ABSTRACT

We have at the present moment, communication technology that can be as powerful, in a creative sense, as the Atomic bomb was in the destructive sense. And remarkably, our children are some of its most fluent and ardent manipulators. Unfortunately, the stories and games being created for them are encouraging many of the values that contribute to social inequality and environment destruction. It is our challenge, as their stewards, to design communication technologies that will enable them to play and learn, while offering them real-life lessons in compassion. Systems scholar, Joanna Macy, presented the similarities between the systems view of reality and core Buddhist teachings in her groundbreaking book Mutual Causality in Buddhism and General Systems Theory: The Dharma of Natural Systems – using the parallels Macy demonstrated as a catalyst, this paper introduces transception – cyberception infused with compassion – considered a key component in evolutionary guidance media. The development of evolutionary guidance media was one of the final areas of research supervised by the late pioneer of evolutionary guidance systems, Bela H. Banathy. Specific examples of transception are presented through introducing key components of Project Milky Way, an experiment currently underway that was encouraged by Banathy as a means to test the theory of evolutionary guidance media in action. The experiment is designed such that it will allow the most privileged children (generally those with computers) the opportunity to share their wealth with those less fortunate. And, as Negroponte’s One Laptop Per Child initiative takes off, these same children will be able to communicate with children in the developing countries. Through transception, the children will be able to play, learn, and compassionately work together to become part of the solution to social injustice and environmental degradation. The paper concludes by suggesting that a generation of children who have come-of-age with transception at their fingertips would be better able to face the challenges they have inherited and more capable of making decisions that include concern for all beings, rather than those based on a NIMBY (i.e., not-in-my-backyard) mentality.

Keywords: Evolutionary guidance systems; evolutionary guidance media; mutual causality; transception; morality

MUTUAL CAUSALITY & EVOLUTIONARY GUIDANCE MEDIA

Evolutionary guidance media is an area of research arising from Banathy’s (1996) design of evolutionary guidance systems – by definition, it is media designed both in content and context specifically for the purpose of guiding and/or facilitating the societal emergence of transpersonal consciousness – specifically, planetary consciousness (Klisanin, 2003). In designing a generic blueprint for evolutionary guidance systems, Banathy provided a means for transcending existing systems and creating systems capable of being used by humanity to guide evolution – into a sustainable future. Rather than being value neutral, the framework for evolutionary guidance systems promotes certain values – clearly demonstrating its systemic origins. Those systemic values, or

---

1 Planetary consciousness is “the knowing as well as the feeling of the vital interdependence and essential oneness of humankind, and the conscious adoption of the ethics and the ethos that this entails (Laszlo, 1997, p. 143).
morals, are clearly described by Joanna Macy in *Mutual Causality in Buddhism and General Systems Theory* (1991).

Through drawing out the parallels between Buddhist thought and general systems theory, Macy provides two avenues through which the interested reader can approach an understanding of the morality inherent in natural systems. In Buddhist thought, the central doctrine or *dharmā* (i.e., the way things are, or work) is based on the Buddha’s teaching of causality, or dependent co-arising “the radical interdependence of all phenomena . . . in which “everything arises through mutual conditioning in reciprocal interaction” (Macy, 1991, p. xi). Likewise, in systems theory, “the system is not only a whole, but part within a larger whole” an interdependent network of interactions (p. 77). This weaving of inner with outer has consequences that can not be denied, as Macy points out — “the very dynamics of mutual causality suggest that certain moral values are woven into the fabric of life, intrinsic to its harmony and continuity” (p.193).

Although with each respiration, human beings interact within a larger system – as a whole, society has yet to embrace this understanding and its concomitant ethical implications. On a global scale, humanity is still stuck within a mentality that is much too small, centered as it is, on the self.

Cybernetic stability requires . . . a broadening of the sense of self and its responsibility: an identification with others which includes both respect and self-restraints. In periods of simpler technology, this requirement could be ignored at the cost of personal maturity, not planetary survival. But now it becomes evident that the very viability of our societies and ecosystems necessitates such a shift in identification. (Macy, 1991, pp. 194-195)

One method of facilitating such a shift in identification is through the *purposeful* use of our mass media technologies. In much the same manner that the invention of the printing press changed the consciousness of humanity², today’s mass media technologies are in the process of altering consciousness. Cyberception is a term that has been used to refer to the sum total of our recent technological advances (Ascott, 1994). Through my research in evolutionary guidance media, I came to believe that cyberception alone is not enough to promote conscious evolution, thus, in previous work I proposed the term *transception* to refer to cyberception infused, or transfused with qualities of high moral development, such as compassion (Klisanin, 2005). In later work I mused that such a merger of technology and morality might create avenues for unprecedented peaceful social action on behalf of our planet (Klisanin, 2006). I have undertaken the writing of this paper to better define transception because I firmly believe that it has the potential to become a force as powerful in the creative positive sense, as weapons of mass destruction are in the destructive negative sense.

**Transception**

In preliminary stage work on an evolutionary guidance media product, as synchronicity would have it, I also began reading Macy’s *Mutual Causality in Buddhism and General Systems Theory* (1991). In my work, examples of transception began to surface more and more readily and I began to ask myself where and how this concept fit within the larger structure of evolutionary guidance media – I began to look more closely. In doing so, where I previously defined transception as cyberception infused with qualities of high moral development, I came to believe that it is more appropriately defined as cyberception infused or transfused with the moral values arising from mutual causality, these include but are not limited to loving-kindness, compassion, self-restraint, social responsibility, and generosity. The latter definition more clearly demonstrates the

³ It is credited for the Renaissance, the rise of scientific societies, the rise of the vernacular, and the general spread of information.
fundamental ground from which transception arises – that is, it involves looking at cyberception in a deep systemic context rather than a shallow systemic context. The former requires not only recognizing the systemic context of which we are a part, but living and making choices as though we have a responsibility to that larger system. As far as finding where transception fit within the larger structure in which I was working, ultimately, I came to realize that just as mutual causality is the dharma of natural systems; transception is the dharma of evolutionary guidance media. It kept turning up in my work because it is central to the way things work within that system.

In order to give a better understanding of transception, this article provides examples from a project that I am currently working on. As mentioned earlier, my research owes much to Banathy’s work in the area of evolutionary guidance systems. This project is specifically the result of Banathy’s urging – he inspired students to not only envision evolutionary guidance systems, but to create them and get them out into the world. The project, code named Project Milky Way (PMW), is a multimedia social experiment designed to test the evolutionary guidance media framework in the real world. One aspect of PMW is an on-line gaming system (from here on referred to as PMW gaming system) – it is through that aspect that transception will be further discussed.

PMW Gaming System

Although often overlooked, games are important tools through which society educates its young. Games transmit history and cultural values while preparing youth for their role as adults. For better or worse, in large numbers our children are moving away from the games of their ancestors and into games of the cyber world. Some of the most innovative products/programs of our mass media evolution are video games, whether they are played on a gaming console (e.g., Nintendo, Sony Playstation) or personal computer. (In the following discussion I use the terms video games, computer games, and on-line gaming synonymously.) The numbers of people engaging in online gaming are staggering; in the USA for example, over 69% of head of households play computer and video games. In so far as children and gaming are concerned, The Media Awareness Network offers the following food for thought:

Just three decades after its invention, video gaming became the fastest growing and most profitable children's cultural industry which is expected to garner an estimated $30 billion in 1998 for the corporations that manufacture, design and sell them. Mario, Sonic and Crash Bandycoot are as familiar as Mickey, Donald and Bugs were in previous generations. Mortal Kombat and Doom are household names. Indeed the video game industry has become the most active and dynamic merchandisers of culture to the young. It has already won 30% of the US toy market, earning $8.8 billion in the US alone - a share which is larger than the Hollywood box-office gross ($5.2 billion) and ten times the amount spent on the production of children's television (Haynes and Disney, 1995). And with the help of their growing global marketing efforts, video game culture is developing a loyal following of millions, who prefer interacting in cyber-play rather than "vegging-out" in front of the television, hanging around with friends or playing street sports. (Media Awareness Network, 2007)

The entertainment industry isn’t the only one interested in video games – the U.S. Military spent $6 million to develop America's Army, a video game given away as a recruitment tool – free of charge! America's Army is similar to a majority of video games – in that it encourages the existing mentality of warring and tribalism – promoting fear and endorsing violence as the preferred solution to nearly all forms of conflict (e.g., World of Warcraft revolves around this theme – it is considered to be the most popular on-line game with 8.5 million worldwide).
Transception: The Dharma of Evolutionary Guidance Media

Utilizing precepts from systems science and psychology, the PMW gaming system is designed to be a harbinger of a new type of game, a game that not only promotes peaceful co-existence, but that is, in and of itself, a vehicle through which players can actually create positive changes in the world (i.e., through transception).

In addition to being entertaining, the PMW gaming system incorporates data/research from the following dimensions of an evolutionary guidance system: social action, economic, moral, wellness, design, science, technology, aesthetics, and political. Banathy (1996) defined these dimensions as follows:

- **Social action:** ensuring social justice and an increase in cooperation, leading to the integration of our societal systems.
- **Economic:** focusing on economic justice and integrated and indigenous development
- **Moral:** strengthening self-realization and social and ecological ethics.
- **Wellness:** nurturing the physical, mental, emotional, and spiritual health and well-being of the individual and society.
- **Design:** nurturing the full development of individuals and social groups and enabling them to develop a design culture and attain evolutionary competence.
- **Scientific:** manifesting ethical science that serves human and social betterment.
- **Technological:** placing technology under the guidance of sociocultural intelligence and in the service of the non-violent resolution of conflicts, and the improvement of the quality of life for all.
- **Aesthetic:** pursuing beauty, cultural and spiritual values, the various forms of art, the treasures of humanities, and the enrichment of our inner quality of life.
- **Political:** promoting self-determination, genuine participation in self-governance, continuous action for peace development, global cooperation and integration, and governance for the improvement of human conditions.

Due to length considerations, this paper examines transception in two of these nine dimensions: **economic** and **political**. However, because the **social action** and **technological** dimensions are foundational to the PMW gaming system I would like to comments on them briefly before moving on to discuss specific examples of transception within the PMW gaming system.

**Social Action & Technology**

From a very young age, children in the Western world are inundated by images and messages that make known to them the dire state of the world. They see commercials with graphic images of starving children and hear about the grim predictions associated with global warming – all the while being given little or no means to take action on behalf of the children, or the planet. This situation may be creating generations of people suffering from **learned helplessness** – a condition in which a person learns to believe that he or she has no control over his or her situation and whatever he or she does is futile (Seligman, 1975). Unknowingly, the “advertising” of our woes may be contributing to the rearing of human beings mired in apathy – unable to pull themselves out of their collective mental quicksand.

As an antidote, PMW gaming system capitalizes on that fact that the Internet has become a preferred mode for young people to both communicate with each other and entertain themselves. Using entertainment as the means, the PMW game educates players about environmental and social situations that exist in the real world (including global warming and extreme poverty), while simultaneously giving them access to ways and means through which they can effect change in the world. In the process of taking actions on the behalf of others, the feeling of being a helpless individual may disappear and be replaced by a feeling of empowerment and interconnection:

> The grip of ego is weakened not only in meditation, but also in acting on behalf of others. The risk-taking and courage which moral action often requires can catapult us beyond constructs of individual self-interest. We
are shot into a larger space where the old boundaries of self dissolve and the interdependence of all life-forms is brought into vivid focus. (Macy, 1991, p. 217)

Because my central aspiration was to create a gaming system that has the capacity to demonstrate evolutionary guidance media, the PMW gaming system places technology squarely under the guidance of sociocultural intelligence, and in the service of the non-violent resolution of conflicts. The basic technology supporting the PMW gaming system is that utilized for Massively Multiplayer Online Games (also called MMOG). Such computer games are played on the Internet and are capable of supporting thousands of players simultaneously. Specifically, the PMW game would be considered a Massively Multiplayer On-Line Social Gaming system (MMOSG), because in addition to being a game, it also provides social networking capabilities. Ultimately, the PMW gaming system is designed to utilize transception to facilitate the emergence of planetary consciousness, preparing our 21st century youth for their role as Earth’s stewards in an increasingly complex global world.

Specific Examples of Transception within the Project Milky Way Gaming System
The following examples are taken from the economic and political dimensions; they reveal how cyberception can be transfused with moral qualities arising from mutual causality.

**Economic**
Although the PMW game can be played by a person of any age, it is designed for children. The economic structure of the PMW gaming system provides a venue through which youth are empowered to make a difference in the world – through both individual and collective actions. Each player has his or her own real “bank account” where points earned in the game are later converted to currency. The player can choose to save his or her funds toward a particular purchase (e.g., rainforest acres) or spend the money on a daily basis (e.g., purchasing a school book for a child in the third world). Furthermore, through the portal, players can communicate during times of crisis (e.g., tsunami, drought, famine, etc.) and choose to donate their money collectively.

This structure gives youth the potential to make a difference in the health of our environment and its inhabitants. For example, as of December of 2006, the popular online game Club Penguin had 4 million users, while the newer Webkinz had 2.5 million (Ruberg, 2007). The online game Half-Life/Counter-Strike was surveyed as having over 50,000 players per day playing in a given hour (at 1700 GMT) (Computer and Video Game Survey). If even half this number played the PMW game each day for one hour, each earning points equivalent to $1.50, at the end of the week, individually each player would have accumulated $10.50. Although this seems like a small amount, consider some of the options the child/player would have:

* Purchasing mosquito nets for distribution to malarial regions: $1.00 pays for one delivered net (poweroflovefoundation.org)
* Purchasing carbon off-sets: $7.50 per month equals zero carbon emissions (carbonfund.org)
* Purchasing rainforest acres: $10.00 saves 2500 sq feet of rainforest (see National Arbor Day foundation)

And, if the 25,000 players chose to spend their funds collectively, the players would have $175,000 at their disposal. With that sum they could purchase 43,750,000.00 square feet of rain forest, the equivalent of 1004 acres, or 406 hectares per week!
But where would the money for such a game come from? The PMW game utilizes funds from *endowments* and from *socially responsible corporate sponsors* and *advertisers* to reward players for taking specific actions within the game. Those actions both allow the player to progress within the game (i.e., access higher levels, etc.) and earn points that are equal to currency; the currency is then allocated by the player to a charity of his or her choice (i.e., participating non-profit organizations).

For those unfamiliar with advertising within video games, I would like to note that advertising within such games is extremely common. Indeed, such advertising (within on-line games) is predicted to grow 70% annually, rising from 56 million in 2005 to almost $1 billion by 2010 (Miller, 2007). An example of advertising in the PMW gaming system: Just as people in the real world must eat to gain energy, so players in video games are required to refuel. To gain a quick boost of energy, the player can “shop” for energy bars manufactured by all of the socially-responsible companies choosing to advertise within the PMW game (e.g., *Clif Bar*, *Odwalla Food Bar*, *Seeds of Change*).

The concept of promoting advertising within a child’s gaming system might at first be considered reprehensible, as Macy points out, from the Buddhist perspective, “the goal of modern advertising to induce the sensation of need and the desire to acquire is immoral, as, for that matter, is an economic system dependent on an ever-widening public consumption of nonessential commodities and artifacts” (1991, p. 204). Indeed, existing computer games are busily familiarizing children with consumerism – preparing them for the market place. In *Webkinz World*, a very popular on-line game for children, players earn “KinzCash” and then go shopping to purchase items for their cyber pets (virtual pets), things such as food, clothing, and toys. This game teaches consumerism without consequence – in contrast, players of the PMW gaming system would have the same fun in cyberspace playing a game in which they earn real currency that can be spent providing animals (and others) in the real world with real needs, e.g., food, shelter, medicine, habitats.

The economic structure of the PMW gaming system demonstrates transception on several fronts. First, the player’s *reward* of purchasing supplies for the less fortunate and/or taking actions on behalf of our planet actively changes the status quo – causing immediate improvement in the lives and future of other beings. This positive effect takes place irregardless of the player’s individual level of moral development. Such a gaming system places our technology savvy in the service of benefiting others. Secondarily, although we cannot know the level of moral development of the player, we can imagine that the player might come to see his or her actions as mattering in the world-at-large. That is to say, he or she may come to recognize the causal process at play – and it may ultimately affect his or her moral development. As Macy points out “in this view of causal process, … in both systems and early Buddhist thought, deeds and doer appear as reciprocally conditioned, and a notion is affirmed that is central to the Buddha’s teaching of karma: *What we do not only matters, it molds us*” (1991, p. 161).[italics added]

Furthermore, through mandating that only socially responsible corporations and/or companies be allowed to advertise their products within the game the following results are gained: 1) Children (and their parents) become familiar with, and perhaps choose to purchase items/products from companies striving to be responsible to the greater systems in which we live, and 2) Through the mass purchase of products from socially responsible companies the cycles of responsibility they endorse are promoted and ultimately become the status quo. If we are to return to a time when items were purchased for durability rather than disposability, we will only arrive there through the same channels by which we arrived where we are now – i.e., advertising. Macy reminds us that the Buddha taught generosity “as an antidote to attachment and the delusion it engenders” – because the players’ actions result in generosity, perhaps attachment and the delusion it engenders will be offset or neutralized entirely (1991, p. 204).
Before leaving the economic dimension we might ask the following questions – the answers of which could affect the bottom line:

*Are children interested in helping others?*
*Would they play a game with such altruistic ends?*

In my opinion, all over the world, children are not only willing, but already actively working on the behalf of others. Whether they are collecting pennies, bringing in canned food for local food drives, participating in walk-a-thons supporting the March of Dimes, or math-a-thons\(^3\) supporting St. Jude Children’s Research Hospital – when given an opportunity to help others, millions of children are eager to rise to the occasion. If children are willing to work hundreds of math problems to raise money for other children – why wouldn’t they be willing to play a video game for the same purpose?

**Political**

The portal aspect of the PMW gaming system provides a type of forum where players can share their concerns with each other and mobilize their resources as they see fit. For example, if players wish to protest the use of child labor, they can follow the traditional practice of boycotting the purchase of products from companies that use child labor, but through playing the PMW game, they can also approach the situation from yet another angle: they can earn money and contribute it in a manner that enables parents to send their children to school instead of to work. Such activism is inherently political – it is meant to encourage players to participate in the democracies they inhabit and/or promote democracy in the countries in which they live.

The PMW game is being designed with the hope that it will one day be played by children worldwide – including those in developing nations. This may be made possible through the XO computer developed through the One Laptop Per Child initiative (OLPC).

OLPC is a non-profit organization created by faculty members from the MIT Media Lab to design, manufacture, and distribute laptops that are sufficiently inexpensive to provide every child in the world access to knowledge and modern forms of education. . . . It is based on constructionist theories of learning pioneered by Seymour Papert and later Alan Kay, as well as the principles expressed in Nicholas Negroponte’s book *Being Digital*\(^2\) (One Laptop Per Child).

The OLPC initiative is well underway; some school children in Nigeria are already using the XO, while Pakistan, Argentina, Brazil, Libya, Nigeria, Thailand, Uruguay are the seven “launch” countries, in January of 2007 the government of Rwanda committed to providing every school age child in that country with a laptop within five years. As cyberception becomes a preferred tool of communication – of learning, entertainment, and so forth for increasing numbers of people – the need for it to be transfused with the moral values arising from mutual causality will become paramount. Rather than exporting the dominate culture through cyberception, we must use transception to retain the diversity of our world – Otherwise we will be faced with the poverty of sameness – a finite number of franchises infinitely spread across the horizon. Through transception we can actively teach our children to share the values necessary for peaceful co-existence and planetary survival while simultaneously making certain that they celebrate their individual cultural differences.

The aim of the PMW gaming system is to motivate action on behalf of others and the planet, irregardless of attachment to a given political ideology. *More than anything the PMW gaming system is designed to help players recognize that the actions they take as*

\(^3\) Math-A-Thon is a program in which children obtain sponsors that pledge to pay them for each math problem they answer correctly. When they have completed the math problems, they collect the pledge money from their sponsors and contribute it to St. Jude Children’s Hospital.
individuals do make a difference in the grand scheme of things. Perhaps a generation of children who have come-of-age with transception at their fingertips would be better able to face the challenges they have inherited and more capable of making decisions that include concern for all beings, rather than those based on a NIMBY (i.e., not-in-my-backyard) mentality.

CONCLUSION

In Mutual Causality in Buddhism and General Systems Theory: The Dharma of Natural Systems, Joanna Macy (1991) explored not only the common denominator of general systems theory and early Buddhist thought, but also the implications arising from it. One of those implications is mutual morality – morality arising from mutual causality and thus inherent in the workings of natural systems. My own efforts in the area of evolutionary guidance media led me to postulate the idea of transception in reaction to cyberception. In the process of working on an experiment designed to test evolutionary guidance media I realized that transception was essential to the creation of such media. In an effort to provide an explanation of transception, I have provided examples in both the economic and political dimensions of the PMW gaming system, intending to demonstrate that while cyberception provides a modus of interaction, transception provides a modus of interaction purposefully designed to result in positive social and environmental consequences. Finally, while I have demonstrated transception through describing it within a theoretical gaming system, it is important to note that examples of transception already exist in the world at large. One of the most interesting examples is the new i’m initiative from Window Live Messenger (2007). With this initiative, each time a person starts a conversation using the i’m service, Microsoft pledges to shares a percentage of the advertising revenues with organizations dedicated to social causes. When a person subscribes to the messenger service, he or she decides where the money will be donated by choosing from a list of pre-selected non-profits. This example demonstrates transception moving into the mainstream. The i’m service requires very little action on behalf of the person (it is free to sign up for service, and all one has to do to set the wheels of charity in motion is to use the service) – it is a painless way to contribute to the wellbeing of others. An alternate example of transception, one which requires and promotes the participation of individuals, is Participant Productions, a film company with “a mission to make the world a better place” (2007). Each Participant film has its own social action campaign; the website provides links to expert advice on the topics dealt with in the films, as well as guidance about actions individuals can take to make a difference. Samplings of the topics addressed, as well as the films that deal with these topics, include: global warming (Inconvenient Truth), genocide in Dafur (Dafur Doc), oil dependency (Syriana). Participant Productions exemplifies many of the goals and aims of evolutionary guidance media in general, while demonstrating transception in particular.

Ultimately, if promoting planetary consciousness is our goal, the Muses of yore may yet help us achieve it, albeit in a slightly altered, 21st century form; Aoide, meaning song, becoming transception; Melete, or practice, becoming social action; and Mneme, or memory, becoming creativity – or, societal memes. A supraorganic system4 poised to usher humanity into an epoch of peaceful planetary co-existence.

REFERENCES


---

4 Suborganic, organic, and supraorganic are terms utilized by Laszlo to refer to the subject matter of the physical sciences, life sciences, and social sciences, respectively (1996, p. 27).
Transception: The Dharma of Evolutionary Guidance Media


Participant Productions. Retrieved May 20 from http://www.participate.net/about


