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Conceptualizing Media Generations: The Print, Online and Individualized Generations

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Abstract

During the 1990s news publishers established an online presence and in the 2000s they developed cross-media news work. This has resulted in changing news accessing habits, with varied magnitude among generations. This article aims to construct theoretically sound news media generations, through statistical analysis of data from a nationally representative scientific omnibus survey conducted in 2010. Firstly the article presents a descriptive and explanatory analysis of how eight generational cohorts utilize news in print and/or online and/or mobile. Secondly these findings are used for merging the generational cohorts into a conceptualization involving three media generations. The print generation (1920s- 1940s) shows high probability (137%) and scored its highest value for reading only printed newspaper (Pearson's r = .135). The online generation (1950s-1970s) shows high probability (97%) and scored highest of online only news accessing (Pearson's r = .135). The heterogeneous news usage patterns exhibited by the individualized generation (1980s-1990s) were accommodated for by two cohorts. The online cohort shows high probability for online-only news usage (49%) and a positive correlation (Pearson's r = .065). The cross-media cohort marks high probability for cross-media use (230 %) and the highest value for cross-media use (Pearson's r

Keywords: media generation, news consumption, print generation, online generation, cross-media, Karl Mannheim

Introduction

Newspapers have, for centuries, catered to different people's needs for news and information. The high willingness of readers to pay for newspapers, accompanied by advertisers' interest in paying for access to them, has secured their existence, function and practices for decade after decade. Many contemporary developments however bear witness to the fact that the press in the Western world is under pressure. Worsening business conditions have arisen, as the end of the 20th century marked the start of a persistent decline in the readership of newspapers in print. The first decade of the 21st century has not only been one in which these worsening conditions have become augmented, but one in which the press has also dealt with the pressures caused by three recessions. A cry for the imminent death of newspapers in print did emerge in the 1990s. Even though in 2012 few reports address the death of newspapers, substantial concerns remain about the future of legacy news media and their role for sustaining quality journalism.

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Newspapers are coping with tremendous change in different ways. This involves relinquishing control in an ongoing shift towards user participation (e.g. Lewis, 2012; Loosen & Schmidt, 2012; Ostertag & Tuchman, 2012), which is transforming the internal dynamics in legacy news media (Nielsen, 2012; Raviola, 2012; Westlund, 2012a). Newspapers are attempting to compensate for losses by advancing their value propositions in digital and mobile domains through cross-media news work (Westlund, 2011; 2012b). However, it is fair to ask whether these endeavors actually compensate for losses of readership, or perhaps actually give fuel to such losses? Cannibalization takes place when one news platform is substituted for another. This certainly produces an unwanted result for legacy news media when people move from the platforms from which they make the most money (print) to those that earn them less (online). Researchers have approached this area in terms of displacing and complementary effects, scrutinizing the interrelationships between legacy media and "new" media. While this topic has spurred much interest among researchers in the 21st century, it certainly remains critically important, considering that such change evidently takes place continuously. Furthermore, this area has had a relatively exclusive focus on print newspapers versus online news accessing (with computers). However, in recent years, other news media platforms, increasingly integral to newspapers and other news publishers, have also gained significant traction among users.

First, one must acknowledge that the mobile in recent years has transformed from being a mobile *phone*, to being a mobile *device*; it is not only technologically equipped to make news accessing possible, but has also started to be used as such (Westlund, 2008a). Various studies suggest that the use of Internet-based mobile media was fairly limited until approximately 2008 in the Western world (e.g. Gómez-Barroso et al., 2010; Wilken & Sinclair, 2009). However, a rapid uptake has occurred since then, which also includes mobile news accessing (Rosenstiel et al., 2011, 2012; Westlund, 2012c). Some have suggested that the niche of mobile news accessing takes place in the interstices of everyday life (Dimmick et al., 2011). Other studies have found similar usage patterns among novice users of mobile media. Such studies have, however, also identified more advanced users, who have developed more frequent mobile news accessing habits that take place in a myriad of situations (e.g. Westlund et.al., 2011). Such patterns are witnessed from reports on transforming usage patterns from 2005 to 2011 in Sweden (Westlund, 2012c).

In parallel to this recent growth in accessing the news with mobile devices there have been increased efforts among legacy news media to develop and provide mobile news (Nel & Westlund, 2012; Westlund, 2013). Following from this, the article empirically focuses on news usage in print, online and via mobile in 2010. The theoretical framework is informed by displacing and complementing effects, and is integrated with a generational approach.

The overall purpose of the article is to construct theoretically and empirically informed news media generations. With this overall purpose in mind, the article first seeks to describe and explain how different generations access news in print and/or online and/or mobile. The analysis utilizes the frameworks of displacing and complementing effects to study single-media and cross-media use among generational cohorts, from which the conceptualization of media generations is shaped. Cross-media users may use one news medium as their main news platforms to which other news sources are complementary, but may also simply use all news platforms interchangeably.

Cross-sectional data naturally carries limitations in terms of determining such effects and also whether age is best approached as a generation and/or life course. Notwithstanding such limitations much can certainly be accomplished with cross-sectional data. The analysis and conceptualization presented in this article can also be seen also as an exercise in the study of media generations that can be utilized in future scientific work.

The analysis draws on data from a nationally representative scientific omnibus survey project which has been conducted by the SOM Institute at University of Gothenburg in Sweden annually since 1986. The authors have contributed with questionnaire items to the surveys conducted during the fall of 2010. The surveys were distributed to two independent and randomized samples of 3000 Swedes aged 16–85 years and elicited a net response rate of 60 percent. The SOM Institute employs systematic probability sampling and the distribution of responses equals the proportion of the Swedish population when it comes to age, gender, social class, education etc. The survey is distributed by postal mail, to ensure the identity of the respondent, but provides opportunity for responding to the questionnaire either by post or through an link to an online version (Nilsson & Vernersdotter, 2011). The items used for the analysis in this article were included only in one of the questionnaires, which focused more specifically on media usage. The enormous data generated by the annual surveys have previously generated numerous publications in Swedish and English, among which one finds analyses of Swedes general news usage (see e.g., Bergström et. al, 2006; Strömbäck et al., 2012), as well as analyses directed to evening tabloids in particular (see e.g., Westlund & Färdigh, 2011; 2013).

The analysis in this article focuses on news accessing patterns for the two largest newspaper titles in Sweden (*Aftonbladet* and *Expressen*). The dataset provides rich in-depth findings on contemporary use of news journalism provided by two legacy news publishers. Their news platforms attract users from a large part of the Swedish population, with some differences among groups.¹ These two evening tabloids have

¹ Frequent usage of evening tabloids for all combinations of news channels (in print, online, and mobile) shows a slight predominance of men (54 percent and women 46 percent), but neglible differences between users with low and high education (26 percent and 24 percent). The predominance of men persist among frequent users of evening tabloids only in print (55 percent and women 45 percent) but show that frequent usage in print for the most part consist mainly of middle and less educated (51 percent and 35 percent). Finally, for frequent usage of evening tabloids only online, there are no differences between men and women (50 percent each), but on the contrary, a predominance of middle and highly educated users (56 percent and 32 percent).

been the most successful newspapers in attracting online users, but have simultaneously suffered from great losses in print readership (see e.g. Westlund & Färdigh, 2011; 2013) for analyses of changing usage patterns among groups over time). Sweden is a historically pronounced newspaper market, which has turned into an international digital hot spot in which the uptake of internet and mobile media is relatively pronounced. Consequently, the analysis informs on contemporary change in a developed country where legacy news media collide with the emergent growth of digital media. The next section presents the theoretical framework and context of the study and thereafter reports the findings. The conclusions close the article.

Displacing and Complementary Effects among Generations in Sweden

This article describes and explains various news accessing patterns related to print, online and mobile news media among generational cohorts in Sweden for the year of 2010. Hence, there is an integration of the generational approach to media usage with the theoretical approaches to displacing and complementing effects. This section introduces and elaborates on these approaches in order to lay the groundwork for the theoretical framework that has guided the analysis. It also includes a discussion on the operationalization and contextualizes the case studies in an attempt to embed the findings.

Displacing and complementary effects...

Questions on whether "new" media will lead to the termination of the "old" media have occupied the minds of many academics during the last century. The address of those questions has become increasingly common in the 21st century with the increasingly dynamic, complex and multifaceted media landscape that has emerged. Newell et al. (2008) suggest that *saturation* takes place when individuals start using some new media in a way that has a displacing effect on their use of other media. However, many studies suggest that the time people spend with media has increased limitedly over time. For example, the annual surveys conducted by Nordicom from 1979 to 2011 in Sweden convey a total increase in time spent per day on media to be 46 minutes, over this period of time (Nordicom, 2011). While people certainly nowadays can engage in media multitasking, the introduction of new media ultimately may affect the use of old media. Two polarized and theoretically informed hypotheses exist on how the interrelationship between old and new media takes shape.

On the one hand, the new is assumed to attract a position alongside the old, where these provide different sets of functionalities and gratifications for the media user. This hypothesis ultimately concludes that new media has a *complementary effect* on old media and its research tradition is often referred to as *user*-

centric. This approach suggests that one must acknowledge a user's needs and habits when trying to understand and explain their choices and behaviours. Those dimensions are considered to be as important to grasp in this context as the specific functions of the medium itself (Dutta-Bergman, 2004; Flavian & Gurrea, 2009; Althouse & Tewksbury, 2000; Neustadtl & Robinson, 2002; Kaiser, 2003; Newell et al., 2008; Gentzkow, 2007). Research on complementary effects has underlined that one news medium may serve both similar and different needs to its users (Van Cauwenberge et al., 2010).

On the other hand, the displacing effects approach posits the hypothesis that the emergence of the new most likely gains traction among users at the expense of the old. Substitution effects and cannibalization are other common and popularized terms used in this context. Displacing can be seen as a process of diminution where replacement represents its final end at which users have terminated their original use entirely. This medium-centric approach hinges on the idea that various media have affordances and logics that vary in how well-suited they are in fulfilling the needs of its users. This strand of research involves two main approaches: the principle of relative constancy (McCombs, 1972; Nguyen & Western, 2006) and the theory of the niche (Dimmick & Rothenbuhler, 1984; Dimmick, 2003). A commonality to these two approaches is the assumption that people will use the medium that best services their needs. This in turn can cause displacing effects, since there are limits to how much available time one has to spend on media and other activities in a particular day. Displacing effects imply that the new results in some sort of diminution of the old. This can and has been measured in several ways, for instance, the money spent on, the length and/or frequency people use specific media. Obviously, newspaper managers have not wanted their endeavours for the digital habitat to encroach on their existing activities for print. The issue of displacing the old with the new has been raised before, in discussions related to the introduction of both radio (Lazarsfeld, 1940) and television (Belson, 1961), particularly concerning online news accessing. Although these studies found little support for displacing effects, another study from North America did, in fact, conclude on such effects. The study showed that emergent television use among children changed their use of radio as well as their habits for reading books and going to the movies (Schramm et al., 1961). Reviewing the literature, one finds numerous reports, some of which suggest that news sites have had a displacing effect on print newspapers (Filistrucchi, 2005; Dimmick et al., 2004), whereas others have suggested that they are complementary to each other (Nguyen & Western, 2006; Dimmick et al., 2004; Lee & Leung, 2008). In more recent investigations, researchers have shown the existence of both complementary and displacing effects (Bergström & Wadbring, 2010). This co-existence of effects partly relates to the fact that effects vary among groups, depending on differentiating factors such as age, gender and educational level (De Waal & Schoenbach, 2010; Westlund & Färdigh, 2011).

Consequently, mixed evidence exists of displacing and complementary effects. This is perhaps not surprising, considering the differences in the methods, time periods and countries of study. This article seeks to build further on the conclusion that such effects vary with "age". The focus is purposely delimited to analyzing differences in news accessing among different generations, which indicates both *of* and *beyond* "age" (as the next section will discuss). This makes it possible for a more in-depth analysis of one factor that has evidently been important to stratifications in earlier studies. At the same time, it explores new ground, since the analyses of news usage from a generational perspective are scarce, particularly concerning mobile news consumption.

It is worth noting that the theoretical approaches of displacing and complementary effects typically analyze more than one cross-sectional study. Since the analysis in this article builds on only one data collection point, it is not possible to analyze the displacing effects (unless one employs the more uncertain measures of retrospective estimations). Ultimately though, cross-sectional studies can be used to describe and explain the usage patterns at a specific time and place. Findings can inform on whether people use only printed newspapers or online news sites (i.e. single-media usage), or if they use several news platforms (i.e. crossmedia news usage). Hence, the operationalization of complementary effects here equals cross-media news usage (i.e. frequent use of at least two news sources), and makes a strong measurement despite the crosssectional nature of the data. The operationalization of displacing effects involves whether people explicitly use only one news medium, that is, single-media use. People who read news only in print have most likely not displaced online, since such news sites emerged long after print. Conversely, however, those using only online news sites may have previously been readers of printed newspapers. Ultimately these questions cannot be resolved nor determined by the analysis of the data reported on here. Considering this shortcoming, the article seeks to analyze generations' single-media use, yet embedded into the broader context of displacing effects research. Nevertheless, the terms "single-media use" and "displacing effects" will be used interchangeably for the sake of simplicity in the descriptive analysis and the explanatory logistic regression analysis.

...among different generations

As noted earlier, mixed evidence exists on displacing and complementary effects depending on people's "age". Age is often treated based on its biological nature, but here its social dimensions are also included. One such approach acknowledges that age is coupled with a number of life phases, which emphasizes the need, interest and possibilities people have at particular periods of their lives. An important assumption to the life phase approach, regarding displacing and complementing effects, is that people are inclined to change their media behavior over time and in conjunction with their changing ways of life. From such a

perspective, young people have been anticipated to change their interest in reading printed newspapers as they grow old. A basis for this assumption has been that they enter a life phase in which other "members" of this life phase has typically developed such reading habits. This assumption seems reasonable, considering that the socio-demographic of newspaper reading in many countries is densely populated by middle-aged and senior citizens. The generation approach provides both an alternative and complementary perspective on the matter, as both approaches can prove valid, but makes a daunting task to determine empirically as one needs longitudinal data over many years.

Sociology of generations' research was originally developed by Mannheim (1952) in the 1920s. It represents an attempt to develop alternative approaches to social stratification, namely Marxism (Eyerman & Turner, 1998). The ideas central to sociology of generations have been applied to much later research on generations. Nonetheless, some have argued that Mannheim's legacy is yet undervalued (e.g. Pilcher, 1994). Socially shaped generations do not constitute concrete groups, that is, groups in which the members are directly known to each other (i.e. generations as kinship). Mannheim instead argued that generations share social locations, relating to their common experiences of historical and social processes (as well as class). This extends beyond a perspective that a generation is constituted by those who share the same year of birth (Mannheim, 1952). The generation approach suggests that people born at a specific time and place develop into socially constituted generations as they establish experiences, practices and values in their formative phase of life (i.e. when young).

The formative phase can also be seen as integral to the ways people develop their media habits. Hence, the media that were important when people grew up remain central as people grow older. Although this does not imply that they necessarily maintain their media habits, it seems reasonable to assume that habits do not change dramatically as people enter a new phase in life. When generations have grown up, they have essentially been situated in radically different media landscapes. Since they accumulate particular and shared experiences (at least in the past) with media and its content, different generations are shaped in different ways (Gumpert & Cathcart, 1985). For example, some studies suggest that media such as gaming forms a symbolic barrier between younger generations and others (Caron, 2007). Contemporary scholars have emphasized the importance of generational differences to how people accept and shape, as well as are shaped by, digital technologies (Colombo & Fortunati, 2011).

Generations can be seen as inexorably connected to the specific media that were dominant when they grew up. Piermarco and Colombo (2007), for instance, have pointed to the direct importance of generations' early experiences and socialization with a medium. With varying affordances, storytelling and media richness, throughout the course of history, different media have functioned as gateways for experiencing and learning about major events in society. With an increasing globalization and mediatization, it can be

held that media play an increasingly important role for the shaping and constituency of generations. From such a perspective, it makes sense to emphasize the link between generations and media to the degree that one refers to media generations. Similarly, Tapscott (1998) juxtaposes the so-called net generation with the television generation, suggesting that their respective media life orientations substantially differed from each other. Additional empirical investigations have been conducted both in Australia (Volkmer, 2006a, 2006b) and Sweden (Bolin & Westlund, 2009). The latter study, for instance, presented an analysis of mobile communication behaviors among three generations called the radio, television and mobile generations.

Generations are typically constructed and presented as if they were homogeneous entities. This holds particularly true for more popularized conceptions of "young" generations, whom are often presented as technologically oriented and given labels such as the X and N generations (Tapscott, 1998), generation digital (Montgomery, 2009), digital natives (Prensky, 2006), generation Y or millennial generation (Savage et al., 2006). There are various reasons for such conceptions and the rise of generational marketing. Costa and Damásio (2010) argue that children and teenagers are appealing consumer groups. However, while it is tempting to conceptualize and emphasize the similarities of particular generations, several researchers have underlined that one must acknowledge the heterogeneity of their composition, and that not all young can be assumed to be technologically savvy (e.g. Buckingham, 2008; Zimic, 2009, 2010). For instance, a study with 9-16 year olds, nationally representative to Sweden, showed pronounced differences between tweens and teens. Tweens used domestic household media, such as television, the most. However, their use of more personal media such as internet and mobile was rather limited, and was certainly significantly higher among young teenagers (Westlund & Bjur, 2013). This witnesses a tremendous heterogeneity within a smaller part of those who are usually treated as the same digitally oriented generation.

Returning to Mannheim (1952), it is worth noting that as he discussed so-called generational actuality, he argued that intra-generational heterogeneity relates to larger differences in the ways of life among the people constituting the generation. Consequently, he also introduced so-called generation units to describe groups who have a sense of collective identity and who also certainly have strong bonds as a result of experiencing the same historical and cultural events (albeit not necessarily interpreted in the same fashion). Ultimately, Mannheim (1952) also positioned himself as critical to generational categorization practices in which decisive birth years are easily extracted and quantified, and regarding interpretations of cultural change.

Nevertheless, for any kind of generational approach, one must attempt to conceptualize and construct the boundaries of generations. This construction process forms a simplification, independent of the sorts of criteria used for its categorization. Scholars approaching age from the perspective of sociology of

generations also tend to categorize, conceptualize and label people born within specific timeframes. Hence, social definitions of generations are inevitably closely connected to biological age and year of birth. There is a lack of consistency in how generations are categorized, conceptualized and labelled, considering the myriad of different kinds of generations in contemporary literature (McCrindle, 2009). Strauss and Howe (1991), for instance, have suggested that generations should be seen as constituted by the aggregate of people born during a span of approximately twenty years. To them, this was assumed to be equivalent to one out of four life phases: childhood, young adulthood, midlife and old age. Furthermore, these aggregates of people were referred to as *cohorts* (Strauss & Howe, 1991). Cohorts makes a concept often used in generation research, and has been defined by Corsten (1999:250) as a form of "collective aggregates of socially structured life stories". He also emphasizes that membership to a specific period of birth years does not necessarily mean that people share similar experiences, since age, culture and socioeconomic conditions can create diversity.

Notwithstanding the existence of heterogeneity within generations, this article explores the patterns that lay the groundwork for constructing different sorts of news media generations. This marks an important academic endeavor, as media definitely permeate social life more than at the time of Mannheim's writing in the 1920s. Hence, they presumably play a large role in how contemporary generations are shaped. The article initially approaches the analysis of generations by extracting *generational cohorts* based on decisive birth years. These are here based on the decade in which people were born and therefore present a simplistic method to identify the granularity of patterns among groups. The analysis of generational cohorts is used to describe and explain patterns, which in turn are used during a second stage for the construction of *media generations*. The constructed boundaries for media generations are, in other words, tangled to the specific news consumption of evening tabloids in print, online and mobile. Consequently our approach to conceptualizing media generations is marked by deriving boundaries based on various statistical analyses of empirical data. In the following, the term "generational cohort" is used when referring to the eight groups analyzed based on decisive birth years connecting these to specific decades (1920s to 1990s). The generation label will be used when referring to the broader media generations defined at the end of the article.

Context of the Study

Similar to other Scandinavian media systems, Sweden includes both private and public service actors (Hallin & Mancini, 2004; Brink Lund, 2007; Färdigh, 2010). From an international outlook, there is high newspaper readership and the use of public service media in Sweden. The Swedish media system is also characterized by comprising accessibility to computers, internet, and broadband penetration rate. Sweden has among the highest newspaper circulation and readership in the world, although there has been a steady decline for printed newspapers in the developed world in the past decade (*World Press Trends*, 2011).

The economics for Swedish printed newspapers varies; free dailies make all their revenue from advertising, subscribed quality morning newspapers generate approximately two-thirds of their revenue from advertising, while evening tabloids, on the contrary, attract two-thirds of their revenue from readers and the remainder from advertisements. However, in the digital habitat, advertisements also accrue most of the revenues for evening tabloids, although *Aftonbladet* has certainly launched several lucrative and fee-based services. The two evening tabloids score the best daily reach among Swedish newspaper, which has made them interesting choices for advertisers. Large circulations have meant that they have benefited from economies of scale (low cost per issue). However, such benefits are diminishing year by year, as the sales of printed evening tabloids in Sweden have suffered a major decline since the early 1990s, in particular during the 21st century. On the positive side, the evening tabloids have accrued significant revenues from supplements and premium products (Gustafsson, 2008).

Evening tabloids differ from subscribed newspapers in terms of their content and distribution structures. The content structure of tabloids is oriented towards entertainment, sports, and gossip, which has proven a successful recipe for their news sites. *Aftonbladet* launched its news site in 1994 and *Expressen* followed suit in 1995. To date, more than two-thirds of all Swedish newspapers offer a news site. Regarding distribution structure, evening tabloids in print are distributed as single-sold copies in stores, whereas subscribed morning newspapers in Sweden are delivered to the home. This marks a substantial difference to potential displacing effects in terms of the nature of the respective commitment. Newspaper subscriptions are paid for on a monthly or annual basis and therefore involve a long-term commitment. Evening tabloids, on the other hand, being sold as single copies, can be displaced overnight.

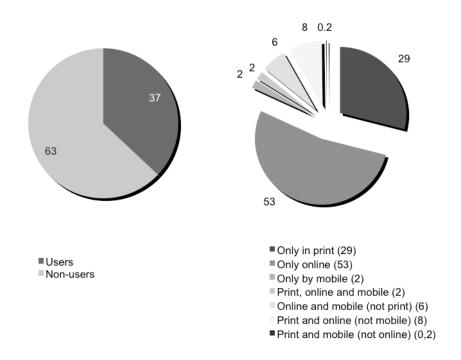
In this context, it is worth noting that earlier survey studies in Sweden have found (self-evaluated) displacing effects of the internet on newspaper reading to be more substantial for evening tabloids than for morning newspapers (Findahl, 2008). Previous studies on the displacing and complementary effects related to print and online for these two particular titles, from 1998 to 2009, reveal a general displacing effect of online on print over time. Although the readership in print was twice as high compared to online in 1998, the situation had reversed by 2006 (Westlund & Färdigh, 2011). The evening tabloid news sites in this

study are the most used Swedish news sites among all news publishers. Notwithstanding their prevalent success in attracting frequent users of digital news, the difficulties in generating revenue from digital endeavors cast doubt on how evening tabloids will suffice from a long-term perspective. Evidently, there is a mismatch between where most revenue is created (print) and where the largest base of users is (online). In 2011 one of these newspapers, *Aftonbladet*, publicly announced its new strategy to prioritize publishing in digital first (including mobile), giving print publishing less priority.

News Accessing among the Public and Generational Cohorts

The first research question is analyzed by focusing on whether people utilize only one particular news channel or whether they are accessing complementary combinations of news channels. Following from this, frequent usage of only print, only online and only by mobile (single-media use), or combinations of these news channels (cross-media use) are analyzed. Figure 1 show all responses divided between frequent users and non-users (the pie chart on the left) and all frequent users in print, online and by mobile (pie chart on the right).

Figure 1. The public's frequent news usage in print, online and by mobile in 2010 (percent)



Note: Frequent usage refers to at least 3 times per week. The pie chart on the left shows all responses divided between frequent users and non-users for print, online and mobile (n = 1653 respondents). The pie chart on the right shows all combinations of frequent usage (n = 617 respondents), from which all non-users (62.6 percent) have been excluded.

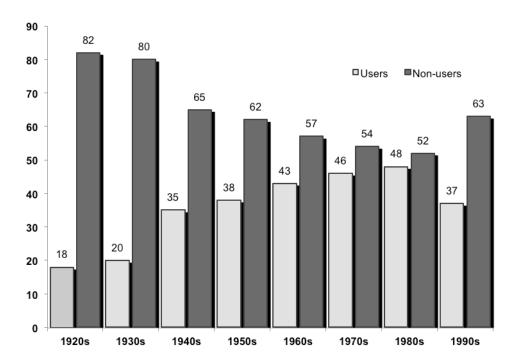
Source: The National Swedish SOM survey, 2010.

The left pie chart shows that 63 percent of Swedes aged 16-85 years did not frequently access news from evening tabloids (i.e. at least three times per week). That leaves 37 percent of the population who do so, which is analyzed in the pie chart on the right and in the remainder of the article. This pie chart sheds light on prevalent differences between single-media and cross-media use. Single-media use in the forms of "only in print", "only online" and "only by mobile" accounts for 84 percent of the total frequent news usage (53%, 29% and 2%). This also means that cross-media news consumption is relatively low. The frequent complementary use of news "in print, online and by mobile" accounts for 2 percent of the total frequent

news usage, whereas the forms of use such as "in print and mobile" or "online and mobile" represent a very small share of the total frequent use (0.2% and 6%).

Next follows an analysis of similarities and differences of such news consumption among different generational cohorts. Figure 2 shows the frequent use and non-use in "print, online and by mobile", inclusive of generational cohorts in the continuum from those born in the 1920s to those born in the 1990s. A conclusion is that non-usage is most common among older generational cohorts, and less so among the young. People born in the 1920s represent over 80 percent of the non-usage and 18 percent of the frequent usage, while non-use covers 52 percent and the frequent usage of news accounts for 48 percent among people born in the 1980s. Those born in the 1990s are an exception in this regard; this suggests that the young have not (yet) developed news accessing practices similar to those of slightly older generational cohorts. The share of non-use is also increasing, and the share of frequent use is decreasing and is located between the equivalent share of frequent use and non-use of the people born in the 1940s and 1950s.

Figure 2. Frequent users versus non-users in print, online and by mobile among generational cohorts in 2010 (percent)



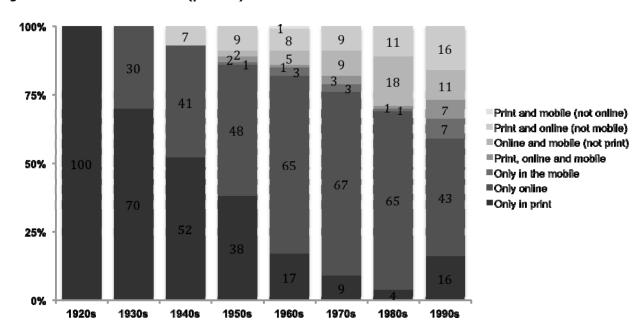
Note: Frequent usage refers to at least 3 times per week. The bar graph shows responses for frequent users and non-users in print, online and by mobile for each generational cohort. The number of responses for each generational cohort is '1920s', n = 61, '1930s', n = 205, '1940s', n = 301, '1950s', n = 307, '1960s', n = 271, '1970s', n = 223, '1980s', n = 162, and '1990s', n = 123.

Source: The National Swedish SOM survey, 2010.

Now follows an examination of how different generational cohorts access news in print, online and by mobile. As noted from earlier research findings, there is mixed empirical evidence on displacing and complementary effects depending on age. Figure 2 includes responses for frequent users of evening tabloids in "print, online and by mobile" among the eight generational cohorts. The most striking result is that single-media use represents the main body of the total frequent usage among the different generational cohorts. However, although print is integral to everyday life for some generational cohorts, it certainly is not for others. On the contrary, some generational cohorts are heavily oriented towards online

news accessing. While cross-media use is evidently less common in relative proportions, some generational cohorts are engaging in such complementary usage.

Figure 3. Combinations of news usage in print, online and by mobile among different generational cohorts in 2010 (percent)



Note: Frequent usage refers to usage that takes place at least 3 times per week. The bar graph displays responses only for frequent users of evening tabloids in print, online and with mobile for each generational cohort. The number of responses for each generational cohort is '1920s', n = 61, '1930s', n = 205, '1940s', n = 301, '1950s', n = 307, '1960s', n = 271, '1970s', n = 223, '1980s', n = 162, and '1990s', n = 123).

Source: The National Swedish SOM survey, 2010.

Scrutinizing the granularity of news accessing patterns among generational cohorts, one finds that people born in the 1920s literally only access news from evening tabloids printed papers. The use of print thereafter continuously decreases among younger generational cohorts, and almost strikes at the bottom among people born in the 1980s. Accessing of news only from online news sites, on the other hand, plays a major part to those born in the 1980s (43%), while it is literally non-existent among those born in the 1920s.

Cross-media use through the combination of print and online among people born in the 1940s, 1950s, 1960s, 1970s and 1980s account for seven to eleven percent, while such usage is slightly higher among the youngest generational cohort. The combination of print and online represents a much more prevalent form of cross-media news usage than the combination of online and mobile. This latter combination was predominantly found among the 1980s generational cohort (18%), but also among the 1990s generational cohort (11%) and 1970s generational cohort (9%). It is worth noting that approximately one out of ten in the 1980s generational cohort frequently utilizes print, online and mobile for news accessing. Hence, the 1980s generational cohort indicates patterns potentially constituting a cross-media generation, together with the 1990s generational cohort (who still display relatively different news consumption habits). The 1920s generational cohort have developed single-media use limited to only print, while those born in the 1930s also involve some people who only access online news. It is also important to note that the 1980s generational cohort largely employs only online for their news accessing. A final finding is that there literally is no generational cohort with habits of accessing news by print and mobile, but not with online. Conversely, online constitutes the key news channel around which news consumption patterns, either single-media usage, or in combination with print or mobile, is being formed.

Explaining News Accessing among Generational Cohorts

Logistic regression analysis is utilized for explaining nonlinear relations with respect to single-media use (i.e. displacing effects), cross-media use (i.e. complementary effects) and non-usage. This explanatory statistical method is also useful for investigating the likelihood of non-usage and six sorts of frequent news accessing habits with evening tabloids: only in print, only online, and four cross-media combinations representing complementary news usage.

Table 1. Generation effects on the frequent accessing of evening tabloids in print, online and mobile 2010 (odds ratio)

	Single Media Use				Cross-n	Cross-media Use		Non-use	
	Only print		Only	Only online		Print and/or online and/or mobile		Neither print, online nor mobile	
	β	Exp[β]	β	Exp[β]	β	Ехр[β]	β	Ехр[β]	
Constant	-2.81	0.06***	-1.47	0.23***	-1.97	0.14***	0.55	1.73***	
1920s (ref. cat.)									
1930s	1.29	3.65**	-19.7	0.00	-19.2	0.00	0.96	2.62**	
1940s	0.96	2.62*	-1.31	0.27**	-19.2	0.00	0.87	2.38***	
1950s	1.31	3.71**	-0.32	0.73	-1.63	0.20***	0.06	1.06	
1960s	1.05	2.85**	0.01	1.01	-1.00	0.37**	-0.08	0.92	
1970s	0.28	1.32	0.58	1.79*	-0.73	0.48*	-0.26	0.77	
1980s	-0.36	0.70	0.75	2.12**	-0.29	0.75	-0.40	0.67*	
1990s	-1.16	0.31	0.72	2.06*	0.18	1.19	-0.48	0.62*	
Number of cases:		178		340		99		1036	

Note: n=1653. β =logarithmic regression coefficient, EXP [β] = anti-logarithmic regression coefficient (odds ratio). Eight dummy variables were constructed (one for each generational cohort): '1920s' = 1 otherwise = 0; '1930s' = 1 otherwise = 0; '1940s' = 1 otherwise = 0; '1950s' = 1 otherwise = 0; '1960s' = 1 otherwise = 0; '1970s' = 1 otherwise = 0; '1980s' = 1 otherwise = 0. The reference category is '1020s' where β = 1.000. Cross-media use consists of all four sorts of complementary news usage to avoid low number of cases. * = significant at the .05-level, *** = significant at the .01-level, **** = significant at the .001-level.

Source: The National Swedish SOM survey 2010.

Table 1 illustrates the effects and odds ratios with significant generational effects squared. The findings suggest that non-use effects are most pronounced among older generational cohorts (1920s-1940s). Despite the partially insignificant coefficients, there is a clear pattern of comprising non-usage among older generational cohorts and less probability of non-use among younger generational cohorts (from 2.62 among those born in the 1930s to 0.62 among those born in the 1990s).

The results from Table 1 also suggest that earlier trends discussed regarding single-media and cross-media uses are partly confirmed. There is a marked difference between those who belong to generational cohorts born before and after the 1970s and those born before and after the 1980s. The results suggest that the 1920s, 1930s, 1940s, 1950s, and 1960s generational cohort are single-media users "only in print". The 1970s, 1980s, and 1990s generational cohorts, on the other hand, are single-media users "only online". Compared with the reference category (people born in 1920s), the likelihood of single-media use "only in print" is highest among people born in the 1930s and 1950s (265% and 271%, respectively) and vice versa, lowest among the younger generational cohorts. The results suggest tendencies (higher yet insignificant figures) towards cross-media news usage among the 1980s and 1990s generational cohorts. Among other generational cohorts, significant coefficients evidence limited cross-media news usage among other generational cohorts, although there is a slight increase among those born in the 1950s to 1970s.

Ultimately, when the regression coefficients are interpreted alongside the previously reported descriptive findings, it is a daunting task to demarcate sharp boundaries in terms of generational news accessing. Despite the insignificant coefficients, the results correspond to the descriptive findings that the 1980s and the 1990s generational cohorts are more oriented towards cross-media news consumption. However, the results also indicate that they are oriented towards frequent online only news accessing, and therefore need to be examined through further statistical analysis.

Towards Constructions of Media Generations

As discussed earlier, contemporary literature on generations and media have posited a sort of inexorable connection between the two (Volkmer, 2006a, 2006b; Bolin & Westlund, 2009). Therefore, one may rightfully speak of media generations. This section attempts to construct media generations, as induced by the descriptive and explanatory analyses of generational cohorts. These media generations are naturally to some degree intertwined to the specific context of this study, the accessing of news platforms provided by evening tabloids in Sweden for the year of 2010, but potentially induce more general patterns.

The rationale for constructing media generations involved drawing broader demarcations based on the news accessing patterns presented earlier (see Figure 3). The most common form of media use for each generational cohort was identified, and has been integrated with eventual additional generational cohorts alike. For instance, single-media use of printed evening tabloids scored highest among the generational cohorts of those born in the 1920s, 1930s and 1940s. This signifies that these generational cohorts share the common practice of primarily accessing news from evening tabloids in print, a habit they presumably developed in their formative phases as they grew up; this was the only way to read the news of Aftonbladet and Expressen. The logistical regression analysis of generational cohorts reinforces this interpretation. Following from this, those born in the 1920s to 1940s are here conceptualized as the print generation. A similar approach has been utilized for constructing two additional media generations, although more difficulties arose in demarcating boundaries. Those born in the 1950s, 1960s, 1970s, 1980s and 1990s scored highest for online only news accessing. However, cross-media news accessing encroached on the area of online only among the 1980s and 1990s generational cohorts. Acknowledging this divergence in the news accessing behaviors, the generational 1950s, 1960s and 1970s cohorts are conceptualized as the online generation. The 1980s and 1990s generational cohorts, on the other hand, are seen as constituting the individualized generation, consisting of two divergent cohorts: one engaged only with online news and one engaged in cross-media news accessing. This media generation is labelled as individualized to encapsulate the internal heterogeneity on the one hand, and to connote to contemporary discourse on how people actively are shaping their own ways of accessing news. That individualized news media accessing has gained traction witness that members of this generation largely let themselves form direct, rather than to be directed by the media structure. The following analysis carefully scrutinizes the validity of this construction into three media generations through further empirical analysis and statistical testing.

Table 2. Effects and correlations of news accessing: print, online, and individualized generations (odds ratio and Pearson's r)

	Only print			Only online			Cross-media		
	β	Exp[β]	Pearson's r	β	Exp[β]	Pearson's r	β	Exp[β]	Pearson's r
Print generation	0.86	2.37***	.135^^	-1.20	0.30***	194^^	-1.86	0.16***	139^^
Online generation	-0.31	0.73*	048	0.68	1.97***	.135^^	0.22	1.24	.026
Individualized generation	-1.35	0.26***	107^^	0.40	1.49**	.065^^	1.19	3.30***	.141^^
Constant	-3.31	0.04***		-1.03	0.36***		-1.87	0.15***	
Number of cases			178			340			99

Note: "Print generation" varies between 0 = reference category and 1 = 'Print generation' (1920s-1940s); "Online generation" varies between 0 = reference category and 1 = 'Online generation' (1950s-1970s); and "Individualized generation" varies between 0 = reference category and 1 = 'Individualized generation' (1980s-1990s). *= significant at the .05-level, **= significant at the .01-level, ***= significant at the .001-level. ^^= correlation is significant at the .01 level.

Source: The National Swedish SOM survey, 2010.

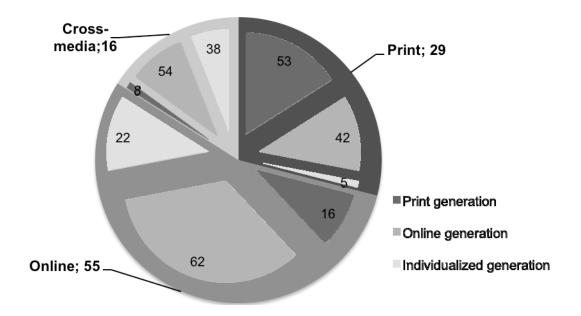
Table 2 inserts these three media generations into a logistical regression model and reports on the statistical correlations between the three media generations, on the one hand, and news usage as only in print, only online or cross-media, on the other. Cross-media news accessing here involves all four combinations of complementary news usage. The findings provide strong support for the analytical distinctions used for constructing the three media generations. A positive relationship exists between print generation and use only in print, online generation and use only online and individualized generation and cross-media news consumption. The print generation shows both high probability and scores its highest value for reading only printed newspaper (.135), which furthermore was higher than the scores of the other two media generations. In concert with this finding, the online generation shows both high probability and scored highest for online only news accessing (.135), also higher than the other two media generations. Finally, the individualized generation attracted its peak figures for cross-media (.141), while scoring relatively high for online only (.065) and negative figures for print only (-.107). In conclusion, the correlations between the three media generations and the news accessing patterns expected to be integral to each of them are significant and robust. These findings further reinforce the theoretical distinction into

the print generation (1920s-1940s), the online generation (1950s-1970s), and the individualized generation (born in the 1980s-1990s). The latter exhibits heterogeneous news usage patterns, which diverge into the online and cross-media generational cohort. Obviously the patterns of news accessing found among these three media generations are intertwined with their respective possession and use of information and communication technologies (ICTs). The use of mobile devices for news, for instance, is significantly lower for the print generation compared to the other generations (Westlund, 2012c).

Finally, the media generations are used for an analysis of their respective relative contribution to different sorts of news usage. Figure 1, presented earlier, showed that among the Swedish public, 37 percent were frequent users and 63 percent non-users. The block of non-users consists of individuals here presented in terms of the three media generations. The largest share of non-users was found among the online generation, constituting 28 percent of the total block of non-users. The print generation similarly scored 25 percent. The individualized generation represented only 10 percent of non-users. It must be acknowledged that these figures have not been weighted and therefore show lower numbers for the individualized generation, as there are a fewer number of cases in this group. Nevertheless, analysing the relative proportion of non-users within each media generation, one still finds higher figures for the online generation (45 percent) and print generation (40 percent) compared to the individualized generation (16 percent). Overall, these findings essentially confirm the results from the regression analyses: non-usage is most pronounced within the print generation, although the online generation represents a slightly higher proportion.

Next comes an analysis of the media generations' relative contribution to different sorts of frequent news usage. Figure 4 presents a reconfigured version of Figure 1, reporting on the dispersion of media generations across the three pies representing news usage forms (print, online, and cross-media).

Figure 4. The relative proportions of news accessing accounted for by the print, online and individualized generations (percent)



Note: Frequent usage refers to at least 3 times per week. Figure 5 shows the relative proportion for each of the three sorts of news accessing accounted for by the print, online, and individualized generations. "Print" = 29 percent, "Online" = 55 percent, and "Cross-media" = 16 percent (n = 617 respondents).

Source: The National Swedish SOM survey, 2010.

The online generation accounts for the largest relative proportion of the frequent use of evening tabloid online (62 percent). A similar pattern is found in the print generation, where the frequent use of evening tabloid in print accounts for 53 percent of the total frequent use in print. Notable is also that the online generation represents such a high proportion in all three forms of news usage. The results in Figure 4 evidenced high probabilities (3.30) and strong positive correlations (.141) of the individualized generation towards cross-media use. However, when the individualized generation is positioned alongside the other two media generations, it is evident that the online generation (54%) accounts for a higher proportion of total cross-media news use than does the individualized generation (38%). This relates to the fact that the latter partly consists of online-only users and thereby consists of a much smaller group than the significantly larger online generation. When assessing the relative contribution of the online and print

generation to single-media use only online and only print, these accounts for the highest portion. Consequently, Table 2, together with the print generation, essentially confirms the construct of the three media generations outlined here.

Conclusions

Substantial transformations are taking place in the realm of legacy news media and digital developments. Empirical studies and theoretical conceptualizations of news accessing patterns have obvious significance to academia, journalism, democracy and the media industry. The findings presented here on single-media and cross-media use are important regarding contemporary developments of cross-media publishing among legacy news media. This explores concerns about cannibalization in the media industry and the theoretically informed inquiries on the displacing and complementing effects in academia. However, the article's first and foremost contribution involves the careful analysis of generational cohorts and the construction of theoretically and empirically informed media generations.

The article has investigated how the public and generational cohorts access news from evening tabloids in print, online and mobile. Acknowledging earlier studies that have shown pronounced differences depending on age, the analysis has focused on this dimension as indicative of differences among generational cohorts and generations. The focus has laid on single- and cross-media usage as a sort of operationalization of displacing and complementing effects. The general conclusion is that Swedes typically engage in singlemedia use of evening tabloids (among frequent users). Firstly, the findings conveyed a pattern comprising non-usage among older generational cohorts and less probability of non-use among younger generational cohorts (with a likelihood of 162% of non-use among people born in the 1930s). Secondly, approximately two-thirds within each of the eight generational cohorts frequently access news only from one out of three news platforms. There is a significant difference for using only print (+185%) and using only online (+79%) between those who belong to generational cohorts born before and after the 1970s. Furthermore, online constitutes the most used news platform of the three. This holds valid both for single-media use and in terms of complementary use together with print and/or mobile. Both the 1980s and 1990s generational cohorts of this study exhibit cross-media news accessing patterns, although it is only among the latter that cross-media news accessing actually supersedes single-media use. This result essentially confirms, with robust data, widely held expectations. This result also corresponds with the intrinsic complexities and challenges for legacy news media associated with monetizing from journalism. Several of the generational cohorts have become accustomed to a news media landscape where journalism is being offered as a free commodity through online news sites.

Mannheim (1952) suggested that formative experiences and patterns become important as people grow older. This article has scrutinized and showed the importance news media play in such formative processes. The findings convey that formative experiences seem to stick with a generation, although they go through life phases and encounter a transforming media system. This is particularly applicable to those who have persisted in reading the news in print, while the findings also lend support to people being willing to embrace online and mobile as platforms for accessing the news.

The article has conceptualized three media generations based on the analysis of generational cohorts: the print generation (1920s-1940s), the online generation (1950s-1970s), and the individualized generation (born in the 1980s-1990s). The prevalence of formative media behaviour perhaps stands as most obvious with the print generation, who grew up with reading evening tabloids in print during a time when online and mobile news were literally absent. The print generation shows high probability (137%) and scores its highest value for reading only printed newspaper (Pearson's r = .135). The print generation exhibit limited tendencies towards using online for displacing, or even complementing, their regular habits of reading the newspaper in print. The patterns of the online generation support this finding, although not regarding cross-media news accessing. The online generation shows high probability (97%) and scored highest of online only news accessing (Pearson's r = .135). The individualized generation exhibits heterogeneous news usage patterns, which diverge into the online and cross-media cohorts. The online cohort shows high probability for online-only news usage (49%) and a positive correlation (Pearson's r= .065). The crossmedia cohort marks highest probability for cross-media use (230 %) and the highest value for cross-media use (Pearson's r = .141). The online and cross-media cohorts are constructs acknowledging the intragenerational heterogeneity of this media generation, and also Mannheim's (1952) discussion of generation units. Thus, the findings of this study emphasize the theoretical distinction into the print generation (1920s-1940s), the online generation (1950s-1970s), and the individualized generation (born in the 1980s-1990s). This pattern is confirmed when examining the media generations' relative contribution to different sorts of frequent news usage. The online generation accounts for the largest relative proportion of frequent online news usage (62 percent). Similarly, the print generation accounts for more than the half of the total frequent use in print (53%).

These three media generations have essentially developed different ways of accessing the news, which varies between news platforms, and also makes an important part of how these generations shape their collective consciousness (Volkmer, 2006) and frames of reference. In both academia and the news industry, there are (normative) encouragements and expectations on developing distinguished journalism(s) for various news platforms. The mere act of shoveling news content from one channel to another has been dismissed as insufficient. One key argument regards that of media accommodating for varied media logic(s).

Another argument of critique, on the other hand, proposes that people want to access different sorts of news from the different channels they utilize. Presenting such arguments in the context of this study, the diversified cross-media publishing of news would not only result in different news reported for print, online and mobile, but these news reports would also primarily be accessed only by respective media generations connected to these news platforms. In other words, such news publishers' strategies will augment the social shaping of different news media experiences among generations. Consequently, the role media play concerning how different generations perceive the world presumably bears crucial significance.

The conceptualization into the three media generations presented here reinforces assumptions on an inexorable connection between generations and the media to be empirically valid in this salient case of news usage (i.e. of evening tabloids among Swedes in 2010). Yet emphasis is given to how some generations cannot be conceptualized solely on the basis of being oriented towards one particular news medium, but are preferably treated in terms of their diverse and individualized media use. The generational boundaries presented in this article are theoretically informed and also empirically derived from the analysis of news consumption of evening tabloids in print, online and mobile. Predefined generational categories, based on membership to a specific period of birth years, are, in other words, hereby avoided. These media generations carry their meaning based on the dominant patterns of accessing news from evening tabloids in Sweden during 2010. These contingencies affect the construction of the media generations presented here, which are ultimately closely connected to the present situation among news users of these newspaper companies. Nevertheless, the findings potentially induce more general patterns and the conceptualization into three media generations is intended to provide other scholars with a helpful framework for analysis. In terms of generalizability a future analysis including also other newspapers would most likely convey similar findings on a general level. This relates to the fact that most newspaper titles, newspaper sorts and newspaper industries are experiencing a decline in print readerships and inclines in the use of online- and mobile news platforms. Ultimately though, additional empirical research is needed to identify patterns and expected differences depending on the composition of users attributes etc. Obviously this however marks one of many important areas for future research that this article ultimately points to.

All in all, this explorative conceptualization on media generations has obvious limitations of time and space, which can be addressed in future research inquiries. It is of great significance to further investigate the granularity of patterns *within* generations (heterogeneity vs. homogeneity) and *over time* (with longitudinal data collection), as their news accessing patterns presumably change. Investigating possible life cycle effects among generations marks a highly important inquiry. Future venues of research should furthermore involve broadening the scope of analysing evening tabloids by also including news accessing through tablets. Future research projects may also broaden the study of news accessing to include other sorts of

newspapers (e.g. quality newspapers and free dailies), as well as broadcasting media and different forms of actors provisioning news through sites and applications. Taking into account the more general trend towards online news accessing, and also with mobile devices and tablets, one will presumably find that such behaviours gain traction on behalf of print. Possibly cross-media news accessing will also propagate among those which are here defined as print and online generations. This sort of empirical research should also expand its focus from Sweden to other geographical contexts, an endeavour which the authors sincerely hope this article has both inspired to and provided guidance for.

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