# Are Media Personalisation and Public Value compatible?

Jannick K. Sørensen

Institute of Literature, Media and Cultural Studies, University of Southern Denmark, Campusvej 55, DK-5230 Odense M, Denmark jannicks@litcul.sdu.dk

Abstract. Public Service Broadcasters (PSBs) are currently challenged by emergence of personalised webservices on the commercial marked. These webservices let the user become editors through so-called 'widgets'. This paper examines as a case study how the Danish PSB 'DR' relates to the editorial questions and design questions emerging through their implementation of a personalised widget-based webservice 'mitDR.dk'. The case-study of communicative properties of 'mitDR.dk' is related to the concepts 'public value' and 'personal value'. The concept 'personal value' is subsequently analysed with Herbert Simon's concept 'attention economy', but also contrasted with a proposed concept, 'narrative economy'. Narrative economy describes the experienced value of redundancy in information streams edited by humans, e.g. edited flows of radio and TV provided by PSBs. Personalised web pages is unknown land for PSBs. This paper argues that the value created is created in quite different way on personalised web pages compared to flow radio and TV, and non-personalised PSB web pages; old paternalistic attitudes must be skipped. PSBs should not avoid providing personalised pages, but doing so they are operating outside the well-known realm of narrative economy, where PSBs traditionally hold a strong position. Please note: This a working paper for the IAMCR conference, Stockholm 2008 – do not quote.

#### Introduction

The Danish Public Service Broadcaster 'DR' is currently developing a personalised webservice enabling users to create their own webpage composed of the content they find relevant. The webservice project has similarities with BBC's current front page¹, and with commercial personal webservices like Netvibes² and iGoogle³. What the services have in common is the interface- and interaction design concept of so-called 'widgets'; moveable and editable boxes of content on a web interface or on the PC desktop. This paper describes and analyses the design- and development process at DR regarding a personalised webservice project, called 'mitDR.dk⁴' [~ 'my DR.dk webpage'] and contextualises the project in relation to the concepts of 'public value' and 'personal value' with the concepts of 'attention economy' (Simon, 1971) and the new concept of 'narrative economy' proposed in this paper as analytical tools. This paper is not indented to constitute a 'Public Value Test' of 'mitDr.dk' but an examination of how DR's strategic objectives are expressed in the design of the webservice and how the webservice possibly redefines the relation between DR and its users.

<sup>&</sup>lt;sup>1</sup> http://www.bbc.co.uk/ accessed 14-05-2008

<sup>&</sup>lt;sup>2</sup> http://www.netvibes.com accessed 14-05-2008

<sup>&</sup>lt;sup>3</sup> http://www.google.com/ig accessed 14-05-2008

<sup>&</sup>lt;sup>4</sup> http://www.dr.dk/Betalab/Projekter/Mit+DR+forside/Mit+DR.htm accessed 15-06-2008

# Methodology

As a case study for my current PhD project<sup>5</sup> I have followed and observed the 'mitDR.dk' project since its initiation in April 2007 through in-depth interviews with project staff and ethnographic observation. The scope of the interviews and observations has been identifying design questions related to the shaping of the 'mitDR.dk' web service which have editorial or brand-strategic importance for DR. I examine how the interaction design of 'mitDR.dk' frames and articulates the relation between DR and its users. The methodology of my research is determined by the processual character of the design- and programming work of the mitDR.dk project. The focus of this paper is however the project motives, as they were presented to me in an interview at the official project 'kick-off' day May 3<sup>rd</sup> 2007 with the project initiator, editor at DR-interactive Jens Poder<sup>6</sup>, responsible for web 2.0 at the dr.dk chief editorial board.

# **Background**

Where many other European PSBs have no explicit mentioning of internet services in their remits and Public Service contracts, or as in the case of Germany have severe formal restrictions on the web services allowing only 'Programmbegleitend' web content, DR is according to the current Public Service contract the other way round obliged to offer Public Service content on 'all relevant platforms' in order 'to mirror the Danes' media use' and the devices involved. The internet is mentioned as a platform on the same level as radio and TV. Further more is DR e.g. explicitly obliged to offer a web-based news channel (DR og Kulturministeren, 2006). DR's internet services are also popular; in the period from May 2007 to March 2008 DR's web domain www.dr.dk had, except August 2007, the highest number of unique users visiting a .dk domain (Foreningen af Danske Internet Medier, 2008). This popularity has however its consequences. Designing an information architecture that satisfies all types of users becomes an increasingly difficult task the more diverse the topics covered by a site are. The findability decreases as the diversity grows, but for a fully grown PSB-site like dr.dk, diversity is exactly the goal, mirroring the diversity of DR's programming. Beyond the usability aspects of providing a 'one-fits-all' information architecture, strategic goals motivates the 'mitDR.dk' project.

# **The External Project Context**

As a popular internet service on a competitive internet market, dr.dk is to a certain degree 'pushed' by developments in interfaces and interaction design among commercial web services. Such recent developments have with a rather imprecise umbrella-term been coined 'web 2.0' (O'Reilly, 2005) or 'the social web'. Despite the weakness of the terms, a number of large commercial webservices have built business models based on offering users easy possibilities of uploading and sharing content,

<sup>&</sup>lt;sup>5</sup> "Media Personalisation as Challenge for PSBs", University of Southern Denmark, 2007 -2010

<sup>&</sup>lt;sup>6</sup> Jens Poder ceased to work at DR winter 2008. Interviews have subsequently been conducted with the DR project leader Christian Valentiner.

and on offering of personal web pages. The business models profit from customer analysis of user profiles, supplemented with the marketing value of personalised, segmented and contextualised access to users' attention. For the users, the personalised web services normatively suggest better possibilities of exposing one's attention to content of real or assumed interest, for providers of information, a possibility of a more efficient reach, more loyalty among users and insight into user behaviour. The web 2.0 services exemplifies thus what looks like a power shift in the relation between information providers (publishers, marketers) to users, expressed in increased possibilities for users to interact with websites.

## Information Architecture from Publishing to Personal Value

One could describe the historic development of computer interfaces as well as web pages as a process where the user has been given more and more options to configure functionalities and information visualisation. The interfaces of the first computer applications were fully determined by the processes in the software, later interfaces were shaped in a desktop metaphor and equipped with 'windows', and finally the layout and functionalities could be customised by users. The development of web pages has followed the same path, but delayed. In the first 10 - 12 years of the WWW, web page's display of information and the information architecture of the web site were solemnly decided by the website publishers. The hypertext mark-up language (html) was designed as a publishing tool for text. One could describe first generation websites as a mass-media; although content is not experienced simultaneously, every user received the same content in the same information architecture.

A combination of new methods and mark-up languages called 'AJAX' (Garrett, 2005) has recently paved the way for webservices which in their functionalities and interaction design resembles PC-applications. Through AJAX-based webservices such as Netvibes<sup>8</sup>, iGoogle<sup>9</sup> users are e.g. able to compose personal websites. The interface metaphor used for this is called 'widgets'; interface elements that can added, removed and rearranged on the personalised webpage through drag-and-drop interaction<sup>10</sup>. Widgets can also to a certain extent be modified; e.g. the number of items to be displayed or the style of display. Typically, the webservice provides an array of widgets to the users; some webservices allow also users to design and share own widgets. Widget-based webservices constitutes a fusion between the windows concept of the PC and web page concept of publishing. Widgets display information, e.g. news headlines, from different web sources<sup>11</sup>, selected by the user, but the stream of information is still steered by publishers. The mitDR.dk project is based on

<sup>&</sup>lt;sup>7</sup> The concept of the graphical user interfaces, including the interface metaphor of windows, was introduced by Tim Mott and Larry Tesler at Xerox PARC research institute, and got its first commercial application in the Xerox Alto computer.

<sup>8</sup> http://www.netvibes.com accessed 21-05-2008

<sup>&</sup>lt;sup>9</sup> http://www.google.com/ig accessed 21-05-2008

<sup>&</sup>lt;sup>10</sup> It should be that the concept of widgets is also applied as PC-applications but in this article, I am referring to browser-based widgets.

<sup>11</sup> Technically, this takes place as through RSS-feeds; the content of many kinds of widgets is derived through a RSS-feed.

widgets provided by DR. This corresponds well with the project objective of giving users more personal value through a personalised access to DR content and with the DR's strategic aim of 'maintaining relationships' with its users. The interesting question to be examined in this article is how this increased personal value relates to DR's remit of producing public value.

# The Internal Project Context – the Strategic Perspectives

The 'mitDR.dk' project is shaped by DR's strategic goals 2007 – 2010. Central to the DR's official strategy is the relation to the users: "With the globalization of the media market and the way media consumption is developing in Denmark, the challenge to us will be how to maintain a strong, valuable relationship with our users. In our programme-making we will therefore increase focus on our users." As 'specific areas for action' the strategy paper mentions e.g. that "DR must be the most preferred news provider", that "DR must increase consumption by the 20-to-40 age group across all media platforms" and that "dr.dk must serve as the population's guide to media and culture" (DR, 2007) The word 'engage' is central to the strategy; "Through courageous, relevant programmes DR will engage users in subjects and debates about the society in which we live, and encourage them to question their attitudes and try new things." (DR, 2007)

How does the 'mitDR.dk' project relate to these overall strategic goals? The starting point is here the motives and elements of the 'mitDR.dk' project, as they were presented in my research interview with editor Jens Poder, May 3<sup>rd</sup> 2007. A full project description extends the scope of this paper, but three of project element may serve as examples for the discussion of media personalisation and public value: 1) the improvement the information architecture / usability of dr.dk though personal shortcuts, 2) easing the sign-on procedure through the 'single-sign-on' sub-project, and 3) DR's position in the 'web ecology'. It should be stressed that neither the ongoing project nor the final result is the topic for this paper, but the initial project description and its motivation as presented May 3<sup>rd</sup> 2007.

#### The user relation

The central property in Poder's project motivation is the 'user relation'. Through the service DR should improve it's relation to users. This project motivation indicates DR's transformation from a broadcast company to a media production and -dissemination company. It is not enough to have listeners and viewers – in modern language 'users', it is also necessary to have relations with users. 'Relation' can be interpreted as a means to establish longer-term connection between DR and the citizens in a situation where such a connection simply cannot be taken for granted due to the growth of media providers. It becomes strategically important have good relation with users - some DR-staff members even describe users as 'customers' (Heide, 2007) - and for this purpose the web offers the most obvious possibility of enhancing the relation. It also indicates how a traditional web content provider is reacting on a change in user behaviour and expectations, caused by developments in web interaction design. It shows that the content is not the only competitive parameter

on the attention economy market, but its framing and mediation. In this sense, DR reacts on the competition in the same way as when the Danish TV market became competitive, primarily with the start up of 'TV 2' in 1988, namely by focusing on what surrounds the content. In the case of DR TV, the answer was strategic scheduling and 'air look' design. In the realm of interactive content the 'surroundings' however have significantly more importance; the process of searching and finding the content is part of the user experience, as well as the interface which surrounds the desired content. The interaction design of the services thus becomes a competitive parameter along with the experiences the content offers. Possibly, this indicates that the very notion 'content' is blurring, as the experience of the linear TVand radio programmes is interwoven in a general experience of the interaction. This point to a dormant conflict within PSBs between linear content constructed by editors (the traditional products of the PSB) and the linear experiences constructed by users of navigating the site, determined by the interaction design provided by the PSB. Here the mitDR.dk pushes a step further in the direction of the user as the one constructing the experience.

### The information architecture of the current dr.dk website

The current structure of dr.dk is centred on a front page with a thematically divided 'top-bar': "News / Sport / Regions / Music / Health / TV / Radio / Blogs & Debate / Mobile" plus a large number of sub sites. The front page and the 'top-bar' represent a classic approach to website information architecture: all users are confronted with the same content and the same hierarchical navigational structure. The front page is the main entrance for everybody, and subsequently content producers struggle for to be present here. The current result is a very long front page<sup>12</sup>. One could of course interpret the giant dimensions of the dr.dk front page and its complex navigational structure as a good illustration of public service's diversity and universality, providing public value, but when the diversity of the web site content is to be represented on a front page and in a navigational system, the diversity becomes rather a usability problem. It requires much search and navigation for a user to reach the desired content. For smaller purpose-specific sites with a homogeneous group of users this hierarchical principle may be unproblematic, but as diversity is the actual remit of DR's programming, the project of satisfying everybody becomes difficult. Jens Poder motivates: "Today you have to find your TV-files in the library at dr.dk/tv, if you can remember all what you're interested in. And in the radio-player you find onDemand here and podcasts there.. It's a major librarian's job finding all what you want. 'Why can't I just click-select the things I'm keeping up with so they can prompt me when there's new stuff?" What Poder here points at, is the multi-channel character of a website like DR's; each sub-site can be regarded a 'channel' itself with an irregular flow of new content. The abundance of channels points to the need of providing the user with a 'channel navigation tool'; an overview of what is going on where; where there is new content / activity. If such an overview should be meaningful tool should only display content relevant to the user. The solution in the case of the 'mitDR.dk' project is based on customisable widgets. For the launch of 'mitDR.dk' widgets with 'my onDemand TV', 'My TV schedule', 'My Radio', 'My

<sup>&</sup>lt;sup>12</sup> The front page of www.dr.dk as accessed May 23<sup>rd</sup> 2008, had at total height of more than 6800 pixels, requiring a user with a 1680 x 1050 screen solution to scroll nine times before the bottom of the front page is reached.

RSS-feeds', My Region', 'My Music' and 'My Archive Material<sup>13</sup>' is being produced currently (Valentiner, 2008), but the intention is that all content producing units of DR provide widgets related to their content; Jens Poder envisions that e.g. the music department would produce and launch a music quiz in the widget format. As such the vision is an internal market of widgets at DR.dk.

#### **Stickiness**

Specifically in relation to DR's site 'dr.dk', the goal of 'engaging the users' can be translated to measurable figures of the number of page-views; an expression for how much (and assumingly how long) users navigate the site. When we here compare www.dr.dk with a competitor site, www.tv2.dk (the other Danish PSB) it becomes evident that even if dr.dk have more unique users<sup>14</sup>, tv2.dk have more page-views (Foreningen af Danske Internet Medier, 2008). E.g. in March 2008 DR.dk had 27% more users than TV2.dk, but TV2.dk had 28% more page views. For Feb 2008 DR had 25% more unique users than TV2, but TV2 had 36% more page views. Since this method of measurement was introduced in May 2007, where DR had 32% more users than TV2 that on the other hand had 51% more page views, this pattern has been stabile. DR.dk is used by many people, but when they click, they keep on clicking on other sites.

One can discuss if this kind of measurements is relevant for the assessment of the public value, but the figures constitute a tacit reality in the competitive Danish media landscape, and internally in DR they play a role, as "DR must increase consumption by the 20-to-40 age group across all media platforms" and "dr.dk must serve as the population's guide to media and culture" (DR, 2007) The figures indicate that although DR.dk has a good 'reach', users watch more web pages by the PSB competitor TV2. The discussion of reasons, including measurement method, is beyond the scope of this paper, but the figures tell about the 'stickiness' of the DR.dk website. Another way of describing 'stickiness' is 'engagement'; to which degree does a site engage its users in the use? The word 'engagement' plays a central role for Jens Poder as project motive, e.g.: "It is about making dr.dk more useful for people, and more engaging. For this we need a more central tool to keep the relation we want to have to the users." (Poder, 2007a, my translation). Subsequently, it makes sense to understand the 'mitDR.dk' project as a means to engage DR.dk users more; to make them stay longer at the DR.dk site.

### The Single-sign-on sub-project

A particular problem mentioned by Jens Poder in relation to the aim of engaging users, is the sign-on procedure needed when a user wants to contribute with content or access personal services. For historical reasons DR have no possibility of offering users a central log-on, meaning that the users must register each time they start to use a new service. Editor Jens Poder mentions this as a strategic problem: "The first weakness when we have at dr.dk compared with other sites is that we have real

<sup>&</sup>lt;sup>13</sup> Through the portal 'Bonanza' DR have recently started giving access to DR archive material, selected by the users. <a href="http://dr.dk/Bonanza/index.htm">http://dr.dk/Bonanza/index.htm</a> accessed 29-05-2008

<sup>&</sup>lt;sup>14</sup> for methodology of measurement refer to <a href="http://www.fdim.dk/?pageid=110">http://www.fdim.dk/?pageid=110</a> accessed 27-05-2008

problems launching new services that requires users to signup, because we are always faced with the problem: what to do with the user data, and how do we at all get them engaged in the signup procedure? Our competitor TV2 has always had their 'TV2-profiles', making it very easy for them to launch new services. We have user profiles at a dr.dk sub-site 'SKUM' [DR's youth community<sup>15</sup>] and notoriously we have here been able to launch a whole lot of good services swiftly. At the remaining part of the dr.dk site it has always been 'what should we do... hmm'. We haven't had the central relation to the users, so it has been difficult launching new things. Actually we just want to offer a better experience at dr.dk and this we would like to do by getting this foundation in place." (Poder, 2007a, my translation) This so-called single-sign-on project has been considered earlier by the general DR Chief editorial board, but not until the 'mitDR.dk' project it found financial support. According to Jens Poder the Single-sign-on project lacked a content-based project to make it attractive in the high-level decision-making and resource disposition process: "When I became editor for this kind of content [web 2.0] content six months ago, I knew that we should one or the other way crack this 'Single-sign-on' nut. For that reasons I spend quite much energy making a concept that could also be understood by... [interrupts him self] so that it would not become a strange database technology project, but a project people could relate to." (Poder, 2007a, my translation) The single-sign-on system thus got financial resources as it became a project of strategic importance.

Another strategic aspect of the Single-Sign-On project, related to the mitDR.dk project, is to ensure that users can grow older and change habits, without loosing their affiliation with DR. E.g. that the young community members of SKUM continues using DR content when they get too old for participating in SKUM. Jens Poder: "The SKUM users that have become too old for the SKUM site will through their mitDR.dk profile be able move sideward by adding new elements to their profile and enter a P3-Community<sup>16</sup>. In this way you can through one profile page manage your own development from being Oline<sup>17</sup> member to being P4-member<sup>18</sup>." (Poder, 2007a, my translation) A shared user-profile system for the whole dr.dk site – the single-sign-on system – enables this 'morphing' of users' personal web access to dr.dk taking place as users grow older or change habits.

#### DR and the Web ecology

A characteristic of web 2.0 webservices is that they facilitate users in importing and exporting (own) user-data from web services. Earlier websites functioned merely as a push of information provided by the web publisher. Users could navigate this information, fill in forms, and occasionally also customise the display of information. A typical feature of many social web services (web 2.0 services) is that users are

<sup>15</sup> http://community.dr.dk/ accessed 23-05-2008

<sup>&</sup>lt;sup>16</sup> P3 is the broadcast radio channel for "modern young people and adults that appreciate to be challenged in musically and content wise" <a href="http://www.dr.dk/radio/alle\_kanaler/p3.asp">http://www.dr.dk/radio/alle\_kanaler/p3.asp</a> accessed 28-05-2008. P3 does not currently offer any community function; Jens Poder's description is visionary.

<sup>&</sup>lt;sup>17</sup> 'Oline' is the 3-6 year old children's channel (on DAB and net radio) including a website universe: http://217.116.240.211/index.php? site=oline accessed 28-05-2008

<sup>18</sup> P4 is the most listened broadcast radio channel (on DAB and net radio as well) It mixes regional and national news with mainstream like music.

encouraged to retrieve data from other sites to be included at their own webpage. As an example: via widgets provided by the music website 'Last.fm' users can show their playlists at other sites such as Facebook<sup>19</sup>. This way of retrieving and displaying user-data outside the original site context is in a commercial context being referred to as an 'ecosystem'<sup>20</sup>.

How does the 'mitDR.dk' project relate to this 'ecosystem'? Traditionally, the dr.dk website has been an island, connected primarily with the remainder of the internet through the editorial selected links. Dr.dk has been a publisher, and thus 'pusher' of information, but also a host of user-generated content such as debating comments. Through podcasts users have been able to take content out of the dr.dk context, and with RSS-feed news headlines can be displayed in browsers and applications, but generally the content is displayed at the site. Jens Poder envisions DR to take more part in the web ecology by allowing content to be distributed also outside the site. "We would like to be present in contexts people find relevant. As an old example of this; young American music users listen more to new music they find at MySpace than what is shown at MTV. The relevant context for new music has simply changed. This we are of course forced to relate to. Can be that some young people rather like to watch news in a community context than visiting dr.dk/news [dr.dk/nyheder]." (Poder, 2007a, my translation)

In the same manner, he envisions user-generated content such debate- and blog comments to be distributed outside dr.dk: "We believe that in the future users will increasingly like to have more utility value of what they collect. If I have contributed with some content at dr.dk, it becomes more useful for me if I'm allowed to show it at another site. E.g. if I every week have contributed to 'Boogie-listen' [DR's user steered music chart<sup>21</sup>] I would like to display my great music taste on my MySpace site, my blog or somewhere else which gives meaning to me. Could also happen that I've written some good contributions to a debate, I would like to show somewhere else than dr.dk." (Poder, 2007a, my translation) Poder exemplifies the web ecology further by referring to a web 2.0 webservice like del.icio.us<sup>22</sup>. For Jens Poder, the advantage of del.icio.us is not the website itself, but the ability to retrieve feeds from it without visiting the site. In the same manner, Jens Poder's opinion is that it is strategically better for DR to increase dissemination of its content, including usergenerated-content in web contexts outside the dr.dk domain, than hoping for more visitors at the dr.dk site. The core argument behind is the utility value as users experience it; if the utility value is higher when the content is experienced outside dr.dk, Poder will not let editorial or branding intentions hinder this. The dr.dk website context is, as he notes, not important, but the stories. "Our intention is not that they [the users] look at dr.dk/news web page, our intention is that they read the news and understand them and get enlightened and engaged in the world and the society they are a part of. It is not the graphic design that frames the content, which is important, but the content it self." (Poder, 2007a, my translation)

<sup>&</sup>lt;sup>19</sup> <u>http://www.last.fm/widgets/</u> 28-05-2008

<sup>20</sup> http://eco.netvibes.com/ accessed 27-05-2008

<sup>&</sup>lt;sup>21</sup> http://www.dr.dk/boogielisten/ accessed 28-05-2008

<sup>&</sup>lt;sup>22</sup> a social web-based bookmark service, enabling users to share bookmarks and create feeds of groups of bookmarks tagged with a certain term: www.del.icio.us accessed 24-05-2008

It should be noted that if DR participates in the web ecology, the intention is not to act as a service provider, but as a content provider. Poder stresses that the aim is not to compete with commercial webservice providers: "When you look at the concept, it could look like some of the functionalities you find at Google or Yahoo start pages, but it is not our intention to compete with them. Our objective is not to built a platform, (...) [but] it is with the starting point in our content at dr.dk that we want to provide users with a more personal tailored version of the content – to get them more engaged in the content. (...) We are not Google, our force is our content" (Poder, 2007a). By doing so, I assume that Poder points to potential accusations of unfair competition. Poder too acknowledges the problems of Intellectual Property Rights related to the distribution of DR content outside the dr.dk site, but do regard this as a problem to be solved.

#### MitDR.dk - Personal and Public Value

In the remainder of the paper I will analyse the mitDR.dk project according to its relation to public value and personal value, and put the project into a general perspective. While examining the phenomena 'personal value' and 'public value', I differentiate between two systems of values, two economies, namely Herbert Simon's 'Attention Economy' and a so-called 'narrative economy' which I propose in this paper. Starting with the possible personal value of MitDR.dk, I proceed by discussing the usage of PSB content in relation to the two ways of economical thinking. Finally, I discuss the public value in relation to narrative economy in general.

# DR and the users

Since the deregulation of the European media market, many PSBs, including DR, have started paying much more attention to the measurement of viewers, listeners and users opinions, both through quantitative and qualitative techniques. The focus on the users is e.g. a central element in DR's strategic goals: "With the globalization of the media market and the way media consumption is developing in Denmark, the challenge to us will be how to maintain a strong, valuable relationship with our users. In our programme-making we will therefore increase focus on our users." (DR, 2007). The term 'Utility value'<sup>23</sup> – referring the user's experience value of content and services - has been one of 7 so-called 'quality terms' being applied in DR's programme making since 2005 (DR, 2005). In the internal decision-making process in DR, a suggested programme or website must in one or the other way relate to the seven quality terms. How does the mitDR.dk fit into the personal 'utility value' discourse?

<sup>23 &</sup>quot;Utility value. Can I use it [the programme / website] to something? Did I get inspired? Did I find out... which film I would like to see, how I flag the terrace with tiles, how the Iraq-war started?" (DR, 2005) – my translation. The six other quality terms are: reliability, depth, originality, clarity, presence and dynamics (in Danish: 'troværdighed, dybde, originalitet, klarhed, nærvær, dynamic, nytteværdi') The quality terms are approved by the DR board of directors, and applied in programme development, evaluation and measurement of user saticfaction.

#### The Personal Value of Information Filtering

As we noted earlier, the diversity of DR's web content, combined with the diversity of its users and the amount media content accessible, make traditional hierarchical information architecture difficult for the dr.dk site. From the user's point of view, the navigation on the DR site requires many clicks, patience and good cognitive skills. From the content producer's point of view the dilemma of getting user's attention – the findability of content - is well represented by the very extensive front page and the voluminous 'top-bar' (the main navigational tool). If users through a personalised page, are enabled to collect the content which they find interesting, the usability of the site is increased, the personal 'utility value' is increased. This is the introvert part of the attention economy of personalised services.

### The Personal Value of Self-representation

The personalised PSB pages may also in another way create personal value; facilitating user's self-representation on the web. In a commercial context, one major purpose of content in personalised web 2.0 services is to facilitate the individual in its self-representation on the web. The media content has no longer solemnly purpose of delivering a message or disseminating ideas, but also to facilitate the individual in its fight for attention; through content you link to or show, you do also describe and represent yourself in the public space of the web. For a PSB engaging in the web ecology, the 'public value' of disseminating knowledge in society (e.g. in the web) is now paired with the users' 'personal value' of being noticed. The PSB content serves as building materials for individuals' web-based self-representation. This is the extrovert part of the attention economy in personalised services.

How does the introvert and extrovert personal utility value in the framework of the attention economy correspond with the concept of public value? To answer this, we need to look closer at the origins of the attention economy, its original context, discourse and paradigm.

# **Personal Value and the Attention Economy**

The concept 'attention economy' was originally introduced by Herbert Simon in 1971, and signifies that when more information is available than human attention, the human attention is to be understood as a scarce resource: "...in an information-rich world, the wealth of information means a dearth of something else: a scarcity of whatever it is that information consumes. What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the overabundance of information sources that might consume it" (Simon, 1971:40-41). Simon suggest applying an economical thinking on how the scarce resource 'attention' is used, a thinking based condensation of information, removing redundant parts of the information.

The context of Simon's paper is governmental decision-making processes blurred by information overflow, not media use in general, although Simon jokes about the need of being paid for reading the newspaper, instead of paying for it. Simon's understanding of attention scarcity has however since his introduction in 1971 moved outside the narrow circle of persons involved in governmental decision-making and scientific problem solving to now encompassing the entire network-connected part of the population. Alan Mitchell applies Simon's concept of attention economy to today's media consumption, and suggests that "next time you come across that salacious headline or sensational stunt, ask yourself this: am I being entertained or informed? Or is my attention - my life - being consumed? (...) Could we, a few years from now, see the likes of Hollywood, News Corporation, Time Warner and Yahoo! branded as polluters and resource-consumers as damaging as today's extractive industries, energy producers and car companies? Of course we want what they make. But we don't want the collateral waste and damage. Human attention is an extremely precious, non-renewable resource. Stop treating it as though it were infinite and free." (Mitchell, 2005:30)

### **PSB** and the Attention Economy

There is no particular reason why PSBs as information providers should be seen as less 'polluting' compared to commercial providers. Well, at least there is one; the remit of PSBs is (also) to educate the population; disseminating useful (educational) information (knowledge). Normatively, the content provided by PSBs should serve some kind of a higher 'purpose', not just being entertaining but also be 'engaging, challenging and inspiring', as e.g. described in DR's strategic goal (DR, 2007). The educational aim is not gone, but has become less paternalistic. PSBs need however to encourage user's appetite for the content, win their attention, and in doing so PSBs apply more or less the same methods as all other suppliers of content. The intentions may be different, but the methods more or less the same. PSBs are actors in the attention economy, trying to attract attention.

### Getting rid of redundancy

Is it then valid or fair to describe PSBs as reckless 'attention economy polluters', not carrying the costs of the externalities of their activities? Answering this question depends not only on how relevant the contents produced and disseminated by the PSB are for the individual and the society. The problem may also be the very application of the 'attention economy' concept; is it really a good description of the actual media experience, and in the case of the PSBs, also a valid model for describing the relation between PSBs and their users? Answering this question, I will now shortly look at some of the original thoughts related to Simon's concept of attention economy.

Central to Simon's concept of attention economy is Shannon concept of redundancy (Shannon, 1949). Simon explains: "If a library holds two copies of the same book, one of them can be destroyed or exchanged without the system's losing information. In the language of Shannon's information theory, multiple copies make the library redundant. But copies are only one of three important forms of redundancy in information. Even if a library has only one copy of each book, it still has a high

degree of informational overlap. If half the titles in the Library of Congress were destroyed at random, little of the world's knowledge would disappear." (Simon, 1971:45) Getting rid of redundancy thus seems in Simon's view to be the key to a better attention economy in governmental and scientific decision-making processes. Simon continues, in the tradition of the natural sciences, stating that "The most important and subtle form of redundancy derives from the world being highly lawful. Facts are random if no part of them can be predicted from any other part – that is, if they are independent of each other. Facts are lawful if certain of them can be predicted certain others. We need store only the fraction needed to predict the rest. That is exactly what science is: the process of replacing unordered masses of brute facts with tidy statements of orderly relations from which these facts can be inferred." (Simon, 1971:45).

# Personal Value and the 'Narrative' Economy

Now we can contrast this view on information with another, I should call 'narrative economy'. In this view information is understood as experiences or as narratives. With 'economy' I here understand the value of the redundant information that glues the experience together. For a narrative to work in the human brain, it must refer to other narratives, cite them or remediate them. Technically, this is redundancy. Deviances in the rhetoric and aesthetic means represent separate layers of additional information. Often these extra layers mirror the intentions or perception of the information provider. One may read, hear and view several news items covering the same 'story', and get a few bits of extra information each time. If controversial subjects are discussed, the differences among the news items may even create its' own narrative. As this way of information consumption is highly redundant and inefficient, the question emerges: why not, through intelligent algorithms, reduce the redundancy, forwarding only the incremental new information, say about a news story?

Here we see the shape of the 'narrative economy', signified by the personal value of redundancy in media display. Elements in this economy includes social praxis's surrounding news- and media consumption; the rituals of news consumption (consumption habits in daily life), the regression effect of experiencing well-known media content; the calming effect of repetition, and well-established narrative patterns or conventions of dramaturgical, temporal structure in experiences; each story must refer to other stories, and each story has a beginning, a middle and an end. Of course there are limits for the acceptable amount of redundancy; a well-informed and bright person might experience redundancy long before the not-so-well-informed or not-so-bright person. New information might be rejected as 'old news' if the similarity with known stories is too high etc.

# **Narrative Economy Meets Attention Economy**

Now we can observe how the two economies clash: the redundancy-hostile 'attention economy', and the redundancy-friendly 'narrative economy'. The 'attention

economy' tries to make communication as efficient as possible by removing redundancy and filtering away irrelevant information, the 'narrative economy' tries to create experiences. These two economies clash at one particular place: in interactive interfaces that display media content; particularly journalistic content.

Looking back on the history of computer interfaces and web pages, on one hand the classic computer interface facilitated efficient personal work-situations; much early research on interfaces aimed to make the individual human-computer-interaction as error free and efficient as possible (see e.g.: Nielsen, 1990; Winograd, 1996). On the other hand, first generation web pages represented a one-way communication publishing tool; even if users freely could click around on the site, the composition of the content was editorially decided. Widget-based webservices mix these two interface approaches, on the one side being a customisable individual tool for user, on the other side still being an edited publishing channel. The particularity of this type publishing channel is that while the user can configure his or her own media experiences, the media content itself is shaped and controlled by the provider. The widgets represent a strange hybrid between an editor-steered and user-steered media experience; it becomes increasingly difficult to tell who owns the personalised widget-based web page?

As the two types of interfaces merge – the user-steered and the editorial steered, we experience also a clash between two ways of representing information; as coherent narratives or as granulated information fragments. In the personalised widget-based interface the two ways clash; a descriptive, algorithmic way of understanding information, and a narrative, redundant way of understanding information. The redundancy-hostile attention economy and the redundancy-friendly narrative economy meet in the widget; but with the attention economy governing the narrative economy. The logic of retrieving and displaying content in the widget is based on attention economy, only the displayed items represent the narrative economy.

As tools for customisation, personalised media content web pages let users to a higher degree administrate their attention economy, but doing so they must submit to the redundancy-hostile logic of the attention economy, leaving the narrative economy behind. The personal value of personalised interfaces is thus strongly linked with the paradigm of the attention economy. The personalisation of the media experience requires the user to apply the formalisms of media content, e.g. by typing in certain keywords of interest or certain feeds to subscribe to, and thereby accept the logic of attention economy. But when the media content is experienced, then plays the attention economy a less significant role, suddenly the narrative economy of having a good experience comes into play. Subsequently a tension emerges between the rationalism of the algorithmic personalised media content selection and the experience of the content. The attention economy of personalising the media display clashes with the narrative economy of experiencing the content.

# PSB, personal value and the narrative economy

PSB's traditional force has been creating narrative value. Editors and schedulers are masters of composing content with the right amount of redundancy to meet fit into the narrative economy of the average user. The PSB content survive on the attention economy marked due to its strong position in the users' narrative economy. Redundancy is accepted as long as the information provider is a trusted administrator of your attention economy. You switch on the TV or the radio and trust the flow. This out-sourcing of the accountant function of personal attention economy, is however challenged by the growing individualisation in society. Letting other people or systems decide your media experience, conflicts with current predominant thinking of 'taking care about one's own life'; here taking care of your attention economy. Ignorance of your personal attention management is labelled a weakness, positioning you as a less smart individual.

What are PSB's strategic options in this individualistic view on attention economy? If PSBs start compete more actively in the attention economy through personalised services, then each single PSB media item must fight its way through the attention economy without benefitting from the narrative economy provided by the PSB flow context. It leads to the conclusion that, the more granulated and personalised the PSB contents become, and the more it is distributed outside the PSB flow context, the less the PSB is able to utilise its classic strength of creating narrative value. The logic attention economy seems thus to be linked closely personal value. Is public value likewise linked to the concept of narrative economy?

# The Personalised Public Value

The much debated term 'public value' would indeed deserve a separate working paper; the definition of 'public value' is embedded in political-ideological discussions. Often, the term gets instrumental value when it is applied in policy-making contexts, e.g. defining the relation between PSB and the media market<sup>24</sup>. It has been criticised as a "rhetorical device and a rationale for increasing consumer research within the Corporation's [BBC's] decision-making processes" that obscures the basic debate about pros and cons of PSB. 'Public Value' is seen as a policy-making tool "As rhetoric, public value functions as an overarching narrative that the organisation tells back to itself and its external (political) stakeholders." (Oakley, Naylor et al., 2006:7).

If we apply the 'public value' not as a defence of one particular economical organisation of the media production (PSB), but as society's total value of free access to media products, then the question emerges: Do conflicting interests exist between public value and personal (utility) value? Will an adaptation of public production of e.g. media content to personal demand reduce the public value? For EBU's Head of New Technology, David Wood, public value is created through the individual value: "Public value is simply a way of quantifying the merits of a goods or a service in an economist's terms. It is not a relevant issue if this plays at a macro level or an

<sup>&</sup>lt;sup>24</sup> e.g. through the concept 'public value test'

individual level. The result for society as a whole is just the sum of the individual effect. The public value of having beautiful buildings is felt for an individual. Because there are a lot of individuals, the society as a whole moves forward, but the aim is not the public in the sense of the macro society, we're not trying to move society forward as a mass. We're trying to ask our self: 'What makes life better for individuals'? My view is that what makes life better for individuals is that they are given help and tools to find out who they are in terms of what they can do, their talents, their relate to other people, where they stand on issues and so on. (...) So I think it is absolutely essential for public service media to stimulate the elements of participation and creation, which are the key pillars of web 2.0." (Wood, 2007, research interview 19-10-2007) Wood sees the participatory and creative aspects in web 2.0 services as PSB's new role: "As I see it – the public service mission must be about helping lead people up the steps from the pure level of experience to true participation in creation."

Woods understanding aligns well with a new understanding of the role of public services, as suggested e.g. by Kelly, Mulgan, & Muers (2004) and by Leadbeater (2004)<sup>25</sup>. Personalisation is the central property in Leadbeater's vision; public value is created in cooperation with the citizens in a participatory manner. The public service institutions are no longer paternalistic nannies, neither 'new public management' service providers to the consumer-citizens, but acts as dialogue partners in facilitating the individual. Kelly, Mulgan, & Muers divide the different approaches to public service into three: Traditional public sector, New public management and Personalisation (2004:10). Here I present Kelly et al.'s table of approaches to public management in abbreviated form, focusing on three of its seven parameters:

	Traditional public sector	New Public Management	Personalisation
Public Interest	Defined by politicians and experts	Aggregation of individual preferences, demonstrated by customer choice	Individual and public preferences (resulting from public deliberation)
Dominant model of accountability	Upwards through departments to politicians and through them to Parliament	Upwards through performance contracts; sometimes to customers through market mechanisms	Multiple citizens as overseers of govt customers as users taxpayers as funders
Role for public participation	Limited to voting in elections and pressure on elected representatives	Limited – apart from use of customer satisfaction surveys	Crucial – multi-faceted (customers, citizens, key stakeholders)

<sup>&</sup>lt;sup>25</sup> The authors discuss however not Public Service Broadcasting, but face-to-face public service such as schools, health care and social services.

# DR and personalisation

How 'personal' is DR with its MitDR.dk project, when measured with Kelly, Mulgan & Muer's public value yardstick? In which cases expresses it the traditional public sector approach, new public management, or personalisation? Space hinders here an extensive discussion and examples; the following analysis is thus only tentative.

#### **Public Interest**

DR has, as many other PSBs, gone through a development from communication defined solemnly by experts and politicians (the traditional public sector approach) to an increased focus on user's preferences, occasionally powered by the costumer choice concept (the New Public Management approach). Editorially it is often discussed how much PSB should follow a customer choice concept; the customer thinking has however been applied when the communicative approach of programming is considered. It can be observed that DR strives to address the topics, experts and politicians with a close eye on the mind of the users; will they assumingly find it relevant?

Does the MitDR.dk project offer DR's possibility to transform from 'Traditional Public Sector' and 'New Public Management' to 'Personalisation'? Will it facilitate the steering of DR's activities through "Individual and public preferences (resulting from public deliberation)" (Kelly et al., 2004:10), enable "Dialogue between providers, funders and users at all levels" (Leadbeater, 2004:63)? Here we need to look at the nature of media production and the conditions which technology constitutes. The cost / benefit in mass media production is justified through the distribution of multiple identical copies at a low price. Personalisation technology enables an automated personalised aggregation of content elements; 'personalisation' in this context is exclusion of information (c.f. Simon's redundancy-hostile attention economy) not 'public deliberation' or 'dialogue between providers, funders and users'. The public interest seems not to be served if personalisation means exclusion of content; on the opposite, and personalised algorithmic content selection would (depending on its design) rather hinder PSB's traditional role as agenda-setter in society - it's traditional public sector role providing a stage for experts and politicians. By the algorithms' selection of personalised content, one could argue that such personalisation services rather expresses a new public management thinking, than the kind of 'personalisation' as Kelly, Leadbeater et al. imagine.

# Dominant model of accountability

The general activities of DR is currently governed through a detailed 'Public Service Contract' (DR og Kulturministeren, 2006). Marked shares play a significant role when proposed and current programmes and services are discussed, e.g. illustrated by Poder's description motives for the MitDR.dk project. The dominant model of accountability in DR must be described as 'new public management'; daily accountability is in DR focused on market shares and quantitative key figures about media consumption. Up-to-date performance figures on channel market share are

exposed to the employees e.g. on displays in the main hall<sup>26</sup> of DR-byen. When programmes are evaluated, the relation between the estimated number of users and the actual plays a significant role. Along this line of thinking, Jens Poder envisions that the general shift in media distribution from broadcast to onDemand, which the MitDR.dk project represents, could also influence the steering mechanisms for the production of journalistic content towards a demand-oriented approach. With onDemand distribution, public value in terms of consumption can be measured on a very concrete level. A system like the widget-based 'mitDR.dk' opens up for monitoring media consumption on an unprecedented detailed level. E.g. the popularity of media items can be measured with advanced methods of data mining. The question is whether – or how - the findings from this monitoring should be translated to editorial decisions. Jens Poder envisioned in a research interview September 13<sup>th</sup> 2007 that through the monitoring of RSS-feed subscriptions, the demand of stories from specific content areas could steer the production of new journalistic stories: "The feed, that repeatedly scores very low in 'number of un-read articles' by those who subscribe to the feed, should pull itself together and get written some more stories. Things like this you can use in a DR context: You can start monitoring and say [to the journalists]: 'Hey listen, you produce too little material about science in relation to the need, because we can see that stories about science is just being torn down the shelves' (...) In stead of trying to guess what the users would like, producing it and putting it up on the shelf, then I don't start producing anything before I see the demand, but then I do it really quickly. If you can sense what is being demanded by the users, and what is there's too little of at the site, then you can start adjusting and say: 'this, they basically need more of'." (Poder, 2007b)

The MitDR.dk may potentially strengthen the new public management thinking, if consumption figures from the use of DR content is used to steer the production to a higher extent, but detailed analysis of user-behaviour in the personalised service enables also a yet unseen possibility of analysing user-desires and using this knowledge proactively in editorial decisions to produce and promote less 'pleasing' or 'well-fitting' content through personalisation system; personalisation with an editorial will, so to speak.

# Role for public participation

As mass media, PSBs have traditionally not offered many possibilities for public participation, but the internet in general, and web communities and the interaction design of web 2.0 web services in particular, have enabled public participation and co-creation. Being obliged by the Public Service contract (DR og Kulturministeren, 2006) to produce for the internet as well as for radio and TV, DR has a number of participatory internet activities, including the youth community 'SKUM'. But how participatory should PSB be? How much should the participative activities be controlled editorially, and how much freedom should users have in using, reusing and redistributing PSB content? One of the discussions is about policies for user-generated content, another is about redistribution of PSB contents outside the PSB context, illustrated e.g. by Jens Poder's suggestions above to allow the display of DR

<sup>&</sup>lt;sup>26</sup> "Den indre gade" in DR-byen (DR headquarters, Copenhagen)

content in external web contexts through feeds and open APIs<sup>27</sup>. For our discussion of 'PSBs producing public value' redistribution is an interesting idea. By distributing DR content though the web ecosystem, one could claim that the public value is enhanced: the content is displayed more, and perhaps more enthusiastically when single PSB media content items are forwarded by engaged users into the web ecology. In this way PSBs are getting a helping hand from its users. One could even describe this a kind of a second phase in the attention economy; in earlier days publishers, hereunder PSBs, demanded the attention of their users, but now the race for attention is now fuelled by the work of users who decide to forward the PSB content to their own site, page or blog. This method of distribution has similarities with the concept of viral marketing (Rayport, 1996); even if the objective isn't commercial, PSBs share the interest in publishing content most possible, making it public. The individual is participating in the creation of public value (Leadbeater, 2004). One could call this 'the public value of viral distribution.

As indicated, among others, by David Wood (2007) and Gregory Lowe (2007), an obvious option for the renewal of the Public Service remits, in a new age where distribution information is no longer the central remit for PSB, is letting public service media serve as initiators and mediators in the public debate. This moves focus from editorial selection to moderation of participation. In relation to MitDR.dk, this intention meets however users' decisions balancing their narrative economy with their attention economy. The personalised concept of MitDR.dk enables participation as well as ignorance; it depends on the array of widgets offered, their interaction design and on which widgets users choose.

One question coming up when widgets and personalised PSB pages are design is the issue of personal freedom: to which extent are users enabled to modify their page and make its functionality mirror their preferences? The personalised BBC front page<sup>28</sup> provides a illustrative example of this: one widget can neither be removed nor edited, namely the 'News Top Story' widget. Other parts of the front page are reserved for advertising. In this way the personal control over the attention economy is reduced, but the publisher is guaranteed at least one 'channel' that is 100% editorially governed. The question of who the 'owner' is of the personalised web page stands again in the middle. Put in another way; how much editorial power – how large share of the attention economy - is actually given away in personalised PSB pages?

# **Public Value and the Attention Economy**

Contrasting Leadbeater / Kelly et al. with Simon we can now identify two diverting understandings of personalisation: 1) as the individual citizen's personal engagement in the creation of public value 2) as an optimisation of one's attention economy. The

<sup>&</sup>lt;sup>27</sup> Feeds (RSS feeds) are lists of links and short descriptions enabling access to specific web content items on a site. API's (Application Programming Interfaces) are tools for computer programmes to request and exchange data mutually, e.g. enabling a programme to search in a database. The BBC project 'BBC backstage' offers access to certain feeds and APIs from the internal BBC systems, enabling external programmers to build web services that combines different BBC data. For an interesting and polemic use of BBC feed see (Riley, 2006) – a service which measures how much BBC news is in touch with their readers. http://cgriley.com/bbctouch/
<sup>28</sup> www.bbc.co.uk accessed 27-05-2008

term 'personalisation' means for Kelly, Leadbeater et al. that the individual citizen participates in society, for Simon (or rather: the attention economy) personalisation means information filtering, protecting the individual customer / consumer against society' interests, more specifically certain commercial actors' abuse of his attention. Are these two understandings of 'personalisation' conflicting?

The interesting aspect of Simon's paper is that the paper was given as part of a series of symposia addressing the subject "Computers, Communications, and the Public Interest"29. Here the future prospects of applying computers in the public administration, health care, educational system etc. were discussed. Simon suggested reducing information overflow jamming governmental decision making by removing redundant information; condensing the necessary information down to the 'need to know' level. The examples brought forward by Simon was the presidential decisionmaking process concerning sending troops to Vietnam, and scientific assessment of the potential dangers of using the pesticide DDT. According to Simon, both complex decision-making processes that in fatal manner were blurred by information overload. Simon proposes the concept of intelligent algorithmic information filtering. This, once very exclusive concept of algorithmic search, has now become daily routine for millions of humans e.g. through Google search. Simon proposed intelligent filtering in the interest of the public to support governmental decisions, now every human face the same information overflow that once allegedly lamed in president of the United States, and need to protect them self from society's urge for communication. The public interest in information filtering has become a personal interest in information filtering.

### **Enlightenment and Parameterised Knowledge**

Citizens are by Leadbeater (2004) being seen as individual decision-makers, whose individual decisions sum up on a large societal scale. He sees the sum of individual citizens' decisions as a power in public management; each individual decision of e.g. stop smoking, safes on large societal scale large sums of money, and thus a successful public management goes through the participation and decisions of each individual. It thus becomes interesting how citizens inform their decisions; through the narrative information provided by e.g. by PSB or through algorithmic personal filtering tools? Tentatively, I assume that decisions informed by the narrative economy emphasise community, society and inter-personal relations, whereas decisions informed by algorithmic search emphasise personal measurable benefits. Herbert Simon notes in "Sciences of the Artificial" (Simon, 1969:76-79) that the way a problem is understood, and a decision being made, is depending on how its data is being represented. By changing its representation, new solutions to the problem are revealed.

If we regard the topics and conflicts of journalistic media content – news stories, features etc. as 'design problems', and the editorial or algorithmic compositions of the media elements as 'representations of design problems', we can with Simon ask: What picture of the world do you get when information about the world is composed

<sup>&</sup>lt;sup>29</sup> at the John Hopkins University 1969-70

as a coherent narrative by a human, and what picture do you get when it is composed by an automated personalised algorithm? Furthermore, we can ask whether citizens get better informed through the one or the other way; how are they – having the public interest and democratic decision making processes in mind – best facilitated to make decisions? How are they best being enlightened? Again, space delimits us from a substantial discussion, but we can ask: what happens to the PSBs classic skill of composing enlightening narratives, when media content also can be composed and filtered algorithmically, protecting the attention economy of the individual?

As a part of the traditional remit, PSBs are typically obliged to inform and 'educate' the population. The term 'educate' as lately given way to less paternalistic expressions such as 'engage', 'challenge' and 'inspire', but PSBs are however agenda-setting institutions in the enlightenment tradition. The problem is only; what should the citizens, the users, do with this knowledge? Should they store it for later use, or should they use it as tools for decision-making? In Simon's attention economy thinking, knowledge is a tool in (scientific) decision-making processes, not something to be stored: "In the common culture, "to know" meant to have stored in one's memory in a way that facilitates recall when appropriate. By metaphoric extension, "knowing" might include having access to a file or a book containing information, with the skill necessary for using it. In scientific culture30, the whole emphasis in "knowing" shifts from the storage or actual physical possession of information to the process of using or having access to it." (Simon, 1971:45) Through algorithmic filtering tools now available to any internet-connected citizen, this 'tool'-oriented understanding of knowledge gains ground; when users search for specific information they apply a tool-oriented decision-making thinking to the knowledge. The question is what happens to the dissemination of 'not-tool-oriented knowledge' - e.g. general news – educational and informational content that traditionally has been part of the general enlightenment of citizens. Will it be sorted out by personalised filtering mechanisms?

### **Conclusion**

The concept of personalised PSB web-pages fluctuates between producing public value by disseminating information valuable for society and producing personal value by displaying information relevant to the user. By personalising the PSB media experience, a tension emerges between the attention economy and the narrative economy. Personalised distribution of PSB content takes place according to the attention economy although the experiences of the content belong to the realm of the narrative economy. The PSBs are thus in this case situated between being active as old giants in the 'narrative economy' and competing on the new battlefield 'attention economy'. PSB as mediator of media content have only a competitive advantage if the information provided is contextualised, e.g. in a flow, through a good analytic comment or by an editorial montage with other media items. This must be the added public value of PSB. Thus, I would claim that the more PSB content is granulated and de-contextualised and made accessible onDemand, the better is the personal value served, but the more is the public value – as broad term - suffering. If we apply the

<sup>&</sup>lt;sup>30</sup> One should here note that when Simon talks about 'science' it is opposed to 'humanities'

narrow understanding of public value - public value as merely aggregated personal value; personalised PSB webservices definitely enhance personal value. These services, if users are given necessary freedom to configure, enhance personal value by facilitating the individual in her management of her attention economy. Power is being moved from editors to users. Here by suffers the narrative economy and thereby PSB. Personalised PSB services drags PSB away from its traditional strong position in the narrative economy, over to a new battleground with more powerful opponents.

The 'mitDR.dk' is currently being built; the purpose of this paper is not to evaluate the result. We see however that the 'mitDR.dk' project articulates general issues of how PSBs relate to the attention economy, how they try transferring their strong position in the narrative economy to the new grounds of attention economy. We see that this transformation changes the mechanisms of how public value and personal value is made. We see that the personalised attention economy of the web operates according to very different mechanisms than the public narrative economy of broadcast. The case study - the mitDR.dk project - illustrates two tensions: one between editorial intentions of the broadcaster compared to the selective interests of user, the other between the rationalism of the attention economy contrasted with the experiences affiliated with the narrative economy. The first tension is on general level expressing the conflict between public value and personal value. The second tension point at an overlooked property on onDemand media use; search algorithms and interfaces (personalised or not) are not very good in generating exactly that amount of redundancy that creates a good narrative experience. The result is not a smaller, but bigger cognitive load on the human user; first of all she is the manager of filtering tools, but she must also accept suffering from redundancy overload – as the filtering mechanism are not smart enough – but ironically also from redundancy shortage, as the separate items being collected by her widgets must be composed to whole by her. Taking the flaws of algorithmic personalisation of media content in consideration, it is possible to predict that human edited non-personalised flows and pages also in the future will find an audience. Personalised pages seem to be the 'attention economical' answer to goal-directed media use, but it appears to be little reason to believe that personalised pages will outdo non-personalised media flow.

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# Jannick K. Sørensen / IAMCR 2008 / DRAFT VERSION - do not quote Page 22 of 22

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