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Beyond the virtual binary
ICTs as tools for bridging cultural divisions

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Beyond the virtual binary. ICTs as tools for bridging cultural divisions

Nico Carpentier[1]

The discourse on the digital divide is characterised by an emphasis on the notion of (equal) access to specific types of media technologies. Populations are divided into information haves and information have-nots; policies are oriented towards the stimulation of the adoption of these technologies. As such the threat exists that the articulation of this discourse becomes (and/or remains) a 'digital myth' (Frissen, 2000), which is predominantly media centred and technology determined thus reducing the social complexity to the virtual binary. This reduction highly contrasts with the basic and valuable premises of this discourse: to prevent and reduce social exclusion, and to increase different forms of societal participation. This paper aims to return to this basic premises by focussing on the abilities of ICT to stimulate access, interaction and participation, building on the theoretical distinction between access, first order participation (linked with interaction and cultural socialisation) and second order participation (linked with em/power/ment). This distinction will be used to analyse how (within the very local setting of an Antwerp cultural centre) ICT can function as one of the many tools available in daily life to increase social and cultural capital and to support an intercultural dialogue between 'high' and 'low' culture, between common sense knowledge and more elitist types of knowledge and between people with different ethnicity and gender. At the level of policy this case study clearly shows the need for targeted financial (project) support and for an increase in ICT-expertise. This will allow for developing both short and long-term visions on the use of ICT in cultural centres and for transcending the mere experimental of secundary status of cultural new media broadcasts.

1. Introduction – the digital divide: c'est quoi finalement?

The discourse on the digital divide is characterised by a complex set of articulations. Some of this complexity can already be found in the diversity of commonly used definitions of the digital divide, as for instance can be found in Rice (2002: 106), who defines the digital divide as the '*differential access to and use of the Internet according to gender, income, race and location.*' At the launch of the UN ICT Task Force in November 2001, established to '*lend a truly global dimension to the multitude of efforts to bridge the global digital divide, foster digital opportunity and thus firmly put ICT at the service of development for all*' (UN ICT Task Force, 2002), Kofi Annan (2001) links the digital divide to development, poverty and inequality, as he states that '*one of the most pressing challenges in the new century*' is to '*harness this extraordinary force [of the new technologies], spread it throughout the world, and make its benefits accessible and meaningful for all humanity, in particular the poor.*'

The definition used at the Digital Divide Network's website is again slightly different as the digital divide is seen here as the '*gap between those who can effectively use new information and communication tools, such as the Internet, and those who cannot.*' A similar but still different definition can be found at the Digitaldivide.org website: here the digital divide is '*the gap between those able to benefit by digital technologies and those who are not.*'

Yet another definition can be found in the '*bringing the nation on-line*'-report (Leadership Conference on Civil Rights Education Fund & Benton Foundation, 2002: 4), where it is stated that '*recognizing that no one should be left behind in the information age, both the executive and legislative branches of the federal government […] have played important leadership roles in bridging the knowledge gap between the "information haves" and the "have-nots" — what some refer to as the digital divide.*' This last report is (on the civilrights.org website) graphically illustrated by a collage of pictures, which include a smiling child with her hands on a pc and a group of people (differing in age, sex and ethnicity) gathered around another pc, signifying an orientation towards the future, community and cultural difference. Interestingly enough, no content is shown on the screens. The other two pictures are more oriented towards technology, as they show a motherboard and (severed) hands working on a laptop. As is argued in feminist theory the fragmentation of the body (Coward, 1978;

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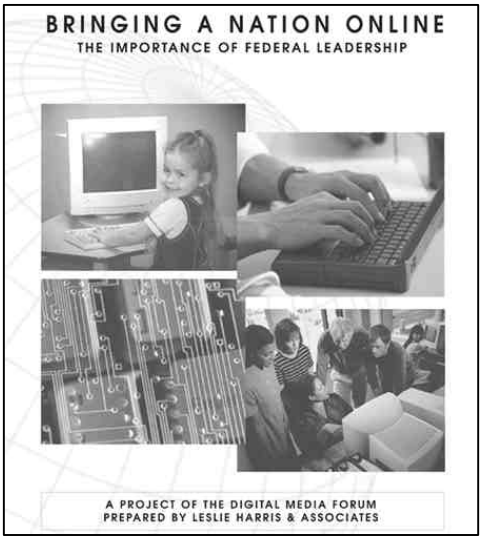
Delhaye 1995) is related to the importance that is attributed to the bodily parts that are on display, in this case the hands as necessary operators of the technological equipment). In itself this collage of pictures already offers a clear visual condensation of the discourse of the digital divide.

As most of the definitions above illustrate, the digital divide discourse is based on the articulation of three elements: 1/the importance of access to on-line computers, 2/which use results in increased levels of information, knowledge, communication or other types of socially valued benefits 3/that are in turn so vital that the absence of access and the resulting 'digibetism' (or computer illiteracy) will eventually create or maintain a dichotomous society of haves and have-nots.



1.1. Access

Especially the element of unequal access to on-line computer technology plays a crucial role and functions as a nodal point (to refer to one of the basic concepts of Laclau and Mouffe's discourse theory (1985)) of the digital divide discourse. As a nodal point it creates the stability and fixity that every discourse needs to maintain its coherence. The centrality of the signifier access is well illustrated by the rather enormous amount of research aimed at documenting socio-demographically based differences in Internet access[2].

In Rice's (2002: 106) definition of the digital divide these socio-demographically based differences are already included as he mentions gender, income, race and location. A recent illustration of this analysis is presented in the above quoted '*bringing the nation on-line*'-report (2002) that re-examines US Commerce Department data following the proposal of the Bush administration to eliminate two major federal programs (the Technology Opportunities Program[3] and the Community Technology Centers Program[4]):

> "*While some of the data clearly show that there are increasing numbers of Americans connected to the Internet and computers, the same data also shows how specific segments of society—particularly underserved communities—continue to significantly lag behind and that the digital divide remains a persistent problem. Significant divides still exist between high and low income households, among different racial groups, between northern and southern states, and rural and urban households. For people in these communities, the enormous social, civic, educational and economic opportunities offered by rapid advances in information technology remain out of reach.*" (Leadership Conference on Civil Rights Education Fund & Benton Foundation, 2002: 4)

This type of analysis is often visualised by a series of graphs that combine one or more of these socio-demographic factors and signify the difference - the 'gap' - in access between these societal groups. In this paper two examples of this approach are reproduced. One of Cooper & Kimmelman's (1999: 26) graphs, based on a 1998 Florida telephone survey with almost 1600 respondents, shows a statistically established relation between income, race and Internet access (and not 'Internet usage' as the header of the graph suggests) where the steep rise of the curves indicates the difference between income groups. The second example is a reproduction of a graph from the UCLA panel analysis, which is based on surveys with 2096 households '*across America*'. This graph shows a relation between age, gender and Internet access. In this case the steep decline signifies the decrease in Internet access over the different age groups.

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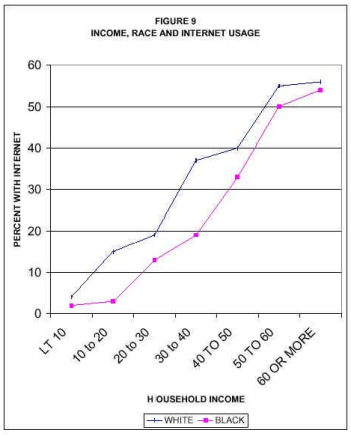
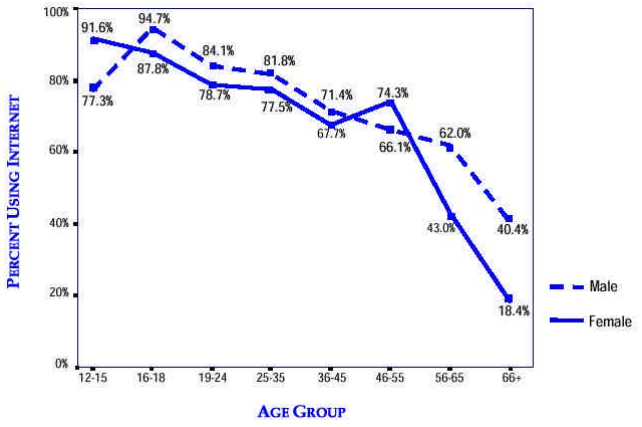
[2] In this paper the focus is on Internet access, but the same points could be made for the much broader discussion on ICT access.

[3] The TOP program funds innovative uses of technology by providing matching grants for technology projects at schools, libraries and other public facilities. http://www.ntia.doc.gov/otiahome/top/

[4] The CTC program provides matching grants to stimulate technology access and training facilities in low-income and rural communities. http://www.ed.gov/offices/OVAE/AdultEd/CTC/



Cooper en Kimmelman, 1999: 26



UCLA, 2000: 12

When looking for an explanation for these differences, the UCLA-report (2000: 23-24) mentions not having a computer as the most important barrier. The second most important reason mentioned in the report is the lack in interest. Other reasons are summarised as follows: '*Two other frequent responses are "I don't know how to use it," and the Internet is "too expensive." Smaller numbers of non-users also cite such concerns as: fear or confused by the technology, privacy, inappropriate for children, pornography, and slow connection speed. Among the many "Other Reasons" are "I'm too old to use the Internet" and "I don't have time."*' Van Dijk (1999) offers a more concise outline of possible obstacles that prevent people from using new media. He distinguishes four different clusters of obstacles: 1/technological intimidation and/or bad experiences, 2/lack of user friendliness, 3/lack of significant usage opportunities and 4/lack of (good) access.

1.2. Lines of critique

This specific articulation of the discourse of the digital divide, with access as its nodal point, does the same time exclude a series of other meanings. As is the case in any discourse, a specific set of elements is linked in a way that their identity is modified by the articulatory practice (Laclau & Mouffe, 1985: 105). The discourse of the digital divide can be analysed, and in a way deconstructed, by focusing on the specificity of the articulation of the different elements that compose the discourse, and by focusing on what meanings and elements become excluded by these specific articulations.

The central position of access (or its discursive position as a nodal point) has already been made abundantly clear. Within the digital divide discourse access receives a specific meaning, mainly due to the need for operationalisation within the much used quantitative research tradition. This meaning thus becomes based on the possession of commodified electronic equipment. As the two graphs discussed above show, the definition of access as possessing an on-line computer becomes conflated with the use of this computer, without including the actually used content and user practices.

A first line of critique of these discursively exclusionary practices is based on the argument of the multi-dimensional character of Internet access. Steyaert (2000 and 2002) for instance argues that '*psychical access*' (stressing the materiality of access) should be complemented with the different necessary skills required for the interaction with ICT (informacy). He distinguishes three levels of capabilities: instrumental, structural and strategic skills[5]. This argument is complemented by the emphasis on user practices. As Silverstone (1999: 252) remarks on the domestication of ICT: '*The more recent history of home computing indicates that individuals in the household construct and affirm their own identities through their appropriation of the machine via processes of acceptance, resistance, and negotiation. What individuals do, and how they do it, depends on both cultural and material resources.*' A third broadening of the scope is performed when the focus is placed on both the relevance of on-line content and on the possibilities of feedback towards the content producing organisation. A clear illustration of this position can be found in the definition of (media)access proposed at the 1977 Unesco-meeting in Belgrade, which has been reproduced in Servaes (1999: 85): '*access refers to*

[5] Instrumental skills deal with the operational manipulation of technology, while structural skills relate to the use (and understanding) of the structure in which the information is contained. Strategic skills include the basic readiness to pre-actively look for information, the information-based decision-making and the scanning of the environment for relevant information (Steyaert, 2002: 73-74).

the use of media for public service. It may be defined in terms of the opportunities available to the public to choose varied and relevant programs and to have a means of feedback to transmit its reactions and demands to production organisations.' More specific content-oriented approaches focus on 'missing content' from a user perspective. The Children's partnership's (2000) analysis for instance points to the absence of content of interest to people with an underclass background, with low levels of literacy in English and with interests in local politics in culture, in other words: '*underserved Americans are seeking the following content on the Internet: practical information focusing on local community; information at a basic literacy level; material in multiple languages; information on ethnic and cultural interests; interfaces and content accessible to people with disabilities; easier searching; and coaches to guide them.*' When analysing the meaning(s) access is attributed within the digital divide discourse and the 'other' articulations and definitions of access discussed above, the following elements have become disarticulated from the digital divide discourse: 1/the possession of skills (and not only of equipment), 2/user practices, 3/relevant content and 4/feedback (and not only the mere use of the equipment).

A second line of critique touches the very hart of the digital divide discourse, challenging the truth claim this discourse inherently carries. More gentle criticisms are oriented towards the notion that a two-tiered division is not tenable. Van Dijk (1999: 155) pleads for replacing the 'gap' or 'divide' by a 'continuum', when he says that: '*a better representation would be a continuum or spectrum of differentiated positions across the population with the "information elite" at the top and a group of "excluded people" at the bottom.*' Others point to the dynamic character of innovation, the role and specificity of early adopters (and im- or explicitly to Rogers' (1996) theory of the diffusion of innovation) in order to account for the reduction or reinterpretation of the 'divide'. Frissen (2000) takes this position and refers (a bit less gently) to the '*myth of the digital gap*'. One of her arguments for this position goes as follows: '*The term 'gap' suggests that the identified differences have a static character. There are enough empirical clues that this is not the case. Certain groups such as women and elderly do not belong to the vanguard, but are rapidly catching up.*' (Frissen, 2000: 9-10 – my translation) In the USA similar arguments have been used stating that racial and gender differences are decreasing or disappearing (Katz et al., 2001; Hoffman et al. 1999). The triumphant 2002 U.S. Department of Commerce report '*A nation online: how Americans are expanding their use of the Internet*' concludes: '*those who have been the least traditional users – people of lower income levels, lower education levels, or the elderly – are among the fastest adopters of this new technology.*' (U.S. Department of Commerce, 2002: 92) It was this report that triggered (undoubtedly among other reasons) the Bush administration's proposal to eliminate the two federal programs aimed at 'bridging the gap' (TOP & CTC). This proposal is supported by a market-oriented argument, voiced by Victory, the assistant secretary of commerce for communications and information, in the New York Times of 11 July 2002: '*The first prong of attack in trying to get services available to as many people as possible is to create the right environment so people have access to those products and services and have the means of purchasing them.*'

An even more fundamental version of this critique is that the digital divide discourse articulates a dichotomy between information haves and information have-nots, between information rich and information poor or between those who use or benefit from the Internet and those who do not[6]. Not only does this dichotomy imply a static approach to technological innovation, but it also offers a structuring of the social on the basis of a technological criterion, both in explaining contemporary and future societies. Especially when the introduction and/or increased access to these '*technologies of freedom*' (de Sola Pool, 1983) is seen as the motor for social development, a technological deterministic ideology is seen in operation. ICTs in general are articulated as beneficial and their possession as enviable. For this reason so-called 'non-users' are often considered as being in a transitory phase, which can be illustrated by the following statement in the UCLA report: '*Many people <u>still</u> don't have a computer at home – nearly 40 percent (39.7) of respondents.*' (UCLA, 2000: 24 – my emphasis) Wolf (1998: 26) links this articulation with commodification: '*calling the Internet the Great Equalizer helps to sell more computers. The metaphor masquerades as a quick fix to social inequality while ignoring the factors that lead to inequality.*'

Moreover at the epistemological level the foregrounding of information forms again a specific articulation that is closely related to the more liberal approaches towards a free flow of information as a democratic practice. The fetishisation of information (to the detriment of knowledge) is based on a very mechanical approach to human learning and knowledge acquisition. One of the major reasons for this can be found in the lack of adequate philosophical reflection on the concepts of information and knowledge (Karvonen, 2001: 50). Stehr (1994: 92) argues here that especially the concept of knowledge has been treated as a black box: '*although many and elaborate definitions of knowledge are offered, an equivalent effort toward a*

[6] Users of these discursive elements often bracket them, signifying their unease with the signifier. Despite the implied conditionality, the signifiers are still articulated as described in the paper.

theoretical analysis of the decisive phenomenon "knowledge as such" is not thought necessary. The new qualities of scientific knowledge and its social consequences are merely postulated. In short, knowledge is essentially treated as a black box.' As knowledge is more closely related to the knowing subject, this can also account for the secondary role of the user. Yet another problem is that the possession of the tools of connectedness as a state of being is conflated with the possession of information and even knowledge, thus further advancing the commodification of information.

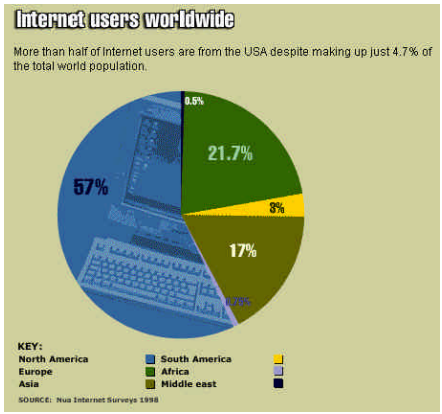
A third line of critique attempts to decentre the digital divide discourse. A more modest attempt is oriented towards people with disabilities. In Kearns' (2001) paper, which can be found on the 'International Centre for Disability Resources on the Internet' website, people with disabilities are simply added to the more traditional list of socio-demographic categories that are said to be concerned, when the digital divide is defined as follows: *'The*

BBC News Online (1999) – Special report:
'Bridging the digital divide'


Bridges.org website illustration

"Digital Divide" is an obstacle that looks to segregate many groups of people from these technological developments simply due to their socio-economic status (SES), their geographic location, their education level, or because they have a disabling condition that is physical, sensory, or cognitive/psychological in nature.' The second and more important attempt to decentre the digital divide discourse is oriented towards a more international perspective, and aims to de-westernise the digital divide. An example of this position can be found at the Bridges.org website (which includes the frequent used visual representation of the need to overcome the digital divide, which is rendered here) where it is stated that: '*"the digital divide" means that between countries and between different groups of people within countries, there is a wide division between those who have real access to information and communications technology and are using it effectively, and those who don't. […] More often than not, the "information have-nots" are in developing countries, and in disadvantaged groups within countries. To bridges.org, the digital divide is thus a lost opportunity - the opportunity for the information "have-nots" to use ICTs to improve their lives.*' Again more or less the same illustrations show up, as is illustrated by the BBC New Online special report on the digital divide, based on the regional data provided by the 1998 Nua Internet Survey[7].

[7] Though there have been some major changes, due to the catching up of Europe and Asia/Pacific, the situation for Africa and the Middle-East has hardly changed in relation to the other regions (Nua, 2002).



BBC News Online (1999) – Special report: 'Bridging the digital divide'

As Servaes (2000: xi) remarks in the introduction of '*Walking on the other side of the information highway*', many developing countries' governments have attributed a leading role to ICT in their strategies for economic growth and are being encouraged by the IMF and World bank to do so. The World Bank has for instance established GICT (the Global Information & Communication Technologies Department) in January 2000. Their 'mission and strategies'-text starts with the following sentences: '*Information and communication technologies (ICT) are opening new opportunities for developing economies. These opportunities will assist developing countries in bridging the digital divide through economic growth, increased jobs, and improved access to basic services. GICT was created to leverage the strengths of the World Bank Group in addressing these needs and taking advantage of these opportunities.*' (GICT: 2002) The involvement of these Western-oriented development agencies, still embedded in the paradigms of modernisation (Burgelman et al., 1999: 16), nevertheless strongly nuance the claim of the de-westernisation of the digital divide discourse. As one of the more graphical representations on the GICT-website illustrates, the same specific articulations that characterise the Western digital divide discourse, can be found in many (but not all) of the more 'global' reorientations of this discourse. Due to these similarities the 'global' digital divide discourse remains vulnerable for the previously summarised lines of critique.

GICT website illustration

Finally another group of attempts to decentre the digital divide discourse are aimed towards a more political[8] rearticulation of the divide. An example of this position is Gandy's (2002) article entitled '*the real digital divide: citizens versus consumers*', in which he sees '*the new media as widening the distinction between the citizen and the consumer.*' (Gandy, 2002: 448) The main concern here is that the 'new economy' will incorporate and thus foreclose the democratic possibilities of the new media (Kellner, 1999). The basis of analysis is provided by a distinction between a 'consumer' and a 'civic model' of network activity; the balance between both models will eventually determine the role of the Internet in post-industrial democracy. Calabrese and Borchert (1996: 252) suggest that this environment will be stratified and segmented - one could add 'divided' here – and that a '*new class of technical and professional intelligentsia*' will engage in '*exclusionary, both by default and by design*' practices. This political rearticulation of the divide offers major opportunities towards the inclusion of power and empowerment within this discourse, avoiding at the same time the technological deterministic, media centred, westernised and epistemologically biased position, and safeguarding the important notion of social exclusion. This rearticulation also implies the inclusion of yet another signifier in this debate, which has always (to a very high degree) complemented access: participation.

[8] Political is used here in the broad sense, not being restricted to a specific sphere and/or system, but as a dimension that is '*inherent to every human society and that determines our very ontological condition*' (Mouffe, 1997: 3).

2. Participation as a complement to access

In order to achieve this broadening of the scope, we now turn to the field of participatory communication (and the domain of traditional media) for inspiration, bearing in mind that access does not become completely discredited, but continues to play a crucial role, especially as a necessary condition for participation.

The following overview of the interpretation(s) of participation within the more traditional media is structured by Servaes' (1999: 84) thesis that the field of participatory communication is characterised by two points of view: Freire's dialogical pedagogy and the already mentioned Unesco-debates about access, participation and self-management in the seventies.

The main topic in Freire's work is the educational process and the struggle against illiteracy. In this context the (mass)medial context is only minimally taken into account. Despite this limitation Freire's theory has had a considerable impact within the domain of participatory communication, as for example Thomas (1994: 51) remarks: '*Although he never really linked his analysis to the use of particular media, it is implicit in his writings that communication, in order to be effective, has to be participatory, dialogic and reciprocal. In fact, the entire enterprise of participatory communication projects, from the organisation and production of community radio in Latin America, Australia, and parts of Africa and Asia, through the practices of popular theatre in countries like Brazil, Chile, Jamaica, South Africa, India, and the Philippines utilise Freire's perspective.*'

Freire's 'pedagogy of the hope' is initially aimed against the traditional educational system, which he regards paternalistic and non-participative, since this system regards knowledge to be passed on as a readymade package instead of as the result of a dialogic meeting between subjects. Freire concludes that people passively accept this content and rarely deal with the validity of this knowledge (Thomas 1994: 51). He situates this conclusion in the context of the 'culture of silence' in Latin-America, which implies that '*the ruling class has such superior power that the repressed end up seeing themselves as the oppressors do, namely as inferior. […] The most important consequence of the culture of silence is the assuming of an apathic attitude by the repressed. In the culture of silence no development can be realised.*' (Servaes & Lie, 1996: 29 - my translation)

Freire emphasises in his alternative pedagogy the importance of action as well as reflection, which are joined in the term 'conscientisation'. This conscientisation still requires the presence of a tutor, so that the arousing critical awareness is related to development and to the political struggle against injustice. At the same time tutor and apprentice are together involved in the (re)search for (of) knowledge: '*authentic participation would then enable the subjects involved in this dialogic encounter to unveil reality for themselves*' (Thomas, 1994: 51). Participation is in other words seen in this context in function of the reduction of the imbalances of power. This reduction is situated in two levels: the educational situation (the relations between tutor, apprentice and knowledge) and the social, political and economic situation (the relations between oppressors and repressed).

The second point of view within the field of participatory communication has to be situated in the context of the Unesco-debates about a 'New World Information and Communication Order' (NWICO)[9] and a 'New International Economic Order' (NIEO). These debates, with the report of the 1977 Belgrade-meeting as transcript of this discussion, are among others oriented towards the defining of the concepts access, participation and self-management. Servaes' (1999: 85) account of the definition of access has already been mentioned above. It stresses the available opportunities to choose relevant programs and to have a means of feedback. Participation and self-management are on the other hand defined as follows: '*participation implies a higher level of public involvement in communication systems. It includes the involvement of the public in the production process and also in the management and planning of communication systems. Participation may be no more than representation and consultation of the public in decision making. On the other hand, self-management is the most advanced form of participation. In this case, the public exercises the power of decision making within communication enterprises and is also fully involved in the formulation of communication policies and plans.*' (Servaes, 1999: 85)

[9] Or also: '*New International Information Order*' (NIIO).

2.1. Access and participation in the traditional media

In creating an overview, the above discussion on participation and access in traditional media (Berrigan, 1977; Berrigan, 1979; Lewis, 1993; Servaes, 1999) can serve as a guideline. The table below gives an overview of the different types of access and participation that can be distinguished in relation to both the production and reception of meaning in relation to these traditional media.

Table 1: Access and participation

Production of meaning	**Reception of meaning**
Access to the content producing organisation → Ability to produce content and have it broadcast	*Access to the content considered relevant* → Ability to receive and interpret content
Participation in the produced content → Co-deciding on content	
Participation in the content producing organisation → Co-deciding on policy	→ Evaluating the content

At the level of reception the use of the concept of access refers to the ability to receive and interpret content, a capability closely related to mediating quasi-interactive aspects of the media discussed below.

At the same level of reception, members of the audience can also often participate (to a limited degree) in evaluating the produced content. Already within some classic linear media models (for example DeFleur's (1966) model) the feedback-concept is used to theorise spontaneous audience reactions, like telephones or letters (later on also faxes and emails) to a specific programme or media professional. A more recent example of this is offered in the 'Crossroads'-research by Hobson (1982), in which a series of viewers' letters to the Birmingham Evening Mail – protesting against the announced death of one of the characters in this soap - are analyzed. More structural forms of this type of participation are evaluations performed by viewer's associations[10] and audience councils (Carpentier et al., 2002).

At the level of media production different practices of gaining access to the traditional media exist. Citizens can for instance address the (news)media individually or collectively (as being part of civil society). In spite of the structural bias that favours the access of so-called *'establishment sources'* (McNair, 1998: 76-77), agents varying from new (and old) social movements to local action committees can (try to) gain access to the (news)media, and can play an active – public - role.

When discussing participation at the level of production, it is firstly related to co-deciding on policy. Although this form of participation still remains rather rare in mainstream traditional media, in (some) community media it is considered proper practice. Prehn illustrates this as follows: '*participation [in community media] implies a wider range of activities related to involving people directly in station programming, administration and policy activities.*' (Prehn, 1991: 259) When it comes to co-deciding on content in the mainstream media, audience participation in the produced content has become more common. Audience participation in this sense means that members of the audience – sometimes extremely meticulously selected and managed - participate in for example talk shows, debates or (even) current affairs programmes and news broadcasts.

2.2. Participation and em/power/ment

The above discussed approaches to participation might give the impression that the definition of participation goes uncontested. The opposite is the case, as for instance Pateman (1972: 1) remarks: '*the widespread use of the term […] has tended to mean that any precise, meaningful content has almost disappeared; "participation" is used to refer to a wide variety of different situations by different people*'. This widespread use (or the floating) of (the signifier) participation has prompted the construction of hierarchically ordered systems of meaning in which specific forms of participation are described as 'complete', 'real' and 'authentic', while other forms of participation are described as 'partial', 'fake' and 'pseudo'. As the illustrations below will

[10] The European viewer's associations are grouped in Euralva (http://www.vlv.org.uk/vlveuralvpg.htm).

illustrate, the defining element of this categorisation is the degree to which power is equally distributed among the participants.

An example of the introduction of the difference between complete and partial participation can be found in Pateman's (1972) book 'Democratic theory and participation'. The two definitions of participation that she introduces are the definitions of 'partial' and 'full participation'. Partial participation is defined by her as: '*a process in which two or more parties influence each other in the making of decisions but the final power to decide rests with one party only*' (Pateman, 1972: 70), while full participation is seen as '*a process where each individual member of a decision-making body has equal power to determine the outcome of decisions.*' (Pateman, 1972: 71)

Other terms construct a hierarchically ordered system within the definitions of participation on the basis of the real-unreal dichotomy. In the field of the so-called political participation for example Verba (1961: 220-221) indicates the existence of 'pseudo-participation', in which the emphasis is not on the creating of a situation in which participation is possible, but on the creating of the feeling that participation is possible: '*participation has become a technique of persuasion rather than of decision*'. An alternative name which is among others used by Strauss (1998: 18) is 'manipulative participation'[11].

Also in the field of participatory communication this difference between real/true participation on the one hand and pseudo-participation on the other hand is acknowledged. White for example refers to a paper of Deshler and Sock (1985) who have analysed the literature on development and participation, in function of the applied basic concepts. In this context they introduce the difference between 'pseudo-participation' and 'genuine participation'. White (1994: 17) summarises the definitions used in this conference paper as follows, where (again) much weight is attributed to the presence of equal power relations: '*People's participation in development in which the control of the project and the decision-making power rests with the planners, administrators, and the community's elite is pseudo-participation. […] When the development bureaucracy, the local elite, and the people are working cooperatively throughout the decision-making process and when the people are empowered to control the action to be taken, only then can there be genuine participation*'. A second author working within the tradition of participatory communication that uses terms as 'genuine' and 'authentic participation' is Servaes. In 'Communication for development' (1999) he writes that this 'real' form of participation has to be seen as participation '*[that] directly addresses power and its distribution in society. It touches the very core of power relationships.*' (Servaes, 1999: 198) The concept of power is in other words again central to the definition of 'real' participation. White (1994: 17) also emphasises this central link between power and participation: '*it appears that power and control are pivotal subconcepts which contribute to both understanding the diversity of expectations and anticipated out-comes of people's participation.*'

3. Can interactivity/interaction save the day?

Although the (older) signifier participation is rather absent in the discourses on the new media, its place might have been taken by yet another signifier: interactivity/interaction. When talking about the new media, interaction[12] plays a significant role. In Rheingold's (1993) summary of new media consequences – supporting citizen activity in politics and power, increased interaction with diverse others and a new vocabulary and form of communication – interaction features prominently.

The use of this concept has been harshly contested and criticised. Manovich (2001: 55) problematises the newness and broadness of the concept. He firstly argues that interaction can be found at work in older cultural forms and media technologies, which makes the concept insufficient to provide the basis for theorising the difference between traditional and new media. Secondly he argues that interaction has been attributed too many meanings and/or a set of problematic meanings (leaving it often undefined or underdefined (McMillan, 2002: 164)). He refers to the '*myth of interactivity*', as its meaning becomes tautological when it is used in relation to computer-based media: '*Modern HCI [or Human-Computer Interaction] is by definition interactive. […] Therefore, to call computer media "interactive" is meaningless – it simply means stating the most basic facts about computers.*' He also points to the danger of the interpretation of interaction as the physical interaction between a user and a media object, at the expense of psychological interaction: '*the psychological processes of filling-in, hypothesis formation, recall, and identification, which are required for us to comprehend any text or image at all, are mistakenly identified with an objectively existing structure of interactive links.*' (Manovich,

[11] The well-known rhyme, which according to myth appeared sometime around the beginning of the seventies on a Paris wall, also takes advantage of this dichotomy between 'real' and 'fake' participation: '*Je participe, tu participes, il participe, nous participons, vous participez, ils profitent.*' (Verba & Nie, 1987: 0)

[12] As interactivity (again) refers more to a technological property and thus is closely connected to the digital divide discourse, the use of the broader concept interaction is preferred in this text.

2001: 57) In order to theorise this reduction Penny (1995: 54) uses the word '*interpassivity*', meaning the '*Pavlovian interactivity of stimulus and response.*'

For Manovich' first point on the lack of newness ample support can be found in traditional media studies, where the ritual, expressive, cultivating or mediating quasi-interactive aspects of the media have been emphasised for quite a long time (see respectively Carey, 1975; McQuail, 1994; Gerbner et al., 1979; Thompson, 1995). Among others Gerbner's cultivation theory (1979) can be classified here. The starting point of these models is the symbolic linkage that exists between media and audience, in which the interaction with and the active-ness of the audience is seen as a form of commitment and sharing of common values.

The second point on the broadness of the meaning(s) of the notion of interaction has only stimulated further inquiry and analysis. Many authors have in the meanwhile started to create an inventory of the different meanings of interaction. A first group has introduced a distinction between two broad types of interaction: person-to-person interaction and person-to-machine interaction (Carey, 1989; Hoffman & Novak, 1996; Lee, 2000), while others have identified three levels of interaction. Szuprowicz' (1995) distinction between user-to-user, user-to-documents and user-to-system) is one of the more commonly used threefold categorisation systems.

As McMillan (2002: 166-167) remarks, the person-to-person or user-to-user interaction (or computer-mediated communication) finds its roots in human communication (and sociological) theory. Subjectivist sociologies as symbolic interactionism and phenomenological sociology have highlighted the importance of social interaction in the construction of meaning through lived and intersubjective experiences embodied in language. In these sociologies the social (including Cooley's (1902) looking-glass self) is shaped by actors interacting on the basis of shared interests, purposes and values, or of common knowledges.

User-to-documents interaction can again be related to more traditional approaches towards mediated interaction, such as Horton and Wohl's (1956) account of parasocial interaction. More recently Thompson (1995: 84-85) has introduced the concept of quasi-interactive mediated communication[13] which he describes as follows: *'it is a structured situation in which some individuals are engaged primarily in producing symbolic forms for others who are not physically present, while others are involved primarily in receiving symbolic forms produced by others to whom they cannot respond, but with whom they can form bonds of friendship, affection and loyalty.*' In this structured situation interaction can be seen as the ways that active audiences interpret and use media messages. The approach to the human subject as an active carrier of meaning is already echoed in the development of Eco's (1965) aberrant decoding theory on the one hand, Hall's encoding/decoding model from 1973[14] and the concept of the active audience (Fiske, 1987) that emanated out of this model on the other hand. Also the uses and gratifications theory by (among others) Katz, Blumler and Gurevitch (1974) and the deduced models, as for example the expectancy-value theory of Palmgreen and Rayburn (1985) and the social action model of Renckstorf et al. (1996), rely to a large degree on the concept of the active audience (Livingstone, 1998: 238).

Finally user-to-system interaction is rather central to the new media, as it focuses on the human-computer relationship. Originally interaction was used to describe the more user-friendly interfaces that transcended the perceived limitations of batch processing. Later human-computer interaction (HCI) research focused *'analogous to reception studies […] on the user-technology interaction, rather than the technology per se. It deals with usage of technology, or, to speak in discourse lingua, the pragmatics of technology.*' (Persson et al., 2000) McMillan's (2002: 174-175) model of user-to-system interaction offers four subsets: human-based interaction (e.g. users organising/manipulating data on the basis of their preferences), computer-based interaction (where information is presented to the user who makes the selection), adaptive communication (where computers are more adaptive to users' characterises, e.g. learning skills) and flow (where users 'loose themselves' in computer environments such as virtually reality systems and gaming environments).

One of McMillan's (2002) important contributions to this debate is that she very explicitly links all different types and (sub)models of interaction with questions of control (and power). Nevertheless the matter of control and power remains problematic, as the relationship between the user and his 'extension' is externally defined. Rokeby (1995: 148) for instance argues that interaction is about *'encounter rather than control.*' Later he continues: *'interactive media have the power to […] expand the reach of our actions and decisions. We*

[13] He contrasts quasi-interactive mediated communication (which is monological and oriented towards an indefinite range of potential recipients) with face-to-face and mediated communication (which is dialogical and oriented towards specific others) (Thompson, 1995: 85).

[14] This article was first published in the form of a paper that was later on included in Hall's 1980 reader *'Culture, Media, Language. Working papers in cultural studies, 1972-79*'.

trade subjectivity […] for the illusion of control; our control may appear absolute, but the domain of that control is externally defined. We are engaged, but exercise no power over the filtering language of interaction embedded in the interface.' (Rokeby, 1995: 154)

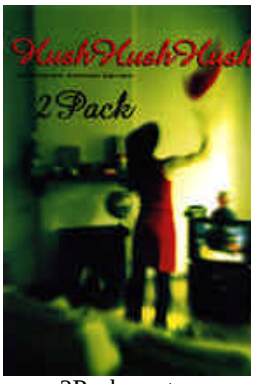
This type of argument creates support for the idea that the discursive replacement of participation by interaction has created an important void that leaves the 'microphysics of power' (Foucault, 1997: 42) and the power/knowledge relations too undertheorised and unchallenged. Interaction remains an important addition to the access-oriented digital divide discourse, but cannot suffice. A more innovative approach would be to combine access, interaction (or first order participation) and (second order) participation in order to achieve a broader perspective on the possibilities of both traditional and new media, and decisively correct the limitations of the digital divide discourse. As table 2 illustrates this approach would allow for the introduction of an intermediary level between access and participation. This inclusion would also allow clearing out some of the theoretical problems of the traditional access/participation division, which has firstly led to the overstraining of both categories. In this new model access is distinguished from the abilities to use and interpret content, while participation is now differentiated from ordinary feedback processes. Secondly the newness of the new media allows highlighting the importance and determining nature of technology. Traditional media technologies have been normalised, resulting in the theoretical neglect (or supposed irrelevance) of participation in the processes of their technological development. New approaches as can be found in 'participatory design' now explicitly theorise the importance of participation within the range of technological development. The combination of access, interaction and participation results in the following table:

Table 2: Access, interaction and participation

Production of meaning	**Reception of meaning**
Access to the content producing organisation → Possession of equipment to produce content and have it broadcast	*Access to the content considered relevant* → Ability to receive content
User-to-technology interaction → Ability to use equipment to produce content	→ Ability to use equipment to receive content
User-to-user interaction → Creating content	*User-to-content interaction* → Ability to interpret content
Participation in the produced content → Co-deciding on (general) content	
Participation in the content producing organisation → Co-deciding on policy	*User-to-content producing organisation interaction* → Evaluating the content
Participation in the technology producing organisation → Co-deciding on technology	

4. Hush Hush Hush

The theoretical frame discussed in the previous segments can also be used to analyse and evaluate specific cultural practices and objects. In this paper a streaming video project was selected as a case study, to both test and strengthen the theoretical framework using the iterative approach that characterises qualitative research. In this specific project 2Pack, a dance performance by the Flemish (North Belgian) dance company Hush Hush Hush[15], was made available on the Internet for a month following the evening they ended their world tour in the Antwerp cultural centre that houses them (on 23/3/2001 in the CCBE[16]). The analysis is firstly based on a series of interviews with the different people involved: the director of the cultural centre CCBE (Pascal Nicolas), the artistic director (Abdelaziz Sarrokh) and the business director (Murat Can) of Hush Hush Hush, Stefan Kölgen and Ann Laenen from Kölgen Bvba[17], the CCBE-website constructor (who acted as a consultant on this project) and John Vanhoucke, the 'head of implementations' of Streamcase[18], the digital publishing company that was responsible for the webcast. These interviews where complemented by a quantitative analysis of the seven log files that resulted from the video streaming and that contained basic streaming video viewer data. A preliminary report on the quantitative analysis was (briefly) discussed with the CCBE-director, adding a modest form of feedback analysis to the research design.



2Pack poster

Hush Hush Hush website

[15] See http://www.hushhushhush.be (only front page in operation)
[16] See http://www.ccbe.be
[17] See http://www.kolgen.be
[18] See http://www.streamcase.com/content/index.htm

4.1. Hush Hush Hush, 2Pack and case study relevance

Hush Hush Hush is a dance company that started in the CCBE in 1996 as a collaboration between Abdelaziz Sarrokh and Khalid Benaouisse. The dance company staged its first performance (Carte Blanche) in 1997. Before Hush Hush Hush the Belgian-Algerian artistic director Sarrokh performed as a dancer in two of Alain Platel's (and Les Ballets C. de la B.) productions (Bonjour Madame and La Tristeza Complice). Other Hush Hush Hush-productions were/are Via (1998), K'Dar (1999), 2Pack (2000), Dancing in the Street (2001) and Bobo in paradise (2002).

Hush Hush Hush aims to fusion contemporary dance and street (dance) cultures, such as hip-hop and break-dance. The cast is a combination both autodidactic street-dancers and classically trained dancers, each with their proper style. A review of Hush Hush Hush's first production describes their work as *'a surprise for everybody by its shimmering combination of hip-hop, break-dance, rap, contemporary youth culture and multi/interculturalism.'* (Paradiso, 1998) Sarrokh particularly stresses the importance of youth culture and the related music genres:

> '*[The specificity of Hush Hush Hush is] its link to youth culture, because you'll end up in the hip-hop scene, which groups a lot of youngsters, that very often come to the theatre [when we play]. That's a different form of recognition, different from what one would get from the average theatre audience. We reach a different type of audience, something that came as a surprise for the entire art scene, which has been dreaming for years about attracting youngsters to the theatres. We managed to do this because we've included some of the youth culture [in our performance].*' (Interview with artistic director HHH)

In the 2Pack performance the same ingredients are present. It features Khalid Benaouisse, Magdalena Przybylek, Lima Lalitha, Abdelaziz Sarrokh, Yada Van der Hoek, Paulo Nuñes and Alain Vyent. Paulo Nuñes is a former world champion break-dance; Alain Viyent and Yada Van der Hoek are both members of the Rotterdam break-dance crew Got Skillz (Uit.nu, 2000). The music features work from Purcell, Bellini, Skunk Anansie, James Brown and Ice T, and was compiled by Peter Lesage and Marc Lacroix. The set[19] (designed by Karen Dobbeleir) consisted out of nine cubicles stacked on top of each other, resembling an apartment block (including a bar in a ground-floor corner). The area in front of the flats became to represent the streets on which the inhabitants meet, but provided also the space where the inhabitants' dreams are enacted (Marshall, 2001). The set allowed the spectator to witness a diversity of scenes from daily life, as we can for instance watch *'one man fix a light bulb, another do push ups, and a female acting out a traumatic opera.'* (Oliver, 2001) As Marshall (2001) remarks, this production also contains clear racial, sexual and gender-related perspectives, as '*B-boy styles and dance-offs sat alongside suggestions of personal histories of sexual abuse, the physical manifestation of racial pressures and other themes*'. He continues that this production '*effectively dramatise[s] women's lives. The sexual freedom of one women, objectified by one man who gazed at her and provoked her with his tongue, become a source of both her liberation and oppression. She found ecstasy in her sexual provocations, yet it was she who later retired to her flat to muse on her scarred sexual consciousness.*'

The one month webcast of 2Pack was planned to start on 23rd March but was delayed with one day for technical reasons. In the CCBE mailing list (called CC.be-zine), the decision to organise the streaming video broadcast was legitimised by the potential increase in 'cultural participation':

[19]These CCBE-pictures can be found at the 'Paleis voor schone kunsten'-website: http://www.pbapsk.be/paleisvzw/HushHush.htm

> '*In function of stimulating broader cultural participation the CCBE will, simultaneously with the* dernière *at the CCBE, place a streaming video of the 2Pack production on its website www.ccbe.be. […] 2Pack on www.ccbe.be is the ideal combination to turn the contemporary and justified policy intentions towards cultural participation into practice. The combination of Hush Hush Hush and the Internet will bring the performing and stage arts closer to a group of (especially young) people that rarely make it to the theatre.*' (CCBE, 12 March 2001)

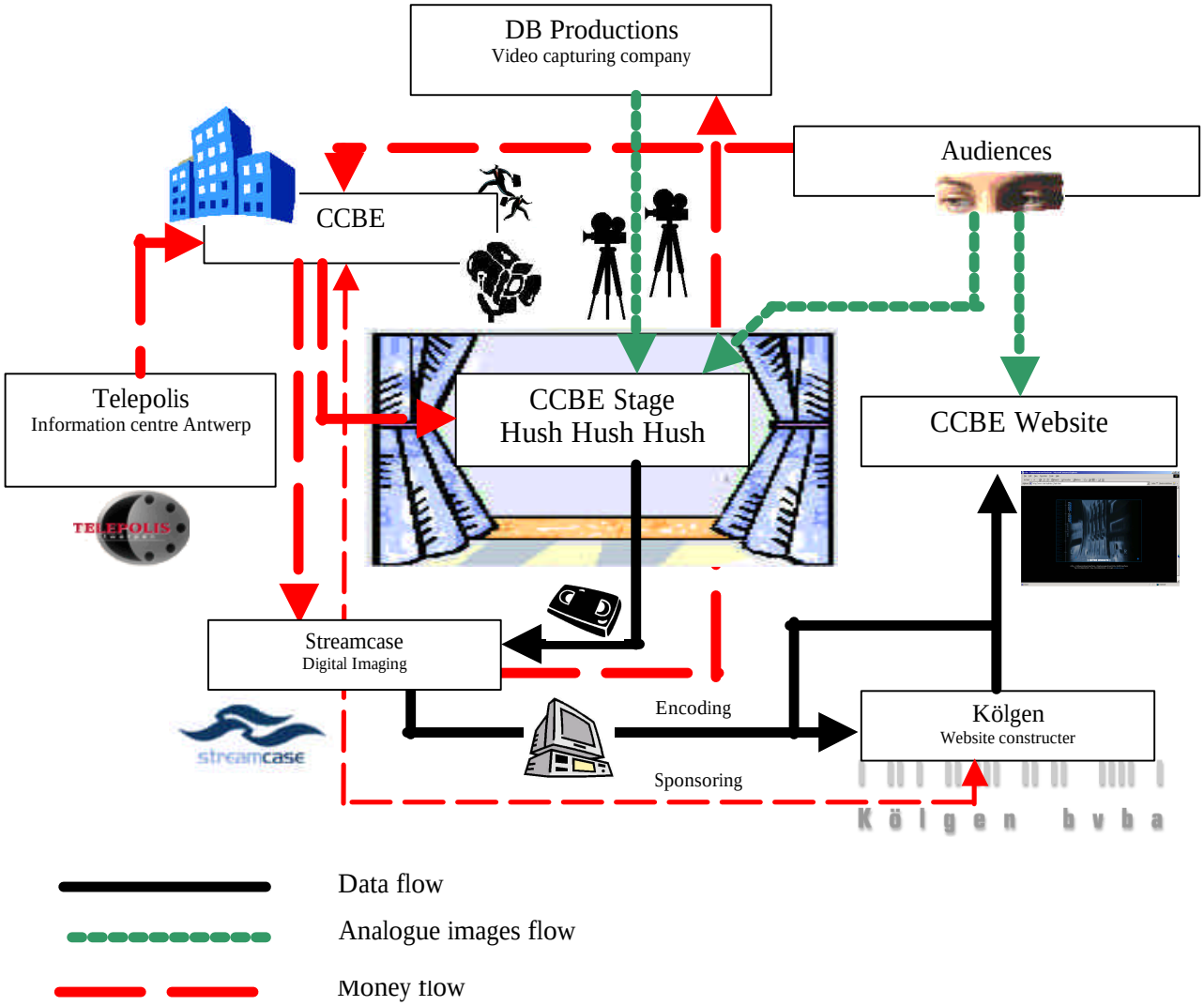
Although the Hush Hush Hush-directors themselves do not feel very comfortable of being considered a 'multicultural dance company', the director of the CCBE also links the Hush Hush Hush-webcast with the concept of cultural diversity, which he considers to be an important (personal) cultural policy accent: '*what interest us the most, is to have a diverse a possible audience that takes part in a diverse as possible programme.*' (Interview with director CCBE) This becomes especially obvious when he links the webcast with the international day for the elimination of racial discrimination:

> '*For me it was the ideal moment: 21 March: international day against racism … For a cultural institution to then put Hush Hush Hush on the Net … I think that a statement.*' (Interview with director CCBE)

The relevance for this case study can be found at two levels. Firstly when legitimising the webcast, clear reference is made to the concept of 'cultural participation'. Building on the specificity of the dance company Hush Hush Hush, which is one of the few arts companies that actually manages to attract an audience that rarely visits a dance performance in a cultural institution, the webcast is aimed at bringing those people even closer to the cultural centre. What adds to the relevance of the case study is that these attempts to increase 'cultural participation' are based on the stimulation of an intercultural dialogue, not only on the level of gender and ethnicity, but especially through reconciliation of subculture and street-culture on the one hand, and institutionalised cultural politics on the other hand. This case clearly shows the negotiation between what is considered to be 'high' and 'low' (or popular) culture and the transformation from 'low' street-culture into 'high' art, signifying the contingency of both categories. The director summarises the role of the CCBE as art making machinery as follows:

> '*We are abusing or using the institutional power of this cultural centre. One says that we're involved in the arts. Well, we're working on this [street-culture], hence this is art. Something we're communicating as broadly as possible. If it concerns break-dance, we're working on it, and if we're working on it, then it is art. Which implies that we're saying: the street creates art.*' (Interview with director CCBE)

4.2. The Hush Hush Hush webcast



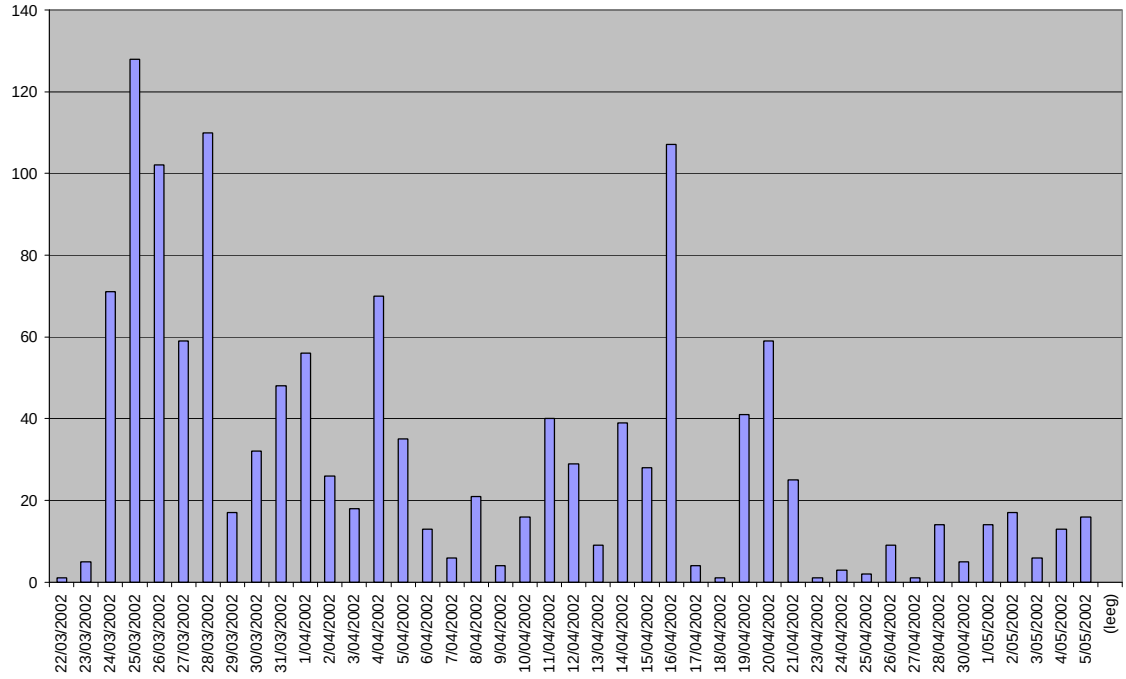
The above schema gives a first impression of the rather complex set of collaborations which eventually resulted in the webcast. Financial support was mainly provided by the Antwerp Information Centre Telepolis. CCBE requested a digital publishing company (Streamcase) to take on the responsibility for the technical side of the video streaming. The CCBE's website constructer acted as consultant, and explicitly requested two formats: Windows Media Player and QuickTime, thus avoiding '*a technically narrow-minded organisation [of the broadcast]. One [first] preferred the easy solution - the umbrella solution I always call it - a one-sided choice for the windows-user*.' (Interview with website constructer). Streamcase in turn asked a video capturing company (DB Productions) to film the closing performance of 2Pack on 23rd March 2001. DB Productions placed two cameras, their operators and a director in the back of the theatre. Together with the Streamcase people they entered in a negotiation with the theatre staff concerning the lighting, as the streaming video requires more intense lighting:

> '*You have the show as such. … They have to give in a bit when it comes the lighting. It has its effects on the final result, the quick movements … You simply can't render it quick enough.*' (Interview with Streamcase's head of implementations)

The video output was immediately encoded using Streamcases's servers. Due to (too) poor quality of live encoding, Streamcase decided to re-encode the material, allowing their obdurate servers more time to render the material. The different files were then transferred to a streaming video server and, on 24th March at 20:00 the on-demand video stream went on-line, embedded in a webpage that was linked to the CCBE's website. The files remained available for a couple of weeks.

293 (paying) spectators were present (and registered) during the Hush Hush Hush-performance, as they watched it live. The streaming video viewer registration is more complex, as it depends on the analysis of the seven log files[20] that were generated by the different servers. These log files show that the video started to play for 1321 times. The graph below gives a first indication of the time frame in which this happened.

Graph 1: Date of clips played (N=1321)



The figure of 1321 clips played does not imply that 1321 people actually watched the performance: 20% of all initiated clips (that had a start and end time – N=1170) were stopped immediately. Moreover the analysis of the clips' start and end times (see table 3) already illustrates the presence of very specific viewing behaviour, which includes zapping, jumping forwards, replaying and pausing.

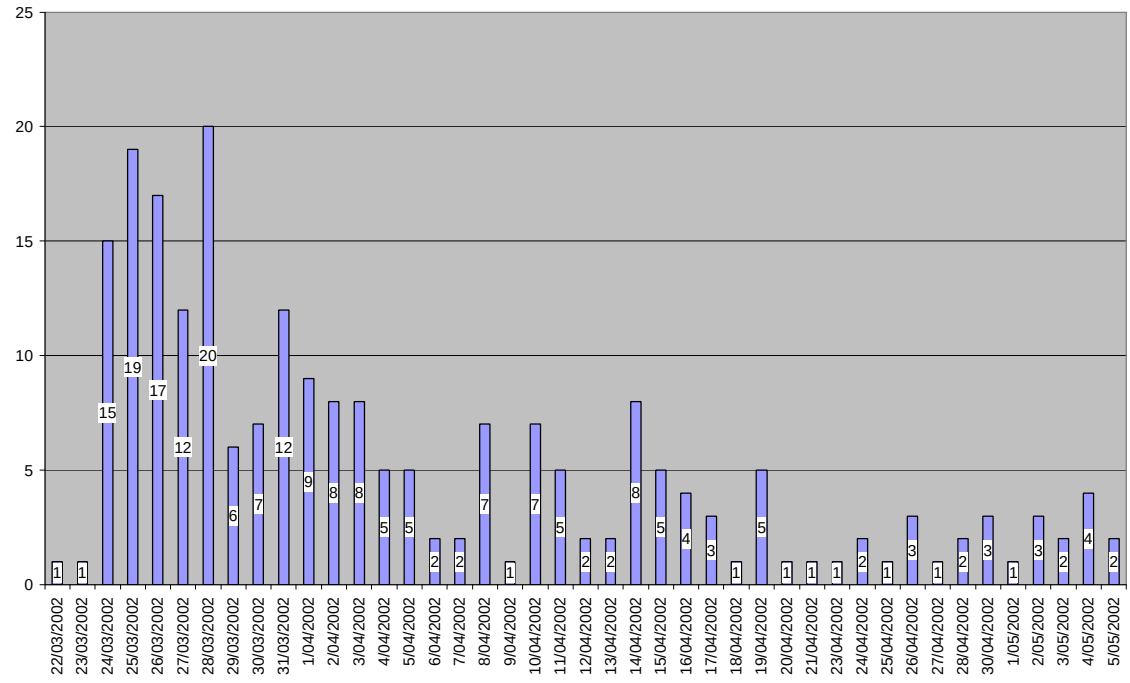
[20] The five WMP log files contained 19016 fields, of which only 1177 related to the Hush Hush Hush performance. The two QuickTime log files only contained fields related to the Hush Hush Hush performance (144), but these files had a different structure (compared to the WMP log files). Both problems necessitated a slow and thoughtful merging process.

Table 3: How the clips were played (N=1170)

Type	Definition	N	%
Failed viewing	Zero duration	235	20
Start viewing	No zero duration and first occurrence of IP-address	120	10
Jumping	No zero duration and start-time next viewing > end-time previous viewing	334	29
Replaying	No zero duration and start-time next viewing < end-time previous viewing	361	31
Paused	No zero duration and start-time next viewing = end-time previous viewing	82	7
Continuous viewing	No zero duration and IP-address different from previous and next	38	3
Total		1170	100

Table 3 at the same time illustrates the main reason why the number of clips played cannot be equated with the number of viewers, as one viewer quite often initiates multiple clips. For this reason the criterion of the 'unique visitor' is preferred, which is defined on the basis of the IP-addresses of the visitors[21]. On the basis of this definition 226 unique visitors have been registered to watch (part of) the performance. When this is again placed on a time scale (graph 2), it becomes clear that the majority of the unique visitors (97) have watched the video for the first time during the first week. In the next two weeks, the number of visitors is reduced by half each week (week 2: 49; week 3: 26). After a brief stabilization on week 4 (26 first time unique viewers), the number of viewers drops significantly (week 5: 9; week 6: 15).

Graph 2: Date of first view of unique visitors (N=226)

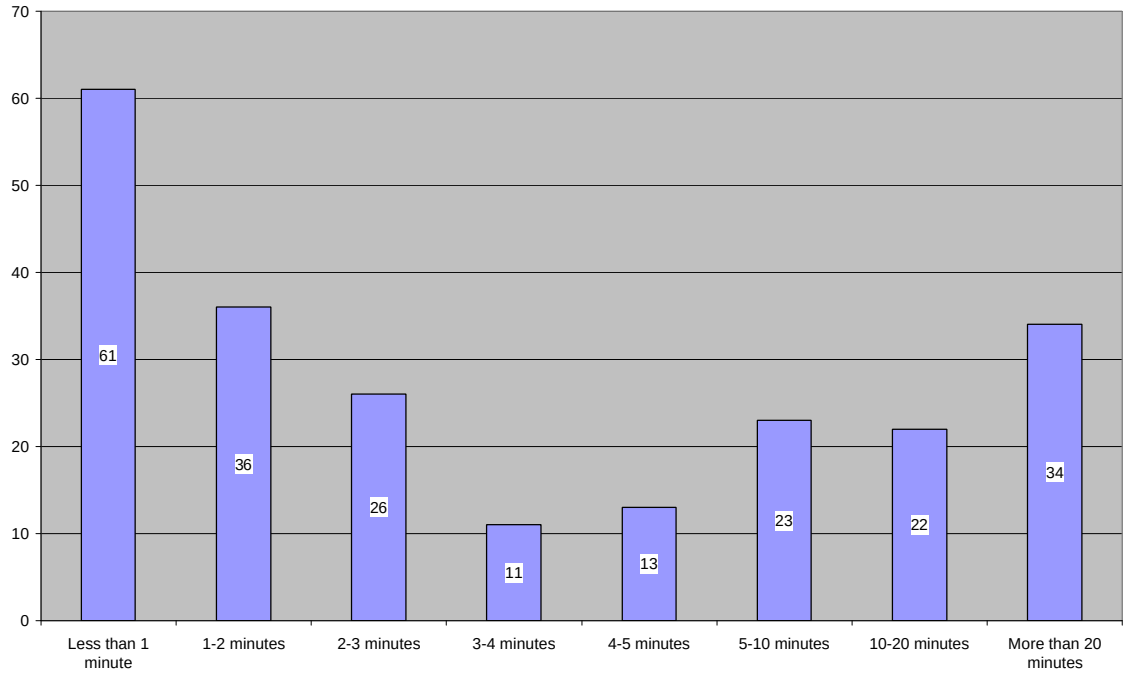


As has already been mentioned, the viewers of the on-line Hush Hush Hush-performance show a rather specific viewing behaviour. Graph 3 shows how short this viewing duration actually is. The total duration of the streaming video is 3551 seconds (about 1 hour). 65% of the unique viewers watch less than five

[21] The criterion is far from perfect, as one IP-address might also hide multiple users. This is very likely the case for five IP-addresses that together hide approximately 77 different users. These IP-addresses also hide a number of project collaborators (such as Streamcase and CCBE-staff).

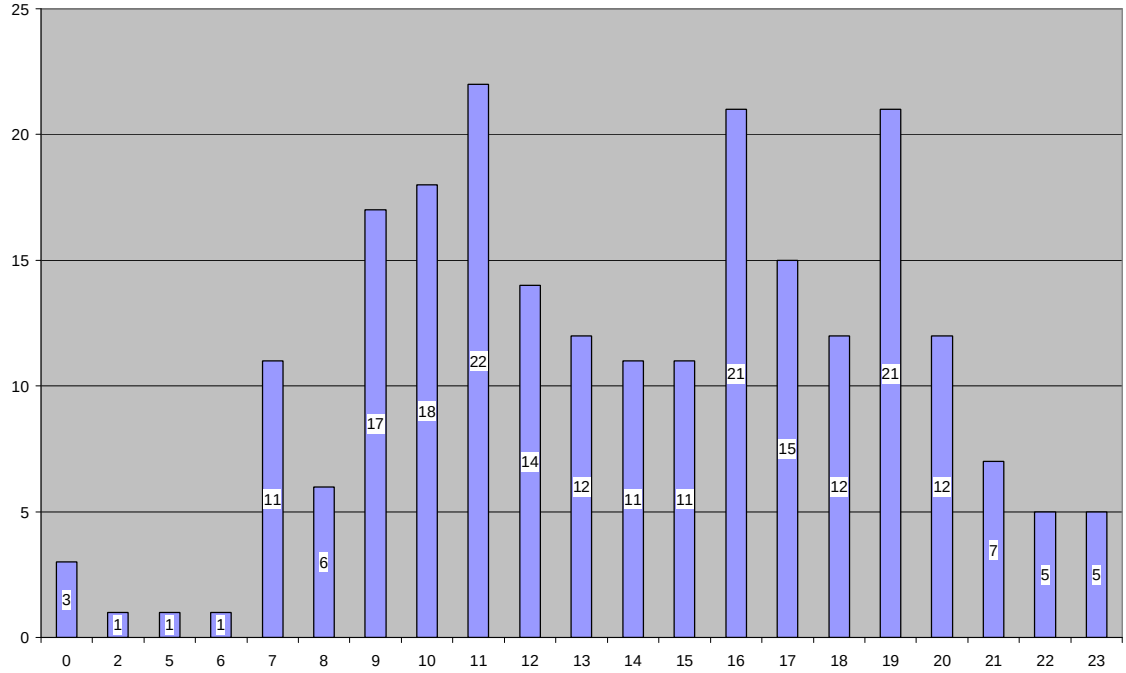
minutes. 27% watches less than one minute. At the same time there are a number of viewers that persevere: 20% watches between 5 and 20 minutes, 15% watches more than 20 minutes.

Graph 3: Duration of first view of unique visitors (N=226)



Secondly, viewing is no longer limited to the traditional moment of a performance, but becomes more dispersed. Peaks are during the morning office hours (9:00-12:00), late afternoon office hours (16:00-17:00) and the early evening hours (19:00-20:00).

Graph 4: Hour of first view of unique visitors (N=226)



Viewers also use different types of technologies, which results in differences in the used video player (78% preferred WMPlayer, 22% a QTPlayer) and in the streaming video quality (79% choose the high quality stream, 21% preferred low quality).

The specificity of the viewing behaviour becomes especially present when the different types of viewing are linked to the unique viewers. Only 38 of the 226 viewers displayed continuous viewing behaviour. Especially time leaping (forward or backward) is a frequently practised form of viewing with regard to this on-line content. Pausing is less common, but nevertheless occurs in 38 cases.

Table 4: How the unique viewer watched (N=226)

Type	N
Failed viewing	53
Jumping	88
Replaying	81
Paused	38
Continuous viewing	38
Total (non-cumulative)	226

4.3. Access, interaction and participation

The discussion on access, interaction and participation, as it was schematised in table 2, can put to work in order to support a three-level evaluation of this streaming video-project.

From the point of view of access, the production of meaning is limited to the dance company, the CCBE and a series of intermediary organisations. The audience is positioned on the reception side of what in this case truly is a production/reception dichotomy. The audience's possibilities for access to the dance production have nevertheless been doubled, as members of the audience can both attend the on-stage and/or the on-line dance performance. In the first case an estimated 293 people did, in the second case an estimated 226 did, although some overlap might have occurred. Both groups gained access to content they deemed relevant – although the brief viewing duration in the second case might nuance this attributed relevance. At the same time access remained restricted, in both cases. Attending a dance performance in a cultural institution (even when blended with street-culture) poses an obstacle to certain members and segments of the (potential) audience. Watching a video stream on a computer requires good physical access and some instrumental skills. Although it is unlikely that both mechanisms completely overlap and touch the very same people, more could have been done to increase physical access, for instance in collaborating with local youth centres etc.

At the level of interaction, little interaction was possible at the production side. No on-line content on this performance could be created, and no on-line user-to-user interaction was facilitated. The difference with the on-stage performance is enlightening, as before and after[22] the performance face-to-face audience-to-audience communication is enabled and facilitated by the existence of a foyer within the theatre infrastructure. A virtual foyer did not exist, nor were there any other locations that facilitated face-to-face communication and the creation of secondary meanings during (or after) watching the video stream. More interaction was possible at the reception side: the user-to-technology interaction becomes apparent through the analysis of the log files. Unfortunately this type of interaction was partially detrimental, as much of the audience was lost because of its zapping behaviour. On the other hand did the interface offer the viewers more possibilities for time management (forwarding, backwarding, pausing), which is in the disciplined environment of the theatre much more difficult. Despite this increased freedom, Rokeby's (1995) analysis of the externally defined limits of the interface must be kept in mind, as many other possibilities of interaction were made impossible. At the level of user-to-content interaction the audience is offered a theatre/dance text with a richness and multitude of meanings and discourses, which it can interpret and read from its own context and frames. The openness of this theatre/dance text is not boundless (as this position would imply a hyper-active audience) as for instance a set of discourses on racial, sexual and gender-related identities, shown to be embedded in daily life, are encoded (see Hall, 1980). Finally the user-to-content producing organisation is rather limited (though not impossible, because of the presence of the CCBE's email address). But it must be noted that little structural effort was made to solicit for feedback or in other words to stimulate interaction between the CCBE and Hush Hush Hush on the one hand and the members of the audience on the other hand.

[22] Judging the cheers, cries and chatting that could be heard on the video streaming, some of that audience-to-audience communication took place during the performance.

When discussing the level of audience participation, the analysis of the on-stage performance resembles strongly the analysis of the on-line performance, as the audience could not participate in (or co-decide on) the production. Both the audience that was physically present in the theatre and the audience that was watching the streaming video could not participate, a situation which is not unlike most performances in the performing and stage arts. The absence of participation is in this case not total, as this specific dance company insists on a fusion between contemporary dance and street-culture, which leads to the opening up of the gates of a cultural institution for dancers 'from the street' to participate on-stage and on-line in the creation of art.

4.4. Opportunities for improvement

In the interviews most of the people involved (rightfully) stress the experimental nature of the streaming video broadcast. One interviewee (the website constructor) for instance called it a '*pioneering initiative*', and analyse the position of the CCBE and its director as follows:

> '*He manages in killing more birds with one stone: we have a company that needs to be profiled. That company is new, young, attractive. How are we going to achieve this? What is new, attractive and young in the media: the new media. […] From all perspectives this carries the label new and fresh.*' (Interview with website constructer)

The Streamcase representative referred to their *'evangelising role*' and (naturally) said to be convinced of the alleged '*surplus-value*' of streaming video. In the interview with the artistic director of Hush Hush Hush, Sarrokh describes (part of) the motivation as follows: '*[especially the CCBE director] defended the idea, to see whether it would work or not, so that in future the same could be done for/with other companies. We just said: let's give it a try, we'll be one of the first.*' The business director later added that *'it was fun, and a good initiative, it makes [our work] more accessible for a larger audience.*' This last quote provides a good summary of the nature of the project, which was oriented towards creating access, and offering artistic content to an enlarged audience. Although the audience could interact with this content (as any active audience can) creating its own meanings (within certain textual boundaries), and although Hush Hush Hush allows (and stimulates) the participation of street dancers within the setting of a cultural institution, the level of interaction and participation remains limited in its scope. Based on the interviews and on the evaluation presented above, a series of improvements and opportunities can be identified.

1. Solving the budgetary restriction

The basic problem that is mentioned in most interviews is the budgetary restriction. The experimental nature of the project and its complementary position regarding the on-stage performance, in combination with the always scarce resources only legitimise a modest investment. The business director of Hush Hush Hush summarises their (understandable) priorities briefly: '*we played for a full house, and that's still the most important: the paying audience.*' (Interview with business director HHH) As the following interview fragment shows, this scarcity of resources is also related to the organisational capacities. At the same time, the interest the Hush Hush Hush in organising webcasts is clearly demonstrated, when the condition of amply resources is adequately met.

> 'Interviewer: *Would you organise the streaming video yourself?*
> Artistic director HHH*: I think not, because we don't have the organisational strength, we couldn't take this on as well.*
> Business director HHH*: I think it is very expensive, as such, to get it organised ourselves. Because the CCBE is a cultural institution, they can use resources that we don't have access to, or that we would have to pay for. […] It has been an option to go live on a continuous basis – as Madonna once did – but that was a project that cost millions.*'
> […]
> 'Artistic director HHH*: We have no specialists in our company that know how to handle the Internet. You need specialists, and you need the resources to employ them. I'd love to have them, but it requires huge capacities. […] Who wouldn't [want that]. I would welcome the idea of people visiting a website, but you need someone to organise that, and frankly speaking, we don't have the resources.*

Interviewer: And what if you would have these resources?
Artistic director HHH*: I would do it immediately, there is no doubt in my mind.*'

The budgetary restrictions can be defined as a meta-problem, as these restrictions structure the entire discussion. More opportunities are available, but in many cases only when more resources are made available. This vicious circle is not completely closed; some of the possible improvements discussed below require little additional financial support.

2. Improving internal collaboration and communication

One of the low-budget improvements is located in the improvement of collaboration and communication. Again, the experimental and complementary nature of the webcast can account for the insufficient time spent on consultation, negotiation and planning. The complexity of the network of organisations and technologies that were involved, combined with the possible problems of conflicting interests, necessitates more coordination and dialogue.

The lack of dialogue can be exemplified by the situation of the dance company that was not involved in the capturing process. The artistic director explains:

'*I have no idea … those people were there with their cameras, they captured the performance and than they left. I don't think I've spoken to them. They were there. […] We did our performance, and the next day it was there.*' (Interview with artistic director HHH)

The CCBE-website constructer makes a similar analysis, and links these coordinating problems to the position of early adopters and the need for a more policy-oriented approach.

'*Unfortunately this is not yet included in a policy. Projects like these today only find their origins in an individual, the reason for that can only be guessed.*' (Interview with website constructer)

3. Increasing promotion – dealing with target groups

A third area of improvement is situated at the promotional level. This problem is again identified by most interviewees. The CCBE-website constructer gives a brief summary:

'*The publicity for the streaming was limited, it was actually minimal. It's a mistake that's still frequently made: we put it on the website, en people will find it. The people will come to us.*' (Interview with website constructer)

The low priority given to additional promotion can again be partially explained by the specific position of the webcast. This discussion nevertheless simultaneously relates to the more general problem of cultural marketing and the interconnected need for defining target groups. In this case, promotional efforts oriented towards specific target groups (preferably in combination with more general promotional efforts) meet with resistance from the dance company that does not want to be locked into a niche:

'*[It's not] because we work on hip-hop, something which a lot of youngster identify with [that youngsters are our target group] Is dancing hip-hop a purposeful choice? It's purposeful because I like to dance hip-hop myself, and because I like to use it in my performances. […] [You want to know] if I'm oriented towards a target group? I prefer that everybody comes. I don't care if they are 30 or 40, that doesn't count for me, as long as you have fun.*' (Interview with artistic director HHH)

4. Archiving for the future

After the webcast, the files were removed from the streaming video server, and became inaccessible for members of the audience, but also for the dance company and the CCBE-staff. It took some effort to retrieve these files (in order to facilitate this analysis), which is in a way surprising, as these files are to be considered part of the (virtual) history of the dance company and the CCBE, and do not lose their relevance after the official webcast is terminated. Especially the CCBE-website constructer strongly pleads for the archiving of projects like these, radicalising the temporal differences in viewing behaviour, where

watching an on-stage performance is strongly situated in time and watching an on-line performance is characterised by temporal fluidity.

5. Improving the quality of the broadcast

In contrast to the previously discussed issues, the improvement of the quality of the broadcast is inseparably linked with the availability of the necessary financial resources. At the level of the capturing process, an increase in resources would enable a larger team to work longer on the filming of the performance, making the streaming video more dynamic. As the following interview quote indicates, this increase in size of the capturing team would also have major implications for the on-stage performance. The two Hush Hush Hush-directors relate this problem to their experiences with an Arte-documentary on 2Pack. This quote indicates the need to find a balance between artistic requirements, on-stage audience expectations and streaming video quality.

> 'Artistic director HHH: *We did that with Arte, but that included five, six shooting days. […] A performance is played only once, but if you want to capture that in an decent way – with close-up and so – then you need to redo the same thing six or seven times. […] Finally, to do it well, I don't think you can use an ordinary performance. Saying: we'll do it live, that can't be done.*
> Business director HHH*: It can be done, if you have 20 cameras.*
> Artistic director HHH: *Everything's possible. […]*
> Interviewer: *What about the live-audience, if you have 20 cameras on stage?*
> Business director HHH*: That the problem, practically speaking it can't be done.*
> Artistic director HHH*: It that case you need to inform the audience, you need to sell your tickets differently and so on. Then it becomes some sort of an avant-première.*'

Seen from another angle, finding this balance also requires taking into account the specificities (and obduracy) of the used technology. The streaming video quality suffered from the lack of sufficient lighting (making the video rather dark) and of sufficient audio capturing technology (rendering much of the spoken words inaudible). Below two citations from the interview with the Streamcase-representative on this issue:

> '*We always try to get some extra lighting. There is of course that fact that there is a show, which has a certain structure. You cannot expect people to place a spotlight somewhere, while at the same time someone is changing the set in the background. It always requires some consideration. That's the difference with a situation where you're yourself responsible for the lighting, and where you have full control. […] You can't expect them to use all the spotlights.*' (Interview with Streamcase's head of implementations)

> '*That was a crucial point: you couldn't capture the audio in a decent way. People were shouting on-stage. We had arranged for a surround-microphone, but you can't record everything with that. We actually use the PA, what we get from the PA, is encoded on the spot.*' (Interview with Streamcase's head of implementations)

At the level of the digital publishing process a higher budget would also allow for better (and more simultaneous) access en higher viewing quality. At the same time it would facilitate the use of other – more complex – digital publishing techniques, creating a web-environment for the streaming video. This would allow the inclusion of other informational web-formats (additional text, photographs, discussion forums, virtual foyers, …). Another digital technique, the indexing of the video, would significantly improve the access to the on-line content and take the volatile on-line viewing behaviour more into account.

6. Improving access, interaction and participation

Not surprisingly, the improvement of access, interaction and participation also features in this list of opportunities, as the previous analyses contain many possibilities. As indicated above, the basic condition for the adoption of improvements is the development of a policy related to access, interaction and participation, exploring the multitude of possibilities, such as the creation of additional viewing sites (in cyber-cafés or youth centres), the creation of a web-environment that allows for more interaction

(including the use of indexed video, and the construction of a virtual foyer) and the establishment of audience advisory groups[23] for more audience participation. Some of the interviewees already mention some other options, such as on-line editing:

> '*In my dreams – but then it have cost four times as much - it would have been live, with four cameras, so that people could edit it themselves. To give you one possibility. […] But it wasn't possible.*' (Interview with director CCBE)

During the feedback-discussion with the CCBE-director, yet another (quite radical) possibility was mentioned. In this discussion Nicolas suggested that fragments of rehearsals could be put on-line, allowing a broad range of people - from ordinary members of the audience to other professionals – to formulate their opinions and advice concerning these fragments and thus influence the actual performance.

7. The need for vision

This last area extrapolates an important element from the previously discussed opportunities and is (in a way similar to the budgetary restrictions) part of the over-arching context of the use of ICT and Internet: the need for clear vision. The streaming video project is to be considered a valuable experiment, but needs to be translated into policy. This point of view is again summarised by the website constructor:

> 'The *CCBE is merely one year on-line. They've just been in touch with networked computers. Now they've been overwhelmed by the new media – "how are we going to use them?" – they've just taken their very first steps. And now they already face a necessity: creating a frame for this event. […] What has it caused, this one live-streaming event? Let's now create a frame, allowing for a long-term vision and planning. But that's running, before having taken those very first steps.*' (Interview with website constructer)

In short: careful and broad reflection needs to take place, contemplating on the past experiences and deciding on the future of these potential techniques, taking all advantages and disadvantages into consideration.

5. Conclusion

The digital divide discourse is considered problematic in many regards, because of its unilateral emphasis on access, and because of its specific articulation of the signifier access. As a first line of critique has shown, this articulation results in the exclusion of user skills and practices, relevant content and opportunities for feedback. A second line of critique is even more vital, as it challenges the truth claims of this discourse, on empirical, conceptual, ideological and epistemological grounds. A third line of critique attempts to decentre, de-westernise and politicise the digital divide discourse.

Despite these different lines of critique some elements of the digital divide discourse are worth saving, more specifically a broadened notion of access, and the emancipatory discourse of a struggle against social exclusion that lies hidden somewhere behind the discursive complexity of the digital divide discourse. Although social exclusion cannot be reversed without tackling the factors that lead to inequality (following Wolf (1998) and many others) and *'inclusive politics of inclusion*' form a necessity, access to ICT remains one of the many tools to achieve this aim, but not without correcting the digital divide discourse.

This paper contains a strong plea to combine access with two other concepts that have played an important role in the field of discursivity that structures the relationship between people and media: participation and interaction. Both are signifiers that have had a long history in communication and social sciences, but one of them (participation) can only be rarely found in discourses on the new media. Arguably its strong emancipatory and potentially critical load - that was contested violently - resulted in the softening-up of its meaning. As an old floating signifier from the sixties and seventies - meaning everything and nothing for a long time – it became very vulnerable and is now threatened with a discursive replacement. The contrast with the other signifier (interaction) is extensive, as interaction became one of the buzzwords of the wonderful world of ICT, happily floating around (again meaning

[23] One of the other Antwerp cultural centers (CC St.-Andries) has actually established audience working groups.

everything and nothing, but still being very new). Although interaction certainly has a discursive surplus-value and should play a role in theorising the relationship between people and media, this paper aims to come to the rescue of participation, as this concept directs the attention – more than interaction can – to the power/knowledge relations that still decisively characterise traditional and new media.

The paper furthermore deals with a specific case study, in order to test and strengthen the combined model of access, interaction and participation. This case study looks at the integration of ICT within the functioning of an innovative cultural centre, as it initiated the webcast of a performance of Hush Hush Hush, a dance company that fusions street-culture with contemporary dance. Despite the experimental and complementary position of the 2Pack-webcast, it has proven to be an interesting experiment that needs to be evaluated (further) by the actors directly involved and deepened in order to meet some of high expectations. The use of the combined AIP-model allowed for a nuanced analysis that highlighted both the strengths and weaknesses of this webcast. The increase in access, allowing for interaction with content considered relevant and for more freedom in viewing behaviour can be placed on the credit side of this project, in combination with the specificity of this dance company that is build on introducing hip-hip and break-dance in contemporary dance, by looking for participation of members of those street-cultures. The different limitations imposed on access, interaction and participation and the lack of clear visions and policies on how to deal with these obstacles have to be placed on the downside of this project. At the theoretical level this case study shows that mere access (as propagated in the digital divide discourse), or mere interaction (as a signifier threatening to replace participation) cannot suffice, as the power/knowledge relations contained in the people/audience/public/media relationships would be left too undertheorised. At the level of policy this case study clearly shows the need for targeted financial (project) support and for an increase in ICT-expertise. This will allow for developing both short and long-term visions on the use of ICT in cultural centres and for transcending the mere experimental of secundary status of cultural new media broadcasts.

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