

Future Arts, Media, and Entertainment: Seeds for 2020

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Introduction

The explosive, accelerating growth of knowledge in a rapidly changing and increasingly interdependent world gives us so much to know about so many things that it seems impossible to keep up. At the same time, we are flooded with so much trivial news that serious attention to serious issues gets little interest, and too much time is wasted going through useless information. How can we learn what is important to know to make sure that there is a good future for civilization? Traditionally, the world has gained access to most of its knowledge through the education systems, the arts, media, and entertainment. Today and into the future, information flow will be even more pervasive, with ever increasing communication technologies emerging on the landscape of experience. In 2007 The Millennium Project conducted a global assessment of some elements of the future of education and learning.¹ In 2011 the Millennium Project looked at the future of the arts, media, and entertainment. A distillation of the results is presented here.²

Clearly the arts, media, and entertainment have an enormous influence on people's worldview and, as a result, on the future. Every day the average global citizen watches 3.4 hours of television, listens to 2.2 hours of radio, uses the Internet 1.7 hours, reads magazines and newspapers for 1 hour, and watches 8.5 minutes of cinema.³ Our homes and workplaces are filled with art and various forms of media. And with the wireless revolution and smart phones, media is an ever-present reality for an increasing number of citizens. Not only can these powerful tools of transformation inform and influence humanity's understanding of itself, they can also aid in the evolution of society by inspiring visions, disseminating information, and catalyzing actions that address the 15 Global Challenges identified by the Millennium Project in the *2011 State of the Future*.

With thousands of global channels to choose from plus the Internet, social media, mobile phones, computer tablets, games, and a proliferation of new media technologies, it is essential that we become media literate and also create from a new socially beneficial awareness. While there has been tremendously powerful media created in the past, there is so much potential that we have yet to tap through the intentional use of these powerful creative tools to educate and address pressing issues facing humanity. The 15 Global Challenges and the solutions offered in the *2011 State of the Future* can inspire and inform artists, content creators, and those working

in these fields to create art, content, and stories that transform when distributed to the masses.

Inspired by the Florentine Camerata Society, a sixteenth-century “think tank” responsible for the creation of the art form we know today as the European opera, The Millennium Project created a new Node, a Global Arts and Media Node. Under the leadership of arts and media professionals and educators dedicated to a more positive future, this Node is responsible for tracking and reporting on the latest trends in the arts and media as well as serving as a resource for artists, content creators, and media makers interested in creatively advocating solutions to the 15 Global Challenges found in this report.

Futuristic innovators around the world were invited to suggest and discuss future elements or seeds of the future in the arts, media, and entertainment. After a month of online discussions, 34 elements were chosen and put into a Real-Time Delphi for an online international assessment. Several of the seeds chosen are new trends and technologies that are emerging in the media and entertainment landscape. Other seeds are topical and related to the use of the arts, media, and communications technologies. Writers, producers, performing artists, arts/media educators, and other professionals in entertainment, gaming, and communications were nominated by the 40 Millennium Project Nodes around the world to share their views. They were asked how likely it was that each element or seed might become dominate by 2020. They were also asked how important these seeds are for achieving the best for civilization and if they were or would be interested in developing the seed with other elements of the future. About 250 people from 33 countries signed on to the study. Of these, over 150 provided at least one response. This 60% response rate is fairly representative of similar studies.

An example of the questionnaire for 2 of the 32 elements:

Questionnaire



	Questions	Likelihood	Importance	Comments
1	 <p>Cyber-Tachno Classical (Blending Classical Arts and Futuristic Technologies)</p> <p>click here for example click here for example</p>	<p>Please enter the probability that this seed of the future will grow into a dominant form in popular media by 2020 (100=certain)</p> <p><input type="text" value="85"/></p> <p>Changes are OK Average= 64.4 (133)</p> <p>Submit only this cell <input type="button" value="go"/></p> <p>Reasons for your answer - click here</p>	<p>How important will this be in achieving the best for civilization? (100 = hugely: 1 = not at all).</p> <p><input type="text" value="40"/></p> <p>Changes are OK Average= 47.9 (124)</p> <p>Submit only this cell <input type="button" value="go"/></p> <p>Reasons for your answer - click here</p>	<p>Are you or would you like to be involved in developing this seed with other futuristic seeds? Please explain.</p> <p>To proceed to the answer form please click here</p>
2	 <p>"Holographic" Performances (live performance of virtual characters - digital puppetry)</p>	<p>Please enter the probability that this seed of the future will grow into a dominant form in popular media by 2020 (100=certain)</p> <p><input type="text" value="58.4"/></p> <p>Average= 58.4 (113)</p> <p>Submit only this cell <input type="button" value="go"/></p> <p>Reasons for your answer - click here</p>	<p>How important will this be in achieving the best for civilization? (100 = hugely: 1 = not at all).</p> <p><input type="text" value="42.3"/></p> <p>Average= 42.3 (106)</p> <p>Submit only this cell <input type="button" value="go"/></p> <p>Reasons for your answer - click here</p>	<p>Are you or would you like to be involved in developing this seed with other futuristic seeds? Please explain.</p> <p>To proceed to the answer form please click here</p>

Figure 1. Questionnaire

The results are displayed on the following four pages, listed in order of likelihood of becoming a dominant form by 2020.

1. Multi-touch Displays



Likelihood: 91.18, Importance: 63.54
Example: http://www.ted.com/talks/jeff_han_demos_his_breakthrough_touchscreen.html

2. Electronic Publishing



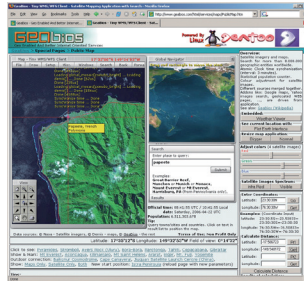
Likelihood: 89.09, Importance: 76.92
Example: <http://shelf-life.ew.com/2009/10/01/what-is-a-vook-and-will-it-change-how-you-read>

3. Augmented Reality: (Overlays & Geotagging)



Likelihood: 87.82, Importance: 68.85
Example: <http://www.mirror.co.uk/news/technology/2009/12/02/twitter-360-geo-tagging-augmented-reality-app-released-115875-21868106/>

4. Geographical Information Systems (GIS) - Advanced geographic mapping, visualization & augmentation.



Likelihood: 87.80, Importance: 72.45
Example: http://www.ted.com/talks/blaise_aguera.html

5. Convergence of Computer/Mobi Content on Television



Likelihood: 86.39, Importance: 60.54
Example: http://www.youtube.com/watch?v=14hnh8yy_H4

6. Ubiquitous Computing (tracking tags embedded into everyday products/objects/appliances)



Likelihood: 85.70, Importance: 60.06
Example: http://www.youtube.com/watch?v=2I3T_kLCBAw

7. Digital/Social Networking for Cultural Diplomacy & Change



Likelihood: 85.31 Importance: 82.68
Example: <http://gephi.org/2011/the-egyptian-revolution-on-twitter/>

10. Social/Global advocacy through storytelling



Likelihood: 78.65 Importance: 73.77
Example: <http://www.grist.org/article/2011-01-27-how-to-get-tv-shows-to-tell-truth-about-climate-change>

8. User Generated Content Technologies providing Democratization of Content Creation



Likelihood: 82.58 Importance: 74.88
Example: <http://www.lulu.com>

11. Interactive Displays (gesture-based user interfaces)



Likelihood: 78.35 Importance: 56.70
Example: <http://www.youtube.com/watch?v=GmqJr2ijKI0>

9. Telepresence (virtual teleportation using immersive cameras and displays)



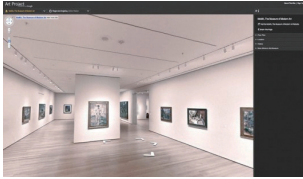
Likelihood: 81.49 Importance: 73.59
Example: http://www.youtube.com/watch?v=refNC_x0VvE

12. Media/Arts for Cultural Diplomacy and Change



Likelihood: 77.17 Importance: 75.52
Example: <http://www.socialchangeilmfestival.org>

13. Virtual and 3D Art Exhibits/ Collections/Museums



Likelihood: 75.78 Importance: 56.28
Example: <http://www.googleartproject.com>

14. Photogrammetry and Gigapixel Panoramic Imaging; Extracting 3D models or ultra-high-resolution images of spaces



Likelihood: 75.08 Importance: 56.08
Example: <http://www.photogrammetry.com/>

15. Media literacy



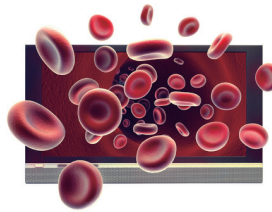
Likelihood: 75.03 Importance: 76.41
Example: <http://www.medialiteracy.com/>

16. Multiplayer Online Virtual Worlds



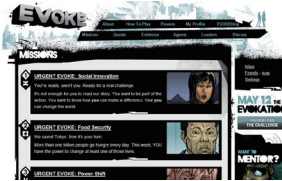
Likelihood: 73.03 Importance: 48.67
Example: <http://www.virtualworldsreview.com/info/categories.shtml>

17. Autostereo (glasses-free) 3D Displays



Likelihood: 72.79 Importance: 44.30
Example: <http://www.magnetic3d.com/>

18. Serious Games (Cyber games to educate & solve world problems)



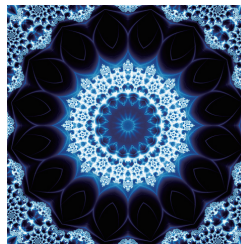
Likelihood: 72.50 Importance: 74.39
Example: <http://www.urgentevoke.com>

19. Augmented Reality: Third-Person Augmented Reality



Likelihood: 68.95 Importance: 51.47
Example:
<http://www.iphoneness.com/iphone-apps/best-augmented-reality-iphone-applications/>

20. SciArt (art inspired by science)



Likelihood: 64.81 Importance: 58.52
Example: <http://artsci.ucla.edu/>

21. Cyber-Techno Classical (Blending Classical Arts & Futuristic Technologies)



Likelihood: 64.49 Importance: 47.97
Example: <http://www.youtube.com/watch?v=D7o7BrlbaDs>

24. Location-based group interactive video games



Likelihood: 63.64 Importance: 47.42
Example: <http://www.youtube.com/watch?v=y6izXII54Qc>

22. User-Based Content Creation (i.e. cinematography) within Virtual Worlds (called Machinima)



Likelihood: 64.29 Importance: 50.36
Example: <http://www.machinima.com/>

25. Domes, Planetariums and 360 Immersive Cinema



Likelihood: 61.79 Importance: 48.39
Example: <http://vimeo.com/6988758>

23. Media/Arts/Cyber Healing



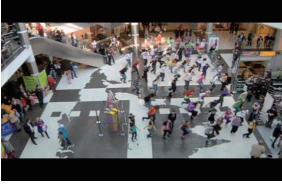
Likelihood: 63.85 Importance: 62.45
Example: <http://www.uclartsandhealing.net/background.aspx>

26. Augmented Reality: Architectural Projection Mapping



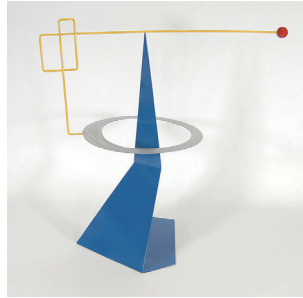
Likelihood: 60.82 Importance: 49.74
Example: <http://www.fuelyourcreativity.com/architectural-projection-mapping-the-future-of-motion-graphics/>

27. Performance in Public Spaces/ Flash Mob Art



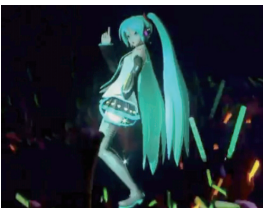
Likelihood: 60.42 Importance: 52.52
Example: <http://www.youtube.com/watch?v=SXh7JR9oKVE>

30. Kinetic Art



Likelihood: 54.93 Importance: 37.64
Example: http://www.kinetica-museum.org/new_site/home.php

28. “Holographic” Performances (digital puppetry)



Likelihood: 58.34 Importance: 42.45
Example: <http://www.youtube.com/watch?v=G-AhYnjKEzs>

31. Technoetic arts



Likelihood: 52.93 Importance: 47.02
Example: <http://wn.com/Technoetic>

29. ARG: Alternative Reality Games and Experiences



Likelihood: 57.39 Importance: 44.05
Example: <http://www.youtube.com/watch?v=7iti8Ivy--s>

32. Eyeware and Head-Mounted Displays (HMD)



Likelihood: 52.82 Importance: 37.94
Example: <http://www.sensics.com/>

Table 1 *TOP 6 seeds in order of importance*

Seed Topic	Importance		Likelihood	
	Rank	Average	Rank	Average
Digital/Social Networking for Cultural Diplomacy and Change	1	82.69	7	85.31
Electronic Publishing (Vooks or video books)	2	76.93	2	89.09
Media literacy (consumer awareness regarding media creation, content, language, business, etc.)	3	76.41	15	75.03
Media/Arts for Cultural Diplomacy and Change	4	75.52	12	77.17
User Generated Content Technologies providing Democratization of Content Creation (i.e. print on demand, do-it-yourself/DIY)	5	74.88	8	82.58
Serious Games (Cyber games to educate and solve world problems)	6	74.39	17	72.5

When analyzing the results of the seeds in terms of “how important these seeds are to humanity” versus the “likelihood that they would happen,” it is critical to note that of the top six seeds participants felt were important, only one seed was in the top 10 of those most likely to become popularized. While the other five were considered important for the future, they were also considered less likely to become popular. The study and subsequent studies like it are important in that they helps us identify areas of the arts and media that are deemed important to humanity but are in greater need of attention, visibility, or support. These seeds include:

- Digital/Social Networking for Cultural Diplomacy and Change
- Media Literacy
- Media/Arts for Cultural Diplomacy and Change
- User Generated Content Technologies providing Democratization of Content Creation (i.e., print on demand, do-it-yourself)
- Serious Games (cyber games to educate and solve world problems).

Of these, Media/Arts for Cultural Diplomacy and Change, Media Literacy, and Serious Games received the lowest likelihood ratings, indicating that they are fertile areas most worthy of support.

In reviewing the top six seeds in order of importance, “social networking for cultural change” has by far the highest ranking, indicating a need to more thoroughly evaluate this methodology for its ability to influence future trends. Also of high value is the interest in more-accessible digital content (e.g., published books) and content that is user-generated. Media literacy places high enough in the rankings that consideration should be given to enacting strong evaluations of how we are teaching it both in the classroom and to adults. Serious gaming and socially beneficial storytelling/content creation are both at high importance value as well, indicating that intentional use of these technologies is likely to yield a greater degree of societal change. Societal change can be maximized by a concerted effort to strategically design media and the arts to be effective tools of personal, social, and

global transformation.

Narrative Inputs

One distillation of the many views by the participations about the future of arts, media, and entertainment is that it will be global, participatory, tele-present, holographic, augmented reality conducted on next-generation mobile smart phones and immersive screens that engage new audiences in the ways they prefer to be reached and involved.

For each of the 32 seeds, respondents were asked to provide reasons for their quantitative responses and to describe the extent of their current or future involvement in the various seeds/items presented in the questionnaire.

Nearly a hundred pages of comments were received. The complete text of all the responses appears in Chapter 13 of the *2011 State of the Future CD*. This section provides a distilled flavor of them in italics:

“Merging of technology and art appears a given. The quality will be in proportion to the genius applied.... I already compose with collaborators via the Internet and want to be part of a virtual choir like Aurumque! It makes room for the spiritual/energy connection between participants, since there is no physical contact to color the relationships. Of course singing in a choir or making music in person with others is the ultimate oxytocin rush and very satisfying as an artist, but virtual performances and concerts are definitely exciting and I can’t wait to be involved in one.

Not only will use of futuristic technologies keep the art forms relevant, they will add a fresh experience to the existing body of work created by artists. With older audiences dying out, creating experiences that will attract newer, younger audiences is important to keep creative companies thriving. And these new technologies can also make it possible for us to collaborate and create with artists globally. Use of holographic characters and performers may be a novelty and passing fad, but imagine if you could teleport a real-time performer, speaker, singer, dancer, and so on into a performance space in real-time?

We should develop this flash mob further for “achieving the best for civilization” because these flash mobs bring people together and create a sense of well-being, a sense of happiness. One could argue that it is a shallow sense, however in these hard times where disasters and inhumanity are frequent and will probably become more frequent, I am convinced that these quick, small gatherings where everyone is connected by movement, across language borders and across cultural borders, even for 10 seconds are of essential meaning for our future.

Electronic Publishing is fabulous and definitely here as the new way to read and interact in different mediums. I love the way you can link to others while reading and watching videos of scenes etc. This was all science fiction not long ago, and we’ve finally brought it into being. The only problem with electronics is that there is more unrecyclable waste, even though it cuts down on tree usage...we are now poised to see a second wave of enlightenment

inspired by the twenty-first-century version of the Gutenberg Press, the Internet and e-publishing...Achieving the best for civilization when it comes to electronic publishing I feel is a two-edged sword. As long as the current copyright regulations are in place, the west is well served with all sorts of knowledge. But how about access to knowledge in other countries? This is already a problem now, because e.g. libraries in third world countries have a hard time paying the licenses. If this is not improved, the electronic publishing will go ahead but it will not be achieving the best for civilization worldwide!

Games could assist in sensitizing people to alternative realities and ways of working towards those realities... So much of game-play is based on eliminating "the other;" to solve world problems, we will need to change that view into "each other as our self." ...Quite likely in the not so distant future a game developer will win the Nobel prize for peace...

Advances in neuroscience will allow a growing understanding about triggering specific mind states and hence develop the field of media/arts/cyber healing. This is already being used for neurofeedback devices to teach people how to entrain specific brain frequencies and has recently broken into the consumer market with the Jedi mind games for kids...Arts-based healing equals deeper-faster compared to traditional talk-based therapy (both are needed, however).

Skype can already allow a certain amount of "telepresence" at little or no cost. By 2020, driven by the costs of travel and the rapid deployment of new tools and capabilities in networking and display systems, this will be highly developed. Some offices and homes in 2020 will have rooms in which large-screen projectors line the walls and create a "holodeck" feel ala "Star Trek" (not that complete immersion, but a representation of it) and you can "transport" yourself to Hawaii or talk to grandma 1,000 miles away, visiting as if she's in the same room with you. We have the technology now to do this, but it's too expensive for consumer adoption... this form will be critical for building more peaceful relations among peoples.

Not only does telepresence technology provide businesses and organizations the ability to meet virtually, it is a technology that artists and creators can explore for group collaboration. Imagine attending a global orchestral performance of the greatest musicians from around the world performing virtually? The World Opera and You Tube Orchestra have been doing work that leads to greater experiments in this effort. This also provides a great opportunity for experiences that encourage cultural diplomacy.

The primary breakthrough in new eyeware and head-mounted displays will be contact lenses with nanobots creating overlay. Current HMD are still clunky and only appropriate for specialty use. Such contact lenses have already been developed in first gen experiments.

"Dumbing down" the user interface makes it less useful to power

users who are most likely to be able to innovate and invent new things if they continue to have the most latitude possible. While there's no doubt that multi-touch displays have an advantage because they are intuitive, they can never possibly gain the nuances of control we already experience through current methods of accessing computing power in our large and small devices. Apple and other companies are using software and hardware design to move consumers into a realm in which they will be app-dependent, and while some applications will be "free," most will cost people something every time they choose to use them. The world is moving from freely available information on computers hooked up to information networks to a world of controlled appliances for which they must pay and pay and pay and pay. Apple's latest OS update, nicknamed Lion, is the company's move to get consumers into that controlled world and build up the company's profit-margin. This does create new jobs for applications developers, and monetizing the Internet in more direct ways creates more revenue flows, but the act of monetization politicizes the act of creation and drives people to impose more rules and build more bottlenecks and can cut the poor and uneducated out of the invention and innovation equation.

Many of these seeds of the future raise the question about what is really true. Will we be able to identify true history from reconstruction? When there are competing histories, who will be able to tell which is authentic?

We are seeing the collapse of the distribution system, allowing artists to enter the field as they will. Copyright issues notwithstanding, we are seeing a democratization of art.

Storytelling is the most powerful way to elevate human consciousness. If the story is engaging, people remember it forever and are changed as a result. We have scientific measures in published literature of the profound impact of TV health storylines on viewers' knowledge, attitudes, and behavior. These stories reach up to 20 million viewers in a single hour and up to 80 million viewers in the first week. The episodes later reach up to 400 million viewers in over 100 countries worldwide. When the content has social value, it is a service to humanity.

The way to partner with scriptwriters and producers is NOT through advocacy or "product placement." That is an old paradigm, and Hollywood's writers are allergic to it. I would change the wording of this question to "Social/Global enlightenment through storytelling (partnering with writers/producers to inspire and inform them to address topics of social concern accurately) and to link traditional media and new media in innovative and interactive ways."

In the realm of this Delphi, augmented reality will have quite a high impact compared with other choices. Just-in-time or real-time information can be life-saving in some situations, and it will certainly make a huge difference in informing people, providing them with needed economic, social, and political information on which to base decisions as they move from moment to moment in their daily lives.

The final column asked the question “Are you or would you like to be involved in developing this seed with other futuristic seeds?” The full text of the responses without attribution is in the Appendix of the *2011 State of the Future* CD. Here is a short distillation:

I am extremely interested in facilitating the merger of cyber-techno and classical arts; I believe the blend serves as an essential “bridge” between the real world and the cyber world; a bridge necessary to our continual evolution... definitely would like to be involved, as a director, in creating holographic experiences coupled with movion-based (Swedish equal shares), group interactivity with the projections...Being a composer, there are already a couple of songs I’d love to use in a flash mob. When workshops begin for the new musical I’m writing, which is about tapping into the abundant, positive, and powerful energy available to all humans, I’ll be looking for volunteers. ...Would like to participate in an event, especially in at-risk urban communities and in senior centers...Would love to participate in developing, participating, or tracking these flash mob seeds because I believe that anything we can do to foster bring people together is important for our future...there’s an obvious link to social media.

Aesthetic experience of global interdependency and harmony requires telepresence – happy to help get the arts more involved in this medium for simultaneous performances on a global basis... ubiquitous computing will be the tech support for the evolution of global consciousness. How well this evolution works will be dependent on how well mystics and technocrats cooperate to make it enlightening... I am leading this work now and urge the UN and others to partner with us. It is critical to separate advocacy of a particular governmental agency in the media from accurate portrayal in entertainment media of some of the most important issues of our time: health, climate change/environment, human rights, humanitarian aid, global leadership, peace/conflict transformation, spirituality, freedom of creative expression, global monetary systems.

Storytelling is the oldest form of education known to humanity, we must use it to tell the crucial stories of our time... certainly climate change is one of those. My research in the area of “evolutionary guidance media” suggests the importance of including data across 10 dimensions of human activity in our story & media creation if we are to more quickly promote planetary consciousness... Yes – this is one of my ultimate goals, to create and direct entertaining social/global advocacy and education media utilizing a number of the Delphi-listed media technologies in convergence.

The participants were also asked if there were any additional media/arts technologies, genres, or modalities that they feel are important that we should be tracking.

Transmedia – the combining of multiple creative practices on a diverse range of platforms for an interactive experience – is increasing ...Babel

Fish Smart phones...Perhaps the biggest transformation of the future will be started from the demise of the language barrier.

These media technologies have two important attributes: they make possible the construction of realistic alternate histories and others enhance the ability to persuade. Both are potentially dangerous. They lead to confusion about what is or was really true.

When artificial constructs are very good and indistinguishable from reality there will be two possible disasters. First, the constructs may be seen as good or better than the true world, and people, including poor people, may choose to live there and avoid reality. This happens now with Second Life. Could this become even more addictive when jobs are scarce and free time weighs heavily? Second, perhaps even more disturbing is the possibility of using these media technologies to construct artificial histories that are indistinguishable from real truths. Imagine the holocaust deniers building a Nazi history which omits the holocaust, or Apollo deniers building a site that shows how the lunar landing was faked in Utah: a fake of a fake.

In this era, who could say what was or is really true? Maybe there could be an incorruptible NGO that acts as a global authenticator.

Each of these technologies is fascinating in its own right, and each has the potential for beneficial impact. I believe what will be most interesting are the “mash-ups”—the convergence of a number of these technologies into singular media events/environments. Herein lies my primary focus – both as a forecaster and, mostly, as a creator.

And last, participants were asked if they would like to participate in future productions that integrate some of these seeds into new global arts/performances. A brief distillation:

I would love to participate in groups via cyber space to feed or review or suggest content from the 15 Global Challenges to arts/media groups... Flash Mob Art against poverty using Twitter and Facebook...I would like to participate in these global challenges... What we need are exchange programs, mentoring and coaching for artists, creative producers of contents, students and children. We need labs, beta areas, digital and virtual test-playgrounds to apply new ideas and concepts, to exploit the digital power to bring people closer together. Thanks for this great Real Time Delphi which really makes a difference!

Conclusions

As creativity and self-expression are inherent desires for all individuals, we will continue to see trends toward more immersive experiences, audience participation, fan-based contributions, smart gaming, socially beneficial storytelling, innovative ways to use the newly emerging technologies, and DIY and independently created intellectual properties that are developed through a more technically democratized

system of distribution. New screens and portals for delivering stories, media, and interactive experiences will continue to emerge, and a more “transmedia” approach to narrative development and distribution is emerging to exploit these new platforms.

Social media and digital media will continue to catalyze the expansion of “free speech” and be a tool to expose human rights violations and unjust governments, as we have seen in the Arab Spring-Awakening this year (using Twitter). With the proliferation of more media than ever, there should be an emphasis on media literacy being taught from an early age up into adulthood.

Traditional media will continue to evolve into and through new media platforms, but a solid “story” and narrative will always be at the heart of these experiences. Transmedia strategy will become the norm during development stages of media content, as the core intellectual property or story worlds will be developed with new distribution models and emerging portals of entry offering media makers and artists new access for expression and concertizing their concepts and creative properties. Cinemas will likely evolve to become local place-based transmedia distribution centers allowing greater immersion in visitors’ favorite stories through immersive cinemas, video game tournaments, immersive gaming pods, and regional alternate reality games. Electronic publishing and the nature of the book will evolve, and new authors will have the ability to become popular based on the quality of their content and their marketing efforts. Niche subject matters and audiences will proliferate as the Internet offers exposure for any topic or experience.

Games will continue to become a more popular platform for education and other applications in addition to serving as an entertainment art form.

As creator of the smart game EVOKE, author Jane McGonigal writes in her new book, *REALITY IS BROKEN— Why Games Make us Better and How they can Change the World*:

Gamers want to know: Where, in the real world, is that gamer sense of being full alive, focused and engaged in every moment? Where is the gamer feeling of power, heroic purpose, and community? Where are the bursts of exhilarating and creative game accomplishment? Where is the heart-expanding thrill of success and team victory? While gamers may experience these pleasures occasionally in their real lives, they experience them almost constantly when they’re playing their favorite games.

The truth is this: in today’s society, computer and video games are fulfilling genuine human needs that the real world is currently unable to satisfy. Games are providing rewards that reality is not. They are teaching and inspiring and engaging us in ways that reality is not. They are bringing us together in ways that reality is not.

The traditional, folk, indigenous, and classical arts will also benefit by combining new media technologies with traditional art forms in an effort to reach diverse new and global demographics. As an example, note that opera has reached new audiences through the digital distribution into theaters and the video projection accompanying it; classical music is also becoming popular and drawing in more diverse and younger audiences. With mobile technological advances, economically challenged individuals and cultures are also able to create content using mobile video cameras so that their culture and stories can also be expressed in a global

audience space.

Music, media, and the arts remain powerful tools for bridging cultures, sharing diverse values and perspectives, addressing conflict, educating, and ultimately creating new visions for a more evolved and peaceful civilization.

As we continue to explore and create these new emerging technologies and hybrids, let us combine this innovation with intelligent awareness, a passion for meaning, and global collaboration toward a more enlightened humanity. Let us discover and create a new “opera” in the spirit of a twenty-first-century Camerata and a better future for all.

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Notes

- 1 See 2011 State of the Future CD Chapter 10, Future Possibilities for Education and Learning by the Year 2030
- 2 Details are available in Chapter 13 of the 2011 State of the Future CD.
- 3 TGI Global Update, Issue 3, Summer 2009 (<http://globaltgi.com/knowledgehub/documents/TGIUpdate3.pdf>)

