Ruben Konig, Karsten Renckstorf and Fred Wester

Patterns in Television News Use*

Abstract
In this study we explore patterns of television news use, using data from a national survey on Media Use in the Netherlands conducted in 1994 (n = 969). Results indicate that people are much more likely to prefer watching television news selectively and attentively than watching the news while simultaneously engaging in other activities. Moreover, the chances of this preference for watching the news selectively and attentively are even greater for men, older people, and people endorsing well-informed citizen's values. They are somewhat smaller for women, younger people, and people without well-informed citizen's values. No evidence of interaction among these determinants was found. Contrary to our expectations, education, occupation, and having children do not seem to influence self-reported patterns of television news use. A possible explanation for the difference between men and women, is the subjective definition of 'home' as a sphere of leisure for men and a sphere of labor for women, which traditional role-expectancies may still engender. A possible explanation for the inclination of older people and people with well-informed citizens values to prefer watching the news selectively and attentively, may be found in a relatively strong feeling that watching the news is important.

Introduction
Qualitative research shows that people use television and television news in their everyday life as an everyday activity. Watching television or television news appears to be nothing special and, as with any other everyday activity, people seem to develop routines in watching television and television news (e.g., Morley, 1986; Van der Molen 1989; Morley, 1992; Hermans & Van Snippenburg, 1993; Hagen, 1994a, 1994b). Using quantitative research methods, Konig, Renckstorf and Wester (2001) explore such everyday routines in watching television and television news for the Dutch population as a whole. On the basis of survey data, they show that at least three routines of watching television can be discerned in the Netherlands in 1994. The first routine involves watching television gregariously. People using this routine hardly ever watch television alone and talk a lot in front of their television sets. The second routine involves watching television habitually and unselectively as primary activity. People switch on the set when they want to watch tele-
vision, not because they want to see a specific program. This routine comes closest to what is often called ‘heavy viewing’ (cf. Frissen, 1996). The third routine involves watching television as a background for other activities such as eating, talking, reading, working, and domestic activities.

Konig, Renckstorf & Wester (2001) also describe two routines of watching television news in particular, that the present study will elaborate on. These two routines of news watching can clearly be discerned from the three routines of watching television in general. One routine involves selectively and attentively watching the news as primary activity, whereas the other routine implies that people not only watch the news, but simultaneously engage in other activities as well. The authors show that these routines are not distributed evenly across people with different individual and social-structural background characteristics. For instance, they show that men tend to display a routine of selectively and attentively watching the news as primary activity more strongly than women, whereas women tend to show a routine to engage in other activities simultaneous to watching the news more strongly than men. However, what the authors did not show, is whether men or women tend to prefer one of the two routines; that is, in their actual behavior. In general, it is not yet clear whether or not different people report a different routine to apply more strongly to their own news-watching behavior than the other routine. That is, routines in watching the news were explored, but the authors did not explore patterns of television news use that may have evolved out of preference for one of these routines. Routines are defined here as standard ways of using television news in everyday situations, whereas patterns are defined as combinations of such routines. The aim of the present study is to gain additional insight in people’s television news use by exploring such patterns – that is, combinations of routines – of television news use.

Is it possible to identify social categories that have developed different patterns of television news use? That is, is it possible to identify social categories of which the members have typically developed a preference for one of the two routines in watching television news? One may expect that people with different social-structural backgrounds, with their different roles and situations in life, develop different patterns of television news use (cf. Berger & Luckmann, 1991; Merton, 1968; McQuail, Blumler & Brown, 1972; Wright, 1986). In this paper, these different patterns of television news use will be explored both theoretically and empirically. Theoretical reasoning will serve as starting-point for the empirical exploration.

From an action theoretical point of view (Renckstorf, 1996; Renckstorf & McQuail, 1996), this means that we will have to find theoretical reasons for differences in the typical ‘interaction situation’ in which members of specific social categories usually watch the news, or differences in the typical context in which these members watch the news in everyday situations. The context concerned does not only consist of the physical surroundings such as the couch on which the viewer is seated and the other people present in the room, but
also of internal processes of the viewer, such as his or her preoccupations and
drowsiness after a hard days work. In fact, the ‘interaction situation' consists
of everything that influences the processes of giving meaning to the news and
the items in the news (Renckstorf & Wester, 1999: 49–50). Or, as Dahlgren
(1988: 289) puts it: “The meanings the programmes have for the viewers arise
in the programme/audience interface”. Therefore, reasons for differences in
the typical ‘interaction situation' are manifold and one can never be complete
in summing them up. As a result, theoretical and empirical explorations like
the present one cannot be complete either, but one may still hope to at least
throw some light on the complex matter of patterns in television news use.

Different interaction situation, different pattern of television news use?
Three kinds of differences in interaction situations will be elaborated upon,
assuming that these differences are relevant to the patterns of television news
use that people develop. First, the subjective definition of ‘home' as a sphere
of leisure or labor is suggested as a possible ground for preference of different
routines in television news use. Second, the subjective relevancy of watching
the news may lead to different patterns. Third, differences in preference for
a specific routine in television news use may evolve out of people’s time
budgets.

Subjective definition of ‘home' as a sphere of leisure or labor
If ‘home' is subjectively defined as a sphere of leisure, people may indulge
at will in selective and attentive news watching as a primary activity. How-
ever, if in contrast, ‘home’ is subjectively defined as sphere of labor, some
domestic task is always waiting to be attended to, and selectively and atten-
tively watching the news may not be experienced as an appropriate thing to do.
In the latter case, people may choose to watch the news while engaging in
simultaneous activities as well. Two reasons for different subjective defini-
tions of ‘home' will be explored here: a) traditional role-expectancies about
the division of labor between men and women, and b) people’s daily occupa-
tion in or outside the family home.

Traditional role-expectancies about the division of labor between men
and women may be a prominent reason for differences between (subjective
definitions of) interaction situations in which men and women watch the news.
Gilroy, 1999) suggests that the traditional role models for men and women
define ‘home' as a leisure situation for men and a sphere of labor for women.
Traditionally, women are expected to do the domestic work – whether they
have a job outside the family-home or not. Morley (1986: 150) reports that
"...many of the women feel that to just watch television without doing any-
thing else at the same time would be an indefensible waste of time, given their
sense of their domestic obligations, [and that] men state a clear preference
for viewing attentively, in silence, without interruption ‘in order not to miss
anything". Studies by Meier and Frissen (1988) and Hermans and Van Snippenburg (1993, 1996) also suggest that women may prefer a routine of watching the news while engaging in simultaneous activities, whereas men may prefer a routine of watching the news selectively and attentively as primary activity.

But differences in people's television news use patterns need not necessarily be based on the difference between the traditional role models for men and women. Whether 'home' is defined as a sphere of leisure or labor, might depend on people's actual occupation – caused by traditional role models or not. The difference between people's television news use patterns might be based on whether or not their main occupation lies within the family home. If one goes out in the morning to do a full-time job outside the family home, only to return when the work is done in the evening, 'home' is likely to be perceived as a sphere of leisure. However, if one's main occupation lies within the family home this is unlikely. Therefore housewives may be expected to experience their home as a sphere of labor, and consequently, they may be expected to prefer to watch the news while engaging in other activities simultaneously. For people with a full-time job outside the family home, the opposite may be expected.

This line of reasoning suggests that gender and occupation may be relevant variables as to patterns of television news use. Therefore gender and occupation will be used in our empirical exploration of patterns of television news use.

Subjective relevancy of watching the news
As indicated, subjective definition of 'home' as a sphere of leisure or a sphere of labor is not the only factor that may influence the interaction situation in which people watch television news. One may expect the subjective relevancy ascribed to watching television news programs to be another major influence. People who subjectively feel that the news might discuss relevant topics can be expected to be more likely to prefer to watch the news selectively and attentively, than people who do not expect the news to present relevant topics. If the latter watch the news they are more likely to simultaneously engage in other activities as well. Three reasons for this expected difference in subjective relevancy of watching the news will be explored: a) differences in education, b) differences in age, and c) differences in 'informed citizen's values'.

Television news hardly ever brings items that bear immediate relevance for one's everyday life (Lewis, 1985; Jensen, 1986). Therefore we expect that people who live their lives within the narrow bounds of their own social and cultural communities, without an interest for the broader society outside their immediate sphere of life, feel less subjective interest for the items that usually dominate the news, such as politics, economics, and foreign news. Since previous research shows that people with a lower education are, on average, less interested in the broader society outside their immediate sphere
of life (e.g., Warshay, 1962; Kelman & Barclay, 1963; Gabennesh, 1972; Roof, 1974, 1978; Eisinga, Lammers & Peters, 1991; Konig, 1997), we expect that the lower educated are inclined to watch the news – if they watch the news at all – while engaging in simultaneous activities as well, whereas the higher educated will probably prefer to watch the news selectively and attentively. Therefore, we will explore whether people with different educational levels also display different patterns of television news use.

Another reason to expect differences in education to lead to differences in subjective relevancy of watching the news, and thus to different patterns of television news use, lies in the cognitive capacities of people with different levels of education. The higher educated are usually better equipped to understand the news and therefore more likely to find watching the news gratifying and relevant.

Further, people's level of education is negatively correlated to age, which leads us to expect that older people – who tend to have a lower formal education – may also be more inclined to watch the news while engaging in simultaneous activities as well, whereas younger, better educated people may tend to watch the news selectively and attentively. A conflicting hypothesis, however, may be formulated as well, because previous research shows older people to be more inclined to watch informative programs than younger people (Van Snippenburg, 1996). So the relationship between patterns of television news use and age may be more than just a reflection of the relationship between patterns of television news use and education. Two theoretical reasons may be formulated: one explaining the relationship as an age effect and one explaining the relationship as a cohort effect.

Van Snippenburg (1996) opts for an age effect and suggests that people acquire 'cultural capital' during their lifetime, which makes people better equipped to process and understand the news as they grow older, and therefore makes watching the news increasingly satisfying with an advancing age. Growing older, people may become more interested in the broader society outside their immediate sphere of life (cf., Warshay, 1962; Kelman & Barclay, 1963; Konig, 1997) and therefore come to feel more inclined to watch television news. That is, during their lives, people learn to appreciate the news. Therefore chances of people preferring to watch selectively and attentively should increase with one's age.

Should one opt for a cohort effect, expectations are the same, but for a radically different reason. Previous research suggests that for most people watching television news is a daily ritual in their everyday life (Van der Molen, 1989; Morley, 1992; Hagen, 1994a, 1994b), which suggests that watching the news has become a habit. Therefore we assume that the routines in watching television news that were identified by Konig, Renckstorf and Wester (2001) are relatively stable and may have formed decades earlier. The older cohorts, having developed their routines in watching the news in earlier decades than the younger cohorts, may well have developed a preference for a
routine different from that developed by the younger cohorts. The older cohorts started watching the news in times in which they could only receive one or two television channels, that were on the air for only a few hours in the evening, and that featured the news very prominently as the only daily program on prime time. Such a situation is bound to signify that watching the news is very important, which may have resulted in ascribing a relatively high subjective relevancy to watching the news by the older cohorts and consequently a preference to watch the news selectively and attentively.

Therefore, we will not only explore educational differences, but also age differences as a possible reason for a difference in one’s preference for one of the two routines in watching television news. However, subjective relevancy of watching the news may also rise from the fact that watching the news is deemed socially desirable. Van der Molen (1989) and Hagen (1994a, 1994b) conclude that the subjectively felt need to be informed about current affairs is often engendered by social pressure. People subjectively feel that they need to know about the issues in the news because they expect that these issues may come up in their everyday contacts with other people. There appears to be a social norm that demands from everyone in Dutch (and Norwegian) society to be a ‘well-informed citizen’. Therefore, ‘well-informed citizen’s values’ should also be explored in relation to patterns of television news use. Furthermore, the social norm to be an ‘informed citizen’ is likely to influence respondents’ answers in any research project on television news. Considering Dahlgren’s (1988) distinction between official versus personal talk, and his finding that as a researcher he mostly elicits official talk about the news because people “…apparently feel that they are ‘on stage’ in terms of their citizens role” (Dahlgren, 1988: 293), the influence of this social norm on respondents’ answers becomes more than obvious. Therefore, in our empirical exploration, we will have to explicitly deal with the possibility that our data also contain answers that may reflect the pressure of the social desirability to be a well-informed citizen (see below).

This line of reasoning suggests that education, cohort or age, and well-informed citizen’s values may be relevant variables as to patterns of television news use. Therefore these variables too, will be used in our empirical exploration of patterns of television news use.

**Time budgets**

Next to the subjective definition of ‘home’ as a sphere of leisure or labor and the subjective relevancy of watching the news, subjective time constraints may influence the pattern of television news use too. People who feel they have a lot of time on their hands may be more likely to allocate time for selectively and attentively watching the news, than people who feel they have limited time resources. The latter may or may not want to watch the news, but if they want to watch, they may feel that they cannot afford to watch the news without simultaneously doing other thing as well. People’s subjective time budget may
be of influence on the interaction situation in which people watch television news (cf. Huysmans, 2001). Two reasons to expect different subjective time budgets for watching the news will be explored: a) whether people's daily occupation is a full-time or a part-time occupation and b) whether people have children living in their household or not. Both a full-time occupation and having children do increase the amount of domestic and family tasks that need to be attended to in the evening hours, thus decreasing the amount of time one feels one can spare for the news. Therefore it may be expected that people with a part-time occupation and no children may prefer to watch the news selectively and attentively as primary activity, whereas people with a full-time occupation and children are more likely to have developed a preference for watching the news while engaging in simultaneous activities. Thus, these variables will also be included in our empirical exploration of patterns of television news use.

Data and measurement instruments
The data used in this study come from a national survey on Media use in the Netherlands 1994, and since Hendriks Vettehen et al. (1995) extensively report on these data, a very short description of the data should suffice. The random sample consisted of 969 respondents between 18 and 70 years of age, of which 782 respondents (80.7%) returned an additional self-administered questionnaire. Data came partly from this self-administered questionnaire. For more information regarding the data, see Hendriks Vettehen et al. (1995).

Konig, Renckstorf, and Wester (2001) obtained their results from the analysis of the same data, using non-linear principal components analysis (Van de Geer, 1988; Gifi, 1991; De Leeuw, 1984; SPSS, 1990b), a powerful technique for exploratory analysis of nominal, ordinal, and interval data. As a consequence, however, their study did not result in ready-to-use measurement instruments for the two routines in watching the news that they identified in their study. In the present study we tried to overcome this problem with a reanalysis of the data. First, we redid the non-linear principal components analysis for the two routines of watching the news, excluding variables that did not explicitly refer to television news and only using those eight variables that loaded highest on the two components referring to the news (see Konig, Renckstorf & Wester, 2001: 156). From this analysis we concluded that all relationships between these variables were linear, or at least monotonous. This means that all variables can be treated as ordinal variables and that more conventional procedures could be applied. Consequently, we performed an exploratory factor analysis (Kim & Mueller, 1978). Two variables did not fit in the factor structure and were subsequently excluded from the final analysis. Results of the final analysis are reported in Table 1. Factor 1 is interpreted as selectively and attentively watching television news, and factor 2 is interpreted as watching television news while simultaneously engaging in other activities. Finally, we constructed measurement instruments for these two
routines by computing the sums of the scores of the respondents on the items with high factor loadings on the respective factors. Relationships of these constructs with media related variables and individual and social background characteristics are very similar to the relationships reported by Konig, Renckstorf and Wester (2001). Therefore, we are confident that we did not diverge too much from the routines of watching the news that they reported.

Table 1: Factor analysis of variables pertaining routines in watching television news (n = 741; oblique rotation; explained variance = 42.7%; correlation between factors = -.31).

<table>
<thead>
<tr>
<th>Communality</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1</td>
</tr>
<tr>
<td>V162</td>
<td>.55</td>
</tr>
<tr>
<td>V171</td>
<td>.35</td>
</tr>
<tr>
<td>V175</td>
<td>.47</td>
</tr>
<tr>
<td>V166</td>
<td>.49</td>
</tr>
<tr>
<td>V177</td>
<td>.41</td>
</tr>
<tr>
<td>V172</td>
<td>.30</td>
</tr>
<tr>
<td>V168</td>
<td></td>
</tr>
<tr>
<td>V184</td>
<td></td>
</tr>
</tbody>
</table>

Using these measurement instruments for the two routines in watching television news, we created a typology for the patterns of television news use that may have evolved out of preference for one of these routines. As a consequence of the way we constructed our measurement instruments (sums of scores), the scores on these instruments range from 3 to 15. We interpreted scores lower or equal to 6 to indicate that respondents reported that a particular routine did not apply to their own news-watching behavior, and scores in the range of 7 to 9 to indicate that respondents reported that a particular routine applied partly to this behavior. Higher scores are interpreted as indicating that respondents positively evaluated a particular routine to apply to
their own news-watching behavior. Based on this interpretation, the two measurement instruments were recoded into three categories. A cross-tabulation of these collapsed instruments, finally, formed the basis for the typology in Table 2. The respondents in the three shaded cells below the diagonal reported the routine of selectively and attentively watching the news to apply more strongly to their own news-watching behavior than the other routine (58.3%), whereas the respondents in the three shaded cells above the diagonal reported the routine of watching the news while simultaneously engaging in other activities as the dominant routine (10.8%). The respondents in the cells on the diagonal did not report one of the two routines to apply more strongly to their own news-watching behavior than the other (30.9%). This group encompasses respondents who indicated that both routines apply to their news watching behavior, as well as those respondents who indicated that neither of the routines applies to their news watching behavior. However, the largest segment of this group (80.1%) claimed that both routines partly apply to its behavior. Because of the skewness of the distribution of a typology thus constructed and the unreliable results that would be obtained using such a skewed dependent variable in the analysis, the typology was reduced to only indicate a preference for watching the news selectively and attentively (the three shaded cells below the diagonal; 58.3%) or no such preference (the other cells lumped together; 41.7%).

Table 2: Cross-tabulation of the routines in watching television news.

<table>
<thead>
<tr>
<th>Watching news while engaging in other activities simultaneously</th>
<th>does not apply</th>
<th>partly applies</th>
<th>applies</th>
<th>row total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selectively and attentively watching news</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>does not apply</td>
<td>29 (3.9%)</td>
<td>35 (4.7%)</td>
<td>14 (1.9%)</td>
<td>78 (10.5%)</td>
</tr>
<tr>
<td>partly applies</td>
<td>143 (19.3%)</td>
<td>185 (25.0%)</td>
<td>81 (4.2%)</td>
<td>359 (48.4%)</td>
</tr>
<tr>
<td>applies</td>
<td>185 (25.0%)</td>
<td>104 (14.0%)</td>
<td>15 (2.0%)</td>
<td>304 (41.0%)</td>
</tr>
<tr>
<td>column total</td>
<td>357 (48.2%)</td>
<td>324 (43.7%)</td>
<td>60 (8.1%)</td>
<td>741 (100%)</td>
</tr>
</tbody>
</table>


Gender was measured straightforward, that is, the sex of the respondents was observed on face value by the interviewers (50.4% male and 49.6% female). As to occupation, we discerned people with a full-time job (40.9%), people with a part-time job or no job (i.e., unemployed, pensioned off, retired, students, et cetera; 40.1%), and housewives (19.0%; among whom 3 men). Formal education was measured as the level of the highest completed education of the respondent, or the education that the respondent was still receiving as a pupil or student (41.9% at most O-levels or lower vocational school, 58.1% at least A levels or higher vocational school).

Age or birth cohort was measured by asking the respondents' year of birth. The answers were then divided into three categories for the following reasons. The Dutch broadcasting system started to change rapidly in 1989 after the introduction of private broadcasting channels (Bardoel, 1996). At that time people who were born before 1965 were at least 25 years old and may be assumed to have developed their patterns in watching the news within the bounds of the 'traditional' public broadcasting system with its prominent place for the news as the only daily program at prime time. Additionally, people who were born in or after 1965, for the most part, had to develop their news watching patterns within the bounds of a continuously expanding and changing broadcasting system with a much less prominent place for the news. But, the people born before 1965 can also be divided into two groups. Before 1975, the evening news was broadcast on the two Dutch television channels simultaneously, a practice that was abandoned in 1975 (Bardoel, 1996). At that time people who were born before 1951 were at least 25 years old and may be assumed to have developed their news watching patterns by then. People, who were not yet 25 years old in 1975, may have developed their news watching patterns later, in a situation in which the news had become avoidable by switching channels. This may have suggested to them that watching the news was not that all-important after all. The resulting categories are: born in 1965 or later (22.6%), born before 1965, but after 1950 (36.3%), and born in or before 1950 (41.1%).

Whether or not respondents had children still living with them at home, was measured by asking them whether or not they had children, and how many of these children still lived at home. We found that 45.7% of our respondents had one or more children living at home. 'Well-informed citizen's values' were measured with a dichotomous index that was based on the factor analysis of value systems reported by König, Renckstorf and Wester (2001: Appendix 5). Respondents who subscribed to the two following statements as important to them, were categorized as having 'well-informed citizen's values'. The other respondents were categorized as not having 'well-informed citizen's values'. The statements were "to be able to discuss current affairs" and "to know what is happening in the world".
Analysis

To explore whether or not differences in gender, occupation, education, age or cohort, well-informed citizen's values, and having children result in different patterns of preference for one of the two routines in watching television news, we performed logit analyses (Cramer, 1991; Gilbert, 1993; Christensen, 1997), using the SPSS procedure LOGLINEAR (SPSS, 1990a). That is, we tried to explain the odds of preferring a routine of watching the news selectively and attentively, rather than not preferring this routine.\(^9\) Using this technique we intended to overcome the problem of possible socially desirable answers, which we hinted at in the introduction. Logit analysis can be used for that purpose, because in essence one is interpreting odds ratios and these are independent of the marginal distributions of the contingency table on which they are based (Reynolds, 1977; Clogg & Shihadeh, 1994). Therefore, assuming that the tendency to give socially desirable answers is evenly distributed over the population, odds ratios are independent of influences of social desirability tendencies in the population as a whole.

Below, separate analyses are conducted for the three kinds of differences between interaction situations that we theoretically elaborated on earlier in this article. Finally, the results of these explorations will be combined into an integrated empirical model for the explanation of the odds of preferring to watch the news selectively and attentively, rather than not preferring this routine in watching the news.\(^10\)

Different subjective definitions of 'home' as a sphere of leisure or labor is the first kind of difference between interaction situations that may lead to different preferences for routines in watching the news, that was explored empirically. That means that we explored the relationship between a preference for watching television news selectively and attentively, and gender and occupation.

To select a model that can parsimoniously predict the observed frequencies in the three-way contingency table of pattern by gender by occupation, we started by estimating the three main models with deviation contrasts.\(^11\) These models are nested in the sense that every model contains the same effects of independent variables on the dependent variable that the previous model contains, with additional effects. The first main model assumes no effects of the independent variables on the dependent variable (independence model in Table 3). The second main model assumes mutually unrelated effects of the independent variables, gender and occupation, on the dependent variable (main-effects model in Table 3). The third main model additionally assumes combined effects of the independent variables (interaction model or saturated model in Table 3). The likelihood ratio chi squares ($L^2$) of these models are reported in Table 3, together with the degrees of freedom (df) and the probability of finding a larger $L^2$ value, that is, a worse fitting model (p).
Table 3: Subjective definition of ‘home’ as a sphere of leisure or Labor: Likelihood ratio chi squares ($L^2$) of logit models ($n = 726$).

<table>
<thead>
<tr>
<th>Main model [restricted models at this level]</th>
<th>In comparison with empirical observations</th>
<th>In comparison with other main model</th>
<th>Compared with:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction model (saturated)</td>
<td>$L^2$ 0, df 0, p 1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main-effects model</td>
<td>.02, 1, .898</td>
<td>.02, 1, .898</td>
<td>Interaction model</td>
</tr>
<tr>
<td>Independence model</td>
<td>13.45, 4, .009</td>
<td>13.44, 3, .004</td>
<td>Main-effects model</td>
</tr>
</tbody>
</table>

Table 3 shows that the independence model does not fit the data at a .05 significance level ($p = .009$), and that it fits significantly worse than the main-effects model ($p = .004$). The main-effects model ($p = .898$) and the interaction model (which is saturated) do fit the data, and when we compare those two main models among themselves, the figures in the left three columns of Table 3 show that the main effects model does not fit significantly worse than the interaction model ($p = .898$). Therefore – since we strive for a model that both fits the data and is parsimonious and which does not fit worse than the other models – the independence model and the saturated model are discarded as respectively not fitting the data and not being parsimonious enough. The main-effects model, however, may not be the optimal model either. A more parsimonious model that does not include an effect of both independent variables may also fit no worse than the less parsimonious models. Therefore, a backward procedure of systematically discarding independent variables was used to search for such a more parsimonious model. The results (indicated in Table 3 between square brackets) indicate that the model should only include the main effect of gender. This model does fit the data ($p = .812$), and it does not fit worse than the model including both main effects ($p = .621$). The model that only includes the main effect of occupation does not fit the data ($p = .039$) and fits significantly worse than the model including both main effects ($p = .010$). That means that occupation has no significant effect on the odds of having a preference for watching the news selectively and attentively.

Difference of subjective relevancy of watching the news is the second kind of difference between interaction situations which may lead to different patterns of television news use that was explored empirically. We explored the relationship between a preference for watching television news selectively and attentively on one hand and education, age or birth cohort, and well-informed citizen’s values on the other.
Table 4: Subjective relevancy of watching the news: Likelihood ratio chi squares ($L^2$) of logit models (n = 723).

<table>
<thead>
<tr>
<th>Main model [restricted models at this level]</th>
<th>In comparison with empirical observations</th>
<th>In comparison with other main model</th>
<th>Compared with:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturated model</td>
<td>$L^2$ 0, df 0, $p = .1.000^*$</td>
<td>$L^2$ 2.05, df 2, $p = .358^*$</td>
<td>Saturated model</td>
</tr>
<tr>
<td>Interaction model</td>
<td>$L^2$ 5.84, df 7, $p = .558^*$</td>
<td>$L^2$ 3.79, df 5, $p = .579^*$</td>
<td>Interaction model</td>
</tr>
<tr>
<td>Main-effects model</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[education &amp; values effects]</td>
<td>$L^2$ 15.08, df 9, $p = .089^*$</td>
<td>$L^2$ 9.24, df 2, $p = .009^*$</td>
<td>Main-effects model</td>
</tr>
<tr>
<td>[education &amp; cohort effects]</td>
<td>$L^2$ 32.41, df 8, $p &lt; .001^*$</td>
<td>$L^2$ 26.58, df 1, $p &lt; .001^*$</td>
<td>Main-effects model</td>
</tr>
<tr>
<td>[education effect]</td>
<td>$L^2$ 42.18, df 10, $p &lt; .001^*$</td>
<td>$L^2$ 36.34, df 3, $p &lt; .001^*$</td>
<td>Main-effects model</td>
</tr>
<tr>
<td>[cohort effect]</td>
<td>$L^2$ 32.46, df 9, $p &lt; .001^*$</td>
<td>$L^2$ 26.62, df 2, $p &lt; .001^*$</td>
<td>Main-effects model</td>
</tr>
<tr>
<td>[values effect]</td>
<td>$L^2$ 17.63, df 10, $p = .062$</td>
<td>$L^2$ 11.79, df 3, $p = .008^*$</td>
<td>Main-effects model</td>
</tr>
<tr>
<td>Independence model</td>
<td>$L^2$ 43.58, df 11, $p &lt; .001^*$</td>
<td>$L^2$ 37.74, df 4, $p &lt; .001^*$</td>
<td>Main-effects model</td>
</tr>
</tbody>
</table>

To find the most parsimonious model for subjective relevancy of watching the news, that fitted the observed frequencies in the four-way contingency table of pattern by education by cohort by well-informed citizen's values, we started again by estimating the main models with deviation contrasts. The likelihood ratio chi-squares of these models are reported in Table 4. Again, the main effects model appears to be the optimal main model when it comes to fit and parsimony. It fits the data ($p = .558$) and it fits no worse than the interaction model ($p = .579$). Discarding the effect of education, however, results in a more parsimonious model that fits the data ($p = .620$) and does not fit worse than the model with all main effects ($p = .527$). That means that education does not have a significant effect on the odds of having a preference for watching the news selectively and attentively.

Table 5: Time budgets: Likelihood ratio chi squares ($L^2$) of logit models (n = 726).

<table>
<thead>
<tr>
<th>Main model [restricted models at this level]</th>
<th>In comparison with empirical observations</th>
<th>In comparison with other main model</th>
<th>Compared with:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction model (saturated)</td>
<td>$L^2$ 0, df 0, $p = .1.000^*$</td>
<td>$L^2$ 1.35, df 2, $p = .509^*$</td>
<td>Interaction model</td>
</tr>
<tr>
<td>Main-effects model</td>
<td>$L^2$ 1.35, df 2, $p = .509^*$</td>
<td>$L^2$ 8.52, df 3, $p = .004^*$</td>
<td>Main-effects model</td>
</tr>
<tr>
<td>Independence model</td>
<td>$L^2$ 8.52, df 3, $p = .004^*$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As to time budgets – the third kind of difference between interaction situations – we explored the relationship between the preference for watching television news selectively and attentively, and occupation and having children living at home. One can see in Table 5 that the independence model is the most parsimonious model that fits the observed frequencies in the three-way contingency table of pattern by occupation by children (p = .130). This means that neither the presence of children in the household, nor a full-time or part-time occupation (either in- or outside the family home) have a significant effect on the odds of preferring to watch the news selectively and attentively.

### Table 6: Integrated model: Likelihood ratio chi squares (L²) of logit models (n = 735).

<table>
<thead>
<tr>
<th>Main effects model [restricted models at this level]</th>
<th>In comparison with empirical observations</th>
<th>Compared with:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L²</td>
<td>df</td>
</tr>
<tr>
<td>Saturated model</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Interaction model</td>
<td>3.46</td>
<td>2</td>
</tr>
<tr>
<td>Main-effects model</td>
<td>4.21</td>
<td>5</td>
</tr>
<tr>
<td>[gender &amp; cohort effects]</td>
<td>29.11</td>
<td>8</td>
</tr>
<tr>
<td>[gender &amp; values effects]</td>
<td>14.70</td>
<td>9</td>
</tr>
<tr>
<td>[cohort &amp; values effects]</td>
<td>16.04</td>
<td>8</td>
</tr>
<tr>
<td>[cohort effect]</td>
<td>41.37</td>
<td>9</td>
</tr>
<tr>
<td>[values effect]</td>
<td>28.43</td>
<td>10</td>
</tr>
<tr>
<td>[gender effect]</td>
<td>38.95</td>
<td>10</td>
</tr>
<tr>
<td>Independence model</td>
<td>53.03</td>
<td>11</td>
</tr>
</tbody>
</table>

The results of the previous analyses indicate that education, occupation, and having children still living at home, are empirically unrelated to the odds of preferring to watch television news selectively and attentively; gender, age or birth cohort, and informed citizen’s values, however, are. Subsequently, combining those results, an integrated model explaining differences in patterns of television news use was empirically explored. Again, the most parsimonious model that fitted the empirical observations was searched for, this time based on the four-way contingency table of pattern by gender by birth cohort by well-informed citizen’s values. Table 6 shows that the main effects model is the optimal model (p = .998) and that none of the three determinants can be discarded from this model.12 Our final empirical model thus consists of three variables influencing patterns of television news use: gender, age or birth cohort, and well-informed citizen’s values.
Table 7: Final model: effects of gender, birth-cohort, and well-informed citizen’s values on the odds of preference for selectively and attentively watching television news (n = 735; $L^2 = 4.21$, df = 7, p = .755; concentration = .065; entropy = .049).

<table>
<thead>
<tr>
<th>Mean</th>
<th>2.89*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1.30*</td>
</tr>
<tr>
<td>Female</td>
<td>.77*</td>
</tr>
<tr>
<td>Birth-cohort</td>
<td></td>
</tr>
<tr>
<td>1921–1950</td>
<td>1.37*</td>
</tr>
<tr>
<td>1951–1964</td>
<td>1.03</td>
</tr>
<tr>
<td>1965–1976</td>
<td>.71*</td>
</tr>
<tr>
<td>Informed citizen’s values</td>
<td></td>
</tr>
<tr>
<td>no</td>
<td>.68*</td>
</tr>
<tr>
<td>yes</td>
<td>1.47*</td>
</tr>
</tbody>
</table>

Note: * parameter significant at .05 level.

The effect parameters for this final model are presented in Table 7. The parameters that are presented in this table are not the log-linear parameters explaining the logits (log-odds), but the multiplicative parameters explaining the odds of preferring the routine of watching television news selectively and attentively. The first parameter in Table 7 indicates that – independent of gender, birth-cohort, and well-informed citizen’s values – more people show a preference for selectively and attentively watching the news (2.89 times more), than do not. On top of this overall effect, the chances of men showing a pattern of watching selectively and attentively are even greater (1.30 times), whereas the chances of women showing such a pattern are somewhat less (.77). Also, the chances of people from the oldest birth-cohort preferring this routine of selectively and attentively watching the news are greater than average (1.37 times), whereas the chances of people from the youngest cohort showing this pattern are less (.71). People born between 1950 and 1965, the middle cohort, are not more or less inclined to prefer watching the news selectively and attentively than average. Finally, people with well-informed citizen’s values prefer to watch the news selectively and attentively more than average (1.47 times), whereas the opposite holds true for the people without well-informed citizen’s values (.68). The absence of parameters for occupation, education, and children in one’s household indicates that whether people’s main occupation lies inside or outside the family home, whether they work full-time or part-time, their educational level, and the presence of children do not matter in regard to the routine in television news use that they prefer.
Conclusion and discussion

The explorations in this study show that people are much more likely to prefer watching television news selectively and attentively than to prefer watching the news while engaging in other activities simultaneously, or to show no preference for one of these two routines in watching the news at all. Moreover, the chances of showing a preference for watching the news selectively and attentively are even greater for men, older people (born in or before 1950), and people endorsing well-informed citizen's values. They are somewhat smaller for women, younger people (born in or after 1965), and people without well-informed citizen's values. No evidence of interaction among these determinants was found.

One explanation for these findings can be found in the subjective definition of 'home' as a sphere of leisure for men and a sphere of labor for women, which traditional role-expectancies may still engender. In this view, the situation in which men watch the news differs significantly from the situation in which women do. At home, men may feel that they can dispose of their time at will, and may thus be prone to allow themselves to watch the news selectively and attentively. In contrast, women may feel that there is always some domestic task waiting to be taken care of, and they may therefore be inclined to choose not to watch the news selectively and attentively, but to attend to some other task simultaneously. This difference between men and women can not be ascribed to differences in occupation between men and women. Neither the difference between full-time and part-time employed people, nor the difference between those who are employed outside the family home and those who perform their labor within the family home, can explain these different patterns of television news use of men and women.

Another explanation for these findings may be that different people subjectively ascribe different levels of relevancy to watching the news and are therefore differently inclined to watch the news selectively and attentively. Older people (born in or before 1950) and people with well-informed citizen, values may find watching the news more relevant than younger people (born in or after 1965) and people without well-informed citizen’s values. However, they may do so for distinctively different reasons. Older people may prefer to watch the news selectively and attentively because they have learned to appreciate the news in the course of their lives (age effect), or because the period in which they developed their routines and preferences in watching the news was characterized by the news having a prominent place in the broadcasting system, which suggested that watching the news is important (cohort effect). Younger people may not yet have learned to appreciate the news as much as older people, and they developed their preference for a routine in watching the news within the bounds of a broadcasting system in which there is much less emphasis on the news, suggesting that the news is not as all important as some may say. Whether or not this difference between older and younger people is due to people's age or their birth-cohort, however, cannot be decided on the basis of our data and analyses.
As to the subjective relevancy of watching the news for people with or without well-informed citizen’s values, the results are self-evident. It is very likely that endorsing these values makes it subjectively relevant to watch the news and to do so selectively and attentively.

Another explanation for differences between patterns of television news use that was formulated prior to empirical exploration appeared empirically irrelevant. Time budgets – at least insofar as daily occupation and the presence of children in one’s household determine these budgets – seem to be unrelated to the chances of people having a preference for watching the news selectively and attentively rather than not having this preference.

Two of our results deserve critical attention. First, we did not find an effect of one’s level of education. Second, we found that age, or birth cohort did have an effect on patterns of television news use, but we cannot determine whether this is an age effect or a cohort effect. Both results will be elaborated upon.

As to the absence of an effect of level of education, that is highly unusual in empirical social research. Because education is associated with cognitive capacities and with breadth of perspective on social reality – that is, width of the mental horizon of people in dealing with the world – it hardly ever fails to have an effect. In fact, for both reasons we expected such an effect in our analyses. After all, if one is better equipped to understand the news – that is, more likely to be gratified by watching – and one is more interested in the wider world of society at large, watching the news selectively and attentively is likely to be subjectively perceived as highly relevant. Consequently, it is very likely that watching selectively and attentively will be the preferred routine in watching the news of the higher educated. However, no empirical effect of education was found. Apparently, the mental capacities and breadth of perspective that we associated with a higher education do not influence the perceived relevancy of watching the news in such a way that people are inclined to prefer watching the news selectively and attentively.

As to the effect of age, or birth-cohort we formulated two opposite expectations. We can now discard one. Apparently, older people are not less inclined to watch television news selectively and attentively because they are less interested in the broader society outside the immediate sphere of their daily lives or because on average, they have a lower formal education than the young have. Had we found this, we would very likely have concluded that we were dealing with a cohort effect that would result in a growing subjective relevancy of watching the news, within the population as a whole, in the future. The young, we would conclude, would be growing old, replacing the older cohorts without loosing their preference for watching the news selectively and attentively. And new ‘young’ cohorts would be raised and educated into preferring this routine too. However, we cannot conclude that.

Our results are diametrically opposed to that hypothetical conclusion – given the absence of an effect of education, that is not surprising. Older people are inclined to show a preference for the routine of watching the news
selectively and attentively more strongly, whereas younger people tend to be inclined not to prefer this routine. Now suppose that this age difference is due to the ageing process itself, that is, suppose that people learn to appreciate the news during the course of their lives. In that case, the age effect we found would have no great implications for the future. If, however, the cohort interpretation of the found age-effect is valid, the implications for the future may be severe. If young people are less likely to prefer to watch the news selectively and attentively because the media system they grew up with suggested that the news is not a very important program to watch, then in the future news will be watched less selectively and attentively.\textsuperscript{15} Watching the news selectively and attentively might eventually disappear as the preferred mode of watching the news. Assuming that people learn less from the news if they do not watch attentively (cf. Johnson, Braima & Sothirajah, 2000), the importance of the traditional television news format as disseminator of politically relevant information would diminish. Future research might therefore aim to find out whether we found an age or a cohort effect.

Should future research reveal that we are dealing with a cohort effect here, our present exploration of patterns of television news use boils down to people making pretty stable evaluations and choices in their lives, that influence their pattern of television news use. Men evaluate ‘home’ as a sphere of leisure and women evaluate ‘home’ as a sphere of labor; not because they work outside or inside ‘home’ respectively, but because they are men and women sensing what traditionally their culture expects of them. Men are therefore stronger inclined to prefer to watch the news selectively and attentively. Different cohorts – if indeed we are dealing with a cohort effect here – grow up with different media systems, that help them to determine the relevance of watching the news. When people are young they evaluate the relevance of watching television news and they stick by that evaluation. At present this means that the younger cohorts are less inclined to prefer to watch the news selectively and attentively. People with well-informed citizen’s values value to know about the things they are traditionally expected to know as responsible citizens of their democratic society. These values too, are supposed to be relatively stable and thus, like gender and probably cohort, make for a relatively stable pattern of television news use.

Notes

* Previous versions of this paper were presented at the conference Communica-
tiewetenschap: de groeistuipen voorbij? [Communication science: Beyond the
growing pains?] at the University of Twente, Enschede, The Netherlands, March
23–24, 2000, and at the 2nd International EJCR Colloquium Action Theoretical
Approaches in European Communication Research: Theory, Methods & Findings
at the University of Nijmegen, The Netherlands, October 18–20, 2001. Many
thanks to the participants of this conference and this colloquium, and to other
colleagues, who contributed to this paper with their expert comments. While acknowledging their support we do, of course, remain responsible for all omissions and errors of fact and interpretation.

1 Thus, 'to prefer' is not used here to express various degrees of liking for the two routines in watching the news. It is solely used to express differences in self-reported behavior concerning the two routines.

2 In Konig, Renckstorf and Wester (1998), which is a previous version of Konig, Renckstorf and Wester (2001), the words 'routines' and 'patterns' are used in a rather confusing way. From the perspective of the present study, wherever in that article the word 'patterns' is used, one should read 'routines'. In the 2001 version this confusion of patterns and routines is corrected.

3 This wish not to miss anything might be taken as an indication that watching television is not a leisure activity for men after all. The possible uses of television are manifold (McQuail, Blumler & Brown, 1972; Lull, 1980), and some of these uses may not be for leisure, but that does not cancel the difference between men and women, described here.

4 Hagen's (1994a, 1994b) research pertains to Norwegian society.

5 To do justice to the ordinal measurement level, we also performed a factor analysis, using polychoric correlations (Olsson, 1979; Jöreskog, 1990, 1994). The results were very similar to the results presented in Table 1.

6 Data from the more recent national survey on Media Use in the Netherlands 2000 (n = 825) reveal the same factor structure, which indicates that we are dealing with a fairly stable factor structure. Unfortunately, these more recent data could not be used for our analyses, because they do not cover all concepts that we utilize in this article.

7 The variables were scored 1 = does not apply to me at all, 2 = does not apply to me, 3 = partly applies to me, 4 = applies to me, and 5 = applies to me entirely.

8 This strikingly high number of respondents with a preference for the routine of watching the news selectively and attentively may - or may not - be partly the result of respondents giving social desirable answers. However, assuming that all groups in our analyses have the same tendency to give socially desirable answers, this will not hamper our analyses because we will interpret odds ratios (see below).

9 What we did not try to explain, are the odds of preferring a routine of watching the news while engaging in simultaneous activities, and the odds of having no preference for one of the two routines, because that would result in many empty cells in the contingency table, and consequently, in unreliable results.

10 The choice to explore the three kinds of different interaction situations separately is based on technical grounds. Introducing all variables in one analysis, results in too many zero cells and thus renders unreliable results. Larger surveys could overcome this problem.

11 To prevent a lot of empty cells in the contingency table, we excluded the three male housewives from the analyses and declared all cells that combine the categories 'male' and 'housewife' structural zeros.

12 Additional analyses show that neither occupation, nor education, nor having children in one's household can be added to this model without violating the principle of parsimony.

13 Post-hoc analysis reveals that the correlation between education and the average amount of time people are watching the news on regular working days is slightly, but significantly negative (-.10). Controlling for the average time people are
watching television on regular working days, however, diminishes this correlation to insignificance. Hence, education not only fails to have an effect on the patterns of television news use, but also on the time people spend on the news.

14 That is, on average a higher education does not seem to influence people’s patterns of television news use. However, it is possible that for some people a higher education does induce a preference for watching the news selectively and attentively, whereas for others the opposite is true; for example when the need for news is so high that people spend a lot of time reading the papers (maybe even while watching the news), resulting in a lesser need to watch the news selectively and attentively.

15 If watching the news selectively and attentively can be compared to newspaper reading, our results are in line with the results of Lauf (2001), who found that in Europe every generation reads less than its predecessor.

References
Patterns in Television News Use


