

Media Pedagogics in Converged Environments of the Future

Robert J. Wierzbicki, Kerstin Kermer, Karolin Röbisch, Thomas Schmieder, Tina Straßburger
University of Applied Sciences Mittweida
Technikumplatz 17
D-09648 Mittweida, Germany
0049 160 844 9001
info@fgam.de

ABSTRACT

Our life patterns and culture increasingly find their roots in visual media: film, video games, internet and multimedia. Visual media shape the image of our world and our society, thereby being, however, somewhat detached from reality, portraying the bold and the beautiful as role models. Entertainment has become a driving force in the creation of films, television programs and the design of computer games. Education and pedagogical aspects are often neglected. Values and norms in our society seem to be continually losing importance. Our society appears to be getting poorer, both financially and intellectually. In this article we demonstrate the potential that can be found in media forms of the future in respect of education and discuss a number of aspects of reader response and aesthetic response in connection with media and violence.

Keywords

converged media, pedagogics, education, computer games, media violence, media effects research, media effects model, future media, phantovisor, GAMECAST.

1. MEDIA AND VIOLENCE

Education and the causal effect of violence in media are often discussed controversially in connection with opportunities for the media, particularly in the context of the so-called visual culture and computer games. The main reasons for this are that in recent years there has been a significant increase in both the depiction of violence in visual media and the propensity towards violence of young people. Many young people are increasingly growing up bypassing life's opportunities. Plagued by fears, depression, stress and the pressure to achieve, they often see very few opportunities to put themselves in a good position to define the future. Frequently the consequence is dreadful acts as a form of emotional abreaction ([1]). Ever since we have seen an increase in reports about the propensity to violence and desocialisation of

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

EuroITV2010, June 9th-11th 2010, Tampere, FINLAND.
Copyright 2010 ACM 978-1-60558-31-5/06/10...\$10.00

young people, the words "computer games" are primarily associated with violence and aggression. As soon as a shooting spree takes place in a school the reasons for the attacker's actions are quickly sought in his or her media consumption..

2. EFFECTS OF MEDIA - A SIMPLE MODEL

The process of media effects lacks an unequivocal theoretical description with simple models. Some people say that until now there is no entirely empirically confirmed theory on the effect of the depiction of violence in media (see e.g. [1] and [2]). Others

consider the causal effect of violence in media to be unobjectionably, convincingly and methodically proven (see [3], [4], [5]). What have been disputed and also partly disproved are theories that violent media depictions even have an inhibitory effect on the recipient in as far as violence is concerned (in the sense of working off aggression, see [8]). The situation seems to be too complicated and too complex to be able to comprehensively and correctly describe it with just a simple theory (see [10]). The behaviour of a person can be interpreted as the function of various factors, the two most important being personality traits (p) and environmental influences (e):

$$\text{behaviour} = \text{behaviour} (p, e, \dots) \quad [i]$$

The personality traits of a person include, amongst other things, his personal "identity", his cognitive development, age, psychological composition, as well as any personality or reality deficits. The environmental influences are, for example, family upbringing, social environment, individual experiences, stress factors, pressures to achieve, and the influence of media (m). [i] hereby becomes:

$$\text{behaviour} = \text{behaviour} (p, e(m, \dots), \dots) \quad [ii]$$

In [ii] *m* must take into account a number of response-dependent factors: How frequently (*f*) is violent media content consumed? How intensively (*i*) are acts of violence depicted? Are these acts depicted positively, negatively or neutrally? Are reasons evident for the violence used or do the acts shown appear to be without grounds? Does the consumer view the scenes from the perspective of the attacker, the victim, or from a neutral perspective? How

strongly does the recipient identify with the characters involved? Parameter m in [2] must therefore be dependent on other factors ($m = m(f, i, \dots)$). Even if we were in a position to empirically conceive the effects of media as an environmental factor we would hardly be able to draw objective conclusions which go beyond the resulting behaviour of a person, since the personality traits of an individual are not ascertainable as a parameter, or can at best be ascertained only to a limited extent. Here we are unavoidably confronted with the constructivist interpretation of the circumstances: every person constructs his or her own reality on the basis of their "me", their knowledge, their experiences, and their thought patterns. In some cases violence in media can certainly trigger real acts of violence (for example the reenacting of shooting sprees such as the Columbine massacre, [6]). It is, however, extremely doubtful that it can also be the cause of such acts. Violence portrayed in the media needs a personality-dependent breeding ground for it to result in real violence. Langman sees the cause of acts of violence among young school pupils as being primarily psychological defects such as trauma and paranoia [7]. It is likely that people who have a tendency towards violence also turn to the respective media. The reverse conclusion that consumers of violent media content also generally tend towards violent behaviour is, however, going too far. We should therefore observe empirical studies in the area of research into the effects of media from a distance.

3. PEDAGOGY IN CONVERGED MEDIA OF THE FUTURE

The biological, technological and cultural evolution of man is making ever faster progress. When assessing change in the personality and behaviour of children and young people we often make the mistake of tending to make that which is negative the subject of discussion. People are, however, becoming more and more clever. The use of computers, internet, games and other interactive recreational activities enrich our knowledge and our ability to act socially – at first at least in virtual environments. What is missing is content of pedagogical value in easily accessible, medial, interactive form. The most important characteristic of convergent media is the possibility to experience connected virtual worlds together. The feeling of a social group identity is thereby of importance: the "me" must be ancillary to the "we". Online games have already been able to reach the "we" stage. This is, however, in content that is detached from the real world. In educational games of the future it will be important to create virtual scenarios in which problems can be jointly solved. The joint reaching of goals strengthens both the group and the individual. By gaining an insight into other ways of thinking there can be a much more intensive learning process.

4. GAMES ENVIRONMENTS OF THE FUTURE

The convergent media of the future will be different from anything we know already. A 3D virtuality in the form of the "SecondLife" experience will in future give way to a genuine 3D experience. We don't want to speculate on whether this will be realised on the basis of a holographic projection, a type of what we today call interactive television, or even by way of bio-multimedia. It will though be a new generation of hardware systems, let's call them "phantovisors" (taken from the word

"phantom"), and with whose help our senses can be perfectly manipulated. At the moment, however, we haven't come that far but we are already building innovative new systems which allow for completely new possibilities in the creation of pedagogically-based games. In [11] we reported on the GAMECAST System that is currently being developed. GAMECAST unites the TV series with the multiplayer online game. Players can intervene in the plot of a computer-animated GAMECAST series by creating their own role (character) in the story world and deciding on / acting out strands of the plot from the series online. The game sessions and virtual scenes which develop between the players are recorded by the system as a logfile, which gives rise to promising possibilities:

1. Scenes can be edited flexibly, even down to individual animations, and newly rendered with the quality of an animated film. By doing so, the players and game scenes become players and scenes in an animated series.
2. Logfiles can be automatically analysed for specific patterns in order to determine the user behaviour and individual game goals. The game experience can be adapted to the individual player type through the game logic.
3. A semantic analysis of the players' contact lists as well as the created logfiles and the plots contained in them can be used in order to appreciate the social network of the players and their development. By doing this also specific behaviour of individuals and groups can be ascertained (social commitment or violent behaviour and even the preparing of a virtual attack).

A team of directors, authors and animation specialists (production team) can use the GAMECAST system to analyse these cyber-social developments and integrate them into the plot of the series by varying the plot strand and integrating scenes of the players. On the other hand the production team can purposefully trigger specific developments in the game (for example by way of virtual decision-making situations, missions which continue the conflicts in the plot). The game experience as well as the production and broadcast of the series are closely linked to each other (see Fig.1).

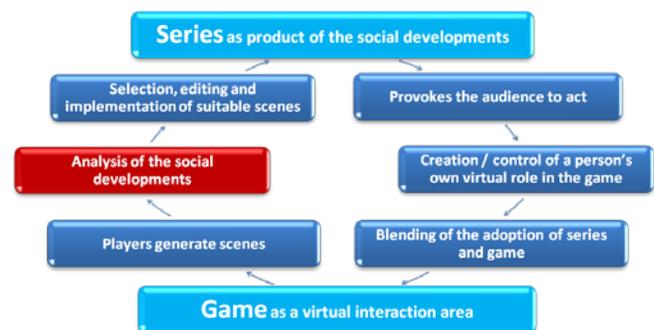


Figure 1: Cyclical process of the adoption and production of the GAMECAST episodes

The broadcasting of the episodes via a linear medium such as TV or cinema makes use of the stage functions of these channels: abstract and complex social developments can be communicated in an understandable and exciting way with the explanatory strength of the story [9]. Additionally the players have the possibility to make a medially perceptible statement about the world through their actions. In this way virtual actions gain both medial and social importance. The use of violence in the game can help the player to be successful in the short term, but in the series it is placed in a dramatical context. By switching from the view of the actor to that of the observer when it comes to the response, the behaviour of individuals and groups in their roles can be questioned and the effects of their actions can be reflected emotionally. This results in a learning effect, the lessons learned from which can then flow back into the game at a later stage. The gaming community thereby creates a series which reflects the wisdom of the masses and which is animatedly modifiable: a cross-medial stage on which social problems can be virtually dealt with, solved and visualised.

5. SUMMARY

In the article we have briefly discussed various aspects of the media in connection with violence. We introduced GAMECAST as a promising system which can be used for didactical and pedagogical purposes. GAMECAST allows for a range of stories to be told and sensitive scenarios, such as the prevention of a shooting spree, to be acted out. The system can be used for the purpose of preventing violence and can thus be an important contribution towards education, defining of roles in society, and opinion making.

6. REFERENCES

- [1] Anderson, C.A./Bushman, B. J. (2002). The Effects of Media Violence an Society, *SCIENCE*, Vol. 295, 2377-2379.
- [2] Freedman, J. (1984). Effects of television violence on aggressiveness. *Psychological Bulletin*, 96, 227–246.
- [3] Gentile, D. A., Anderson, C. A., Yukawa, N., Saleem, M., Lim, K. M., Shibuya, A., Liau, A. K., Khoo, A., Bushman, B. J., Huesmann, L. R., & Sakamoto, A. (2009). The effects of prosocial video games on prosocial behaviors: International evidence from correlational, longitudinal, and experimental studies. *Personality and Social Psychology Bulletin*, 35, 752-763.
- [4] Hopf, W. H. (2004). Mediengewalt, Lebenswelt und Persönlichkeit – eine Problemgruppenanalyse bei Jugendlichen. *Zeitschrift für Medienpsychologie*, 16 (3).
- [5] Joy, A.L., Kimball, M.M., Zabrack, M.L. (1986). Television And Children's Aggressive Behavior, in Williams, T.M. (Ed.): *The Impact Of Television — A Natural Experiment in Three Communities*, Orlando.
- [6] Kass, Jeff (2009). *Columbine: A True Crime Story, A Victim, The Killers And The Nation's Search For Answers*, Ghost Road Press.
- [7] Langman, Peter (2009). *Why Kids Kill: Inside the Minds of School Shooters*. Palgrave.
- [8] Lorenz, Konrad (1963). *Das sogenannte Böse*. Wien.
- [9] McKee, Robert (2009). *Story, Die Prinzipien des Drehbuchschreibens*. Berlin. pp. 18-19.
- [10] Signorielli, Nancy (2005). *Violence in the Media. A Reference Handbook*, ABC-Clio Inc.
- [11] Schmieder, T., Wierzbicki, R. J. & Lugmayr, A. R.(2009). GAMECAST®: A Cross-Media Game And Entertainment System, In: Lugmayr, A. et al. (eds.). *TICSP Adjunct Proceedings of EuroITV 2008, Changing Television Environments*, Salzburg, Austria, 3-4 July 2008, pp. 157-161, 2008, [http://www.wierzbicki.org/papers/GAMECAST%20\(R\)%20-%20A%20Cross-Media%20Game%20and%20Entertainment%20System.pdf](http://www.wierzbicki.org/papers/GAMECAST%20(R)%20-%20A%20Cross-Media%20Game%20and%20Entertainment%20System.pdf) (24.02.2010).