

# Hypercasting

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## 1. The story so far

Everything is changing. Everything has changed. Everything always changes, but at times that change is particularly pronounced and thus specifically noteworthy. For media— which is the topic du jour— this is so plainly obvious that any attempt to refer to the “before” time has an almost archeological feel, as though we must shovel carefully through layers of dirt to uncover how media worked just a few year ago. These transformations have been seismic, and singular. There is no going back.

But what, exactly, has happened?

The revolution we glimpsed in 1994, when the rough beast of the Web, its hour come at last, made the earth tremble, seducing and subsuming us into its ever-broadening expanse, fell back, for a brief while, into patterns more established and more familiar. We glimpsed a utopia; then a fog rose, and the vision faded. We endured half a decade of stupidity, cupidity and the slow strangulation of dreams. We longed for communion; we got DVD players delivered in under an hour. Fortunately, the network accelerates everything it embraces, and what might have taken a generation in earlier times took just five years to run its course, from Netscape to Razorfish, and the lunar crater of NASDAQ seemed to spell the final doom of all our hopes. The Web, people loudly proclaimed, was so over.

Silly humans.

During those first five years, we learned just how different network economics could be; not just in theory, but in practice. We learned that the essence of the digital artifact is that it exists to be copied. Like a gene in the Cambrian seas of the early Web, information was copied and recopied endlessly. John Perry Barlow’s *Declaration of the Independence of Cyberspace* was one of the first such objects, spread via email and website until it became nearly impossible to ignore. More recently, Cory Doctorow’s lecture on DRM for Microsoft Research— in text, Pig Latin and video versions— has been passed around like a cheap two-dollar...well, you know. Each of these digital artifacts eventually reached nearly every single individual who might find them interesting, because, as they were copied and read, forwarded and linked to, each of the human nodes in this network made a decision that this information was important enough to share. In the networked era, salience is the only significant quality of information. For that reason, it was only a matter of time until the technologies of the network would reinforce this natural tendency, and accelerate it.

So even as the Web died, it was reborn. The top-down design of a hundred centralized sources of information evolved into seven hundred million peers. From each according to their ability, to each according to their need. Feeds replaced websites, and torrents replaced streams. The revolution we had fleetingly glimpsed had finally— blessedly— arrived.

But one man’s blessing is another’s curse.

The network revolution presented incredible opportunities to anyone working in the media industries. Suddenly, it became possible to reach massive audiences, unbounded by proximity. But instead of reinforcing the previous structures of media ownership and information distribution, the network has consistently undermined them. Mention Craigslist to a newspaperman, and watch as the color drains from their face. Casually drop BitTorrent into a conversation with a studio executive, and observe as they choke back their rage. The network carries within it the seeds of their destruction. And they're absolutely, utterly, completely powerless to stop it.

This would be a sad story if professional media had not willingly cooperated in their own demise. The technologies of the digital era were simply too tempting to be ignored, too important to the bottom line. But the network has its own economics, and quickly overcomes or blithely ignores any attempt to subvert its innate qualities. Film studios make the majority of revenues from DVD distribution of their productions, but that same DVD, because of its essentially digital nature, can be copied and recopied endlessly, at no cost. If it is salient, it will be copied widely. That's not just a horror story: that's the law.

And if you don't want your film copied? Well then, you have to resort to antique production technique. Make sure it's shot to film stock, physically edited (good luck finding an editor who prefers a Steenbeck to an Avid) and graded— with no digital intermediates— then projected in an exhibition space where every audience member has been subjected to a humiliating physical search of their bodies. If you did that, you'd kill piracy. Probably. Of course, you'd also kill your exhibition revenues. But the studios (and the record companies, and the broadcasters, and the book publishers) want to have it both ways, want the benefits of digital distribution, all the while denying the essential quality of the medium— it exists to be copied.

But all of this noise about the approaching end of copyright obscures a more salient point: the barriers of distribution have utterly collapsed. Anyone can send anything to everyone, everywhere, at little or no cost. The tribulations of the largest of the professional media producers are simply the canary in the coal mine; they're the most sensitive to the economics of a distribution system that has kept them alive and well-fed for a hundred years. Now that those economics have irrevocably changed, the entire business of professional media production is threatened.

## II. stupid is the new black

Behold: I bring tidings of the second dot-com boom. Stupid is back!

That, at least, is the message from a hundred insta-pundits, on the business pages of newspapers, in blogs, and countless analysts' reports. The entire world seemed shocked by the entirely expected purchase of video-sharing site YouTube by Google for 1.65 billion dollars. It's a bad deal, some say, doomed to fail. It isn't worth it. It'll bring Google crashing back to earth with endless litigation from the copyright holders who have just been waiting for someone with deep enough pockets to sue.

Feh.

What most everyone overlooked— as it happened the very same day as the Google purchase— were the licensing agreements YouTube struck with Universal, Sony BMG, and CBS. Together with their earlier deal with Warner, YouTube now has a deal with every major music publisher in the world. YouTube will now figure out how to share the revenues it will be generating with Google's advertising technology with all of the copyright holders whose materials end up on YouTube.

Some pundits— most notably, Mark Cuban— have indicated that only a moron would buy You-

Tube, because it's widely believed that YouTube has built its business entirely upon the violation of copyright. Certainly, YouTube established its reputation with a specific piece of video owned by someone else— a digital short from NBC's Saturday Night Live, *Chronic Sunday*. That video— viewed millions of times before NBC rattled its legal saber and the content was removed— introduced most users to YouTube. In the year since *Chronic Sunday*, YouTube has become a clearing house for the funniest bits of video content produced by other companies, from segments of *The Daily Show with Jon Stewart*, to *South Park*, to *Family Guy* to *The Simpsons*. Why has YouTube become the redistributors of these clips? Because none of the copyright holders made an effort to distribute these clips themselves. YouTube has been acting as an arbitrageur of media, equalizing an inequity in the market place— and getting very rich in the process. It may be copyright violation, but the power of the audience is far, far greater than the power of the copyright holder. YouTube could delete every clip uploaded in violation of copyright— to some degree they do— but if you have a few thousand people uploading the same clip, how do you stay ahead of that? Even YouTube itself is subject to the power of its audience. And if they become draconian in their enforcement of copyright— which is a possible outcome of the Google purchase— they will simply force the audience elsewhere, to other sites. Better by far to strike a deal with the copyright holders, so that they receive recompense for their efforts. NBC has started to distribute *Saturday Night Live's* digital shorts on its own website; ABC and FOX offer full streaming versions of their programs; everyone is queuing up to sell their TV shows on iTunes. Is this a willing transition? Probably not. Minutes spent in front of the computer are minutes lost to television ratings. But if the copyright holders don't distribute their content as widely as possible, someone else will. YouTube has proven this point beyond all argument.

Cuban believes that YouTube will die without a steady stream of content uploaded in violation of copyright. But if recent history is any guide, the studios are now falling over each other in their eagerness to do a deal, and share some of that money. The simultaneity of the Google purchase and the YouTube deals with the recording industry are not accidental; they're indicative of a great sea-change. Big media has swallowed the bitter pill, and realized that they've lost control of distribution. Now they'll try to make money off of it.

But Cuban makes another, and more damning point: he says that no one wants to watch the little hand-made videos which make up the vast majority of uploads to YouTube. This is the Big Lie of Big Media: if it isn't professionally produced, the audience won't watch it. No statement could be more mendacious, no assertion could be further from the truth. As a film producer and broadcaster, Cuban certainly hopes that audiences will always prefer professional content to amateur productions, but there's no evidence to support this position— and rather a lot which counters it. The success of *Red versus Blue*, *Homestar Runner*, *Happy Tree Friends*, and *The Show with Ze Frank*— each of which command audiences in the hundreds of thousands to millions— prove that audiences will find the content which interests them, and share that content with their friends, using the hyperdistribution techniques enabled by the network that ensure these audiences can get what they want— from anyone, anywhere, at any time— with a minimum of difficulty. These productions lie completely outside the bounds of "professional" media; they are "amateur," not in the sense of raw, or poorly produced, but because they have turned their back on the antique systems of distribution which previously separated the big boys from the wannabes.

A perfect example of this transition can be seen in a video on YouTube by the Australian band Sick Puppies. Shot by the band's drummer, it features a well-known character, Juan Mann, who inhabits Sydney's Pitt Street mall, bearing a sign reading "Free Hugs." The band befriended this unlikely character, and shot hours of video of him at work, giving free hugs to passers-by. While in Los Angeles, pursuing a recording deal, the drummer cut his footage into a three minute film, then added one of the band's songs "All The Same" as a temp track. Thinking to share his work around, he uploaded the

video to YouTube on the 26th of September, and told his friends. Who told their friends. Who told their friends. YouTube is particularly good at “viral” distribution of media— it’s the one thing they’ve gotten absolutely right— so, within three week’s time, that little hand-made video had been viewed well over three million times. Sick Puppies are now on the map; their music video has given them a worldwide fan base. A debut album on a major label— expected early next year— will complete their transformation from amateurs to professionals.

Salience determines whether an audience will gather around and share media, not production values. In the time before hyperdistribution, audiences had a severely limited pool of choices, all of them professionally produced; now the gates have come down, and audiences are free to make their own choices. When placed head-to-head, can a professional production of modest salience stand up against an amateur production of great salience? Absolutely not. The audience will always select the production which speaks to them most directly. Media is a form of language, and we always favor our mother tongue.

The future for YouTube lies with the amateurs, not with the professionals. Cuban misses the point entirely, assuming that the audience will behave as it always has. But this is not that audience; this is an audience which has essentially infinite choice, and has come to understand that the sharing of media is an act of production in itself— that we are all our own broadcasters.

And you’d have to be a moron to miss that.

### III. The epidemiology of cool

We know why YouTube has had such an incredible string of successes; the site makes it easy to share a video with your friends, and for those friends to share that videos with their friends, and so on. The marketers call this “viral distribution,” but we know it by another and rather more prosaic name— friendship. As an inherently social species, we are constantly reinforcing the our social connections through communication. It could be an IM, a text message, an email, a phone call, or a video— it’s all the same to the enormous section of our forebrains that we use to process the intricacies of our social relationships. We share these things to tell our friends that we’re thinking of them— and, rather more competitively, to show our friends that we’re on the tip. Each of us are coolfinders (some of us do it professionally), and we each keep a little internal thermometer which measures our own cool against that of our peers. That innate drive to be recognized for our tastes has been accelerated to the speed of light by the network. Now, even as we coolfind, we are constantly inundated and challenged by the coolfinding of our peers. It’s produced a very healthy, if ultra-Darwinian, ecology of cool. Our peers are the selection pressure as we struggle to pass our memes on to the next generation.

Thus far, we’ve done this on our own, with very little assistance from the wealth of computing machinery which crowds our lives. We create ad-hoc solutions for media distribution: mailing lists, websites, podcasts— each of these an attempt to spread our ideas more successfully. But they’re held together tenuously, only by our constant activity, busy bees maintaining the cells of our hive. And it’s a lot of work. We’re forced to do it— forced to run the race, lest we be overrun by the memes of others— but we’ve reached the one practical limit: time. No one has enough time in the day to keep up with all of the information we should be absorbing. We can filter ruthlessly— and perhaps miss out on something we’ll regret later— or declare email bankruptcy, like Lawrence Lessig, or just withdraw to an ever-more-specialized domain of coolfinding. And we are doing each of these things, every day, under the pressure of all this information.

There’s got to be a better way.

In the early years of the 19th century, farmers in western Pennsylvania kept their wagon wheels

greased with puddles of bubbling muck that studded the countryside. Although useful, the puddles were a toxic nuisance to livestock. If the farmers could have rid their lands of these puddles, they likely would have. A half a century later, western Pennsylvania became a boomtown, built on its substantial petroleum reserves. The bubbling muck had immense value— but it had to wait for the demands of the kerosene lamp and the internal combustion engine.

In the early years of the 21st century, we each generate an enormous amount of interaction data— every click on a computer, every email sent or received, every website visited, every text message, every phone call, every swipe of a credit card or loyalty card or debit card, every face-to-face interaction. None of it is recorded— or at least, it's not recorded by any of us, for any of us (though the NSA has expressed some interest in it)— because it hasn't been seen as valuable. It's bubbling up through all of us, and around all of us, as we create data shadows that have grown longer and longer, resembling Jacob Marley's lockboxes and chains, rattling throughout cyberspace.

All of that information is worth more than oil, more than gold. And all of it is sadly— almost obscenely— dropped on the floor as soon as it is created. If we're lucky, it is deleted. If we're unlucky, someone uses it to create a digital simulacrum, and we find our identities hijacked. But in no case is this information ever exposed to us, for our own use. We're told it has no value to us, and— so far— we've been stupid enough to believe it.

But now, just now, economic forces are linking the persistence of our data shadows to our ability to filter the avalanche of information which characterizes life in the 21st century. Turns out this data guck is good for more than greasing the wheels of commerce. These data shadow glow with the evanescent echo of our real social networks— not the baby steps of MySpace and Friendster— but the real ground-truth interactions which reveal ourselves and our relations one to another. It is human metadata. And it is the most valuable thing we've got, now that there's demand for it.

YouTube records every email address you use to forward a video to a friend. It uses these, at present, to do auto-completion of addresses as you type them in. It also presents a friendly list of these addresses, to make forwarding all that much easier. What they're not doing— at least, not visibly, and very likely not at all— is keeping any record of what I sent to whom, nor when, nor why. Yet every video forwarded through YouTube is forwarded for a reason— salience. YouTube could record those moments of salience, could use them to build a model, a data shadow, which could reinforce your own ability to make decisions about who should see what. It might even, to some degree, automate that process. When you add to this the newly emerging capabilities of analytic folksonomy— comparing a user's tag clouds against the tag clouds of others within their social network— certain other relationships and affinities emerge. Again, these relationships can be used to improve the capability of the system to help find, filter and forward relevant videos. This is how a social network really works. It's not about having 500 first-degree friends in MySpace. It's about listening to your naturally occurring social network to direct, improve, and accelerate information flow. When the brand-new power of the individual as broadcaster is reified by the capabilities of computing machinery to listen to and model our interactions, the result is hypercasting. This is what media distribution in the 21st century is inevitably hurtling toward, driven by the natural selection of steadily increasing informational pressure.

Hypercasting solves some lingering questions confronting us. The first and most important of these is: How will we figure out what to watch now that we've got a near-to-infinite set of choices? We'll rely on the recommendation of our friends, as we always have, but now these recommendations will be backed up by a hypercasting system which will invisibly and pervasively keep track our interests, the points of interest we hold in common with our friends, our communities, our families, and our co-workers. It will not be automatic— no one really wants to see some out-of-control hypercasting system deluge us with video spam— but it will be so tightly integrated into our interactive experiences that it will barely register on our perceptions. We'll simply come to

expect that our iPods, our Media Centers, our PSPs and our mobiles are loaded up and ready for us, with things we're sure to find compelling. Addiction to television will soar to new highs, a new crop of amateurs— millions of them— will find successful and lucrative careers in media production, and advertisers, as always, will find a way to spread their messages. On the surface, things will look much as they do now, but everything will move at a more rapid clip. Videos will fly across the world in seconds, not days, and a global audience of a million will gather in moments. Almost accidentally, this will change news reporting forever, as citizen journalism becomes a real threat to established media companies, and their utter undoing. Shouldn't the *New York Times* be subject to the same pressures as NEWS Corporation?

Is YouTube the harbinger of the transition to hypercasting? The lead is theirs to lose. GooTube delivers over half of all videos seen on the Internet. They have the cash and the brainpower to transform broadcasting into hypercasting. And they have to worry about the next set of 20-somethings, in a garage, working on the Next Big Thing. Those kids, nurtured by YouTube, know just what's wrong with it, and how to make it better. YouTube faces its own selection pressures, which will only increase as it grows exponentially and cuts content deals and just tries to keep the whole centralized mess up and running.

Yet it doesn't matter. We have seen birth and death, and thought they were different. But the death of the Web brought a new kind of life, a vitality and surefootedness suppressed during the years of MBAs and crazy business plans and IPOs. Perhaps history is repeating itself, as everyone goes wild with another case of gold fever, and we'll lose the plot again. In that case, we should be glad of another death.

Hypercasting might need to wait a few years, for a platform very much like a fully mature Democracy DTV— or something we haven't even dreamt up. It may be that YouTube will disappoint. But that doesn't mean anything at all. YouTube isn't driving the evolution toward hypercasting. The audience is. And the audience— in its teeming, active, probing billions— always gets whatever it wants. That's the first rule of show business. ▣

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