The Fuji Declaration

Igniting the Divine Spark for a Thriving World

THE FUJI DECLARATION IN ACTION:
MEDIA

New Media for a New Future:
The Emerging Digital Landscape for a Planetary Society

by Bente Milton, Kingsley L. Dennis, and Duane Elgin

New Media for a New Future:

The Emerging Digital Landscape for a Planetary Society

Bente Milton, Coordinator - Denmark

Kingsley L. Dennis – Spain/UK

Duane Elgin – USA

Introduction

Since the beginning of the 21st Century especially the media landscape has undergone a profound transformation. The growth and spread of global communication technologies has helped to foster a new terrain - a new playing field - that supports a whole wealth of new actors and players who are participating in changing the face of our media landscape.

One of the most significant aspects is the transition from a top-down media landscape, dominated by major global media conglomerates, to a horizontal, distributed, and decentralized model. This new model encourages the participation of individuals from across the globe who would otherwise be excluded from the old model of media production and distribution. What is now emerging is a new superpower - one that is arising from the combined voice and conscience of the world's citizens mobilized through the revolution in global networks of communication.

In this report we aim to:

1) map the emerging media landscape

2) offer a longer-term view of how we see the influence and potential for transformational impact by the new media

3) reflect upon the obstacles in the merging of digital and physical lives

4) consider how this profound transition will re-write the narratives and stories that frame our own understanding as an emerging global species. Also, how the new emerging superpower of citizen-centered media is destined to re-write the script of the human story.

It is crucial we understand now this epochal transformation in order to co-participate and assist in the shift toward a more peaceful, equitable and interconnected planetary society. We begin by examining the systemic change of a media landscape in transition.

TABLE OF CONTENTS

Media in Transition

It was our ability to communicate that enabled us to evolve from awakening hunter-gatherers to the edge of a planetary, species-civilization, and it will be our ability to communicate that will enable us to make it through this time of challenging transition. To place this process in perspective, it is useful to step back and review the great revolutions that have brought us to this turning point in human history.

The *First Industrial Revolution* that began in Great Britain (1750-1850) revolutionized social, cultural, and economic conditions by shifting from the energy resource of wood to coal. The scope of communication was expanded with the invention of the first practical steam engines, roads and canals for travel. It was also the period when the telegraph was invented and brought into use.

The *Second Industrial Revolution* (1850-1920) marked the emergence of a significant shift in the way humans communicated on a more extensive scale. The early technologies of communication -- expanded telegraph, telephones, radio, and then the television -- brought the world even closer together. These new technologies of connectivity also triggered a reorientation in human perspective. A new perception of the dimensions of space and time gave birth to a consciousness that could now begin to look, reach out, and connect beyond the borders and horizons of the physical frontier. From these technological innovations arose an expanding commercial media landscape that blanketed much of the Earth. Understandably, it was not long before consolidation and centralization produced a close-knit handful of media empires.

The main players in this new late twentieth-century western media landscape were: Disney, News Corp, Time-Warner, Viacom, Vivendi Universal, and Bertelsmann.

The mainstream news media that is disseminated via the above media conglomerates is largely fed by two global news services; Reuters (now Thomson Reuters) and Associated Press. This constitutes a centralization of news gathering and dissemination.

Now, we are in the midst of a *Third Revolution—a Communications Revolution—*where a new form of participatory consciousness is arising among people that perceive a way of connecting that is more egalitarian and engaged. The earlier technologies of radio and television produced a passive *audience* through a one-way model whereby people were *consumers of information*. However, the new model of media is based upon people engaging as *prosumers -- as producers of their own content that is then published and disseminated through the distributed networks of our global communications.*

YouTube, Facebook, Twitter, blogging, podcasts, etc, are the platforms and channels of the new media landscape. These burgeoning media networks have matured tremendously over the past decade, spreading locally-produced content through the electronic nervous system of the planet . *A more mature form of collective social intelligence is beginning to*

manifest around the world as the shift increases from the consumption of information to the creation, production and participation in a more fluid, dynamic, and interactive mode of media. This game-change in how media is produced and published is already having a marked effect upon traditional media platforms. As Buckminster Fuller so aptly described - **"**You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.**"**

It is an error to think the communications revolution is primarily serving only developed nations. In many cases the reverse is in progress. This technological revolution has had some of its most startling impacts in empowering the poorer regions and peoples.

- In 2012 the planetary population was around 7 billion and the number of registered Internet users was 33% or approximately 2.3 billion people.

- By 2020 world population is estimated to be 7.8 billion and Internet users worldwide are estimated to be 66% or approximately 5.1 billion people -- that's a strong majority of the world's population with the potential for nearly 3 billion new people plugging in to the global conversation. *This is the foundation for an emerging superpower where planetary citizens have an unprecedented, collective voice—an "Earth Voice."*

Looking ahead only five years, nearly 3 billion new minds will be tapping in to the information flows—and that's billions of new creative problem solvers, innovators, and visionaries! What is more, the majority of these new minds will be coming online from Asia, the Middle East, and developing countries. These will be mostly young minds; and minds with necessities, with the urge for social betterment. A tribesman in Africa with a mobile phone now has access to better communications than did President Reagan 25 years ago. Furthermore, if they have a smart phone with Internet connections, they have better communications access than did President Clinton 15 years ago. This shows the power of exponential change.

What is more, it is the consciousness of the creative, young minds behind these technologies of communication that are the true source of power. Can we imagine the collective potential of these creative minds entering the new media landscape, many of them thinking outside of the old patterns and paradigms? Imagine living in a world where a few humans can touch the lives of millions. This world has already arrived!

Citizens living in poorer countries will be able to leapfrog over the previous industrial revolutions and jump directly into the digital age. As billions of people from developing countries become increasingly connected they will join with others through a vastly expanding array of citizen-centered media. In many ways, the established social order is little prepared for what lies ahead. They were already taken aback when the networked protests of the Arab Spring erupted in 2011. In today's digitally-connected world a single

individual can connect with and catalyze thousands, if not millions, of people around the world within this new landscape.

One example of digital empowerment involves Oscar Morales, a resident of Columbia, who one day felt so much anger against the FARC rebels (The Revolutionary Armed Forces of Colombia) of his native country that he decided to express himself. Late in the evening of January 4th, 2008 he created a Facebook page and named it "One million voices against FARC" (Un Millon de Voces Contra Las FARC). By 9 a.m. the next morning, he found that fifteen hundred people had already joined his group. By the late afternoon the group had grown to four thousand members. By the second day, the group not only had eight thousand members, but people were actively posting on the discussion board and seeking to connect with him physically and publicly. As a result of his catalytic posting, on February 4th 2008 – a mere four weeks after the group was begun – millions of Colombians marched throughout the country, and in major cities worldwide, to express their anger at FARC. In the space of a single month, one individual had catalyzed millions of people to come together in 27 cities in Colombia and 104 other cities around the world to march in empathy and solidarity.

As this example illustrates, a new superpower is emerging on the Earth. This new superpower is the combined voice and conscience of the world's citizens mobilized through the global communications revolution. Although often chaotic, fragmented, and confusing, the emergence of social movements such as 'Arab Spring' and 'Occupy' demonstrate to ordinary citizens that an individual voice can have a powerful collective impact, particularly when expressed with the maturity and dignity of non-violence.

A New Superpower — Creative Transformation through New Media

When the people of the Earth are not simply on the receiving end of media as a collective witness to climate disruption, intense poverty, genocide, etc., but also capable of offering a collective voice for change, then a new and powerful force for creative transformation is unleashed in the world

We are witnessing a metamorphosis which could be compared to the story of how a caterpillar transforms into a butterfly:

> *The caterpillars new cells are called 'imaginal cells.' They resonate at a different frequency and they are so different from the caterpillar cells that his immune system thinks they are enemies. But these new imaginal cells continue to appear. More and more of them, and pretty soon, the caterpillar's immune system cannot destroy them fast enough. The imaginal cells start to clump together, into friendly little groups. They all resonate together at the same frequency, passing information from one to another. After awhile, clumps of imaginal cells start to cluster together.*

*Then an amazing thing happens! A long string of clumping and
clustering imaginal cells, all resonating at the same frequency, and all
passing information from one to another there inside the chrysalis, starts
to create the wings of the butterfly.*

Thanks to communication capacities that are intensely interactive, highly intelligent, and virtually instantaneous, the citizens of the Earth now have the power to communicate together and express a shared vision for the future.

For the first time in human history, people from all over the world are acquiring a way to listen to and talk with one another as members of one family. As we start to connect with each other across continents, we begin to see that humanity has the potential for an evolutionary leap forward. However, having the technical ability to communicate with ourselves does not mean we will automatically do so. The question remains open as to whether we have the collective maturity to consciously seize this precious opportunity. It is imperative that we learn, and share, how to become conscious and responsible citizens of the planet.

The mass media are a primary window through which we see the world. If the mass media present diminished images of ourselves as isolated consumers who only want to be entertained, then we will tend to fulfill that self-image. However, if we see portrayals of ourselves as citizens of the Earth who are actively engaged in a heroic journey of transition, we will tend to fulfill that self-image. Because the mass media are so powerful in presenting and reinforcing our story and self-image as a species, it is critically important to use the dominant story telling machine of mass culture to tell ourselves bigger stories about where we are, who we are, and where we are going.

Learning to see ourselves in the collective mirror of the mass media is as important as learning to see ourselves in the mirror of our personal consciousness. Once there is inclusive and sustained social reflection, we can build a working consensus regarding appropriate actions for a promising future. We are a visual species; we cannot consciously build a positive future that we have not first *collectively* imagined. When we can see a sustainable and promising future, we can build it. Actions can then come quickly and voluntarily. Self-organizing actions will be vital to success, as hundreds of millions of people are being challenged to act in cooperation with one another. With local to global communication, we can mobilize ourselves purposefully, and each can contribute their unique talents to the creation of a life-affirming future.

At the very time that humanity requires a dramatic, new level of communication, the emerging media are making the world more transparent to itself. Particularly with the Internet, the world is bursting with conversations from the grass roots and bringing an entirely new layer of conversation and connection into global culture. Through the eyes of these new media, we can see climate disruption producing crop failures and famine in Africa, the destruction of rain forests in Brazil, coastlines eroding from hurricanes in the

United States, violent conflict fueled by religious differences in the Middle East, and the impact of fluctuating energy prices around the world. This new distributed media makes every person a global witness—a knowing and feeling participant in world affairs.

Although we now have access to the world more than ever before, we must be mindful of the weakness inherent in the very strength of the Internet. The vast outpouring of views and voices from the grass roots is flooding the Internet with an overwhelming and confusing avalanche of messages. Without a way to aggregate hundreds of millions of voices and views and discover an ongoing, working consensus, we will be paralyzed. Therefore, to combine our collective sentiments, we require regular opportunities for mass communication where millions and even billions of persons can gather to explore our common future. The scope and quality of our collective attention is the most precious resource we have as a human community. If we don't pay attention while decisions of monumental importance are being made, then we effectively forfeit our future. The bottom line is this: if we are to take practical steps to awaken our society, then citizens must make their voices heard by creating a more reflective and responsive media environment.

Many people feel profoundly disempowered when it comes to current media institutions. It is now time to move beyond disempowerment: As the media goes, so goes the future. The media are the most visible representation of our collective mind. As our collective mind goes, so goes our collective future. Currently, our collective mind is being programmed for commercial success and evolutionary failure.

Building cultures of sustainability will require as much creativity, energy, and enthusiasm as we have invested in building cultures of consumption. It is vital we begin conversations about sustainability at a scale that matches the actual scope of the challenges we face—and often these are of regional, national, and global scale. The world has become intensely interdependent. Our consciousness and conversations need to match the scale of the world in which we live. This is a time for rapid learning and experimentation locally, while being mindful of how we connect and evolve globally.

The business-as-usual focus of global media on commerce and entertainment needs to be replaced by planetary-scale truth telling where we humans work to heal the wounds of history and then, together, forge a workable vision of a sustainable and meaningful future. It was communication that enabled humans to evolve from early hunter-gatherers to the verge of a planetary civilization, and it will be communication that enables us to become a bonded human family committed to the well-being of all.

At the very time that we need an unprecedented capacity for local-to-global communication, we find we have the necessary tools in abundance. New media networks are blossoming from the local to national to global scale and making the sentiments of the body politic highly visible. When everyone knows the 'whole world is watching'—when economic, ethnic, ideological, and religious violence is brought before the court of world

public opinion through the Internet and citizen media—it will bring a powerful corrective influence into human relations. As groups and nations see their actions scrutinized and judged by the rest of the world community, we will become more inclined to search for ethical and nonviolent approaches.

Because communication is fundamental to our common future, it is critical that the human community work to consciously bridge the digital divide, extend the communications culture to all corners of the globe, and build an effective 'social mirror' for the human family—one that authentically reflects back both the adversities and the opportunities of our times. All cultures will be naked—their history forever exposed in a world made transparent by decentralized and accessible media—and confronted with the need to make amends for wrongs committed in the past if there is to be release into a promising future. A supreme challenge will be to hold a steady and undistorted social mirror as we struggle for collective understanding, respect, and reconciliation. Societies without a tradition of freedom of speech will find this both liberating and extremely demanding as new skills of inclusion and reconciliation are required to participate effectively.

One of the most helpful and powerful actions we can take as we move through this transition as a species is to increase opportunities for conscious reflection from the personal to the planetary scale. Personal reflection refers to seeing ourselves in the mirror of consciousness as individuals and to observe the unfolding of our lives. By analogy, social reflection refers to seeing ourselves in the mirror of collective consciousness by using the tools of a new media landscape.

The more widely and accurately our time of initiation is witnessed by the people of the Earth through global media networks, the more powerfully the lessons of this time will be grounded in our collective lives and memory. In turn, the less likely it is that we will have to relearn these lessons in the future. As societies, we can learn through our collective imagination by showing ourselves visions of the future we would not want to enact in our actual experience—such as a world in a whole-systems crisis that descends into the meanest form of survival mentality and utterly devastates the biosphere, leaving a mutilated and crippled planet for generations to inhabit for the indefinite future. If we can see the outlines and dimensions of disaster in our social imagination, we may not need to manifest it in our direct experience.

Ultimately, with social reflection we can explore core questions such as 'Who are we as a species?', and 'What kind of journey are we on?' As our capacity for social reflection grows in scope and depth, we can choose our social conversations more wisely and look for promising pathways ahead. Actions can come quickly and voluntarily as we develop a shared understanding and a working consensus for a promising future.

With a shared vision, each person can contribute his or her unique talents in creating that future. Voluntary, self-organizing action will be vital to our success. Our swiftly

developing world situation is far too complex for any one individual, group, or nation to understand the remedies that will work for everyone. While being mindful of the conditions and needs at the global scale, we can work creatively at the local scale to adapt to changing conditions. This is a time for diverse, local experimentation undertaken in a context of rich communication from the local to the global levels and involving the participation of many young new minds.

Social Media as a Powerful Tool

In a world of immensely difficult challenges, social movements can help to identify the source of problems, the groups and individuals that stand in the way of solutions, and the way in which resolving those issues will lift up our best and highest selves.

The use of social media as a powerful tool for building social movements is unquestionable. In recent years, social movement groups have been using the Internet to accomplish an extraordinary range of tasks resulting in successful and innovative local and global projects. The Internet helps to increase the speed, reach and effectiveness of social movement-related communication as well as mobilization efforts. Crowd sourcing, flash mobs, and other social innovation can spark movements in today's digital world that can gain incredible momentum within hours whereas previously the slow speed of telephones and letters took weeks to realize similar goals. If power in a democracy is the power to communicate, then citizen empowerment has grown tremendously in the past few years alone and will continue to escalate, wiring together our global nervous system.

We can witness the power of the social media by noting how in recent years it has become an ever more powerful and critical force in the awakening of citizen empowerment and coordinated action. For example, recently we have seen the explosive growth of major and impactful movements such as Occupy Wall Street and the Arab Spring. The 2009–2010 Iranian election protests demonstrated how social networking sites could mobilize large numbers of people quicker and easier than ever seen before. Iranians were able to speak out against the election of Mahmoud Ahmadinejad, and reach a broad audience, by using popular sites such as Twitter and Facebook. This in turn prompted widespread government censorship of the web and social networking sites. If we are in a race between citizen communication and catastrophe, then the conscious use of social media has the potential to tip the world toward a more promising future.

In a recent survey the Committee to Protect Journalists listed the top 10 countries where the Internet is most controlled:

1. **North Korea.** All websites are under government control. About 4% of the population has Internet

2. **Burma.** Authorities filter e-mails and block access to sites of groups that expose human rights violations or disagree with the government.

3. **Cuba.** Internet available only at government controlled "access points." Activity online is monitored through IP blocking, keyword filtering and browsing history checking. Only pro-government users may upload content.

4. **Saudi Arabia.** Around 400,000 sites have been blocked, including any that discuss political, social or religious topics incompatible with the Islamic beliefs of the monarchy.

5. **Iran.** Bloggers must register at the Ministry of Art and Culture. Those that express opposition to the mullahs who run the country are harassed and jailed

6. **China.** China has the most rigid censorship program in the world. The government filters searches, block sites and erases "inconvenient" content, rerouting search terms on Taiwan independence or the Tiananmen Square massacre to items favorable to the Communist Party.

7. **Syria.** Bloggers who "jeopardize national unity" are arrested. Cyber cafes must ask all customers for identification, record time of use and report the information to authorities.

8. **Tunisia.** Tunisian Internet service providers must report to the government the IP addresses and personal information of all bloggers. All traffic goes through a central network. The government filters all content uploaded and monitors e-mails.

9. **Vietnam.** The Communist Party requires Yahoo, Google and Microsoft to divulge data on all bloggers who use their platforms. It blocks websites critical of the government, as well as those that advocate for democracy, human rights and religious freedom.

10. **Turkmenistan.** The only Internet service provider is the government. It blocks access to many sites and monitors all e-mail accounts in Gmail, Yahoo and Hotmail.

In countries with unrestricted access to the Internet, any individual or organization can launch a campaign on social media. However, starting a successful movement is not that simple. A campaign that appears to be self-serving won't resonate with others and is unlikely to have a significant impact. The greater the authenticity and flexibility the greater the chance of virality and, ultimately, success.

Jean Dobey – founder and CEO of Hibe - has listed five elements as key aspects when it comes to creating a social media campaign that engages with people on a human level:

1) Pick a cause you believe in

The obvious first step is to pick a specific cause – such as raising awareness of a political concern, fundraising for a charity or highlighting an environmental issue. The important thing is that it's something you genuinely believe in.

2) Define the goal of the campaign
The aim of the social media campaign must be clearly defined. This objective will influence everything from the language used, the platforms that are leveraged to how people engage with the campaign. Determining the ultimate goal will also help to create a compelling call to action. By giving people something they can respond to and rally behind, you greatly increase the chances of the campaign going viral.

3) Show what the cause means to you
The virality of a movement on social media is determined by whether people can empathize on a human level. You need to show why people should care about a particular cause and what impact it could have on them or someone around them. By providing your personal reasons for supporting this cause, you can lend credibility and increase the likelihood that it will strike a chord with people in your network.

4) Let others share their story
The most effective campaigns have a human touch that people can connect with and that prompts them to share their experiences. A campaign must provide a platform for contributors to express what a particular cause means to them. It should also give people the flexibility to share in a manner that suits them best – the It Gets Better Project enables contributors to share both video and written submissions of their stories. A social media movement that fails to allow people to add their own experiences is less likely to take off. In fact, it is the emotion that others express in response to the cause that enables a campaign to gain traction.

5) Select the right social media tools
The tools you use will depend on your objective. If it's to raise awareness, effective messaging and a social presence may be all that's needed. Idle No More was initially viewed as a local campaign before it used Facebook and Twitter to gain international recognition. A petition platform – such as Change.org – can be combined with social networks to urge policymakers to address a political or societal issue.

Looking at the condition of our world, a revolution in social media is vital for awakening our collective imagination and for building a collective consensus—affirming that it is important for us to connect and communicate. As diverse citizens of our communities, countries, and cultures we have a larger responsibility to step forward in sincere dialogue about our concern for our common future. We now have the public reach and the tools -- in abundance -- to do just that. In 2014, Internet is accessible to more than 3 billion people . Within five more years, it will be accessible to more than 5 billion people—a

majority of citizens on the planet. The tools for giving the people of the Earth a voice that transcends the gridlock of nation-state politics are now available—and it seems vital for our collective future to develop them consciously. Using the Internet and digital tools for choosing our pathway together into a more promising future is a now core challenge of our times and our species. We are being asked to reveal and then to heal age-old differences - and then to vote, together, on choices that are genuinely pivotal to the lives of countless generations to come and to the future of the Earth.

New Media Empowering a New Generation

The youth of the world are entering an evolutionary phase of immense responsibility -- and opportunity. Today's youth represent the first generation who have grown up with digital technology and spent their entire lives using computers, video games, mobile phones, and all the other toys and tools of the digital age. Combined with social media platforms, these technologies are rapidly wiring the global brain and supporting the awakening of a new level and quality of collective consciousness. Children coming of age in this new media context will show marked differences in their consumption – and production – of media. They will be active *pro*sumers of media content, not only consumers. The following are a number of key changes that we foresee in the media landscape over the coming years:

> 1) Young minds will tire of a fear mongering, fear-sponsoring media. The programming that dominated mainstream media in past decades often presented crudely commercial content that delighted in high-tension and stressful drama: in conflicts, murder, and sexual exploitation. Such mind manipulating programming will cease to inspire a new younger generation.

> 2) There will be a shift in media programming toward what elevates a person rather than what promotes fear and greedy materialism. The minds and hearts of the new generation will increasingly reject negative news and stories, and naturally shift away from such primitive programming. The mainstream media will be forced – through declining viewership and advertising revenues – to broadcast more inspiring and uplifting programs.

> 3) The age of top-down, corporate-controlled media will no longer be the dominant force as self-produced content becomes increasingly the norm. Mega-media corporations will continue to merge and consolidate as they find it difficult to perpetuate their old style of broadcasting in a media environment that is increasingly people-centered, locally produced, globally distributed, and with a positive orientation.

> 4) Young people will become their own journalists - creating, producing, and out-sourcing their services. Individuals will not only contribute stories and news items

to the mainstream media, but will also create their own media platforms. Many new voices will become recognized as credible sources of information and understanding. Young media activists from around the world will supply information faster than mainstream journalists. Also, they will report from areas that mainstream media either cannot, or will not, go to – such as local violent conflict zones or selective communities. Peer-to-peer programming will become more popular as people prefer to produce and share their own news, stories, and events.

5) Transparency will become the new watchword as mainstream media and governments make closer ties. As online content becomes increasingly monitored by governments, and doctored by media conglomerates, transparency and integrity will become a central issue. Younger generations of people will turn their back on attempts to control and manage the flow of information. The media landscape will never be the same again as the power of the image is taken from the hands of the few into the digital fingertips of the many.

Transforming Education in the New Media Environment

Education as well as news information is being transformed by the new media. The structure, content, and connectivity for this new educational platform is already emerging – and it is opening a new phase in collaborative learning at a global scale. Traditional educational systems are becoming antiquated and are being forced to radically re-think and re-envision their roles in response to student's changing needs and attitudes. We are moving into a new world that requires a new kind of learning to provide students with new skills—academic, collaborative, and inner development. Here is what we envision:

1) Classrooms will no longer be contained within the confines of physical rooms; instead, learning spaces will be diverse environments wired to connect with students and teachers around the world. In a virtual world of learning, connections, collaborations, and experiences will span the planet. Without the need to create the brick and mortar physical spaces for learning, the cost of education will plummet, bringing millions of students into classrooms that would have otherwise been completely unaffordable.

2) In a world of virtual learning, entirely new approaches to education will be developed: Collaborative learning spaces will connect students with one another around the planet, fostering a new level of global consciousness and concern. Multi-media presentations will replace the traditional text-book with voice, music, photographs, films, and more. Interactive learning will accelerate with gaming technologies that teach with hands-on student engagement in areas ranging from society, to ecology, business, biology, and far more. These new learning environments will foster social innovation, entrepreneurship, leadership skills,

collaboration skills, creativity, and whole-systems design adapted to a rapidly changing world.

3) Not only will students have virtual access to the world's finest teachers across diverse disciplines, they will also have the opportunity to learn from peers around the world. Teaching will be transformed as it engages other students in collaborative learning but also older persons, retired persons, and uniquely skilled volunteers from around the world. Guests from varied occupations – business leaders, creative artists, biologists, cosmologists, etc – will regularly join online learning forums to interact with students and to pass on their own learning and knowledge. These mixed learning environments – no longer called classrooms – will be able to place students of varying ages and abilities together. In this way older, more learned students, can also assist in the learning process of younger and newer students. We can build a new world if we can collectively imagine what a world of sustainable prosperity looks like and how it works. We are building a new future for the Earth in our collective and collaborative imagination.

4) The Internet combined with new technologies and software is opening the online world to three-dimensional platforms where students can have immersive learning experiences. Imagine putting on a headset and being offered an immersive experience of traveling to places around the world, seeing important events through history, and exploring the universe, including the realms of the very small and the very large. The learning process will be a lot more fun as well as more connecting and collaborative. Students will use an array of virtual games and online problem solving activities to exercise creativity. Multiple player platforms will also allow many students to work together and collaborate to solve challenges and quests -- similar to video gaming yet with constructive goals and outcomes.

5) The development of realistic "virtual worlds" will transform the relationships among students throughout the Earth. Imagine a "pod" of 10 to 20 students, who physically live all around the world, coming together in virtual space with "avatars" that represent who they are. Beyond making friends with students in radically different cultural, social, and physical environments, these virtual worlds will make it possible for students to collaborate in co-creating a future world that reflects their collective preferences. In cyber-space, students can create a distinctive "eco-village" with a unique architecture, set of economic activities, ways of growing food and providing energy, expressing their artistic sensibilities, and much more.

6) Learning will become more individually oriented and customized. Students will have more choice in directing their learning process according to their needs, wishes, and motivations. A new world confronts students with challenges ranging

from climate change and species extinction to energy transition. New skills will require new ways of establishing competencies. The older examination system will be replaced by a variety of comprehension measures and capacity assessments from both teachers and fellow peers. Understanding will be increasingly measured by one's comprehension and individualized capability – and less by standardized grades. Stress and self-doubt will be replaced by enjoyment and self-confidence.

These media-based, educational platforms will support a new generation of learners in creating radically different competencies and capacities that fit the changing world in which we live.

The Transforming Power of Computer Games

Over the past few years hundreds of millions of people around the world have become immersed in virtual worlds and online games. While the economist Edward Castronova calls it a mass exodus to the game spaces, the world-renowned creator of ARG's (Alternate Reality Games) Jane McGonical points to the fact that games and virtual worlds can be designed to improve real lives and solve real problems.

Game developers know better than anyone else how to inspire extreme effort and reward hard work McGonical says. They know how to facilitate cooperation and collaboration at previously unimaginable scales. And they are continuously innovating new ways to motivate players to stick with harder challenges for longer and in much bigger groups. These crucial skills can help all of us find new ways to make a deep and lasting impact on the world around us and inspire us to work together to accomplish real change.

When the ecologist and internet pioneer Steward Brand launched the Whole Earth Catalog of "tools and ideas to shape the environment" he wrote: "We are as Gods and might as well get good at it" In 1996 he co-founded The Long Now Foundation. A San Francisco-based foundation dedicated to long-term thinking and responsibility – for the earth and for the survival of the human species. Co-founder of The Long Now Foundation Danny Hillis, who developed the "massive parallel" architecture of the current generation of supercomputers, is now building the Clock of the Long Now - a monumental size mechanical clock designed to keep time for the next 10000 years. If we want to stay on this planet for anywhere near that long Brand says, we have to become better at strategically affecting our ecosystem. We are forced to learn "planet craft".

Jane McGonical claims that gamers have a head start on this mission, because they have been mastering the art of planet craft for years. There's actually a genre of computer games known as "God games" she explains, which is world and population simulations that give a single player the ability to shape the course of events on earth in dramatic ways, over lifetimes. What all of these god games have in common, is that they encourage the players to practice the three skills that are critical for real planet craft:

1. Taking a long view. In God games players are operating at scales far larger than we would ordinarily encounter on our day-to-day lives. They have to consider their moment-by-moment actions in the context of a very long future: an entire simulated human life, the rise and fall of civilizations, or even the entire course of human history.

2. Ecosystems thinking. In God games you get to understand the world as a complex web of interconnected interdependent parts. A skilled player will study and learn how to anticipate the ways in which changes to one part of the system will impact other parts – often in surprising and far-reaching ways.

3. Pilot experimentation. In God games you learn the process of designing and running many small tests of different strategies and solutions in order to discover the best course of action to take. When you have successfully tested a strategy, you can scale up your efforts to make a bigger impact.

As we try to develop systems for engaging huge numbers of people in world-changing efforts we can take an important cue from the most successful God games.

The universe simulation "SPORE" which was developed by the American game designer Will Wright is explicitly linked to the notion of planet craft – and intentionally focus on getting players to think of themselves as capable of changing the real world.

In SPORE players control the development of a unique species through five stages of evolution: From single-cell origins into social land dwelling creatures - who form tribes, build technologically advanced civilizations and ultimately ventures off into intergalactic space exploration. Each stage gives the player control over a more complex system. The game is meant to spark a sense of creative capability among players and to inspire them to adopt the kind of long term planetary outlook that can save the real world.

For players who complete all five stages of the game successfully, SPORE has a super goal that represents the ultimate achievement in the game. The primary win is to develop your single-cell creature into a successful intergalactic space-faring civilization, which eventually reaches a super massive "black hole" at the center of the galaxy. Players who reach this stage receive a "staff of life" which allows them to transform any planet in the Spore galaxy into a vibrant diverse eco-system teeming with plants and creatures of all kinds, with breathable , sustainable food webs and plentiful water supply. Along with the staff of life players receive a special message and a mission:

> *"You have traveled very far and overcome many obstacles. Your creative powers have not gone unnoticed. Your heroic efforts have proven you deserving the advancement to the next level of your existence. You are now to be given the power. Yes, that's right THE POWER. The power to create and spread life intelligence and*

understanding throughout the Cosmos. Use this power wisely. There is a wonderful opportunity to start on one particular planet. Look for the third rock from SOL"

(Sol is Latin for "sun", and so this final message from the game is a playful imperative to become a real creator and protector of life on Earth).

As game designer Will Wright says: "*The human imagination is this amazing thing. We're able to build models of the world around us, test out hypothetical scenarios, and in some sense, simulate the world. I think this ability is probably one of the most important characteristics of humanity…*"

However, at the same time there is a counterbalance to the stimulation provided by the digital world – and that is the hazards of digital addiction, anxiety, and mental and emotional imbalance.

The Hazard of an *Always-On* Lifestyle

The complexity of our rapidly expanding digital infrastructures and connected lives also reveal a less positive and more menacing side. The growing deluge of information and the tyranny of schedules, for example, demand that we stay connected to an 'always-on' lifestyle, which has proven to cause stress and anxiety.

It is said that today there are more young children who play computer games and browse the web than there are young children who swim or ride a bike. There are also a number of cases where children and adults alike are suffering from what is referred to as "nature-deficit disorder"— reduced awareness and a diminished ability to find meaning in the life around us. Those people who live in big cities especially and thus who don't have the opportunity to play freely in nature are finding recompense by retreating into the digital world. When we observe the frantic lives of those around us, we see just how many distractions there are and how addictive our on-line behavior has become. The problem is that as we spend more time in the digital realms we are spending less time in the natural one – and this can lead to an unhealthy imbalance.

Yet a further imbalance can also occur when our exposure to the digital realms interferes with our grasp on reality. A number of extreme cases have already made the headlines. These include the case of a 22-year-old South Korean man who, in February 2010, was charged with murdering his mother after she nagged him for spending too much time playing online games. After murdering his mother the young killer then went to a nearby Internet café to continue playing his games. Another extreme event is that of a young couple, again in South Korea, who in September 2009 returned home from an all-night 12-hour gaming binge to find their three-month-old daughter dead. The couple were later arrested and charged for starving their daughter to death after it emerged the couple were more interested in raising an online baby (called Anima) in a popular role-playing game

called Prius Online. Research published in the UK in February 2010 also showed evidence of a link between excessive Internet use and depression.[1] Whilst it is recognized that online gaming material can stimulate children's brains through complex puzzle-solving and strategy-based games, it must also be recognized that more menacing aspects lie close by. It is imperative that in our vision for an empowering digital media landscape we remain aware and mindful of the potential hazards associated with emerging technologies.

Gopi Kalayl, chief evangelist at Google Social for Brands, presents an antidote in the form of daily rituals that focus on personal well-being and inner-balance, such as yoga and meditation, as a way of counteracting the influence of the Internet by connecting to one's own "inner-net." This is just one perspective in how we can re-calibrate our lives to successfully merge the digital and physical realms. In order to cope and engage with the accelerating change thrust upon us, it is essential that we develop the tools we need to integrate our inner and outer worlds with the new information technology in a balanced way. Essential for this positive balance and calibration is the need for new stories and narratives.

New Stories for our Future

At this pivotal time in human evolution, it is vitally important that messages in the mass media serve our psychological and spiritual health and not distort our collective intelligence, imagination and evolution. We face big challenges and it will take an equally big vision to transform conflict into cooperation and draw us into a promising future. The most difficult challenge facing humanity is not devising solutions to the energy crisis or climate crisis or population crisis; rather, it is bringing stories of the human journey into our collective awareness that empower us to look beyond a future of great adversity and to see a future of great opportunity.

Without stories to orient us, we are literally lost. When we are lost, it is easy to be frightened and to focus on security and survival, to look for threats, and to pull together into "safe" enclaves. Collective and powerful stories of the human journey can serve as the social glue to pull us together in common effort and take us in a regenerative direction. We do not seem to have those common stories now; however, the stories we seek are already present in biology, psychology, cosmology, mythology, technology, and more.

It is time to gather wisdom for the human journey from diverse sources so that we can better understand our time of profound transition and the promise that lies ahead. As the

---

[1] Published by Leeds University (UK). For journal abstract see - http://content.karger.com/produktedb/ produkte.asp?doi=277001

U.N. Secretary General Ban Ki-Moon has stated recently, we are in a period of "Great Transition." This is a rare moment in human history when we are beginning to develop, for the very first time, the "story of, by, and for all of us." There may be no more important task for humanity than to cultivate narratives in our collective imagination that can serve as beacons for guiding us into a promising future. Such new narratives may touch upon the following themes:

- **A living universe paradigm**: A self-consistent, pattern of thoughts, concepts, and assumptions about the nature of reality is rapidly emerging. Simply stated, we are seeing a profound shift from a non-living view of the universe to a view that regards the universe as uniquely alive. This is not a "new" perspective as, more than two thousand years ago, Plato said that, "the universe is a single living creature that encompasses all living creatures within it." What is new is how a living systems perspective is drawing upon insights from science to validate this emerging paradigm that regards the universe as a unified system that is sustained continuously by the flow-through of phenomenal amounts of energy and whose essential nature includes consciousness or a self-reflective capacity that enables systems at every scale of existence to exercise some freedom of choice. A living universe perspective transforms our approach to economic activity: Consumerism makes sense in a dead universe. If matter is all there is, then where can I look for happiness? In material things. How do I know my life mattered? By how many material things I have accumulated. How should I relate to the world around me? By exploiting that which is dead on behalf of those who are most alive (ourselves). Consumerism and exploitation of the Earth are direct and predictable outcomes from the perceptual paradigm of a non-living universe. Alternatively, if we regard the universe as a living system, then it is only natural that we look for our happiness in the juice of aliveness—in our relationships with others, with nature, and within ourselves. To live in a living universe, we are motivated to consciously reduce needless busyness, complexity, and clutter in the material areas of our lives so that we can have the gift of time and space to engage the non-material areas. As experiential sources of satisfaction become more engaging, consumerism loses its appeal.

- **A bio-cosmic identity**: The paradigm of a living universe reveals that we are much more than biological beings whose identity extends no further than our skin. Instead, we are "bio-cosmic" beings that participate in the aliveness of a living universe. The energy of divine aliveness pours through and sustains the entire universe. Awakening to our identity as both distinct and intimately interconnected within a living universe transforms the feelings of existential separation and species-arrogance that threaten our future. We are participants in a cosmic garden of life the universe has been patiently nurturing over billions of years. A living universe invites us to shift from feelings of indifference, fear, and cynicism to feelings of curiosity, love, awe, and participation.

- **A surpassing sense of purpose**: A living universe is also a learning universe. Living is more than "only not dying." Our purpose in being here is to learn how to live sustainably and compassionately within a living universe. Our life is our gift from the universe and how we choose to live is our gift to the universe. We are on a journey of discovery. In freedom, we are discovering our identity as beings of both earthly and cosmic dimensions. After nearly 14 billion years of evolution, we stand upon the Earth as agents of self-reflective and creative action at a time of great transition for the entire Earth community.

- **A thriving planetary civilization**: Through history, humanity's capacity for self-reflective consciousness has developed progressively—from the magical world of the hunter-gatherer, to the nature-based world of the agrarian farmer, then into the dynamic world of the urban-industrial society, and now into a holistic perspective and collective consciousness rapidly awakening within our global brain. This new consciousness provides the basis for a new, global civilization. If our lives are nested within the larger aliveness of a living universe, then it is only fitting that we treat everything that exists as alive and worthy of respect. Every action has ethical consequences that reverberate throughout the ecosystem of the living cosmos. Our collective purpose shifts from seeking high-consumption lifestyles toward simpler ways of living that enable us to connect more directly with a living universe of which we are an integral part. Humanity's journey of awakening has reached a critical turning point. We now confront the supreme test of living sustainably on the Earth, in harmony with one another, and in communion with the living universe.

The new media landscape is not only about cultivating stories that resonate and engage with the outer world of the Internet but also narratives that inform and empower the landscape of the 'inner-net'. Our sense of self-worth as human beings -- and as planetary citizens -- is crucial to the new media narrative.

New Media and the Politics of Conscious Citizenship

We cannot create a new world in the cultural context of the old media programming. The old media is selling a culture of consumption. The new media must serve a culture of conservation and compassion. As we think, so we will become. If we fill our social mind with old media, there is no room to imagine new possibilities. Communication is the lifeblood of democracy. To choose a sustainable future, citizens need to be able to communicate among themselves about the future they want to bring into existence. We require a "conscious democracy" that pays attention to what is going on and that uses the modern tools of local to global communication to enable citizens to engage in unprecedented levels of dialogue and consensus building about our future. A healthy democracy requires the active consent of the governed, not simply their passive acquiescence. Democracy has often been called the art of the possible. If we don't know

how our fellow citizens think and feel about policies to create a sustainable future, then we float powerless in a sea of ambiguity and are unable to mobilize ourselves into constructive action. The most powerful and direct way to revitalize democracy is by improving the ability of citizens to know their own minds—local, national, and global. By combining televised dialogues on key issues with instantaneous Internet-based feedback from a scientific sample of citizens, the public can know its collective sentiments with a high degree of accuracy. With regular Electronic Town Meetings or ETMs, the perspectives and priorities of the citizenry could be rapidly brought into public view and the democratic process revitalized. When a working consensus emerges, it would presumably guide (but not compel) decision makers. The value of ETMs is *not* as a vehicle for citizens to attempt to micromanage government through direct democracy; rather, its value is as a vehicle for citizens to discover their widely shared priorities that can guide their representatives in government. Involving citizens in choosing the pathway into the future will not guarantee that the "right" choices will always be made, but it will guarantee that citizens will feel involved and invested in those choices.

A future of sustainable prosperity will emerge as citizens recognize the absolute necessity of using these new media tools to undertake an unprecedented level of dialogue about the most promising pathways ahead. With ongoing, local-to-global communication comes mutual understanding and gradual reconciliation around a shared vision of a sustainable future. With an emerging vision of workable living held in common and a commitment to realizing that vision, the human family could make dramatic reductions in military expenditures, begin to heal the global ecology, make development investments in poorer nations, build new energy systems, and in many other ways build a promising future.

With a witnessing consciousness or observer's perspective offered by the new media, citizens can cultivate the detachment that enables us to stand back, look at the big picture, and make the hard choices and trade-offs that our circumstances demand. With a reflective consciousness we look at our situation objectively and see how imperative it is to begin the process of healing and reconciliation. The communications revolution plays a critical role in this global consciousness raising and consensus building. With the rapid development of sophisticated communication networks, the global consciousness of humanity can awaken decisively. The Earth has a new vehicle for its collective thinking and invention that transcends any nation or culture. From this communications revolution can come a trailblazing, new level of human creativity, daring, and action in response to the global ecological crisis.

Rather than feeling cynical or powerless, citizens feel engaged and responsible for society and its future. As citizens are empowered to cope with mounting crises and to participate in decision-making, democratic processes are revitalized. With a free and open exchange of information and visions, and with safeguards to prevent any one group or nation from dominating the conversation of democracy, a foundation for building a sustainable future is firmly established.

A revitalizing society is a decentralizing society, with grass-roots organizations that are numerous enough, have arisen soon enough, and are effective enough to provide a genuine alternative to more centralized bureaucracies. Eco-villages and smaller communities can take charge of activities ranging from education, housing, and crime prevention, to child care, health care, job training, and many more. The strength and resiliency of the social fabric can grow as local organizations promote self-help, self-organization, a community spirit, and neighborhood bonding. With control over many of life's basic activities brought back to the local level, a strong foundation is established to compensate for faltering bureaucracies at the state, federal and global levels.

By breaking the cultural hypnosis of consumerism and using the new media as a potent tool for active social learning, a new cultural consensus could emerge rapidly. Industrialized nations could move beyond the historic agenda of self-serving material progress to a new, life-serving agenda of promoting the well-being of the entire human family. Despite enormous economic, ecological, and social stresses, an overarching vision of a sustainable and satisfying future flourishing in a world of new media could provide sufficient social glue to hold humanity together while working through these trying times. A new sense of global community, human dignity, goodwill, and trust could be growing. Although problems may continue to abound, a new springtime for humanity could be emerging.

Conclusion

We are now participants in a profound cultural epoch of transition, change, and recalibration like never before in human history. What makes this moment so pivotal is that, as a global species, we are on the cusp of becoming a planetary society. As stated in the Fuji Declaration *Awakening the Divine Spark in the Spirit of Humanity: For a Civilization of Oneness with Diversity on Planet Earth* (provisional title), we have the possibility now to witness a worldwide shift in consciousness and collaboration .

The recent revolution in global communications is having a profound effect and impact upon human consciousness and the collective mind of our species. Increased physical, digital, and emotional connectivity through our global-social networks appears to be catalyzing the emergence of an empathic species mindset. The spectacular rise in a new global media landscape also reflects a new form of participatory consciousness, especially among younger people. This emerging landscape of connectivity, communication, collaboration, and consciousness reflects a distributed engagement and relational approach to living, rather than hierarchical. In this era the individual is no longer constrained to be merely a passive receiver of information but can now be both the user and the producer of knowledge: we have entered the era of the *prosumers*.

In this study we have drawn attention to a new media landscape in profound transition: social media as a powerful tool of collective awakening; the rise of an Earth Voice movement and a global citizen superpower; transformative approaches to global education; the creative potential of computer games; the politics of conscious citizenship; and the need for inclusive and transformative new stories for our collective future. We have also, as a counterbalance, pointed to the hazards of living in an 'always-on' media environment. Overall, however, this study has mapped and highlighted the emerging terrain of a new media landscape that has incredible potential for nurturing and sustaining a diversified, yet unified, human planetary society.

Unlike any previous time in human history, an unprecedented opportunity for change and betterment is now present. The human community has a responsibility for rising to this time of opportunity as the many media factors described above may never be present again at exactly the right moment when they are so badly needed. The human species is a witness to and participant in a time of great transition at an individual, community, national, and planetary level. The new media landscape is critical for building a promising future based on new cultural narratives of hope and change. As a maturing species, we have a profound responsibility to actively engage in this time of great transition with an awakening consciousness that informs practical visions of a promising future.

References

Brand, Stewart, *Whole Earth Discipline*, New York: Viking 2009, pp.275, 298.

Castronova, Edward, *Exodus to the Virtual World*, Palgrave and MacMillian, 2007.

The Committee to Protect Journalists, *USA Today*, February 5, 2014. http://www.usatoday.com/story/news/world/2014/02/05/top-ten-internet-censors/5222385/

Dennis, Kingsley L., *New Consciousness for a New World*. Rochester: VT: Inner Traditions, 2011.

Dennis, Kingsley L., *The Struggle for Your Mind*. Rochester: VT: Inner Traditions, 2012.

Dennis, Kingsley L., *New Revolutions for a Small Planet*. London: Watkins Books, 2012.

Dennis, Kingsley L., *The Phoenix Generation: A New Era of Connection, Compassion &*

Consciousness. London: Watkins Books, 2014.

Diamandis, Peter & Kotler, Steven *Abundance: The Future Is Better Than You Think.* New York: Free Press, 2012.

Dobey, Jean "Five ways to turn a Social Media Campaign into a movement," *The Guardian*, 25 June, 2014. http://www.theguardian.com/voluntary-sector-network/2014/jun/25/five-ways-to-turn-social-media-campaign-into-movement

Elgin, Duane , "Is Communication Revitalization the Secret to Avoiding Collapse?,"
posted November 19, 2013 on the *Millennium Alliance for Humanity and the Biosphere:* http://mahb.stanford.edu/topic/ethical-revitalization

Elgin, Duane , "Great Transition Stories For Becoming A Global Eco-Civilization," posted on www.GreatTransitionStories.org, May 1, 2013. Also see the section, "The Global Brain Awakens" on this website at: http://www.greattransitionstories.org/wiki/Story:Global_Brain

Elgin, Duane , *Voluntary Simplicity*, New York: Harper Collins, 2nd revised edition, 2010, excerpt from Chapter Seven: "Living in a Green World."

Elgin, Duane , "Mass Media, Consumerism, and the Consensus Trance," posted June 30, 2013:
http://www.terrypatten.com/blog/lighthearted-sobriety-in-our-interesting-times#comment-1123

Elgin, Duane , "A New Superpower—An 'Earth Voice' Movement," posted July 16, 2012: http://www.huffingtonpost.com/duane-elgin/a-new-superpoweran-earth-_b_1675081.html

Elgin, Duane , "Integral Activism in the Social Commons," posted March 27, 2012: http://www.integralrevolution.com/integral-activism-in-the-social-commons

Elgin, Duane , "Change the Story to Change the World," posted February 1, 2012: Huffington Post: http://www.huffingtonpost.com/duane-elgin/change-the-story-to-chang_b_1247046.html

Elgin, Duane and Peter Russell, "Take Back the Airwaves," posted on YouTube November, 2011, part I: https://www.youtube.com/watch?v=HOY-VqIrVPk and part II: https://www.youtube.com/watch?v=a53hL5Z1WHE

Elgin, Duane , "The Power of a "Community Voice' Movement," posted November 18, 2011: http://www.huffingtonpost.com/duane-elgin/future-occupy-movement_b_1100549.html

Elgin, Duane , "Occupy the Airwaves!", posted October 18, 2011: http://www.huffingtonpost.com/duane-elgin/occupy-the-airwaves_b_1014433.html

Elgin, Duane , "Take Back the Airwaves!", posted July 29, 2011: http://www.huffingtonpost.com/duane-elgin/the-last-taboo-on-televis_b_870497.html

Elgin, Duane , "Can Television Help Awaken a Healthy World?," posted July 21, 2011: http://www.huffingtonpost.com/duane-elgin/mass-media-world-health_b_883616.html

Elgin, Duane , "The Last Taboo on Television," posted June 2, 2011: http://www.huffingtonpost.com/duane-elgin/the-last-taboo-on-televis_b_870497.html

Elgin, Duane , "Our Collective Awakening and the Politics of Consciousness," in *Enlighten-Next Magazine*, May-July 2004.

Elgin, Duane , "The Self-Guiding Evolution of Civilizations," *Systems Research and Behavioral Science Journal*, April 2002, http://duaneelgin.com/wp-content/uploads/2010/11/self_guiding_evolution.pdf

Elgin, Duane , *Promise Ahead*, New York: Harper Collins, 2000, see Chapter Five: "Communicating Our Way Into a Promising Future."

Elgin, Duane , "Collective Consciousness and Cultural Healing," a report for the Fetzer Institute, October 1997, http://duaneelgin.com/collective-consciousness-and-cultural-healing/

Elgin, Duane , *Awakening Earth*, New York: William Morrow, 1993, See chapter 5: "Reflective Consciousness and the Era of Communication and Reconciliation."

Elgin, Duane , "Revitalizing Democracy Through Electronic Town Meetings," in *Spectrum: The Journal of State Governments*, Spring 1993, http://duaneelgin.com/wp-content/uploads/1993/12/ETMs-Spectrum-Journal.pdf

Elgin, Duane , "Let's Put The Vision In Television!," *In Context Journal*, Summer 1983, http://duaneelgin.com/wp-content/uploads/2010/11/vision_in_tv.pdf

Hillis, Danny, Interviewed by Bente Milton.

Judith, Anodea, *Awakening the Global Heart*, Shift Books Second edition, 2013, p.35.

Laszlo, Ervin; Dennis, Kingsley, *Dawn of the Akashic Age: New Consciousness, Quantum Resonance, and the Future of the World*, Rochester, VT: Inner Traditions, 2013.

Mason, Paul, *Why It's STILL Kicking Off Everywhere: The New Global Revolutions*. London: Verso, 2013.

McGonigal, Jane, *Reality is Broken*, Jonathan Cape, 2011, chapter 14.

Rifkin, Jeremy, *The Third Industrial Revolution*. London: Palgrave Macmillan, 2011.

Rifkin, Jeremy. *The Empathic Civilization: The Race to Global Consciousness in a World in Crisis.* Cambridge: Polity Press, 2010.

Shirky, Clay *Here Comes Everybody: The power of organizing without organizations*. Penguin Press HC, 2008.

Steele, Robert D., *The Open-Source Everything Manifesto: Transparency,Truth & Trust*. Berkeley, CA: Evolver Editions, 2012.

Viewpoint, Interview with Will Right, September 17th. 2008.

Wu, Timothy., *The Master Switch: The Rise and Fall of Information Empires.* New York: Atlantic Books, 2010.