

Exploiting Celebrity to Produce Delight in Multimedia Tools

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People love watching TV and going to the movies. This is great news for multimedia researchers because it guarantees that new content will constantly be developed. In fact, we can see this in the explosion of new cable and satellite channels and in the growing use of video clips such as movie trailers, news stories, and so on for the growing broadband Web community. This explosion of content has primed the consumer market for real-world applications to quickly grow out of our research tools. For the last several years, researchers have explored how to extract content from the visual, audio, and transcript domains and how to integrate the results in robust retrieval applications. However, one question that rarely gets addressed in the research is, Why do people love to consume TV programs and movies?

Current research places the goal of understanding stories as our horizon—a goal we take one small step toward with each new technique and improved tool such as algorithms for identifying actors, shots, locations, objects, and summarization of events. But maybe we're pursuing the wrong goal, walking toward the wrong horizon.

In addition to understanding stories, we should also address how audiences react to stories. We should look past trying to understand what content creators are saying. Every day, content creators push their traditional production tools to capture, entertain, inform, and delight. We should focus on discovering what choices content creators have made through composition, color, movement, and audio, as well as why they made these choices. We need to consider how an audience might react to the new media and the new story tools we create. Knowledge of viewers' reactions will guide us in building more relevant tools for segmenting and indexing content and tools that can even assist content cre-

ators in developing new content. By better understanding viewers' reactions, we can personalize the media consumption experience. Then by focusing on what viewers enjoy, we increase the chances that our research findings will quickly transform into commercial products and services.

One critical element in viewers' enjoyment that I find particularly interesting comes from the celebrities that inhabit the content. Celebrities offer a gateway by which viewers vicariously participate in stories. Actors on the screen offer viewers a chance to live a hundred different lives. Viewers can pick and choose scenarios they enjoy, which lift them out of their ordinary existence. Viewers develop strong attachments to and relationships with the people and the characters they see onscreen. These relationships become a starting place for exploring how multimedia research can create new pleasurable viewing experiences.

Celebrity classification

The explosion in mass communication and communication technologies has given rise to a similar explosion in the number and type of celebrities. Before photographic reproduction, radio, movies, television, and the Internet, celebrities as we know them today didn't exist. Societies had mythical local celebrities (heroes and villains), but they existed on a much smaller level because of the limited number of people exposed to any one character. Today, media connects millions of people through the shared experience of consuming celebrities. Every day, we see familiar faces on magazine covers, on TVs, at the movies, and on the Internet. Working at local, national, and global levels, celebrities have become a common link. They shape social communities made up of people who have never met each other, but share a common experience

through the content they've consumed. Celebrities quite literally are the content that people consume.

In his 1961 book, *The Image: A Guide to Pseudo-Events in America* (Harper and Row, 1961), social historian Daniel Boorstin defined celebrities as people well known for their "well-knownness." He considered the scripted and directed lives celebrities presented to Americans on TV and in movies as dangerous because of their complete lack of reality. While holding a cynical view of their role in society, he did manage to capture the very essence of celebrity. It doesn't matter if people love or hate the person they see on the screen. It's only important that they remember that person. Celebrities aren't the most talented actors, musicians, athletes, or spokespeople. They're instead people with the most stage presence, people that resonate with an audience. In psychological terms, celebrities are the people that cause strong arousal, regardless of valence.

Jib Fowles' book, *Starstruck: Celebrity Performers and the American Public* (Smithsonian Institution Press, 1992), offers a more detailed view of top-shelf celebrities. He writes about "Star Village," a place where the 100 most popular celebrities live in the American consciousness. Star Village contains actors, musicians, athletes, and comedians who can be identified by 95 percent of the American public. These 100 top stars fall into a small set of archetypal categories. For example, Sylvester Stallone, Clint Eastwood, and Arnold Schwarzenegger all point to the male aggressor archetype. In Fowles' celebrity model, new stars emerge by either displacing current stars within a single archetype, or by generating a new archetype that society wants or needs. He believes that celebrities benefit society by making people feel better about themselves and that this benefit more than outweighs the payoff celebrities receive in money and adulation.

Both Boorstin and Fowles present the classical view of celebrity. However, a more expanded view benefits multimedia researchers. I propose the following three models:

- celebrity performer,
- celebrity character, and
- synthetic celebrity.

Celebrity performers, like Fowles' model, are actors that play characters across many roles. I

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call this the Tom and Tom Model for the celebrity performers Tom Cruise and Tom Hanks. Tom Cruise always plays a character I think of as "the best." He appears as the best teenager (best at having fun while his parents are away) in *Risky Business*. He plays the best fighter pilot in *Top Gun*, the best race-car driver in *Days of Thunder*, the best bartender in *Cocktail*, the best brother of a person with autism in *Rainman*, the best spy in both *Mission Impossible* movies, and he will appear soon as the best Samurai in *The Last Samurai*. While he has played many characters during his acting career, these characters all have strongly similar characteristics that go well beyond his physical appearance. Audiences resonate with his portrayal of an archetype. It's a portrayal that's so popular that people going to see a Tom Cruise movie know exactly what to expect.

Tom Hanks offers a similar example—almost always playing an "ordinary guy" who experiences extraordinary events. He's an ordinary guy who meets a mermaid in *Splash*, he's an ordinary gay lawyer who sues his own firm in *Philadelphia*, he's an ordinary kid who suddenly becomes an adult in *Big*, he's an ordinary astronaut who has a disastrous flight to the moon in *Apollo 13*, he's an ordinary prison guard who witnesses healing miracles in *The Green Mile*, he's an ordinary man of limited intelligence who leads an extraordinary life in *Forrest Gump*, and he's an ordinary FedEx employee who must learn to live alone on a desert island in *Cast Away*. Like Tom Cruise, Tom Hanks offers a consistent portrayal of an archetype embodied in various roles that audiences gravitate toward. They enjoy seeing him because he makes it easy for viewers to imagine

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these events happening to themselves.

While Tom and Tom illustrate how successful celebrities often appear as the same character, the celebrity character model grows out of multiple embodiments of the same character by different actors. James Bond presents a good example. In this case you have more than five actors who have embodied this character onscreen over a 40-plus-year span. The tuxedo wearing, gun toting, martini drinking character is strong enough to encompass the many faces and voices that have taken his name. In addition, viewers speak of the character in the same way they speak of more traditional celebrities. For example, when people say they're going to see a James Bond movie, it has the same communicative value as when they say they're going to see a Tom Cruise or Tom Hanks movie.

The character of James Bond has become a celebrity over time. Viewers identify with the persona more than they do with the actor who provides the more transient face and voice. The character celebrity has become more evident of late with the penchant for both movie sequels and remakes and as more story lines move between movie and TV formats. Additional examples include *Batman*, played by more than four different actors on TV (Adam West) and in three movies (Michael Keaton, Val Kilmer, and George Clooney); Elliot Ness from *The Untouchables*; any of the "Angels" from *Charlie's Angels*; and Tom Clancy's character Jack Ryan from *Patriot Games* (Harrison Ford), *The Sum of all Fears* (Ben Affleck), and *The Hunt for Red October* (Alec Baldwin).

In addition to celebrity performers and celebrity characters, researchers should consider synthetic celebrities. Synthetic celebrities are celebrities with less human instantiation than celebrity performers and characters. Lara Croft, a human character controlled by players in the video game series *Tomb Raider* offers a good example. Even before Angelina Jolie played this role on the movie screen, Lara Croft had the trappings of a real celebrity, appearing on the cover of magazines and in fictional stories generated by fans. Animated characters evoke almost identical reactions from audiences as actors on the screen, allowing some to ascend to celebrity. As further proof, consider the fact that Elmo (a *Sesame Street* puppet controlled and voiced by a person) testified to the House Subcommittee on Labor, Health, and Human Services Reform in support of music education. Appearing onscreen as a character and resonating with an audience transforms performers, fictional characters, and even animated characters into celebrities who bring delight to viewers.

Celebrity appeal

People create celebrities to fulfill a need for relationships. Since the early 1950s when televisions rapidly began entering homes, social scientists have looked at parasocial relationships—that is, relationships that develop between viewers and the people/characters they see onscreen. Celebrities, experienced almost exclusively through media, offer safe, one-way relationships where viewers can pick and choose who they like and who they identify with. The viewers remain in full control, selecting and dropping celebrities at will. In *The Media Equation: How People Treat Computers, Television, and New Media Like Real People and Places* (Cambridge University Press, 1996), Byron Reeves and Clifford Nass theorize that viewers react to people they see on TV in much the same way they react to people they meet in real life. They claim that millions of years of human-to-human interaction forms the basis for our recent interactions with people on a screen. Repeated viewing of the same person leads us to believe we really know the people onscreen.

Several years ago while working in a video-editing suite, I experienced the subtle power of screen-based relationships. A colleague was editing an industrial video consisting of interviews. I had my back to him, working on an unrelated animation, but occasionally I would hear some

dialogue and see some of the footage as I moved around the room. A few days later I encountered one of the interviewees on the street and greeted her with a friendly, "Hello, Marge." She looked at me puzzled and meekly offered a hello in return. I suddenly had the embarrassing revelation that I didn't know her at all. Seeing and hearing her on a TV tricked me into thinking not only that I knew her but also that she knew me. However, the influence of a celebrity is much stronger than simply seeing someone onscreen, because the audience gets to select the celebrity who they wish to be or be with.

Fans build relationships with celebrities by first selecting content to consume. Repeated consumption builds a bridge, making fans think they really know the celebrity. Fans can then increase this relationship by imagining themselves in the stories they see or by fantasizing new stories. Generally, fans play one of two roles. They either inhabit the persona of the celebrity to vicariously live out the viewed experiences (be the celebrity), or they fantasize scenarios where they interact with the celebrity (be with the celebrity). For example, a fan might imagine herself as Buffy, from the TV show *Buffy the Vampire Slayer*, saving her friends by using her extraordinary powers to fight off demons. Examples of this behavior appear daily, every time you see someone repeating a favorite line while imitating a character's voice. A fan might also fantasize about an encounter with an actor or character based on a situation she has seen onscreen or one of her own making.

Fans deepen their parasocial relationships by letting themselves be influenced or caught up in the culture of the characters they play. Generally, this influence falls into lifestyle categories. For example, fans might adopt a hairstyle, food preference, wardrobe, and so on. Adopting lifestyle choices not only reinforces the relationship, but it also allows fans to publicly state their identification with different celebrities. It's a way they can quickly communicate to other people and a method they use for rapidly developing easily identifiable social networks. Advertisers have known about this influence for years and have exploited it through celebrity endorsement and product placement. Anecdotal evidence includes increased sales of Ford Broncos after the televised O.J. Simpson police chase and increased sales of Bern 10 handguns after Don Johnson started using one on the TV show *Miami Vice*.

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Opportunities for multimedia research

Some early examples into the use of celebrity in multimedia include Video Scout and InfoSip (projects I collaborated on while at Philips Research) and the Ask Einstein project developed by Carnegie Mellon's School of Computer Science (<http://websi-01.ci.cs.cmu.edu/index.htm>). Video Scout lets viewers stalk celebrities within their TVs. By creating an interface element called a TV magnet, viewers can instruct their personal video recorders (PVRs) to record every program their favorite celebrities appear in. In addition, the system can extract clips containing or referring to their favorite celebrity from programs such as talk shows and TV news. InfoSip, on the other hand, links celebrities in narrative programs and movies with related Web content. This tool seeks out the freshest data such as filmographies, biographies, and rumors for all actors in narrative programs stored on a PVR. When viewing, if users see an actor they recognize or an actor that they're interested in, they can access the Web data via a remote control. Both Video Scout and InfoSip let viewers grow parasocial relationships by offering additional celebrity consumption opportunities.

The Ask Einstein application lets users ask Einstein questions in a synthetic interview. In response to questions, the system plays back video clips of an actor playing the role of Einstein from a large database of answers. Letting users form their own questions leaves them free to generate their own experience. This application lets users further their parasocial relationship by simulating a "be with the celebrity" fantasy. This direction is ripe for synthetic celebrities who can be made to say and do almost anything the user desires. In addition,

synthetic celebrities offer the chance to move beyond the one-way relationship viewers currently enjoy to richer one-way plus relationships. Instead of fans only consuming celebrity content, synthetic celebrities can use profiling techniques to get to know individual fans on a personal level and use this information to generate a more personal relationship. For example, synthetic celebrity users interact with through their television and can observe which programs are watched. If for example, the synthetic celebrity observes that a user always watches a certain sports team, they can infer the user is a fan. In a future interaction, the celebrity might share this observation by either asking the user to verify this fact or by even stating his or her own allegiance to the observed team. This more personal level of interaction with the celebrity can significantly increase viewers' enjoyment and delight over the traditional one-way model.

In addition to the examples mentioned here, focus on celebrities in multimedia research offers opportunities in the area of content understanding, social interaction, and story generation. Focusing on celebrities in content understanding can shift the focus from finding objects to discovering effect, such as screen presence. By examining low-level features, can we discover when audiences begin resonating with a specific actor or character? If so, this information would be of huge value to content creators using any of the three celebrity models. Researchers can also explore how actors "play to type." Classifying content that contains instances of Tom Cruise playing "the best" as opposed to playing "against type" (not the best) can aid viewers in more careful selection of content. This information is also quite valuable in generating new relationships between different pieces of content. It helps refine application features such as finding similar content. Instead of comparing actors' names and genres to generate a matching list, a better understanding of the character and the audience's reaction to the character can help generate more granular matches.

Celebrities currently offer strong opportunities for social networks. Viewers often use the Web, chat rooms, and even more traditional methods such as conventions to connect with other fans. Multimedia research can offer opportunities for more finely tuned connections. Instead of simply linking viewers who like a single celebrity, movie, or TV show, multimedia allows matching at a subshow or clip level. Viewers can select more granular items that they

identify with and use these preferences to both meet others and to share with others their favorite small encounters. Instead of just publicly stating their affiliation with a celebrity, more granular content-level access helps users refine their identification with celebrities. They can identify with individual scenes, or pieces of scenes, or even specific elements of a character that are expressed in small parts of a larger piece of content.

Finally, exploration of celebrities can help automate story generation. For me, the goal of multimedia research is more than understanding stories. I see the end goal as the ability to generate new stories, and the ability to understanding stories is a first step. By better understanding how a story affects an audience, we can create tools to help content creators better share their vision. For example, researching how archetypical characters work across a large volume of content can help identify patterns that would benefit content creators and automatic content generation. Content creators can observe patterns in the types of characters that successfully go together. By watching for changes over time, they can begin to explore new patterns that may resonate with future audiences.

Final thoughts

The goal of multimedia research ought to be more than just understanding and classifying content, more than finding goals in a soccer match, or detecting jokes in a situation comedy. The real goal should be to merge the understanding of stories with the understanding of viewers' reaction to stories. This higher level representation will make multimedia tools more relevant in the long run because it considers both the what and the why of content. By understanding both the elements that make up stories as well as audience reactions, systems can move past simple classification to the more distant horizon of story creation. Exploring features surrounding celebrities takes a step in this direction. **MM**

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