

## What Technology Wants

75 Anniversary Issue of *The Hollywood Reporter* on "The Future of Entertainment"

The desire to hear a well-told story will never leave us. But the way in which stories are created and delivered will change immensely in the next 20 years. These changes, although birthed in culture, are ultimately driven by technology. What will entertainment technology look like in 20 years? Let's listen to what technology says.

First, technology has no preference between real and simulations. Neither will our stories. The current distinction between biological actors and virtual actors will cease, just as the distinction between real locations and virtual locations has almost gone. The choice will simply come down to what is less expensive. In fact in 20 years the equation will flip, and story-tellers might use a real location primarily because it is more expensive to do so. A future criticism might be that a director used a live real location simply because it was possible.

Further virtual sets don't necessarily mean that they will be photorealistic. Once simulated locations are indistinguishable from "real" sets, they no longer have to prove anything. This will tend to make sets, like paintings, become more abstract, fanciful, and non-photographic because the real world can't. We'll move into an impressionistic period in cinema, where real becomes hyperreal as a way to distinguish the made from the born. We already see a bit of this in the underground movement to craft movies within video games. Twenty-somethings who are listening to the technology are producing weekly shows using the characters and sets in XBox games, or PC games. They write a script and employ easily directed figures in the detailed ready-made world of Halo or The Sims, and are happy to have it look different.

The blur between real and simulated will continue to blur the line between documentary and fiction. As straight documentaries continue to surge in popularity in the next 20 years, so will hybrids between fiction and non-fiction. We'll see more reality shows that are scripted, scripted shows that run out of control, documentaries that use actors, actors that are robotic creations, news that is staged, stories that become news, and the total collision and marriage between fantasy and the found.

The most obvious effect of this shift will be visible in the craft of visual storytelling -- what we know as movies and TV. The fact of capturing something on film is no longer the final step, but only the first step in fantasy. Images are like paint, to be finessed and redone, to be layered and bent and shaped just like words. They can be edited at any time, in multiple editions, in multiple versions. Films and shows are no longer monuments but processes without end. Technology turns all nouns into verbs.

Second, technology wants to be free. Not free as in free beer, but free as in freedom, to quote Richard Stallman, a digital pioneer. Technology wants content to migrate merrily, to be liquid, to be portable between devices, to be manipulated by the users and audience, to be linked, tagged, commented, categorized, collected, annotated, and deeply participatory. As iTunes proved, the great advantage of digital music was not that it was free (as in beer) but that it was wrapped in the free (of freedom) for users to create playlists, to link cover art, to sample it, to email it, to ENGAGE the content. We are entering into a regime where technology encourages participation. The more that customers participate in the creation at hand, the more they want. This makes some artists and publishers who were comfortable with the previous notion of

fixed monumental art quite nervous because participation is a new way, a seemingly extreme way. But what technology wants is maximum flexibility and liquidity. Fans want a hand in the creation, if only to trade annotated screen credits, swap early drafts of the script, or produce their own alternative scenes. The revolution in digitalization, both in production and distribution, accelerates the freedom of content and the culture of participation.

Third, the reach of participation will turn the audience into producers. That idea was laughable until the rise of blogs. Twenty years ago, the worried were wringing their hands over the death of reading and writing, how TV had killed the alphabet, and made kids illiterate. Now, every second another person will begin writing a daily blog. The audience is prosumer. Will that happen with much-harder-to-create video and music? Yes. Technology is making it easier and easier to whip up visuals as fast and cheaply as words. Good stories are just as hard to complete, but bad stories will be amazingly easy to produce. Prepare yourself for a two-decade great flood of really bad movies -- and some of the best stuff ever produced by humans.

Third, technology wants to fill in all the times. The two-hour movie and half-hour TV show are legacies from the scarcity of distribution. We should expect to see more great works at the scale of music videos, 3-minute shorts, or 15-minute serials (at the short end) and interminable seven-part epics (at the long end). Think of any duration other than the half-hour unit, and now imagine a flood of creations filling that niche -- made possible by the freedom of the niche-rich "long-tail" distribution.

Forth, technology is universal. Global piracy is a symptom of success in how universal the ubiquity of technology has become. Kids around the world are eating the same foods, listening to the same music, watching the same films, studying the same subjects in school, and packing the same technology. Different languages, but one technology. The most interesting films in the next 20 years will be made wherever there is the least resistance to new technology. That may be China, or India, or maybe even California.

This page was last modified on Thursday, September 22, 2005