'More Research Needs To Be Done'

Problems and Perspectives in Research on Children's Use of Interactive Media

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"Does using a computer or playing video games help or hurt?" In a number of studies on children's and young people's uses of computer media, this simple dichotomy serves as a point of departure for the thesis guiding the research process, for the formulation of research questions as well as for the design of research projects[1]. But is it useful or actually possible – even for analytical purposes – to narrow down a complex problem to either-or questions with a built-in expectation of conclusive answers? The critical answers to these questions are obvious to me, but they are followed by other questions, the primary one being: How can we study the complex relations between a specific group of users, computer media and society and what are our purposes in doing so? In order to approximate any answers, we should consider our efforts as constituting an ongoing process and critically evaluate our epistemological as well as methodological approach as well as what we aim to reveal, explore, explain, and describe. We could commence by discussing whether there are hidden – perhaps unrealised – agendas behind our framing and design of research projects and aims for our studies, such as normative conservation of cultural, social and ideological standards or perhaps promotion of biased utopian optimistic expectations for potential benefits from using computer media. Second, we should ask ourselves how we can innovate theory and research development in a new area of media research – trying out new views, new methods, crossing borders between paradigms, traditions and methods, combining innovation with experience.

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The aim of the following comment is to discuss how we, from the perspective of media studies, develop, frame and understand research within one specific research area.

In her keynote address, Professor Wartella outlined the main findings from a report to the Markle Foundation, *Children and Interactive Media. A compendium of current research and directions for the future*, and framed the results in a discussion of a number of general perspectives regarding children's uses of interactive media as well as research within the field. The discussion in the report, and hence in Professor Wartella's presen-

tation, is based on an impressive tour de force through a vast number of research reports, supplemented with an extensive selected annotated bibliography.

The writers of the report are of course committed to the assignment from the Markle Foundation: "A review of all publicly available research to see how much is known about the role of interactive media in children's lives" (Wartella et al. 2000a: 5). The answer based on the review of research reports is that "very little" is known and a general conclusion seems to be that "more work needs to be done". This line is prominent throughout the report, which is evident in the design of the text, in that the authors primarily point to a number of questions at a general level as well as in detailed discussions. In the last part of the report, this framing is concluded by a number of suggestions for future research.

It is of course not possible – or necessary – to know the hundreds of reports, articles and books that make out the fundament of the report. But by looking over the listed titles and annotated bibliography, and especially by going through the discussion of research results to date and perspectives for future research, it becomes obvious that there is a strong focus in the report on developmental and learning outcomes of children's uses of interactive media. This points towards one of the differences between the perspective of much US research and that of much European research – a difference that perhaps also shows in the ways in which we address the questions and the focus and theories guiding our research. Though some European research results are included in the report, I would like to point out a few examples of recent research that is absent. One example is the report from a comparative work on childhood and socialisation, *Growing up in Europe*, edited by Lynne Chisholm. Another example in which young people's uses of new media are discussed is the anthology *Digital Diversions. Youth Culture in the age of Multimedia*, edited by Julian Sefton-Green (1998). The anthology represents a number of diverse and very interesting research projects. Third example is Paul Löhr and Manfred Meyer's *Children, Television and the New Media* from 1999; a collection of articles from TelevIZIon, which present a number of approaches and findings regarding children's uses of media – especially TV – in the perspective of computer media. Primarily, however, I wish to point out the results from the European comparative research programme, *Children, Young People and their Changing Media Environment*. During the period 1996 to 1999, research teams from 11 European countries and Israel[2] conducted a comprehensive, comparative study of 6- to 16-year-old children's media uses. The final report was published in 2001 (Livingstone and Bovill 2001), but an extensive and informative interim report was published in 1998 in the European Journal of Communication (Livingstone 1998), and could possibly have informed the authors of the Markle Foundation Report. This study discusses the need to carry out research on children and young people's media uses in context and with a holistic perspective on the understanding of relations between childhood, child, media use and society. The priority of the project was "to understand the meanings, uses, and impacts of the screen in the lives of children and young people, first by placing it in its everyday context. … and second, by viewing the screen where possible from a child-centred perspective" (Livingstone 2001:6).

There are, however, some US studies on children and media that have the ambition of covering more media in a contextual framework. A recent report from The Kaiser Foundation, *Kids & Media @ the New Millennium* (Donald F. Roberts, Ulla G. Foehr, Victoria J. Rideout, Mollyann Broadie 1999), which is briefly reviewed in the Markle Foundation Report, is probably the most comprehensive study of American children's and young people's media uses. It is an interesting and informative work, which espe-

cially illustrates the patterns of media uses and discusses relations between access, use and social and cultural background. It also combines multiple methods in the respective studies comprising the empirical basis of the study. In their introduction to the field of interest for their own report, Professor Wartella and her colleagues take a starting point in the Kaiser Foundation Report's findings; they do so, however, with a specific conception of the report as a tool to understand "how such a pervasive experience affects their [children's] development" (Wartella et al., 2000a: 6). The focus of the Markle Foundation Report mirrors partly the assignment from the Markle Foundation, partly the general point of departure of the available research results that are reviewed, and partly the approach through which Professor Wartella and her colleagues have chosen to read the research reports. Altogether, the report reflects a rather strong focus on the effects and impact of interactive media experience on academic performance, and the question opening this contribution "Does using a computer or playing video games help or hurt?" is a main thread through the report (Wartella et al., 2000:5). The report's general focus on development and effects illustrates, on the one hand, the persistent nature of the traditional dichotomous understanding of children as either innocent and vulnerable or as sinners and aggressive; on the other hand, it is an example of the still emerging contra dictionary understanding of children as either beings or "becomings". Both dichotomies obstruct approaching the research field of new media with a mind open to the complexity of factors that form the reality of the relation between media, users and society. The report does discuss cultural and social aspects of interactive media, but in the respective chapters the discussions eventually ebb away into notions of developmental perspectives and learning aspects of new media. The latter is obviously an important aspect of child media research, but if the focus on learning potential as defined in the report becomes predominant in the study of interactive media, it limits the perspective and prohibits the broader view into new areas of research, theory and analysis.

Media Revolution or Another Period of Change, Experiment and Experience?

The Markle Foundation Report starts out by stating that: "Today we are in the middle of a new revolution in both technology and culture; a revolution in which our children are often in the vanguard. For they are the first generation that is truly 'growing up digital'[3]" (Wartella 1999:5). I suggest, however, that this 'revolution' is experienced much more by researchers trying to catch up with reality in their research and by parents and teachers trying to catch up with the changes in children's and young people's cultural and social practices than by the youngsters in question themselves. Generally, young people adapt to and integrate 'digital media' such as computer, Internet and mobile phones into their everyday lives in a constant process of testing usefulness, experimenting and adaptation. They focus on usefulness, experience and need in the situation. They practice both technical and symbolic convergence of media as well as, not least, convergence of media content across media types, genres and texts. It is perhaps more adequate to put it as Sonia Livingstone does: "researching "new media" means studying a moving target" (Livingstone 2001:6).

'Revolution' usually means radical changes, that something is turned upside down, or the upheaval of power structures as well as economical and social systems. When we are studying media on the level of access, uses and meaning, I do not find the concept of 'revolution' adequate. On the basis of my own studies, I claim that the basic uses of media, which correspond with basic cultural and social needs also for children, are un-

changed through decades of introduction of new media as well as through the present period of digital, interactive, converged computer media technology. The basic uses are still guided by people's needs to be entertained, to communicate and to receive and exchange information. Specific aspects of innovation or breaking of traditional patterns of use in social and cultural practices could be discussed, however.

The reader might find this discussion of a seemingly inferior comment in the report out of proportion. I have included the discussion, however, because it mirrors one of the general viewpoints in the report, namely that even if new media give certain advantages to young generations, they also constitute a potential threat to children's well being and development and, essential in this context, new media consequently constitute a threat to established norms and values. I suggest that what is perceived by Professor Wartella and her colleagues as a revolution should rather be understood as a clash between, or perhaps more adequately *a balance of*, normative and moral codes, rules, behaviour, on the one hand, and experiment, experience, innovation and provocation, on the other. Even if some of the social and cultural practices that arise in youth media cultures apparently reject what could collectively be described as conventional ways of behaviour and values, they are more a scratch on the surface of modern society than a revolutionary movement. Young people are, at the same time, provocateurs trying out new possibilities and social beings collectively and individually looking for values, trust and safety in their search for footing and identity. I found in my studies that children and young people reflect and listen much more to adult experience and attitudes than adults would believe and adolescents would admit. Without starting a debate, I shall air this as a possible effect of a general emergent situation of stronger mutual respect between adults and children/adolescents. This could partly result from a dialectic process of changing relations between generations and of a changing view of children and childhood in Europe, perhaps most strongly seen in the Nordic countries.

The Responsibilities of Adults – and Those of Children?

It is striking that much research done on children and young people's media use underlines – and to a degree rightfully so – the role of adults in examining, evaluating and regulating children's and young people's media use. The report also mentions the responsibilities of content developers, parents and policymakers and researchers to study the numerous aspects of growing up with media by bringing together work across academic disciplines.

The responsibility of adults is obvious, but I would like to draw attention to the need to study much more closely and to rely on young people's own experiences, own creativity and their abilities to converge and explore the possibilities of interactive media. Of course, we do interview children and young people about their uses and experiences, and some studies, such as the European comparative study mentioned above (Livingstone and Bovill 2000), strive to take the perspective of children and adolescents. But I propose that we look much more closely, much deeper at active creativity, interactivity, textual uses and the transformation hereof into children's and young people's social and cultural practices, and hence into the formatting of collective as well as individual identity. I refrain from taking up a discussion on methodological issues here, even if a major discrepancy between different approaches to child media research does have bearing on the reliability and validity of analyses based on children's own accounts and interpretations. I merely wish to point to some general observations from the Danish part of *Children, Young People and the Changing Media Environment*. They show that young Danes are

generally accustomed to reflective and critical thinking. In relation to their own media use and understanding of media, they generally look upon influence and meaning both from a rational, sensible position and from the position of pleasure. This, I think, supports an argument for leaving some responsibility for their own uses and development of use to the young people themselves. In our research, we credit them for being critical and engaged users by acknowledging their own experiences and accounts thereof.

One example of an area that could be studied much more closely is online multi-player computer games where participants meet, play, interact, and communicate in virtual worlds. Simultaneously a continuous transcendence between the virtual and the physical worlds takes place, and experiences, norms and emotions travel between the two versions of reality, which constitute the life worlds of young people today (Stald 2001, 2002 a and b). The users develop new variations of language in their ways of communicating – e.g., in discussion groups where specific language, codices and norms are developed disregarding the norms of adult world. Complex procedures are explored in relation to the gaming situation; self-developed contributions are added to the multitude of creative challenges. Social relations are formed and tried out in several contexts and across cultural, geographic and age borders. A first look at these environments and communities would probably identify them as rather anarchistic and in opposition to other sorts of communities. A closer analysis, however, identifies the virtual environments as training fields for social and cultural interaction, for development of specific skills, for intellectual, emotional and social experiences. An interesting observation is that the self-established gaming communities, which form around the most popular online multiplayer games, are at the same time characterized by open access to those who understand the world and – partly following the first characteristic – by quite restrictive settings regarding normative behaviour. Patterns similar to these can be found in relation to other areas of youth media culture such as chat and use of mobile phones/sms.

The Question of Addiction – An Example of Normative Thinking

My next comment relates to the question of addiction. Professor Wartella downplayed this theme in her presentation, and the report deals with the theme as one of several questions related to health and safety – also it is indirectly asked whether the research projects are 'measuring preoccupation rather than dependence' (Wartella et al., 2000a: 84). Still, I have chosen to take up the discussion here as an example of how normative thinking may influence the questions we ask and the way we frame our research. As such this paragraph is more a discussion of the research projects reviewed in The Markle Foundation Report than of Professors Wartella's and her colleagues' approach and conclusions in this area.

The report mentions a 1995 survey showing that half of the respondents reported behaviours that would score high on an addiction scale, addiction defined as playing six or more times a week, playing for more than one hour at a time, feeling that they play longer than intended and neglecting homework in order to play. The report also refers to other results showing 20% of a group to be dependent on game playing and 25% who had been dependent. I do not question the fact that tendencies of excessive game playing or Internet use occur among children and young people. Obviously some have problems with organising their time and with leaving the virtual world for everyday life.

But I would like to discuss the criteria for what in the report, based on the reviewed reports, is defined as addiction and compared to a pathological condition. I am aware that the report sums up the total of indications, such as time use and neglect of homework,

but still these criteria are discussed individually. I would, however, like to point briefly to some issues of definition of addiction. First, regarding time use: six or seven times a week and more than one hour at a time – well, that could be compared to the use of a range of other media as well. On this scale, most are addicted to television, music and some even to books or news media. One or even two hours time is not very much when you are engaging yourself in a game or trying out new things.

Regarding the question of neglecting homework in order to play: I am sure that this is true – much could be read and written in the hours spent at the computer. Apart from a notion completely different in nature – that computer games and Internet might also contribute to intellectual and personal development – I should like to point to a finding from a study I did in 1996. I interviewed a number of teachers who mentioned a rather serious problem of children being very tired at school and neglecting homework because they watched satellite television at night and videos in the mornings and afternoons. Obviously, a reference to problematic uses of one medium does not eliminate the potential negative effects of another, in this case interactive media. It is, however, possible that new media are objects of 'reinforced alert' because we find it difficult to overlook the potential negative effects and to see positive barrier breaking uses of new media. Children's uses of computer and Internet have to be seen in the context of the way we organise daily life and the positive attention we give to the media use of our children – concerning access, time use and content – in general. However, in relation to upbringing and pedagogical alertness, it is easier to focus on certain isolated aspects of media uses than to analyse media uses and the effects on our social and cultural practises and normative formation as integrated into and resulting from our modern lifestyle. In short, and transformed into an example in practice, it is easier to forbid a certain computer game or one hour of playing seven days a week than to break daily patterns, take up game playing yourself, or shut your own screen down – be it TV or computer – and propose to play a game and talk about it with your child, read a story, bake some cookies or whatever is perceived as worthwhile activities in everyday life.

Another perspective on this particular issue is that it is problematic to look upon media uses as fixed categories. One example is the finding from one of the research projects reviewed in the report. It states that 25% of a group of 12- to 16-year-olds had been dependent on game playing at some point in their life (Wartella et al., 2000:84). This could, in my opinion, be read as showing that the 25% in question are no longer dependent. It is, in other words, problematic to draw dramatic conclusions on the basis of an ongoing process.

Time Perspective and Processes of Change

Somewhat contradictory to the presentation of a number of singular findings, the authors of the Markle Foundation Report draw the general conclusion that media use and media preferences change over time and quite rapidly among children and young people. Again, however, this important notion is discussed primarily in a developmental and learning perspective. One specific notion is that early use tends to predict later use. On the one hand, this seems to be true in relation to patterns of use and the meaning of parents' educational and economic background. On the other hand, recent research results within the specific area of this debate indicate that some patterns and perceived traditional attitudes do change with technological, social and cultural change and with age. A striking example is the way in which girls' attitudes towards and uses of computers have

changed over a short period of time. When I conducted my first large-scale qualitative research in 1998, many girls between 12 and 15 years were uninterested or even sceptical to their own uses of computers. In 2000, when I did my second study, almost all girls used computers and Internet regularly. First it is a question of access, second of usefulness that overcomes potential scepticism towards technology and what might be perceived as primarily a medium for boys' culture. The girls simply found something to use the computer for in their cultural and social practices, and this triggered the integration of computer media as obvious choices on more levels in daily life. It must be said that the studies are not longitudinal, that is I have not followed the same girls, but the patterns are rather clear and the stories told by my informants support my analytical point. I also found that, for example, the 12-year-old boy who spends hours playing rather violent action games does not necessarily do this at the age of 16; that those who have spent hours in their favourite teen-chat room at the age of 12 most likely find other ways of establishing relationships and communities, online or offline, at the age of 16 and so forth.

With reference to the above examples, I would like to propose that we aim to study media use over time in order to follow its processes as well as the meaning of media within groups and for individuals. We should do so by looking not solely at statistics, but by holdings these up to focused studies of individual life stories.

Another suggestion is to study the group of young adults between 18 and 25 years who, to various extents, have grown up with interactive media. In fact some members of this group were the first to 'grow up digital' (cf. the above quote). Comprehensive studies of patterns of uses, experiences, integration in everyday life and meaning in relation to formatting of social, cultural and psychological identity within this age group could bring new perspectives to the analysis of children's and teenagers' uses of interactive media.

Focus on Content

The report points towards a number of general conceptions and conclusions, which are useful to keep in mind in an ongoing evaluation of much European research within this field. One example is the emphasis on the need to study the role and effect of content in interactive media. In the Markle Foundation Report, content is actually primarily understood as good or bad, harmful or useful and less as aesthetic, narrative, thematic experience and creative challenge, but still the notion of the meaning of content should be a reminder to some European researchers. Sometimes in our efforts to analyse and comprehend the context, we seem to forget to analyse the texts. Seen from my position, understanding the complex of textual, intertextual and contextual meaning should be the ambition. There is, however, a progressive tendency towards innovative research in the field of computer games, computer-mediated communication and mobile phones/sms-messages that indicates a revival, within youth media research, of textual analysis in context.

Another core conclusion in the report is that it is not the medium itself that affects children's perceptions, attitudes, or awareness. "Rooted in the understanding that the medium alone is not the message; that creative ideas and human values will ultimately determine whether communications technologies fulfil their enormous potential to educate, inform and inspire" (Wartella et al., 2000b: 2). Apart from my opinion that McLuhan's famous statement is somewhat misunderstood – also in its new wrappings – in this context I support the idea that we should analyse the potentials of new media in

light of human interaction with media and media content. The simultaneous challenge, however, is to acknowledge uses and meanings that transgress traditional perceptions of positive potentials.

Finally, Professor Wartella and her colleagues stress the importance of dealing with commercial aspects of children's uses of interactive media. It is mentioned in the paragraph on the potential (in American terms enforced) collaboration between the content industry and academia in order to shape an environment 'in which new media producers can thrive by understanding children as more than just a commercial market' (Wartella 2000a: 5). Market, commercial interest, media access, uses and preferences are closely related, and with a somewhat wider perspective than that suggested in the Markle Foundation Report, I support a reinforced research interest in this area.

Methods and Methodology

The report states, as described in a few words in the summary, that "We – and our children – could all benefit from a more robust collaboration among scholars in different fields and between academic and market researchers" (Wartella et al., 2000b: 11, elaborated in Wartella 2000a: 94-97). This is an important recommendation, especially because the report put forward a number of suggestions for how to enable such a mutual exchange of results, experiences and theories with reference to developing the field and transforming the results for use within the relevant groups of 'purchasers'. I have one comment, however. I suggest certain caution regarding collaboration between industry and academia. No doubt exchange of results and ideas can be mutually useful, still, it would be wise to realise that the starting points, purposes and expectations of industry as compared to those of academia may differ considerably. This notion might reflect my training within the humanities in Denmark, where we have little experience of research funding from private enterprise[4]. There is, though, much sense in working together on content development, in conducting repeated surveys and describing patterns of access, use and preferences.

The report underlines enhanced cross-disciplinary approaches and exchange on different institutional levels as an essential strategy for understanding the meaning of interactive media in children's lives (Wartella et al., 2000a: 96). This is, however, primarily understood as bringing together researchers, exchanging results, etceteras. The possibility, or some would claim necessity, of taking a cross-disciplinary approach within a given research project is not described, even if the recognition of using multiple methods is mentioned in a few lines: "Multiple methods of study are required to answer the complex sets of questions posed in the area of children and interactive media" (Wartella et al., 2000a: 95). My suggestion is that we do both, and furthermore that we try out new ways of studying and analysing the research area using general as well as specific questions. In short, we should aim to combine our well-proved and well-considered theories and methodologies with a bit of 'wild thinking'.

Another suggestion would be to take a step back from child-orientated research – which is not the same as research from a child perspective – and combine the results from this area with studies of theories on new media at a general level. Closer attention to high-level theories of visuality and of the relation between reality and virtuality, theories of interactivity, narration, time and space relations, and of aspects of communication could probably inform child media research and inspire new theoretical framing of the research questions that have to be studied.

Concluding Remarks

In this comment on the Markle Foundation Report and on Professor Wartella's presentation, I have discussed a small selection of problems in order to question some of the main themes on multiple levels. I am aware that many of my comments could be discussed and developed further. The rather categorical queries I put forward should not, however, be understood as a one-sided emphasis on the virtues and potentials of European, or rather Scandinavian, child media research. The intention has been to accentuate the constant process of questioning epistemological and methodological approaches to our research – and to keep alive and kicking the ongoing debate on aims and means within this particular research area.

During my reading of the Markle Foundation Report, I was reminded of a general experience drawn from the European comparative research programme (Livingstone and Bovill 2001) in which I participated. It becomes quite obvious that children as well as researchers in the Western world do in fact live in different societies with major cultural and social differences that influence our experiences and approaches to research. We might have common values regarding our way of living in general as well as research in particular. But at the same time, we must realise that different social and cultural practices should be put into perspective as well as considered as different normative influences on concepts and approaches to research and evaluation of research results. For example, the potential difference between the US and Scandinavian concept of childhood and children in child media research may not only derive from determined adherence to traditional positions, but more profoundly from deeply rooted moral and ideological codices, which are much more influential than we as independent researchers usually care to realise.

To conclude, I shall have to repeat Professor Wartella's and her colleagues' often mentioned general finding and agree that, "yes", more research needs to be done. But my conclusion is not drawn because research thus far has failed to include comprehensive and in-depth studies of children and young people's uses of interactive media, nor because research thus far has followed the wrong track altogether. We should not expect to ever obtain the divine overview that will enable us to register and understand all processes and problems and to act accordingly. The need for more research is a constant factor of the dialectic process of historical progress, of our need to understand the time and society in which we live, and to comprehend, evaluate and influence our lives on a meta- as well as individual level.

This might appear rather dramatic and pompous in print, but a little overkill might also promote my point in the above discussion: The day no more research is needed, history has ended.

Notes

1. Many are reviewed in *The Markle Foundation Report* (see list of references). They primarily represent studies within developmental child psychology and pedagogical theory, but also certain traditions within social theory.
2. The countries were Belgium, Denmark, Finland, France, Germany, the United Kingdom, Israel, Italy, the Netherlands, Spain, Sweden and Switzerland.
3. 'Growing up Digital' refers to the book of the same title by Don Tapscott.
4. The only one I can think of in relation to child media research is a large-scale collaboration between Lego and the University of Southern Denmark on children and playing cultures.

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