

EVERYTHING BAD  
IS GOOD FOR YOU

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*How Today's Popular Culture  
Is Actually Making Us Smarter*

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*For Lydia, true believer*

SCIENTIST A: Has he asked for anything special?

SCIENTIST B: Yes, why, for breakfast . . . he requested something called "wheat germ, organic honey, and tiger's milk."

SCIENTIST A: Oh, yes. Those were the charmed substances that some years ago were felt to contain life-preserving properties.

SCIENTIST B: You mean there was no deep fat? No steak or cream pies or . . . hot fudge?

SCIENTIST A: Those were thought to be unhealthy. . . .

—from Woody Allen's *Sleeper*

Ours is an age besotted with graphic entertainments. And in an increasingly infantilized society, whose moral philosophy is reducible to a celebration of "choice," adults are decreasingly distinguishable from children in their absorption in entertainments and the kinds of entertainments they are absorbed in—video games, computer games, hand-held games, movies on their computers and so on. This is progress: more sophisticated delivery of stupidity.

—George Will

*This book is an old-fashioned work of persuasion that ultimately aims to convince you of one thing: that popular culture has, on average, grown more complex and intellectually challenging over the past thirty years. Where most commentators assume a race to the bottom and a dumbing down—"an increasingly infantilized society," in George Will's words—I see a progressive story: mass culture growing more sophisticated, demanding more cognitive engagement with each passing year. Think of it as a kind of positive brainwashing: the popular media steadily, but almost imperceptibly, making our minds sharper, as we soak in entertainment usually dismissed as so much lowbrow fluff. I call this upward trend the Sleeper*

*Curve*, after the classic sequence from Woody Allen's mock sci-fi film, where a team of scientists from 2173 are astounded that twentieth-century society failed to grasp the nutritional merits of cream pies and hot fudge.

I hope for many of you the argument here will resonate with a feeling you've had in the past, even if you may have suppressed it at the time—a feeling that the popular culture isn't locked in a spiral dive of deteriorating standards. Next time you hear someone complaining about violent TV mobsters, or accidental onscreen nudity, or the inanity of reality programming, or the dull stares of the Nintendo addicts, you should think of the Sleeper Curve rising steadily beneath all that superficial chaos. The sky is not falling. In many ways, the weather has never been better. It just takes a new kind of barometer to tell the difference.

## Introduction

### THE SLEEPER CURVE

EVERY CHILDHOOD HAS its talismans, the sacred objects that look innocuous enough to the outside world, but that trigger an onslaught of vivid memories when the grown child confronts them. For me, it's a sheaf of xeroxed numbers that my father brought home from his law firm when I was nine. These pages didn't seem, at first glance, like the sort of thing that would send a grade-schooler into rapture. From a distance you might have guessed that they were payroll reports, until you got close enough to notice that the names were familiar ones, even famous: Catfish Hunter, Pete Rose, Vida Blue. Baseball names, stranded in a sea of random numbers.

Those pages my dad brought home were part of a game,

though it was a game unlike any I had ever played. It was a baseball simulation called APBA, short for American Professional Baseball Association. APBA was a game of dice and data. A company in Lancaster, Pennsylvania, had analyzed the preceding season's statistics and created a collection of cards, one for each player who had played more than a dozen games that year. The cards contained a cryptic grid of digits that captured numerically each player's aptitudes on the baseball diamond: the sluggers and the strikeout prone, the control artists and the speed demons. In the simplest sense, APBA was a way of playing baseball with cards, or at least pretending to be a baseball *manager*: you'd pick out a lineup, decide on your starting pitchers, choose when to bunt and when to steal.

APBA sounds entertaining enough at that level of generality—what kid wouldn't want to manage a sports team?—but actually playing the game was a more complicated affair. On the simplest level, the game followed this basic sequence: you picked your players, decided on a strategy, rolled a few dice, and then consulted a "lookup chart" to figure out what happened—a strikeout, or a home run, a grounder to third.

But it was never quite that simple with APBA. You could play against a human opponent, or manage both teams yourself, and the decisions made for the opposing team transformed the variables in subtle but crucial ways. At the beginning of each game—and anytime you made a

substitution—you had to add up all the fielding ratings for each player in your lineup. Certain performance results would change if your team was unusually adept with the glove, while teams that were less talented defensively would generate more errors. There were completely different charts depending on the number of runners on base: if you had a man on third, you consulted the "Runner on Third" chart. Certain performance numbers came with different results, depending on the quality of the pitcher: if you were facing a "grade A" pitcher, according to the data on his card, you'd get a strikeout, while a "grade C" pitcher would generate a single to right field. And that was just scratching the surface of the game's complexity. Here's the full entry for "Pitching" on the main "Bases Empty" chart:

The hitting numbers under which lines appear may be altered according to the grade of the pitcher against whom the team is batting. Always observe the grade of the pitcher and look for possible changes of those numbers which are underlined. "No Change" always refers back to the D, or left, column and always means a base hit. Against Grade D pitchers there is never any change—the left hand column only is used. When a pitcher is withdrawn from the game make a note of the grade of the pitcher who relieves him. If his grade is different, a different column must be referred to when the underlined numbers come up. Certain players may have the numbers

7, 8, and/or 11 in the second columns of their cards. When any of these numbers is found in the second column of a player card, it is not subject to normal grade changes. Always use the left (Grade D) column in these cases, no matter what the pitcher's grade is. Occasionally, pitchers may have A & C or A & B ratings. Always consider these pitchers as Grade A pitchers unless the A column happens to be a base hit. Then use the C or B column, as the case may be, for the final play result.

Got that? They might as well be the tax form instructions you'd happily pay an accountant to decipher. Reading these words now, I have to slow myself down just to follow the syntax, but my ten-year-old self had so thoroughly internalized this arcana that I played hundreds of APBA games without having to consult the fine print. *An 11 in the second column on the batter's card? Obviously, obviously that means ignore the normal grade changes for the pitcher. It'd be crazy not to!*

The creators of APBA devised such an elaborate system for understandable reasons: they were pushing the limits of the dice-and-cards genre to accommodate the statistical complexity of baseball. This mathematical intricacy was not limited to baseball simulations, of course. Comparable games existed for most popular sports: basketball sims that let you call a zone defense or toss a last-minute three-point Hail Mary before the clock ran out; boxing games that let

you replay Ali/Foreman without the rope-a-dope strategy. British football fans played games like Soccerboss and Wembley that let you manage entire franchises, trading players and maintaining the financial health of the virtual organization. A host of dice-based military simulations re-created historical battles or entire world wars with painstaking fidelity.

Perhaps most famously, players of Dungeons & Dragons and its many imitators built elaborate fantasy narratives—all by rolling twenty-sided dice and consulting bewildering charts that accounted for a staggering number of variables. The three primary manuals for playing the game were more than five hundred pages long, with hundreds of lookup charts that players consulted as though they were reading from scripture. (By comparison, consulting the APBA charts was like reading the back of a cereal box.) Here's the *Player's Handbook* describing the process by which a sample character is created:

Monte wants to create a new character. He rolls four six-sided dice (4d6) and gets 5, 4, 4, and 1. Ignoring the lowest die, he records the result on scratch paper, 13. He does this five more times and gets these six scores: 13, 10, 15, 12, 8, and 14. Monte decides to play a strong, tough Dwarven fighter. Now he assigns his rolls to abilities. Strength gets the highest score, 15. His character has a +2 Strength bonus that will serve him well in combat. Con-

stitution gets the next highest score, 14. The Dwarf's +2 Constitution racial ability adjustment [see Table 2-1: Racial Ability Adjustments, pg. 12] improves his Constitution score to 16, for a +3 bonus. . . . Monte has two bonus-range scores left (13 and 12) plus an average score (10). Dexterity gets the 13 (+1 bonus).

And that's merely defining the basic faculties for a character. Once you released your Dwarven fighter into the world, the calculations involved in determining the effects of his actions—attacking a specific creature with a specific weapon under specific circumstances with a specific squad of comrades fighting alongside you—would leave most kids weeping if you put the same charts on a math quiz.

Which gets to the ultimate question of why a ten-year-old found any of this *fun*. For me, the embarrassing truth of the matter is that I did ultimately grow frustrated with my baseball simulation, but not for the reasons you might expect. It wasn't that arcane language wore me down, or that I grew tired of switching columns on the Bases Empty chart, or that I decided that six hours was too long to spend alone in my room on a Saturday afternoon in July.

No, I moved on from APBA because it wasn't realistic enough.

My list of complaints grew as my experience with APBA deepened. Playing hundreds of simulated games revealed the blind spots and strange skews of the simulation. APBA

neglected the importance of whether your players were left-handed or right-handed, crucial to the strategy of baseball. The fielding talents of individual players were largely ignored. The vital decision to throw different kinds of pitches—sliders and curveballs and sinkers—was entirely absent. The game took no notice of *where* the games were being played: you couldn't simulate the vulnerable left-field fence in Fenway Park, so tempting to right-handed hitters, or the swirling winds of San Francisco's old Candlestick Park. And while APBA included historic teams, there was no way to factor in historical changes in the game when playing teams from different eras against each other.

And so over the next three years, I embarked on a long journey through the surprisingly populated world of dice-baseball simulations, ordering them from ads printed in the back of the *Sporting News* and Street and Smith's annual baseball guide. I dabbled with Strat-o-Matic, the most popular of the baseball sims; I sampled Statis Pro Baseball from Avalon Hill, maker of the then-popular Diplomacy board game; I toyed with one title called Time Travel baseball that specialized in drafting fantasy teams from a pool of historic players. I lost several months to a game called Extra Innings that bypassed cards and boards altogether; it didn't even come packaged in a box—just an oversized envelope stuffed with pages and pages of data. You rolled six separate dice to complete a play, sometimes consulting five or six separate pages to determine what had happened.



Eventually, like some kind of crazed addict searching for an ever-purer high, I found myself designing my own simulations, building entire games from scratch. I borrowed a twenty-sided die from my Dungeons & Dragons set—the math was far easier to do with twenty sides than it was with six. I scrawled out my play charts on yellow legal pads, and translated the last season's statistics into my own homebrewed player cards. For some people, I suppose, thinking of youthful baseball games conjures up the smell of leather gloves and fresh-cut grass. For me, what comes to mind is the statistical purity of the twenty-sided die.

This story, I freely admit, used to have a self-congratulatory moral to it. As a grownup, I would tell new friends about my fifth-grade days building elaborate simulations in my room, and on the surface I'd make a joke about how uncool I was back then, huddled alone with my twenty-sided dice while the other kids roamed outside playing capture the flag or, God forbid, *real* baseball. But the latent message of my story was clear: I was some kind of statistical prodigy, building simulated worlds out of legal pads and probability charts.

But I no longer think that my experience was all that unusual. I suspect millions of people from my generation probably have comparable stories to tell: if not of sports simulations then of Dungeons & Dragons, or the geopolitical strategy of games like Diplomacy, a kind of chess superimposed onto actual history. More important, in the quarter

century that has passed since I first began exploring those xeroxed APBA pages, what once felt like a maverick obsession has become a thoroughly mainstream pursuit.

This book is, ultimately, the story of how the kind of thinking that I was doing on my bedroom floor became an everyday component of mass entertainment. It's the story of how systems analysis, probability theory, pattern recognition, and—amazingly enough—old-fashioned *patience* became indispensable tools for anyone trying to make sense of modern pop culture. Because the truth is my solitary obsession with modeling complex simulations is now ordinary behavior for most consumers of digital age entertainment. This kind of education is not happening in classrooms or museums; it's happening in living rooms and basements, on PCs and television screens. This is the Sleeper Curve: The most debased forms of mass diversion—video games and violent television dramas and juvenile sitcoms—turn out to be nutritional after all. For decades, we've worked under the assumption that mass culture follows a steadily declining path toward lowest-common-denominator standards, presumably because the "masses" want dumb, simple pleasures and big media companies want to give the masses what they want. But in fact, the exact opposite is happening: the culture is getting more intellectually demanding, not less.

Most of the time, criticism that takes pop culture seriously involves performing some kind of symbolic analysis, decoding the work to demonstrate the way it represents

some other aspect of society. You can see this symbolic approach at work in academic cultural studies programs analyzing the ways in which pop forms expressed the struggle of various disenfranchised groups: gays and lesbians, people of color, women, the third world. You can see it at work in the "zeitgeist" criticism featured in media sections of newspapers and newsweeklies, where the critic establishes a symbolic relationship between the work and some spirit of the age: yuppie self-indulgence, say, or post-9/11 anxiety.

The approach followed in this book is more systemic than symbolic, more about causal relationships than metaphors. It is closer, in a sense, to physics than to poetry. My argument for the existence of the Sleeper Curve comes out of an assumption that the landscape of popular culture involves the clash of competing forces: the neurological appetites of the brain, the economics of the culture industry, changing technological platforms. The specific ways in which those forces collide play a determining role in the type of popular culture we ultimately consume. The work of the critic, in this instance, is to diagram those forces, not decode them.

Sometimes, for the sake of argument, I find it helpful to imagine culture as a kind of man-made weather system. Float a mass of warm, humid air over cold ocean water, and you'll create an environment in which fog will thrive. The fog doesn't appear because it somehow symbolically reenacts the clash of warm air and cool water. Fog arrives in-

stead as an emergent effect of that particular system and its internal dynamics. The same goes with popular culture: certain kinds of environments encourage cognitive complexity; others discourage complexity. The cultural object—the film or the video game—is not a metaphor for that system; it's more like an output or a result.

The forces at work in these systems operate on multiple levels: underlying changes in technology that enable new kinds of entertainment; new forms of online communications that cultivate audience commentary about works of pop culture; changes in the economics of the culture industry that encourage repeat viewing; and deep-seated appetites in the human brain that seek out reward and intellectual challenge. To understand those forces we'll need to draw upon disciplines that don't usually interact with one another: economics, narrative theory, social network analysis, neuroscience.

This is a story of trends, not absolutes. I do not believe that most of today's pop culture is made up of masterpieces that will someday be taught alongside Joyce and Chaucer in college survey courses. The television shows and video games and movies that we'll look at in the coming pages are not, for the most part, Great Works of Art. But they are more complex and nuanced than the shows and games that preceded them. While the Sleeper Curve maps *average* changes across the pop cultural landscape—and not just the

complexity of single works—I have focused on a handful of representative examples in the interest of clarity. (The endnotes offer a broader survey.)

I believe that the Sleeper Curve is the single most important new force altering the mental development of young people today, and I believe it is largely a force for good: enhancing our cognitive faculties, not dumbing them down. And yet you almost never hear this story in popular accounts of today's media. Instead, you hear dire stories of addiction, violence, mindless escapism. "All across the political spectrum," television legend Steve Allen writes in a *Wall Street Journal* op-ed, "thoughtful observers are appalled by what passes for TV entertainment these days. No one can claim that the warning cries are simply the exaggerations of conservative spoil-sports or fundamentalist preachers. . . . The sleaze and classless garbage on TV in recent years exceeds the boundaries of what has traditionally been referred to as Going Too Far." The influential Parents Television Council argues: "The entertainment industry has pushed the content envelope too far; television and films filled with sex, violence, and profanity send strong negative messages to the youth of America—messages that will desensitize them and make for a far more disenfranchised society as these youths grow into adults." And then there's syndicated columnist Suzanne Fields: "The television sitcom is emblematic of our culture; parents, no matter what their degree of education, have abandoned the simplest standard of

shame. Their children literally 'do not know better.' The drip, drip, drip of the popular culture dulls our senses. An open society with high technology exposes increasing numbers of adults and children to the lowest common denomination of sex and violence." You could fill an encyclopedia volume with all the kindred essays published in the past decade.

Exceptions to this dire assessment exist, but they are of the rule-proving-variety. You'll see the occasional grudging acknowledgments of minor silver linings: an article will suggest that video games enhance visual memory skills, or a critic will hail *The West Wing* as the rare flowering of thoughtful programming in the junkyard of prime-time television. But the dominant motif is one of decline and atrophy: we're a nation of reality program addicts and Nintendo freaks. Lost in that account is the most interesting trend of all: that the popular culture has been growing increasingly complex over the past few decades, exercising our minds in powerful new ways.

But to see the virtue in this form of positive brainwashing, we need to begin by doing away with the tyranny of the morality play. When most op-ed writers and talk show hosts discuss the social value of media, when they address the question of whether today's media is or isn't good for us, the underlying assumption is that entertainment improves us when it carries a healthy message. Shows that promote smoking or gratuitous violence are bad for us, while those

that thunder against teen pregnancy or intolerance have a positive role in society. Judged by that morality play standard, the story of popular culture over the past fifty years—if not five hundred—is a story of steady decline: the morals of the stories have grown darker and more ambiguous, and the anti-heroes have multiplied.

The usual counterargument here is that what media has lost in moral clarity it has gained in realism. The real world doesn't come in nicely packaged public service announcements, and we're better off with entertainment that reflects that fallen state with all its ethical ambiguity. I happen to be sympathetic to that argument, but it's not the one I want to make here. I think there is another way to assess the social virtue of pop culture, one that looks at media as a kind of cognitive workout, not as a series of life lessons. Those dice baseball games I immersed myself in didn't contain anything resembling moral instruction, but they nonetheless gave me a set of cognitive tools that I continue to rely on, nearly thirty years later. There may indeed be more "negative messages" in the mediasphere today, as the Parents Television Council believes. But that's not the only way to evaluate whether our television shows or video games are having a positive impact. Just as important—if not *more* important—is the kind of thinking you have to do to make sense of a cultural experience. That is where the Sleeper Curve becomes visible. Today's popular culture may not be showing us the righteous path. But it is making us smarter.

## PART ONE

*The student of media soon comes to expect the new media of any period whatever to be classed as pseudo by those who acquired the patterns of earlier media, whatever they may happen to be.*

—MARSHALL MCLUHAN

to appreciate distortion in music a generation before. To non-players, games bear a superficial resemblance to music videos: flashy graphics; the layered mix of image, music, and text; the occasional burst of speed, particularly during the pre-rendered opening sequences. But what you actually *do* in playing a game—the way your mind has to work—is radically different. It's not about tolerating or aestheticizing chaos; it's about finding order and meaning in the world, and making decisions that help create that order.

## TELEVISION

THE INTERACTIVE NATURE of games means that they will inevitably require more decision-making than passive forms like television or film. But popular television shows—and to a slightly lesser extent, popular films—have also increased the cognitive work they demand from their audience, exercising the mind in ways that would have been unheard of thirty years ago. For someone loosely following the debate over the medium's cultural impact, the idea that television is actually improving our minds will sound like apostasy. You can't surf the Web or flip through a newspaper for more than a few minutes without encountering someone complaining about the surge in sex and violence

on TV: from Tony Soprano to Janet Jackson. There's no questioning that the trend is real enough, though it is as old as television itself. In Newton Minow's famous "vast wasteland" speech from 1961, he described the content of current television programming as a "procession of . . . blood and thunder, mayhem, violence, sadism, murder"—this in the era of Andy Griffith, Perry Como, and Uncle Miltie. But evaluating the social merits of any medium and its programming can't be limited purely to questions of subject matter. There was nothing particularly redeeming in the subject matter of my dice baseball games, but they nonetheless taught me how to think in powerful new ways. So if we're going to start tracking swear words and wardrobe malfunctions, we ought to at least include another line in the graph: one that charts the cognitive demands that televised narratives place on their viewers. That line, too, is trending upward at a dramatic rate.

Television may be more passive than video games, but there are degrees of passivity. Some narratives force you to do work to make sense of them, while others just let you settle into the couch and zone out. Part of that cognitive work comes from following multiple threads, keeping often densely interwoven plotlines distinct in your head as you watch. But another part involves the viewer's "filling in": making sense of information that has been either deliberately withheld or deliberately left obscure. Narratives that require that their viewers fill in crucial elements take

that complexity to a more demanding level. To follow the narrative, you aren't just asked to remember. You're asked to analyze. This is the difference between intelligent shows, and shows that force you to be intelligent. With many television classics that we associate with "quality" entertainment—*Mary Tyler Moore*, *Murphy Brown*, *Frasier*—the intelligence arrives fully formed in the words and actions of the characters onscreen. They say witty things to each other, and avoid lapsing into tired sitcom clichés, and we smile along in our living room, enjoying the company of these smart people. But assuming we're bright enough to understand the sentences they're saying—few of which are rocket science, mind you, or any kind of science, for that matter—there's no intellectual labor involved in enjoying the show as a viewer. There's no filling in, because the intellectual achievement exists entirely on the other side of the screen. You no more challenge your mind by watching these intelligent shows than you challenge your body watching *Monday Night Football*. The intellectual work is happening onscreen, not off.

But another kind of televised intelligence is on the rise. Recall the cognitive benefits conventionally ascribed to reading: attention, patience, retention, the parsing of narrative threads. Over the last half century of television's dominance over mass culture, programming on TV has steadily increased the demands it places on precisely these mental faculties. The nature of the medium is such that television will

never improve its viewers' skills at translating letters into meaning, and it may not activate the imagination in the same way that a purely textual form does. But for all the other modes of mental exercise associated with reading, television is growing increasingly rigorous. And the pace is accelerating—thanks to changes in the economics of the television business, and to changes in the technology we rely on to watch.

This progressive trend alone would probably surprise someone who only read popular accounts of TV without watching any of it. But perhaps the most surprising thing is this: that the shows that have made the most demands on their audience have also turned out to be among the most lucrative in television history.

\* \* \*

PUT ASIDE for a moment the question of why the marketplace is rewarding complexity, and focus first on the question of what this complexity looks like. It involves three primary elements: multiple threading, flashing arrows, and social networks.

Multiple threading is the most acclaimed structural convention of modern television programming, which is ironic because it's also the convention with the most debased pedigree. According to television lore, the age of multiple threads began with the arrival of *Hill Street Blues* in 1981,



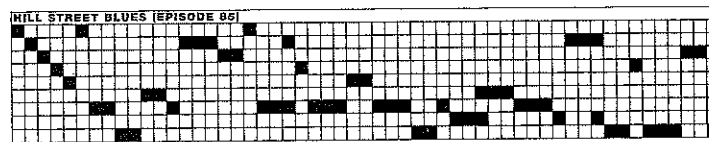
the Steven Bochco-created police drama invariably praised for its “gritty realism.” Watch an episode of *Hill Street Blues* side by side with any major drama from the preceding decades—*Starsky and Hutch*, for instance, or *Dragnet*—and the structural transformation will jump out at you. The earlier shows follow one or two lead characters, adhere to a single dominant plot, and reach a decisive conclusion at the end of the episode. Draw an outline of the narrative threads in almost every *Dragnet* episode and it will be a single line: from the initial crime scene, through the investigation, to the eventual cracking of the case. A typical *Starsky and Hutch* episode offers only the slightest variation on this linear formula: the introduction of a comic subplot that usually appears only at the tail ends of the episode, creating a structure that looks like the graph below. The vertical axis represents the number of individual threads, and the horizontal axis is time.



*Starsky and Hutch* includes a few other twists: While both shows focus almost exclusively on a single narrative, *Dragnet* tells the story entirely from the perspective of the investigators. *Starsky and Hutch*, on the other hand, oscillates between the perspectives of the cops and that of the

criminals. And while both shows adhere religiously to the principle of narrative self-containment—the plots begin and end in a single episode—*Dragnet* takes the principle to a further extreme, introducing the setting and main characters with Joe Friday’s famous voice-over in every episode.

A *Hill Street Blues* episode complicates the picture in a number of profound ways. The narrative weaves together a collection of distinct strands—sometimes as many as ten, though at least half of the threads involve only a few quick scenes scattered through the episode. The number of primary characters—and not just bit parts—swells dramatically. And the episode has fuzzy borders: picking up one or two threads from previous episodes at the outset, and leaving one or two threads open at the end. Charted graphically, an average episode looks like this:



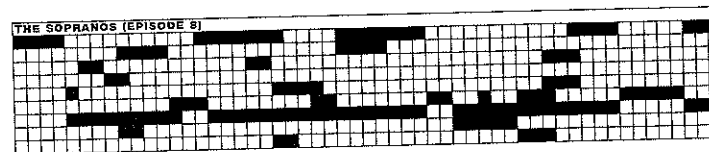
Critics generally cite *Hill Street Blues* as the origin point of “serious drama” native to the television medium—differentiating the series from the single episode dramatic programs from the fifties, which were Broadway plays performed in front of a camera. But the *Hill Street* innovations

weren't all that original; they'd long played a defining role in popular television—just not during the evening hours. The structure of a *Hill Street* episode—and indeed all of the critically acclaimed dramas that followed, from *thirtysomething* to *Six Feet Under*—is the structure of a soap opera. *Hill Street Blues* might have sparked a new golden age of television drama during its seven-year run, but it did so by using a few crucial tricks that *Guiding Light* and *General Hospital* had mastered long before.

Bohco's genius with *Hill Street* was to marry complex narrative structure with complex subject matter. *Dallas* had already shown that the extended, interwoven threads of the soap opera genre could survive the weeklong interruptions of a prime-time show, but the actual content of *Dallas* was fluff. (The most probing issue it addressed was the now folkloric question of who shot JR.) *All in the Family* and *Rhoda* showed that you could tackle complex social issues, but they did their tackling in the comfort of the sitcom living room structure. *Hill Street* had richly drawn characters confronting difficult social issues, and a narrative structure to match.

Since *Hill Street* appeared, the multithreaded drama has become the most widespread fictional genre on prime time: *St. Elsewhere*, *thirtysomething*, *L.A. Law*, *Twin Peaks*, *NYPD Blue*, *ER*, *The West Wing*, *Alias*, *The Sopranos*, *Lost*, *Desperate Housewives*. The only prominent holdouts in drama are shows like *Law & Order* that have essentially

updated the venerable *Dragnet* format, and thus remained anchored to a single narrative line. Since the early eighties, there has been a noticeable increase in narrative complexity in these dramas. The most ambitious show on TV to date—*The Sopranos*—routinely follows a dozen distinct threads over the course of an episode, with more than twenty recurring characters. An episode from late in the first season looks like this:

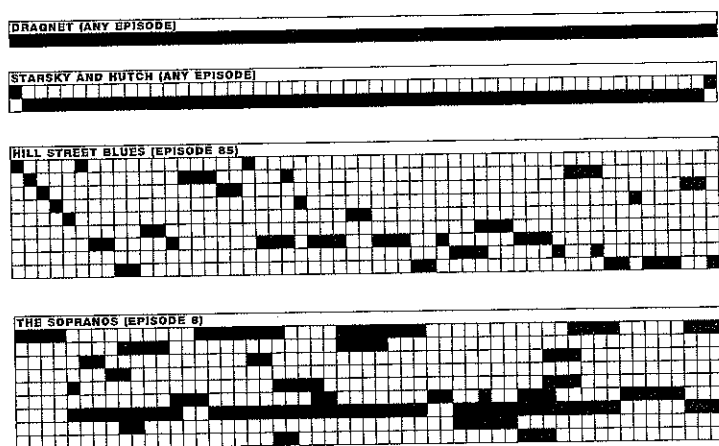


The total number of active threads equals the number of multiple plots of *Hill Street*, but here each thread is more substantial. The show doesn't offer a clear distinction between dominant and minor plots; each storyline carries its weight in the mix. The episode also displays a chordal mode of storytelling entirely absent from *Hill Street*: a single scene in *The Sopranos* will often connect to three different threads at the same time, layering one plot atop another. And every single thread in this *Sopranos* episode builds on events from previous episodes, and continues on through the rest of the season and beyond. Almost every sequence in the show con-



nects to information that exists outside the frame of the current episode. For a show that spends as much time as it does on the analyst's couch, *The Sopranos* doesn't waste a lot of energy with closure.

Put these four charts together and you have a portrait of the Sleeper Curve rising over the past thirty years of popular television.



In a sense, this is as much a map of cognitive changes in the popular mind as it is a map of onscreen developments, as though the media titans had decided to condition our brains to follow ever larger numbers of simultaneous threads. Before *Hill Street*, the conventional wisdom among

television execs was that audiences wouldn't be comfortable following more than three plots in a single episode, and indeed, the first test screening of the *Hill Street* pilot in May 1980 brought complaints from the viewers that the show was too complicated. Fast forward twenty years and shows like *The Sopranos* engage their audiences with narratives that make *Hill Street* look like *Three's Company*. Audiences happily embrace that complexity because they've been trained by two decades of multithreaded dramas.

Is there something apples-to-oranges in comparing a boutique HBO program like *The Sopranos* to a network prime-time show like *Hill Street Blues*? Isn't the increase in complexity merely a reflection of the later show's smaller and more elite audience? I think the answer is no, for several reasons. First, measured by pure audience share, *The Sopranos* is a genuine national hit, regularly outdrawing network television shows in the same slot. Second, *Hill Street Blues* was itself a boutique show—the first step in NBC's immensely successful attempt in the early eighties to target an upscale demographic instead of the widest possible audience. The show was a cultural and critical success, but it spent most of its life languishing in the mid-thirties in the Nielsen TV ratings—and in its first season, the series finished eighty-third out of ninety-seven total shows on television. The total number of viewers for a *Sopranos* episode is not that different from that of an average episode of *Hill Street Blues*, even though the former's narrative complexity

is at least twice that of the latter. (*The Sopranos* is even more complex on other scales, to which we will turn shortly.)

You can also measure the public's willingness to tolerate more complicated narratives in the success of shows such as *ER* or *24*. In terms of multiple threading, both shows usually follow around ten threads per episode, roughly comparable to *Hill Street Blues*. But *ER* and *24* are bona fide hits, regularly appearing in the Nielsen top twenty. In 1981, you could weave together three major narratives and a half dozen supporting plots over the course of an hour on prime time, and cobble together enough of an audience to keep the show safe from cancellation. Today you can challenge the audience to follow a more complicated mix, and build a juggernaut in the process.

Multithreading is the most celebrated structural feature of the modern television drama, and it certainly deserves some of the honor that has been doled out to it. When we watch TV, we intuitively track narrative-threads-per-episode as a measure of a given show's complexity. And all the evidence suggests that this standard has been rising steadily over the past two decades. But multithreading is only part of the story.

\* \* \*

A FEW YEARS after the arrival of the first-generation slasher movies—*Halloween*, *Friday the 13th*—Paramount

released a mock-slasher flick, *Student Bodies*, which parodied the genre just as the *Scream* series would do fifteen years later. In one scene, the obligatory nubile teenage babysitter hears a noise outside a suburban house; she opens the door to investigate, finds nothing, and then goes back inside. As the door shuts behind her, the camera swoops in on the doorknob, and we see that she's left the door unlocked. The camera pulls back, and then swoops down again, for emphasis. And then a flashing arrow appears on the screen, with text that helpfully explains: "Door Unlocked!"

That flashing arrow is parody, of course, but it's merely an exaggerated version of a device popular stories use all the time. It's a kind of narrative signpost, planted conveniently to help the audience keep track of what's going on. When the villain first appears in a movie emerging from the shadows with ominous, atonal music playing—that's a flashing arrow that says: "bad guy." When a sci-fi script inserts a non-scientist into some advanced lab who keeps asking the science geeks to explain what they're doing with that particle accelerator—that's a flashing arrow that gives the audience precisely the information they need to know in order to make sense of the ensuing plot. ("Whatever you do, don't spill water on it, or you'll set off a massive explosion!") Genre conventions function as flashing arrows; the *Student Bodies* parody works because the "door unlocked" text is absurd overkill—we've already internalized the rules of the slasher genre enough to know that nubile-babysitter-in-

suburban-house inevitably leads to unwanted visitors. Heist movies traditionally deliver a full walk-through of the future crime scene, complete with architectural diagrams, so you'll know what's happening when the criminals actually go in for the goods.

These hints serve as a kind of narrative handholding. Implicitly, they say to the audience, "We realize you have no idea what a particle accelerator is, but here's the deal: all you need to know is that it's a big fancy thing that explodes when wet." They focus the mind on relevant details: "Don't worry about whether the babysitter is going to break up with her boyfriend. Worry about that guy lurking in the bushes." They reduce the amount of analytic work you need to make sense of a story. All you have to do is follow the arrows.

By this standard, popular television has never been harder to follow. If narrative threads have experienced a population explosion over the past twenty years, flashing arrows have grown correspondingly scarce. Watching our pinnacle of early eighties TV drama, *Hill Street Blues*, there's an informational *wholeness* to each scene that differs markedly from what you see on shows like *The West Wing* or *The Sopranos* or *Alias* or *ER*. *Hill Street* gives you multiple stories to follow, as we've seen, but each event in those stories has a clarity to it that is often lacking in the later shows.

This is a subtle distinction, but an important one, a facet of the storyteller's art that we sometimes only soak up unconsciously. *Hill Street* has ambiguities about future events:

Will the convicted serial killer be executed? Will Furillo marry Joyce Davenport? Will Renko catch the health inspector who has been taking bribes? But the present tense of each scene explains itself to the viewer with little ambiguity. You may not know the coming fate of the health inspector, but you know why Renko is dressing up as a busboy in the current scene, or why he's eavesdropping on a kitchen conversation in the next. There's an open question or a mystery driving each of these stories—how will it all turn out?—but there's no mystery about the immediate activity on the screen.

A contemporary drama like *The West Wing*, on the other hand, constantly embeds mysteries into the present-tense events: you see characters performing actions or discussing events about which crucial information has been deliberately withheld. Appropriately enough, the extended opening sequence of the *West Wing* pilot revolved around precisely this technique: you're introduced to all the major characters (Toby, Josh, CJ) away from the office, as they each receive the enigmatic message that "POTUS has fallen from a bicycle." *West Wing* creator Aaron Sorkin—who amazingly managed to write every single episode through season four—deliberately withholds the information that all these people work at the White House, and that POTUS stands for "President of the United States," until the very last second before the opening credits run. Granted, a viewer tuning in to a show called *The West Wing* probably sus-

pected that there was going to be some kind of White House connection, and a few political aficionados might have already been familiar with the acronym POTUS. But that opening sequence established a structure that Sorkin used in every subsequent episode, usually decorated with deliberately opaque information. The open question posed by these sequences is not: How will this turn out in the end? The question is: What's happening right now?

In practice, the viewers of shows like *Hill Street Blues* in the eighties no doubt had moments of confusion where the sheer number of simultaneous plots created present-tense mystery: we'd forget why Renko was wearing that busboy outfit because we'd forgotten about the earlier sequence introducing the undercover plot. But in that case, the missing information got lost somewhere between our perceptual systems and our short-term data storage. The show gave us a clear vista on to the narrative events; if that view fogged over, we had only our memory to blame. Sorkin's shows, on the other hand, are the narrative equivalent of fog machines. You're *supposed* to be in the dark. Anyone who has watched more than a handful of *West Wing* episodes closely will know the feeling: scene after scene refers to some clearly crucial piece of information—the cast members will ask each other if they saw “the interview” last night, or they'll make enigmatic allusions to the McCarver case—and after the sixth reference, you'll find yourself wishing you could rewind the tape to figure out what they're talking about,

assuming you've missed something. And then you realize that you're supposed to be confused.

The clarity of *Hill Street* comes from the show's subtle integration of flashing arrows, while *West Wing*'s murkiness comes from Sorkin's cunning refusal to supply them. The roll call sequence that began every *Hill Street* episode is most famous for the catchphrase “Hey, let's be careful out there.” But that opening address from Sergeant Esterhaus (and in later seasons, Sergeant Jablonski) performed a crucial function, introducing some of the primary threads and providing helpful contextual explanations for them. Critics at the time remarked on the disorienting, documentary-style handheld camerawork used in the opening sequence, but the roll call was ultimately a comforting device for the show, training wheels for the new complexity of multithreading.

Viewers of *The West Wing* or *Lost* or *The Sopranos* no longer require those training wheels, because twenty-five years of increasingly complex television has honed their analytic skills. Like those video games that force you to learn the rules while playing, part of the pleasure in these modern television narratives comes from the cognitive labor you're forced to do filling in the details. If the writers suddenly dropped a hoard of flashing arrows onto the set, the show would seem plodding and simplistic. The extra information would take the fun out of watching.

This deliberate lack of handholding extends down to the micro level of dialogue as well. Popular entertainment that

addresses technical issues—whether they are the intricacies of passing legislation, or performing a heart bypass, or operating a particle accelerator—conventionally switches between two modes of information in dialogue: texture and substance. Texture is all the arcane verbiage provided to convince the viewer that they're watching *Actual Doctors At Work*; substance is the material planted amid the background texture that the viewer needs to make sense of the plot.

Ironically, the role of texture is sometimes to be directly *irrelevant* to the concerns of the underlying narrative, the more irrelevant the better. Roland Barthes wrote a short essay in the sixties that discussed a literary device he called the "reality effect," citing a description of a barometer from Flaubert's short story "A Simple Heart." In Barthes's description, reality effects are designed to create the aura of real life through their sheer meaninglessness: the barometer doesn't play a role in the narrative, and it doesn't symbolize anything. It's just there for background texture, to create the illusion of a world cluttered with objects that have no narrative or symbolic meaning. The technical banter that proliferates on shows like *The West Wing* or *ER* has a comparable function; you don't need to know what it means when the surgeons start shouting about OPCAB and saphenous veins as they perform a bypass on *ER*; the arcana is there to create the illusion that you are watching real doctors. For these shows to be enjoyable, viewers have to be

comfortable knowing that this is information they're not supposed to understand.

Conventionally, narratives demarcate the line between texture and substance by inserting cues that flag or translate the important data. There's an unintentionally comical moment in the 2004 blockbuster *The Day After Tomorrow* where the beleaguered climatologist (played by Dennis Quaid) announces his theory about the imminent arrival of a new ice age to a gathering of government officials. His oration ends with the line: "We may have hit a critical desalinization threshold!" It's the kind of thing that a climatologist might plausibly say—were he dropped into an alternative universe where implausible things like instant ice ages actually happened—but for most members of the audience, the phrase "critical desalinization threshold" is more likely to elicit a blank stare than a spine tingle. And so the writer/director Roland Emmerich—a master of brazen arrow-flashing—has a sidekick official next to Quaid follow with the obliging remark: "That would explain all the extreme weather we're having." They might as well have had a flashing "Door Unlocked!" arrow on the screen.

The dialogue on shows like *The West Wing* and *ER*, on the other hand, doesn't talk down to its audience. It rushes by, the words accelerating in sync with the high-speed tracking shots that glide through the corridors and operating rooms. The characters talk faster in these shows, but the truly remarkable thing about the dialogue is not purely a

matter of speed; it's the willingness to immerse the audience in information that most viewers won't understand. Here's a typical scene from *ER*:

Cut to KERRY bringing in a young girl, CARTER and LUCY run up.

The girl's parents are also present.

KERRY: Sixteen-year-old unconscious, history of villari treesure.

CARTER: Glucyna coma?

KERRY: Looks like it.

MR. MAKOMI: She was doing fine until six months ago.

CARTER: What medication is she on?

MRS. MAKOMI: Emphrasylim, tobramysim, vitamins A, D, and K.

LUCY: The skin's jaundiced.

KERRY: Same with sclera, does her breath smell sweet?

CARTER: Peder permadecis?

KERRY: Yeah.

LUCY: What's that?

KERRY: Liver's shut down, let's dip her urine. (To CARTER) It's getting a little crowded in here, why don't you deal with the parents, please. Set lactolose, 30 ccs per mg.

CARTER: We're gonna give her some medicine to clean her blood, why don't you come with me?

CARTER leads the MAKOMIs out of the trauma room,

LUCY also follows him

KERRY: Blood doesn't seem to clot.

MR. MAKOMI: She's bleeding inside?

CARTER: The liver failure is causing her blood not to clot.

MRS. MAKOMI: Oh God.

CARTER: Is she on the transplant list?

MR. MAKOMI: She's been status 2a for six months but they haven't been able to find her a match.

CARTER: Why not, what's her blood type?

MR. MAKOMI: AB.

CARTER and LUCY stare at each other in disbelief.

Cut to MARK working on a sleeping patient. AMANDA walks in.

There are flashing arrows here, of course—"The liver failure is causing her blood not to clot"—but the ratio of medical jargon to layperson translation is remarkably high, and as in so many of these narratives, you don't figure out what's really happening until the second half of the scene. There's a kind of implicit trust formed between the show and its viewers, a tolerance for planned ambiguity. That tolerance takes work: you need to be able to make assessments on the fly about the role of each line, putting it in the "substance" or "texture" slot. You have to know what you're not



supposed to know. If viewers weren't able to make those assessments in real time, *ER* would be an unbearable mess; you'd have to sit down every Thursday night with a medical dictionary at hand. ("Is *peder permadicis* spelled with a *d* or a *t*?")

From a purely narrative point of view, the decisive line in that scene arrives at the very end: "AB." The sixteen-year-old's blood type connects her to an earlier plotline, involving a cerebral hemorrhage victim who—after being dramatically revived in one of the opening scenes—ends up brain dead. Fifteen minutes before the liver-failure scene above, Doug and Carter briefly discuss harvesting the hemorrhage victim's organs for transplants, and make a passing reference to his blood type being the rare AB. (Thus making him an unlikely donor.) The twist here revolves around a statistically unlikely event happening at the ER—an otherwise perfect liver donor showing up just in time to donate his liver to a recipient with the same rare blood type. But the show reveals this twist with a remarkable subtlety. To make sense of that last "AB" line—and the look of disbelief on Carter's and Lucy's faces—you have to recall a passing remark uttered fifteen minutes before regarding a character who belongs to a completely different thread.

It would have been easy enough to insert an explanatory line at the end of the scene: "That's the same blood type as our hemorrhage victim!" And in fact, had *ER* been made

twenty or thirty years ago, I suspect the writers would have added precisely such a line. But that kind of crude-subtitling would go against the narrative ethos of shows like *ER*. In these modern narratives, part of the pleasure comes from the audience's "filling in." These shows may have more blood and guts than popular TV had a generation ago, and some of the sexual content today would have been inappropriate in a movie theater back then—much less on prime-time TV. But when it comes to storytelling, these shows possess a quality that can only be described as subtlety and discretion.

It's not a headline you often see—"Pop TV More Subtle and Discreet Than Ever Before!"—but ignoring these properties means overlooking one of the most vital developments in modern popular narrative. You'll sometimes hear people refer fondly to the "simpler" era of television's alleged heyday, the days of *Dragnet* and *I Love Lucy*. They mean "simpler" in an ethical sense: there were no sympathetic mob bosses on *Dragnet*, no custody battles on *Lucy*. But when you watch these shows next to today's television, the other sense of "simpler" applies as well: they require less mental labor to make sense of what's going on. Watch *Starsky and Hutch* or *Dragnet* after watching *The Sopranos* and you'll feel as though you're being condescended to—because the creators of those shows are imagining an "ideal viewer" who has not benefited from decades of the Sleeper Curve at work. They kept it simple because they assumed

their audience at the time wasn't ready for anything more complicated.

In this, they were probably right.

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TELEVISION DRAMA is the most dramatic instance of the Sleeper Curve, but you can see a comparable shift toward increased complexity in most of the sitcoms that have flourished over the past decade. Compare the way comedy unfolds in recent classics like *Seinfeld* and *The Simpsons*—along with newer critics' faves like *Scrubs* or *Arrested Development*—to earlier sitcoms like *All in the Family* or *Mary Tyler Moore*. The most telling way to measure these shows' complexity is to consider how much external information the viewer must draw upon to "get" the jokes in their entirety. Anyone can sit down in front of most run-of-the-mill sitcoms—*Home Improvement*, say, or *Three's Company*—and the humor will be immediately intelligible, since it consists mostly of characters being sarcastic to each other. The jokes themselves make no reference to anything outside the frame of the conversation that contains them—beyond the bare-bones "situation" that the sitcom itself is grounded in. (A guy pretends that he's gay so he can shack up with two women.) To parse the humor of more nuanced shows—*Cheers* or *Friends*, for example—the scripts will sometimes demand that you know some basic biographical

information about the characters. (Carla will make a snotty reference to Sam Malone's sobriety, without bothering to explain to the audience that he once had a drinking problem; or Rachel will allude to Monica's overweight childhood.) Nearly every extended sequence in *Seinfeld* or *The Simpsons*, however, will contain a joke that makes sense only if the viewer fills in the proper supplementary information—information that is deliberately withheld from the viewer. If you haven't seen the "Mulva" episode, or if the name "Art Vandelay" means nothing to you, then the subsequent references—many of them arriving years after their original appearance—will pass on by unappreciated.

At first glance, this looks like the soap opera tradition of plotlines extending past the frame of individual episodes, but in practice the device has a different effect. Knowing that George uses the alias Art Vandelay in awkward social situations doesn't help you understand the plot of the current episode; you don't draw on past narratives to understand the events of the present one. In the 180 *Seinfeld* episodes that aired, seven contain references to Art Vandelay: in George's actually referring to himself with that alias or invoking the name as part of some elaborate lie. He tells a potential employer at a publishing house that he likes to read the fiction of Art Vandelay, author of *Venetian Blinds*; in another, he tells an unemployment insurance case-worker that he's applied for a latex salesman job at Vandelay Industries. For storytelling purposes, the only thing that you



need to know here is that George is lying in a formal interview; any fictitious author or latex manufacturer would suffice. But the *joke* arrives through the echo of all those earlier Vandelay references; it's funny because it's making a subtle nod to past events held offscreen. It's what we'd call in a real-world context an "in-joke"—a joke that's funny only to people who get the reference. And in this case, the reference is to a few fleeting lines in a handful of episodes—most of which aired years before. Television comedy once worked on the scale of thirty seconds: you'd have a setup line, and then a punch line, and then the process would start all over again. With *Seinfeld*, the gap between setup and punch line could sometimes last five years.

These layered jokes often point beyond the bounds of the series itself. According to one fan site that has exhaustively chronicled these matters, the average *Simpsons* episode includes around eight gags that explicitly refer to movies: a plotline, a snippet of dialogue, a visual pun on a famous cinematic sequence (*Seinfeld* featured a number of episodes that mirrored movie plots, including *Midnight Cowboy* and *JFK*). The Halloween episodes have historically been the most baroque in their cinematic allusions, with the all-time champ being an episode from the 1995 season, integrating material from *Attack of the 50 Foot Woman*, *Godzilla*, *Ghostbusters*, *Nightmare on Elm Street*, *The Pagemaster*, *Maximum Overdrive*, *The Terminator* and *Terminator 2*,

*Alien III*, *Tron*, *Beyond the Mind's Eye*, *The Black Hole*, *Poltergeist*, *Howard the Duck*, and *The Shining*.

The film parodies and cultural sampling of *The Simpsons* usually get filed away as textbook postmodernism: media riffing on other media. But the Art Vandelay jokes from *Seinfeld* don't quite fit the same postmodern mold: they aren't references that jump from one fictional world to another; they're references that jump back in time within a single fictional world. I think it's more instructive to see both these devices as sharing a key attribute: they are comic devices that reward further scrutiny. The show gets funnier the more you study it—precisely because the jokes point outside the immediate context of the episode, and because the creators refuse to supply flashing arrows to translate the gags for the uninitiated. Earlier sitcoms merely demanded that you kept the basic terms of the situation clear on your end; beyond that information you could be an amnesiac and you weren't likely to miss anything. Shows like *Seinfeld* and *The Simpsons* offered a more challenging premise to their viewers: You'll enjoy this more if you're capable of remembering a throwaway line from an episode that aired three years ago, or if you notice that we've framed this one scene so that it echoes the end of *Double Indemnity*. The jokes come in layers: you can watch that 1995 Halloween episode and miss all the film riffs and still enjoy the show, but it's a richer, more rewarding experience if you're picking them up.

That layering enabled *Seinfeld* and *The Simpsons* to retain both a broad appeal and the edgy allure of cult classics. The mainstream audiences chuckle along to that wacky Kramer, while the diehard fans nudge-and-wink at each Superman aside. But that complexity has another, equally important, side effect: the episodes often grow *more* entertaining on a second or third viewing, and they can still reveal new subtleties on the fifth or sixth. The subtle intertwinings of the plots seem more nimble if you know in advance where they're headed, and the more experience you have with the series as a whole, the more likely you are to catch all the insider references.

In November 1997, NBC aired an episode of *Seinfeld* called "The Betrayal," in which the scenes were presented in reverse chronological order. If the *Seinfeld* formula often involved setups followed by punch lines that arrived years later, "The Betrayal" took a more radical approach: punch lines that arrived *before* their setups. You'd see Kramer begging Newman to protect him from a character called "FDR," and only find out why ten minutes later, when you're shown an "earlier" scene where FDR gives Kramer the evil eye at a birthday party. The title of the episode (and the name of one of the characters) was a not-so-subtle nod to the Harold Pinter play *Betrayal*, which told the story of a love triangle as a reverse chronology. But comedies are different from dramas in their relationship to time: a dramatic event with no context is a mystery—the withheld informa-

tion can heighten the drama. But a punch line with no context is not a joke. Nearly unwatchable the first time around, "The Betrayal" became coherent only on a second viewing—and it took three solid passes before the jokes started to work. You'd see the punch line delivered onscreen, and you'd fill in the details of the setup on your own.

"The Betrayal" was a watershed in television programming, assembling all the elements of modern TV complexity in one thirty-minute sitcom. The narrative wove together seven distinct threads, withheld crucial information in almost every sequence, and planted jokes that had multiple layers of meaning. As the title implied, these were storytelling devices that you would have found only in avant-garde narrative thirty or forty years ago: in Pinter, or Alain Robbe-Grillet, or Godard. You might have been able to fill a small theater in Greenwich Village with an audience willing to parse all that complexity in 1960, but only if the *Times* had given the play a good review that week. Forty years later, NBC puts the same twisted narrative structure on prime-time television, and 15 million people lap it up.

A few popular sitcoms have done well with the traditional living room banter of yesteryear: *Everybody Loves Raymond* comes to mind. But most comedies that have managed to achieve both critical and commercial success—*Scrubs*, *The Office*, *South Park*, *Will & Grace*, *Curb Your Enthusiasm*—have almost without exception taken their structural cues from *The Simpsons* instead of *Three's Com-*

pany: creating humor with a half-life longer than fifteen seconds, drawing on intricate plotlines and obscure references. But the sitcom genre as a whole has wilted in the past few years, as television execs turned their focus to the new—and oft-abused—ratings champ: reality programming.

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SKEPTICS MIGHT ARGUE that I have stacked the deck here by focusing on relatively highbrow titles like *The Simpsons* or *The West Wing*, when in fact the most significant change in the last five years of narrative entertainment has nothing to do with complex dramas or self-referential sitcoms. Does the contemporary pop cultural landscape look quite as promising if the representative TV show is *Joe Millionaire* instead of *The West Wing*?

I think it does, but to answer that question properly, you have to avoid the tendency to sentimentalize the past. When people talk about the golden age of television in the early seventies—invoking shows like *Mary Tyler Moore* and *All in the Family*—they forget to mention how awful most television programming was during much of that decade. If you're going to look at pop culture trends, you have to compare apples to apples, or in this case, lemons to lemons. If *Joe Millionaire* is a dreadful show that has nonetheless snookered a mass audience into watching it, then you have to compare it to shows of comparable quality and audience

reach from thirty years ago for the trends to be meaningful. The relevant comparison is not between *Joe Millionaire* and *M\*A\*S\*H*; it's between *Joe Millionaire* and *The Price Is Right*, or between *Survivor* and *The Love Boat*.

What you see when you make these head-to-head comparisons is that a rising tide of complexity has been lifting programming both at the bottom of the quality spectrum and at the top. *The Sopranos* is several times more demanding of its audiences than *Hill Street* was, and *Joe Millionaire* has made comparable advances over *Battle of the Network Stars*. This is the ultimate test of the Sleeper Curve theory: even the crap has improved.

How might those improvements be measured? To take stock of this emerging genre, once again we have to paint our portrait of the rhinoceros carefully, to capture why people really get hooked on these shows. Because I think the appeal is often misunderstood. The conventional wisdom is that audiences flock to reality programming because they enjoy the prurient sight of other people being humiliated on national TV. This indeed may be true for gross-out shows like *Fear Factor*, where contestants lock themselves into vaults with spiders or consume rancid food for their fifteen minutes of fame. But for the most successful reality shows—*Survivor* or *The Apprentice*—the appeal is more sophisticated. That sophistication has been difficult to see, because reality programming, too, has suffered from our tendency to see emerging genres as “pseudo” versions of earlier gen-

res, as McLuhan diagnosed. When reality programming first burst on the scene, it was traditionally compared with the antecedent form of the documentary film. Naturally, when you compare *Survivor* with *Shoah*, *Survivor* comes up short. But reality shows do not represent reality the way documentaries represent reality. *Survivor*'s relationship to reality is much closer to the relationship between professional sports and reality: highly contrived, rule-governed environments where (mostly) unscripted events play out.

Thinking of reality shows in the context of games gives us useful insight into the merits of the genre, as opposed to the false comparisons to Barbara Koppel films and *Capturing the Friedmans*. Perhaps the most important thing that should be said about reality programming is that the format is reliably structured like a video game. Reality television provides the ultimate testimony to the cultural dominance of games in this moment of pop culture history. Early television took its cues from the stage: three-act dramas, or vaudeville-like acts with rotating skits and musical numbers. In the Nintendo age, we expect our televised entertainment to take a new form: a series of competitive tests, growing more challenging over time. Many reality shows borrow a subtler device from gaming culture as well: the rules aren't fully established at the outset. You learn as you play. On a show like *Survivor* or *The Apprentice*, the participants—and the audience—know the general objective of the series, but each episode involves new challenges

that haven't been ordained in advance. The final round of season one of *The Apprentice*, for instance, threw a monkeywrench into the strategy that had governed the play up until that point, when Trump announced that the two remaining apprentices would have to assemble and manage a team of subordinates who had already been fired in earlier episodes of the show. All of a sudden the overarching objective of the game—do anything to avoid being fired—presented a potential conflict to the remaining two contenders: the structure of the final round favored the survivor who had maintained the best relationships with his comrades. Suddenly, it wasn't enough just to have clawed your way to the top; you had to have made friends while clawing.

The rules and conventions of the reality genre are in flux, and that unpredictability is part of the allure. This is one way in which reality shows differ dramatically from their game show ancestors. When new contestants walked onstage for *The Price Is Right* or *Wheel of Fortune*, no ambiguity existed about the rules of engagement; everyone knew how the game was played—the only open question was who would be the winner, and what fabulous prizes they'd take home. In reality TV, the revealing of the game's rules is part of the drama, a deliberate ambiguity that is celebrated and embraced by the audience. The original *Joe Millionaire* put a fiendish spin on this by undermining the most fundamental convention of all—that the show's creators don't openly lie to the contestants about the prizes—by inducing

a construction worker to pose as a man of means while fifteen women competed for his attention.

Reality programming borrowed another key ingredient from games: the intellectual labor of probing the system's rules for weak spots and opportunities. As each show discloses its conventions, and each participant reveals his or her personality traits and background, the intrigue in watching comes from figuring out how the participants should best navigate the environment that's been created for them. The pleasure in these shows comes not from watching other human beings humiliated on national television; it comes from depositing other human beings in a complex, high-stakes environment where no established strategies exist, and watching them find their bearings. That's why the water-cooler conversation about these shows invariably tracks in on the strategy displayed on the previous night's episode: Why did Kwame pick Omarosa in that final round? What devious strategy is Richard Hatch concocting now?

Some of that challenge comes from an ever-changing system of rules, but it also comes from the rich social geography that all reality programming explores. In this one respect, the reality shows exceed the cognitive demands of the video games, because the games invariably whittle away at the branches of social contact. In the gameworld, you're dealing with real people through the mediating channels of 3D graphics and text chat; reality shows drop flesh-and-blood people into the same shared space for months at a

time, often limiting their contact with the outside world. Reality program participants are forced to engage face-to-face with their comrades, and that engagement invariably taps their social intelligence in ways that video games can only dream of. And that social chess becomes part of the audience's experience as well. This, of course, was the appeal of that pioneering reality show, MTV's *The Real World*, which didn't need contests and fabulous prizes to lure its viewers; it just needed a group of people thrust together in a new space and forced to interact with one another.

The role of audience participation is one of those properties that often ends up neglected when the critics assess these shows. If you take reality programming to be one long extended exercise in public humiliation, then the internal monologue of most viewers would sound something like this: "Look at this poor fool—what a jackass!" Instead, I suspect those inner monologues are more likely to project the viewer into the show's world; they're participatory, if only hypothetically so: "If I were choosing who to kick off the island, I'd have to go with Richard." You assess the social geography and the current state of the rules, and you imagine how you would have played it, had you made it through the casting call. The pleasure and attraction of that kind of involvement differ from the narrative pleasure of the sitcom: the appeal of *Happy Days* doesn't come from imagining how you might have improved on the pep talk that Fonzie gives Richie over lunch at Al's. But in the world

of reality programming, that projection is a defining part of the audience's engagement with the show.

Old-style game show viewers also like to imagine themselves as participants; people have been shouting out the answers in their living rooms since the days of *21*. (Reality programming embraces and extends the logic of game shows, just as shows like *The Sopranos* and *Six Feet Under* expand on the template originally created by the soap opera.) But the rules and the "right answers" have increased in complexity since Herbert Stempel took his famous dive. "Playing" a reality show requires you to both adapt to an ever-changing rulebook, and scheme your way through a minefield of personal relationships. To succeed in a show like *The Apprentice* or *Survivor*, you need social intelligence, not just a mastery of trivia. When we watch these shows, the part of our brain that monitors the emotional lives of the people around us—the part that tracks subtle shifts in intonation and gesture and facial expression—scrutinizes the action on the screen, looking for clues. We trust certain characters implicitly, and vote others off the island in a heartbeat. Traditional narrative shows also trigger emotional connections to the characters, but those connections don't have the same participatory effect, because traditional narratives aren't explicitly about *strategy*. The phrase "Monday-morning quarterbacking" was coined to describe the engaged feeling spectators have in relation to games as opposed to stories. We absorb stories, but we second-guess

games. Reality programming has brought that second-guessing to prime time, only the game in question revolves around *social* dexterity rather than the physical kind.

Reality programming unfolds in the most artificial of environments: tropical islands swarming with invisible camera crews; castles populated by beautiful single women and one (fake) millionaire bachelor. But they nonetheless possess an emotional authenticity that is responsible for much of their appeal. At the peak moments—when Joe Millionaire reveals his true construction worker identity; when a contestant gets kicked off the island late in a *Survivor* series—the camera zooms in on the crestfallen face of the unlucky contestant, and what you see for a few fleeting seconds is something you almost never see in prime-time entertainment: a display of genuine emotion written on someone's face. The thrill of it is the thrill of something real and unplanned bursting out in the most staged and sterile of places, like a patch of wildflowers blooming in a parking lot. I find these moments cringe-inducing, because the emotions are so raw, but also bizarrely hypnotic: these are people who have spent the last six months dreaming of a life-changing event, only to find at the last minute that they've fallen short. The thrill of reality TV is seeing their face at the moment they get the news; the thrill of thinking, "This is actually happening." Next to that kind of emotional intensity, it's no wonder the sitcom—with its one-liners and canned laughter—has begun to wither.

I admit that there's something perverse in these moments, something like the frisson that pornography used to induce before it became a billion-dollar industry: what electrifies is the sense that *this is actually happening*. In a world of forgeries, this person on the screen isn't faking it, at least for that split second as the emotion washes over his face. You cover your eyes because the authenticity of the feeling is almost too hot for the medium.

"Split second" is the appropriate timescale here; the intelligence that the reality shows draw upon is the intelligence of microseconds: the revealing glance, the brief look of disbelief, a traitorous frown quickly wiped from a face. Humans express the full complexity of their emotions through the unspoken language of facial expressions, and we know from neuroscience that parsing that language—in all of its subtlety—is one of the great accomplishments of the human brain. One measure of this intelligence is called AQ, short for "autism quotient." People with low AQ scores are particularly talented at reading emotional cues, anticipating the inner thoughts and feelings of other people, a skill that is sometimes called mind reading. (Autistic people suffer from a diminished capacity for reading the language of facial expressions, which is why a high AQ score implies worse mind reading skills.) AQ can be seen as a subset of Daniel Goleman's concept of "emotional intelligence"; being smart is sometimes about doing complicated math in our heads, or making difficult logical decisions, but an equally important

measure of practical intelligence is our ability to assess—and respond appropriately—to other people's emotional signals.

When you look at reality TV through the lens of AQ, the cognitive demands of the genre become much easier to appreciate. We had game shows to evaluate and reward our knowledge of trivia, and professional sports to reward our physical intelligence. Reality shows, in turn, challenge our emotional intelligence and our AQ. They are, in a sense, elaborately staged group psychology experiments, where at the end of the session the subjects get a million dollars and a week on the cover of *People* instead of a fifty-dollar stipend. The shows seem so fresh to today's audience because they tap this crucial faculty of the mind in ways that ordinary dramas or comedies rarely do—borrowing the participatory format of the game show while simultaneously challenging our emotional IQ. *The Apprentice* may not be the smartest show in the history of television, but it nonetheless forces you to think while you watch it, to work through the social logic of the universe it creates on the screen. And compared with *The Price Is Right* or *Webster*, it's an intellectual masterpiece.

Television turns out to be a brilliant medium for assessing other people's emotional intelligence or AQ—a property that is too often ignored when critics evaluate the medium's carrying capacity for thoughtful content. Part of this neglect stems from the age-old opposition between intelligence and emotion: intelligence is following a chess match or imparting a sophisticated rhetorical argument on a matter of



public policy; emotions are the province of soap operas. But countless studies have demonstrated the pivotal role that emotional intelligence plays in seemingly high-minded arenas: business, law, politics. Any profession that involves regular interaction with other people will place a high premium on mind reading and emotional IQ. Of all the media available to us today, television is uniquely suited for conveying the fine gradients of these social skills. A book will give you a better vista of an individual's life story, and a newspaper op-ed is a better format for a rigorous argument, but if you're trying to evaluate a given person's emotional IQ and you don't have the option of sitting down with them in person, the tight focus of television is your best bet. Reality programming has simply recognized that intrinsic strength and built a whole genre around it.

Politics, too, has gravitated toward the television medium's emotional fluency. This is often derided as a coarsening or sentimentalizing of the political discourse, turning the rational debate over different political agendas into a Jerry Springer confessional. The days of the Lincoln-Douglas debates have given way to "Boxers or briefs?" The late Neil Postman described this sorry trend as the show-businessification of politics in his influential 1985 book, *Amusing Ourselves to Death*. In Postman's view, television is a medium of cosmetics, of surfaces, an endless replay of the Nixon-Kennedy debates, where the guy with the best makeup always wins. "Although the Constitution

makes no mention of it, it would appear that fat people are now effectively excluded from running for high political office," he writes. "Probably bald people as well. Almost certainly those whose looks are not significantly enhanced by the cosmetician's art. Indeed, we may have reached the point where cosmetics has replaced ideology as the field of expertise over which a politician must have competent control."

No doubt some of what Postman says is true, though Bill Clinton did manage to eke out a successful political career while battling a minor weight problem. Television lets you see the physical characteristics of the people you're voting for with an accuracy unrivaled by any medium to date. To be sure, this means that physically repulsive individuals have suffered on election day. (Of course, it also means a commander in chief will no longer be able to conceal from the American people the simple fact that he can't *walk*.)

But the visibility of the medium extends beyond hairstyles and skin tone. When we see our politicians in the global living room of televised intimacy, we're able to detect more profound qualities in them: not just their grooming, but their emotional antennae—their ability to connect, outfox, condemn, or console. We see them as emotional mind readers, and there are few qualities in an individual more predictive of their ability to govern a country, because mind reading is so central to the art of persuasion. Presidents make formal appearances and sit for portraits and host



galas, but their day-to-day job is motivating and persuading other people to follow their lead. To motivate and persuade you have to have an innate radar for other people's mental states. For an ordinary voter, it's almost impossible to get a sense for a given candidate's emotional radar without seeing them in person, in an unscripted setting. You can't get a sense of a candidate's mind reading skills by watching them give a memorized stump speech, or seeing their thirty-second ads, or God knows reading their campaign blog posts. But what *does* give you that kind of information is the one-on-one television interview format—*Meet the Press* and *Charlie Rose*, of course, but probably more effectively, *Oprah*, because the format is more social and free-flowing.

So what we're getting out of the much-maligned Oprahization of politics is not boxers-or-briefs personal trivia—it's crucial information about the emotional IQ of a potential president, information we had almost no access to until television came along and gave us that tight focus. Reading the transcript of the Lincoln-Douglas debates certainly conveyed the agility of both men's minds, and the ideological differences that separated them. But I suspect they conveyed almost no information about how either man would run a cabinet meeting, or what kind of loyalty they would inspire in their followers, or how they would resolve an internal dispute. Thirty minutes on a talk show, on the other hand, might well convey all that information—

because our brains are so adept at picking up those emotional cues. Physically unappealing candidates may not fare as well in this environment. (Lyndon Johnson would have a tough time of it today.) But the candidates who do pass the appearance test are judged by a higher, more discriminating standard—not just the color of their skin, but the content of their character.

That's not to imply that all political debate should be reduced to talk-show banter; there's still plenty of room for position papers and formal speeches. But we shouldn't underestimate the information conveyed by the close-ups of the unscripted television appearance. That first Nixon-Kennedy debate has long been cited as the founding moment of the triumph of image over substance—among all those TV viewers who thought Nixon's sweating and five-o'clock shadow made him look shifty and untrustworthy. But what if we've had it wrong about that debate? What if it wasn't Nixon's lack of makeup that troubled the TV watchers? After all, Nixon did turn out to be shifty and untrustworthy in the end. Perhaps all those voters who thought he had won after they heard the debate on the radio or read the transcript in the papers simply didn't have access to the range of emotional information conveyed by television. Nixon lost on TV because he didn't *look* like someone you would want as president, and where emotional IQ is concerned, looks don't always deceive.



REALITY PROGRAMMING and Oprah heart-to-hearts may not be the most sophisticated offering on the televised menu, but neither are they the equivalent of junk food: a guilty pleasure with no redeeming cognitive nourishment. They engage the mind—and particularly the social mind—far more rigorously than the worst shows of past decades. People didn't gather at the water cooler to second-guess the losing strategy on last night's *Battle of the Network Stars*, but they'll spend weeks debating the tactical decisions and personality tics of the *Apprentice* contestants. Consider this one excerpt from an exchange on an unofficial *Apprentice* site:

KMJ179: A person who is a loose cannon panics quite easily and makes hasty decisions without knowing the facts or realizes what is at stake. Loose cannons do not listen to other people. Often times they will hear someone talking to them but they do not listen to what is being said. A loose cannon is someone who says one thing but turns around and does another thing on his or her own. I have dealt with loose cannons before and Troy is not a loose cannon by any means. Where Bernie got that from I do not know. It may have been Troy's accent that bothered the poor Bernie.

Ken NJ: I'm not defending Bernie, but merely providing my reasons so that you can see where I'm coming from in classifying Troy as a loose cannon. He was expected by Donald, his team mates and his TV audience to put in an honest days work for a honest days pay. Well, he didn't performed honestly and started the "hook or by crook" method with some false representations to clients in misleading them to bid by some undue influence. Any responsible executive seeing Troy's business tactics on-the-job would say this worker is a loose cannon because he can't conform to corporate policies and marches to his own tune. Even Bill who has observed own co-worker said he had serious questions about the way Troy goes about closing his deals.

KMJ179: I was surprised when Troy crossed the Ethical boundry and resorted to lying about the actual number of people interested in renting the place. He did not have to do that. Ironically when Troy was up front with the potential second client about having the first client also interested and sitting in another office, Troy lost out. The second client felt like he was being hussled. In a way I could not blame the second client though. We are talking about a high lease price for one day and you are telling me that I am competing with someone else for the highest price. I would tell Troy to go jump in the Hudson. Troy was very professional and let the client go after thanking him for the opportunity to meet.

Ken NJ: You just illustrated one incident of Troy's unacceptable method of doing business. I've seen used-car salesperson with more style and honesty than Troy. The other instance, I've posted about Troy pulling the Kwame autograph sales in Planet Hollywood curbside in misleading patrons. The Better Business Bureau and the State Consumer Agencies would be starting investigations on such pattern of business practices. I've seen aggressive sales people like Troy bankrupt profitable businesses overnight where the courts awarded treble damages in multimillion judgements. Troy is a live trip wire, just waiting to blow up the company. That's NOT an understatement in today's corporate governance.

It would probably take you a lifetime to read all the transcripts of comparable debates, both online and off, that follow in the wake of these shows. The spelling isn't perfect, and the grammar occasionally leaves something to be desired. But the level of cognitive engagement, the eagerness to evaluate the show through the lens of personal experience and wisdom, the tight focus on the contestants' motives and character flaws—all this is remarkable. It's impossible to imagine even the highbrow shows of yesteryear—much less *The Dukes of Hazard*—inspiring this quantity and quality

of analysis. (There are literally hundreds of pages of equivalent commentary at this one fan site alone.) The unique cocktail that the reality genre serves up—real people, evolving rule systems, and emotional intimacy—prods the mind into action. You don't zone out in front of shows like *The Apprentice*. You play along.

The content of the game you're playing, admittedly, suffers from a shallow premise and a highly artificial environment. (Plus the show forces you to contemplate Donald Trump's comb-over on a regular basis, occasionally wind-blown.) This is another way in which the reality shows borrow their techniques from the video games: the content is less interesting than the cognitive work the show elicits from your mind. It's the collateral learning that matters.

Part of that collateral learning comes from the sheer number of characters involved in a show like *The Apprentice* or *Survivor*. Just as *The Sopranos* challenges the mind to follow multiple threads, the reality shows demand that we track multiple *relationships*, since the action of these shows revolves around the shifting feuds and alliances between more than a dozen individuals. This, too, activates a component of our emotional IQ, sometimes called our social intelligence: our ability to monitor and recall many distinct vectors of interaction in the population around us, to remember that Peter hates Paul, but Paul likes Peter, and both of them get along with Mary. This faculty is part of our primate heritage; our closest relatives, the chimpanzees, live in societies

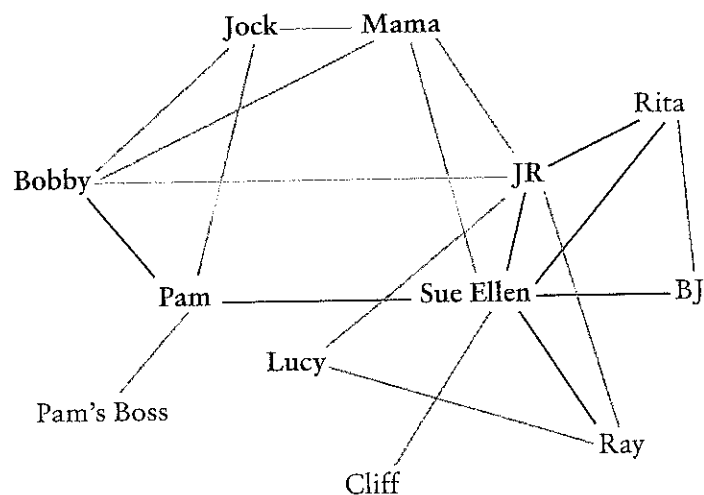
characterized by intricate political calculation between dozens of individuals. (Some anthropologists believe that the explosion in frontal lobe size experienced by *Homo sapiens* over the past million years was spurred by the need to assess densely interconnected social networks.) Environmental conditions can strengthen or weaken the brain's capacity for this kind of social mapping, just as it can for real-world mapping. A famous study by University College London found that London cabdrivers had, on average, larger regions in the brain dedicated to spatial memory than the ordinary Londoner. And veteran drivers had larger areas than their younger colleagues. This is the magic of the brain's plasticity: by executing a certain cognitive function again and again, you recruit more neurons to participate in the task. Social intelligence works the same way: spend more hours studying the intricacies of a social network, and your brain will grow more adept at tracking all those intersecting relationships.

Where media is concerned, this type of analysis is not adequately illustrated by narrative threads or a simple list of characters. It is better visualized as a network: a series of points connected by lines of affiliation. When we watch most reality shows, we are implicitly building these social network maps in our heads, a map not so much of plotlines as of attitudes: Nick has a thing for Amy, but Amy may just be using Nick; Bill and Kwame have a competitive friendship, and both think Amy is using Nick; no one trusts Omarosa,

except Kwame, but Troy *really* doesn't trust Omarosa. This may sound like high school, but like many forms of emotional intelligence, the ability to analyze and recall the full range of social relationships in a large group is just as reliable a predictor of professional success as your SAT scores or your college grades. Thanks to our biological and cultural heritage, we live in large bands of interacting humans, and people whose minds are skilled at visualizing all the relationships in those bands are likely to thrive, while those whose minds have difficulty keeping track are invariably handicapped. Reality shows force us to exercise that social muscle in ways that would have been unimaginable on past game shows, where the primary cognitive skill tested was the ability to correctly guess the price of a home appliance, or figure out the right time to buy a vowel.

The trend toward increased social network complexity is not the exclusive province of reality television; many popular television dramas today feature dense webs of relationships that require focus and scrutiny on the part of the viewer just to figure out what's happening on the screen. Traditionally, the most intricate social networks on television have come in the form of soap operas, with affairs and betrayals and tortured family dynamics. So let's take as a representative example an episode from season one of *Dallas*. The social network at the heart of *Dallas* is ultimately the Ewing family: two parents, three children, two spouses.

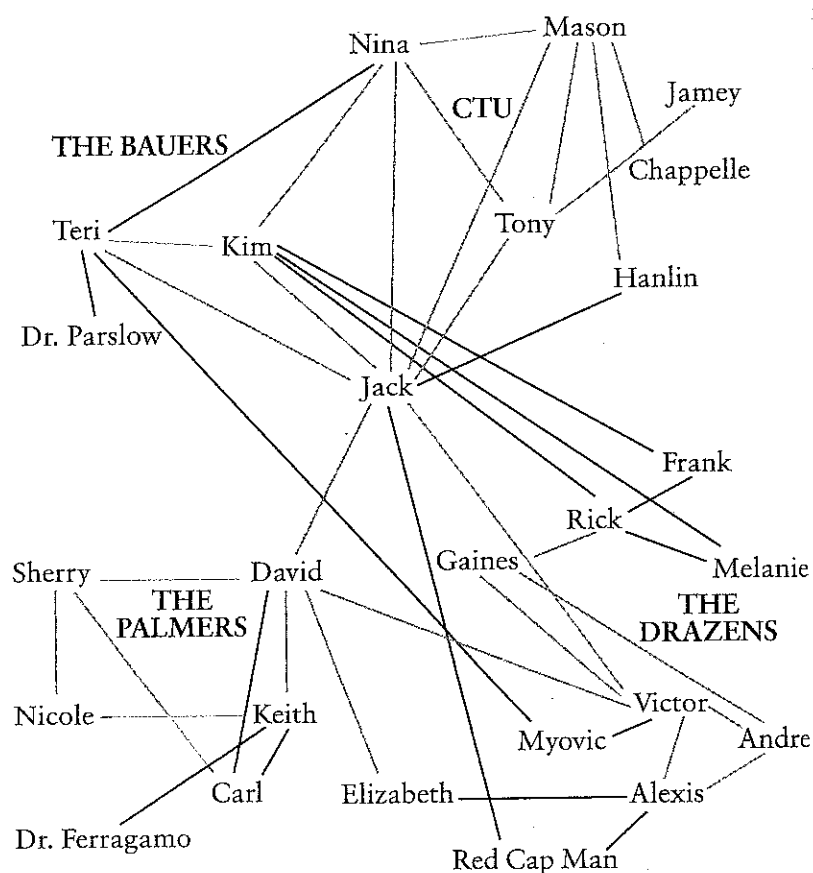
A few regular characters orbit at the periphery of this constellation: the farmhand Ray, the Ewing nemesis Cliff. Each episode introduces a handful of characters who play a one-time role in that week's plotline and then disappear from the network. In this episode, "Black Market Baby," the primary structure of the narrative is a double plot: the competition between the two brothers to have a baby and give the family patriarch a long-overdue grandchild. Imagined purely in narrative terms—along the lines of our *Sopranos* and *Hill Street*—this would be a relatively simple structure: two plot-lines bouncing back and forth, overlapping at a handful of key moments. But viewed as a social network, it is a more nuanced affair:



The lighter lines represent a social relationship that you must grasp to make sense of the episode's plot: you need to understand that the patriarch Jock doesn't approve of Pam's decision to go into the workforce and delay having a baby, just as you need to understand the longstanding rivalry between Bobby and JR in several crucial scenes with the entire family. The darker lines represent social relationships that trigger primary narrative events: when JR intervenes to pay the surrogate mother Rita to leave the state, thereby squelching Sue Ellen's adoption plan, or when Sue Ellen has a drunken night of passion with Ray.

Most of us don't think of these social networks in explicitly spatial terms while we watch TV, of course, but we do build working models of the social universe as we watch. The visualizations help convey in a glance how complex the universe is. And a glance is all you need to see—in the chart on page 112, of a season-one episode of the FOX series 24—that something profound has happened to the social complexity of the TV drama in the past thirty years.

Season one of 24 is ultimately a narrative web strung between four distinct families: the hero Jack Bauer and his wife and daughter; the family of the threatened senator, David Palmer; the family of the Serbian terrorist Victor Drazen; and the informal family of coworkers at the Central Terrorism Unit, where Bauer works. (This last functions as a family not just because they live in close quarters together, but also because the office dynamics include two



significant romantic dalliances.) Again, I have represented social connections that are relevant to the episode's plot in the lighter lines, and relationships crucial to the plot in darker lines. By every conceivable measure, *24* presents at least three times as complex a network as *Dallas*: the number of

characters; the number of distinct groups; the connections between characters, and between groups; the number of relationships that are central to the episode's narrative. The social world of *Dallas* is that of an extended family: the primary players are direct relatives of one another, and the remaining characters have marginal roles. *24*, on the other hand, is closer to the scale of a small village, with four rival clans and dozens of links connecting them. Indeed, the social network of *24* mirrors the social network you frequently encounter in the small-town or estate novels of Jane Austen or George Eliot. The dialogue and description are more nuanced in those classic works, of course, but in terms of the social relationships you need to follow to make sense of the narrative, *24* holds its own.

Watch these two episodes of *Dallas* and *24* side by side and the difference is unavoidable. The social network of *Dallas* is perfectly readable within the frame of the episode itself, even if you haven't seen the show before and know nothing of its characters. The show's creators embed flashing arrows throughout the opening sequence—an extended birthday party for the family patriarch, Jock—that laboriously outline the primary relationships and tensions within the family. Keeping track of the events that follow requires almost no thought: the scenes are slow enough, and the narrative crutches obvious enough, that the modern television fan is likely to find the storylines sluggish and obvious. Watch *24* as an isolated episode and you'll be utterly baffled

by the events, because they draw on such a complex web of relationships, almost all of which have been defined in previous installments of the series. Appropriately enough for a narrative presented in real time, *24* doesn't waste precious seconds explaining the back story; if you don't remember that Nina and Tony are having an affair, or that Jack and David collaborated on an assassination attempt against Drazen, then you'll have a hard time keeping up. The show doesn't cater to the uninitiated. But even if you *have* been following the season closely, you'll still find yourself straining to keep track of the plot, precisely because so many relationships are at play.

The map of *24*'s social network actually understates the cognitive work involved in parsing the show. As a conspiracy narrative—and one that features several prominent “moles”—each episode invariably suggests what we might call phantom relationships between characters, a social connection that is deliberately not shown onscreen, but that viewers inevitably ponder in their own minds. In this episode of *24*, Jack Bauer's wife, Teri, suffers from temporary amnesia and spends some time under the care of a new character, Dr. Parslow, about which the viewer knows nothing. The show offers no direct connection to the archvillain, Victor Drazen, but in watching Parslow comfort Teri, you compulsively look for clues that might connect him to Drazen. (The same kind of scrutiny follows all the characters at

CTU, because of the mole plot.) In *24*, following the plot is not merely keeping track of all the dots that the show connects for you; the allure of the show also lies in weighing *potential* connections even if they haven't been deliberately mapped onscreen. Needless to say, *Dallas* marks all its social relationships with indelible ink; the shock of the “Who shot JR?” season finale lay precisely in the fact that a social connection—between JR and his would-be assassin—was for once *not* explicitly spelled out by the show.

Once again, the long-term trend of the Sleeper Curve is clear: one of the most complex social networks on popular television in the seventies looks practically infantile next to the social networks of today's hit dramas. The modern viewer who watches *Dallas* on DVD will be bored by the content—not just because the show is less salacious than today's soap operas (which it is by a small margin) but because the show contains far less *information* in each scene. With *Dallas*, you don't have to think to make sense of what's going on, and not having to think is boring. *24* takes the opposite approach, layering each scene with a thick network of affiliations. You have to focus to follow the plot, and in focusing you're exercising the part of your brain that maps social networks. The content of the show may be about revenge killings and terrorist attacks, but the collateral learning involves something altogether different, and more nourishing. It's about relationships.



## THE INTERNET

VIEWERS WHO GET LOST in 24's social network have a resource available to them that *Dallas* viewers lacked: the numerous online sites and communities that share information about popular television shows. Just as *Apprentice* viewers mulled Troy's shady business ethics in excruciating detail, 24 fans exhaustively document and debate every passing glance and brief allusion in the series, building detailed episode guides and lists of Frequently Asked Questions. One Yahoo! site featured at the time of this writing more than forty thousand individual posts from ordinary viewers, contributing their own analysis of last night's episode, posting questions about plot twists, or speculating on the upcoming season. As the shows have complexified, the resources for making sense of that complexity have multiplied as well. If you're lost in 24's social network, you can always get your bearings online.

All of which brings us to another crucial piece in the puzzle of the Sleeper Curve: the Internet. Not just because the online world offers resources that help sustain more complex programming in other media, but because the process of acclimating to the new reality of networked communications has had a salutary effect on our minds. We do well to remind ourselves how quickly the industrialized world has embraced the many forms of participatory electronic media—from

e-mail to hypertext to instant messages and blogging. Popular audiences embraced television and the cinema in comparable time frames, but neither required the learning curve of e-mail or the Web. It's one thing to adapt your lifestyle to include time for sitting around watching a moving image on a screen; it's quite another to learn a whole new language of communication and a small army of software tools along with it. It seems almost absurd to think of this now, but when the idea of hypertext documents first entered the popular domain in the early nineties, it was a distinctly avant-garde idea, promoted by an experimentalist literary fringe looking to explode the restrictions of the linear sentence and the page-bound book. Fast forward less than a decade, and something extraordinary occurs: exploring nonlinear document structures becomes as second nature as dialing a phone for hundreds of millions—if not billions—of people. The mass embrace of hypertext is like the *Seinfeld* "Betrayal" episode: a cultural form that was once exclusively limited to avant-garde sensibilities, now happily enjoyed by grandmothers and third-graders worldwide.

I won't dwell on this point, because the premise that increased interactivity is good for the brain is not a new one. (A number of insightful critics—Kevin Kelly, Douglas Rushkoff, Janet Murray, Howard Rheingold, Henry Jenkins—have made variations on this argument over the past decade or so.) But let me say this much: The rise of the Internet has challenged our minds in three fundamental and



related ways: by virtue of being participatory, by forcing users to learn new interfaces, and by creating new channels for social interaction.

Almost all forms of online activity sustained are participatory in nature: writing e-mails, sending IMs, creating photo logs, posting two-page analyses of last night's *Apprentice* episode. Steve Jobs likes to describe the difference between television and the Web as the difference between lean-back and sit-forward media. The networked computer makes you lean in, focus, engage, while television encourages you to zone out. (Though not as much as it used to, of course.) This is the familiar interactivity-is-good-for-you argument, and it's proof that the conventional wisdom is, every now and then, actually wise.

There was a point several years ago, during the first wave of Internet cheerleading, when it was still possible to be a skeptic about how participatory the new medium would turn out to be. Everyone recognized that the practices of composing e-mail and clicking on hyperlinks were going to be mainstream activities, but how many people out there were ultimately going to be interested in publishing more extensive material online? And if that turned out to be a small number—if the Web turned out to be a medium where most of the content was created by professional writers and editors—was it ultimately all that different from the previous order of things?

The tremendous expansion of the blogging world over

the past two years has convincingly silenced this objection. According to a 2004 study by the Pew Charitable Trust, more than 8 million Americans report that they have a personal weblog or online diary. The wonderful blog-tracking service Technorati reports that roughly 275,000 blog entries are published in the average day—a tiny fraction of them authored by professional writers. After only two years of media hype, the number of active bloggers in the United States alone has reached the audience size of prime-time network television.

So why were the skeptics so wrong about the demand for self-publishing? Their primary mistake was to assume that the content produced in this new era would look like old-school journalism: op-ed pieces, film reviews, cultural commentary. There's plenty of armchair journalism out there, of course, but the great bulk of personal publishing is just that, *personal*: the online diary is the dominant discursive mode in the blogosphere. People are using these new tools not to opine about social security privatization; they're using the tools to talk about their lives. A decade ago Douglas Rushkoff coined the phrase "screenagers" to describe the first generation that grew up with the assumption that the images on a television screen were supposed to be manipulated; that they weren't just there for passive consumption. The next generation is carrying that logic to a new extreme: the screen is not just something you manipulate, but something you project your identity onto, a place to work through the story of your life as it unfolds.

To be sure, that projection can create some awkward or unhealthy situations, given the public intimacy of the online diary, and the potential for identity fraud. But every new technology can be exploited or misused to nefarious ends. For the vast majority of those 8 million bloggers, these new venues for self-expression have been a wonderful addition to their lives. There's no denying that the content of your average online diary can be juvenile. These diaries are, after all, frequently created by juveniles. But thirty years ago those juveniles weren't writing novels or composing sonnets in their spare time; they were watching *Laverne & Shirley*. Better to have minds actively composing the soap opera of their own lives than zoning out in front of someone else's.

The Net has actually had a positive lateral effect on the tube as well, in that it has liberated television from attempting tasks that the medium wasn't innately well suited to perform. As a vehicle for narrative and first-person intimacy, television can be a delightful medium, capable of conveying remarkably complex experiences. But as a source of information, it has its limitations. The rise of the Web has enabled television to offload some of its information-sharing responsibilities to a platform that was designed specifically for the purposes of sharing information. This passage from Postman's *Amusing Ourselves to Death* showcases exactly how much has changed over the past twenty years:

Television . . . encompasses all forms of discourse. No one goes to a movie to find out about government policy or the latest scientific advance. No one buys a record to find out the baseball scores or the weather or the latest murder. . . . But everyone goes to television for all these things and more, which is why television resonates so powerfully throughout the culture. Television is our culture's principal mode of knowing about itself.

No doubt in total hours television remains the dominant medium in American life, but there is also no doubt that the Net has been gaining on it with extraordinary speed. If the early adopters are any indication, that dominance won't last for long. And for the types of knowledge-based queries that Postman describes—looking up government policy or sports scores—the Net has become the first place that people consult. Google is *our* culture's principal way of knowing about itself.

The second way in which the rise of the Net has challenged the mind runs parallel to the evolving rule systems of video games: the accelerating pace of new platforms and software applications forces users to probe and master new environments. Your mind is engaged by the interactive content of networked media—posting a response to an article online, maintaining three separate IM conversations at the same time—but you're also exercising cognitive muscles

interacting with the *form* of the media as well: learning the tricks of a new e-mail client, configuring the video chat software properly, getting your bearings after installing a new operating system. This type of problem-solving can be challenging in an unpleasant way, of course, but the same can be said for calculus. Just because you don't like troubleshooting your system when your browser crashes doesn't mean you aren't exercising your logic skills in finding a solution. This extra layer of cognitive involvement derives largely from the increased prominence of the interface in digital technology. When new tools arrive, you have to learn what they're good for, but you also have to learn the rules that govern their use. To be an accomplished telephone user, you needed to grasp the essential utility of being able to have real-time conversations with people physically removed from you, *and* you had to master the interface of the telephone device itself. That same principle holds true for digital technologies, only the interfaces have expanded dramatically in depth and complexity. There's only so much cognitive challenge at stake in learning the rules of a rotary dial phone. But you could lose a week exploring all the nooks and crannies of Microsoft Outlook.

Just as we saw in the world of games, learning the intricacies of a new interface can be a genuine pleasure. This is a story that is not often enough told in describing our evolving relationship with software. There is a kind of ex-

ploratory wonder in downloading a new application, and meandering through its commands and dialog boxes, learning its tricks by feel. I've often found certain applications are more fun to explore the first time than they actually are to use—because in the initial exploration, you can delight in features that are clever without being terribly helpful. This sounds like something only a hardened tech geek would say, but I suspect the feeling has become much more mainstream over the past few years. Think of the millions of ordinary music fans who downloaded Apple's iTunes software: I'm sure many of them enjoyed their first walk through the application, seeing all the tools that would revolutionize the way they listened to music. Many of them, I suspect, eschewed the manual altogether, choosing to probe the application the way gamers investigate their virtual worlds: from the inside. That probing is a powerful form of intellectual activity—you're learning the rules of a complex system without a guide, after all. And it's all the more powerful for being fun.

Then there is the matter of social connection. The other concern that Net skeptics voiced a decade ago revolved around a withdrawal from public space: yes, the Internet might connect us to a new world of information, but it would come at a terrible social cost, by confining us in front of barren computer monitors, away from the vitality of genuine communities. In fact, nearly all of the most hyped

developments on the Web in the past few years have been tools for augmenting social connection: online personals, social and business network sites such as Friendster, the Meetup.com service so central to the political organization of the 2004 campaign, the many tools designed to enhance conversation between bloggers—not to mention all the handheld devices that we now use to coordinate new kinds of real-world encounters. Some of these tools create new modes of communication that are entirely digital in nature (the cross-linked conversations of bloggers). Others use the networked computer to facilitate a face-to-face encounter (as in Meetup). Others involve a hybrid dance of real and virtual encounters, as in the personals world, where flesh-and-blood dates usually follow weeks of online flirting. Tools like Google have fulfilled the original dream of digital machines becoming extensions of our memory, but the new social networking applications have done something that the visionaries never imagined: they are augmenting our people skills as well, widening our social networks, and creating new possibilities for strangers to share ideas and experiences.

Television and automobile society locked people up in their living rooms, away from the clash and vitality of public space, but the Net has reversed that long-term trend. After a half-century of technological isolation, we're finally learning new ways to connect.

## FILM

HAVE THE MOVIES UNDERGONE an equivalent transformation? The answer to that is, I believe, a qualified yes. The obvious way in which popular film has grown more complex is visual and technological: the mesmerizing special effects, the quicksilver editing. That's an interesting development, and an entertaining one, but not one that is likely to have a beneficial effect on our minds. Do we see the same growing narrative complexity, the same audience "filling in" that we see in television shows today? At the very top of the box office list, there is some evidence of the Sleeper Curve at work. For a nice apples-to-apples comparison, contrast the epic scale and intricate plotting of the *Lord of the Rings* trilogy to the original *Star Wars* trilogy. Lucas borrowed some of the structure for *Star Wars* from Tolkien's novels, but in translating them into blockbuster space epic, he simplified the narrative cosmology dramatically. Both share a clash between darkness and light, of course, and the general structure of the quest epic. But the particulars are radically different. By each crucial measure of complexity—how many narrative threads you're forced to follow, how much background information you need to interpret on the fly—*Lord of the Rings* is several times more challenging than *Star Wars*. The easiest way to grasp this is simply to re-