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# Young People's Ownership and Uses of New and Old Forms of Media in Britain and the Netherlands

■ *Tom H.A. van der Voort, Johannes W.J. Beentjes, Moira Bovill, George Gaskell, Cees M. Koolstra, Sonia Livingstone and Nies Marseille*

## ABSTRACT

■ Using data obtained in a national survey carried out in Britain ( $N = 1309$ ) and the Netherlands ( $N = 1355$ ), this article compares British and Dutch children and young people aged 6–17 with respect to: (1) the availability of different media in children's homes, and particularly in the children's own room; (2) the amount of time spent on different media; and (3) the gratifications associated with the use of different types of media. Attention is paid to new forms of media (electronic games and the personal computer) as well as old forms of media (print media and television and video). Cross-national similarities and differences in ownership and uses of media are established, both for the whole 6–17 age group and for subgroups formed in terms of gender, age and socioeconomic status. Special attention is devoted to points where British children and young people are clearly differentiated from their Dutch peers. ■

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**Key Words** children and young people, media ownership, media use, uses and gratifications

This article compares British and Dutch children and young people with respect to their ownership and uses of media. The primary data source for these comparisons is a survey carried out in both countries in April and May 1997 among a nationally representative sample of children and young people aged between 6 and 17. The survey was designed to provide a comprehensive overview of children and young people's media consumption. Due to a shortage of space, however, we are unable to go into the findings obtained for all possible kinds of media. The findings to be presented here focus on three well-established media (television, video and the print media) and two newer interactive forms of media (electronic games and personal computers [PCs]).

The comparison between British and Dutch children and young people will concentrate on: (1) the availability of media equipment (i.e. of television sets, video recorders, shelves of books, electronic games machines and PCs) in children's homes, and especially in children's own rooms; (2) the amount of time spent on these media; and (3) the gratifications that are associated with the use of these media.

It seems particularly interesting to learn more about children's use of interactive media, because little is known about children's access at home to these newer forms of media and the amount of time they spend with them. There is practically no research that has compared the gratifications provided by electronic games and personal computers with those provided by other media. To our knowledge, the gratifications associated with the use of video games have been examined in only one study (Selnow, 1984), which compared video games with one other medium, namely television. We know of no research that has established the gratifications associated with the use of personal computers among children. The computer was included in a set of 12 different media that were involved in a recent 'uses and gratifications' study conducted by Perse and Courtright (1993), but this study used an adult sample.

The present article is primarily descriptive in nature. The study aims to map the current status of children's access and exposure to television, print and interactive media in the two countries, and to establish cross-national similarities and differences in ownership and media use, both for the whole 6–17 age group and for subgroups formed in terms of gender, age and social class. Special attention is paid to points where British children and young people are clearly differentiated from their Dutch peers.

Because Britain and the Netherlands are two North European countries that share many cultural characteristics, it is difficult to indicate in advance where the media behaviour of British children will differ from that of Dutch children. It is true that the two countries show some differences in media provision, but it is hard to predict how these differences will affect children's media behaviour. For example, one salient difference between the British and the Dutch media landscape is that the penetration of cable television is much lower in Britain than it is in the Netherlands. Whereas about 94 percent of Dutch households have cable television, giving access to more than 20 different television channels, only a minority of British households has cable (7 percent) or satellite television (18 percent), with the result that most British households are able to receive only five (terrestrial) channels. The greater number of available channels in the Netherlands compared with the UK seems to give reason to suspect that Dutch children will tend to watch more television than their British peers do. However, another cross-national difference in media provision gives reason to suspect that the amount of time spent watching television will be highest among British children. Relative to the Netherlands and other European countries, Britain has one of the highest proportions of two-set households (Livingstone, 1997), a factor that is likely to increase the amount of time children spend in front of the television set.

Rather than predict what differences are to be found in the media behaviour of British and Dutch children, the present article aims to chart such differences, and then interpret them. It is of particular interest to see how far a number of changes that are now taking place in the media landscape have progressed in the two countries. As McLuhan (1964) foresaw, one category of change is that we are moving from a print to a visual culture. In the Netherlands there are clear indications that young people are reading less and less and that television has contributed to this decline in reading (Knulst, 1991; van der Voort, 1991; Koolstra and van der Voort, 1996). It is of interest to see whether the process of displacement of printed media by screen media has progressed less far or perhaps even further in Britain.

Livingstone et al. (1997) mention two other categories of change that deserve to be considered. First, we are seeing a multiplication of personally owned media. An increasing proportion of children have a television set, a video recorder or a PC in their own room, with the result that children can use these media as frequently as they wish. In addition, there is the shift from one-way, mass communication towards more interactive communication between medium and user. This article

provides indications about how far each of the latter two types of change have progressed in the two countries.

## Method

### *Participants*

In the UK, 1309 respondents aged 6–17 years were recruited through a random location quota sample. In the Netherlands, 1355 children from the same age range were recruited from a representative database of households that participated in diary studies on radio use in 1995 or 1996.

### *Data collection*

Respondents in both countries were interviewed at home by trained interviewers. Answers were noted on the questionnaire (the Netherlands) or a laptop computer (the UK). With respondents younger than 10 years, one of the parents was generally present during the interview. The average duration of the Dutch interview was 60 minutes, whereas the British interview lasted 45 minutes. The fieldwork in both the UK and the Netherlands took place in April and May 1997.

### *Measures*

*Ownership* Children were asked to indicate on a precoded list which media were available in their home. In addition, they indicated which media they had in their own room.

*Time expenditure* The amount of time spent with each medium was established by asking children to indicate: (1) how many days a week they usually used the medium; and (2) for a day when they used the medium, how many hours/minutes they usually spent using the medium. For television viewing, separate questions were asked for weekdays (Monday to Friday) and weekends, because viewing time at weekends can be substantially higher than on weekdays.

It is important to note that this type of child-reported direct time estimates may lead to overestimation of the amount of time children really spend on media (e.g. van der Voort and Vooijs, 1990; Vooijs et al., 1987). An overestimation effect was also found in the present study when the survey estimates were compared with estimates of the amount of time

spent with media obtained with a time use diary (which was kept by a subsample of children during one week). Hence, when interpreting tables reporting survey estimates of the amount of time spent with media, the reader should be aware that the actual amount of time spent with a medium may be somewhat lower than the data presented suggest. However, the direction and relative size of differences were very comparable between countries, and do not therefore affect the validity of the international comparisons.

*Media uses* Children were asked to indicate which media activity they were most likely to choose for each of four types of uses: (1) when they wanted excitement; (2) when they wanted to relax; (3) when they wanted to stop being bored; and (4) when they wanted to learn about things. Children could choose from the following list of media activities: watching television; watching a video; listening to audiotapes, CDs or records; phoning someone; reading a book; reading a magazine; reading a comic; reading a newspaper; playing a computer or video game; using a PC (not for games); and using the Internet.

*Social class* In both surveys, socioeconomic status (SES) classifications were based on parental employment status, level of income and level of educational attainment. In order to make the British and Dutch classifications comparable, children were grouped into three categories: low, medium and high SES children.

## Results

### *Ownership and access*

Before asking how children and young people spend time with the media, we must first consider which media they have access to at home. Compared with their Dutch counterparts, British children are far more likely to have televisions, video recorders and games machines or gameboys in their rooms (see Table 1). Twice as many British as Dutch children have a television set and four times as many British children have a video recorder in their room. In both British and Dutch samples, the presence of a television set or a video recorder in one's own room is associated with gender (more boys than girls), age (older children more than younger children) and SES (lower SES more than higher SES).

However, almost all Dutch children (95 percent) own a shelf of books, while only around two-thirds (64 percent) of British children do

**Table 1** Percentage of British ( $N = 1309$ ) and Dutch ( $N = 1355$ ) 6- to 17-year-olds having media goods in their own room

	TV		Video		Games machines		PC		Books	
	UK	NL	UK	NL	UK	NL	UK	NL	UK	NL
Total group	62	30	21	5	48	37	12	12	64	95
Gender										
Boys	68	32	23	5	62	46	16	17	62	94
Girls	57	29	19	4	34	28	8	7	66	96
Age										
6-8	45	12	11	1	32	28	9	6	68	96
9-11	59	23	18	2	52	43	11	10	65	98
12-14	70	37	22	4	60	41	14	13	63	95
15-17	76	49	32	10	47	35	16	19	59	89
SES										
Low	70	40	26	6	51	41	13	13	57	92
Medium	60	25	17	3	49	32	12	10	69	97
High	44	21	10	4	38	36	12	13	79	97

so. In both countries possession of books is related to gender (girls slightly more than boys), age (younger children slightly more than older children) and SES (higher SES slightly more than lower SES).

Differences between the two countries in owning a PC are not great, but this is because most PCs are not situated in the bedroom. If we consider PCs *anywhere in the home* (see Table 2), it becomes clear that children's domestic access to PCs is nearly twice as common in the Netherlands (85 percent) as in the UK (48 percent).

Although boys are twice as likely to have a PC in their own room, when we consider PCs which are available *anywhere* in the home, then we see that boys and girls in both countries have equal access. There is only a slight tendency for more older children to have access to a PC. The SES trend is however very marked, with PCs considerably more common in higher SES homes in both countries.

Dutch children, unsurprisingly in view of the greater proportion having access to computers in the home, are much more likely to have Internet links. In both samples there are no gender- or age-related

**Table 2** Percentage of British ( $N = 1309$ ) and Dutch ( $N = 1355$ ) 6- to 17-year-olds with PCs and Internet links in their homes by gender, age and SES

<i>Subgroups</i>	<i>PC</i>		<i>Internet link (modem)</i>	
	<i>UK</i>	<i>NL</i>	<i>UK</i>	<i>NL</i>
Total group	48	85	7	19
Sex				
Boys	46	84	8	19
Girls	49	87	7	19
Age				
6–8	45	80	7	19
9–11	48	86	7	18
12–14	48	88	8	17
15–17	50	89	7	23
SES				
Low	35	78	2	10
Medium	57	89	10	24
High	76	94	20	30

differences and Internet links are more often present in higher SES homes.

#### *Traditional screen-based media (television and video)*

*Time spent* Almost every child in both countries watches television (UK 95 percent; the Netherlands 99 percent) and the great majority watch videos (UK 81 percent; the Netherlands 80 percent). Table 3 presents the survey estimates of the time spent watching television and video by all children in the survey aged 9–17 years. Younger children (6–8) were not asked to estimate their time expenditure, because time estimation has been found to be too difficult a task for young children (Vooijs et al., 1987).

As is shown in Table 3, British children watch considerably more television than their Dutch counterparts. In the UK boys tend to watch somewhat more than girls, while perhaps surprisingly there is no significant difference in the amount of time watched by Dutch boys and girls. In both countries, the youngest children watch least, and in the

**Table 3** Mean number of minutes per day spent watching television and video by British ( $N = 976$ ) and Dutch ( $N = 1016$ ) 9- to 17-year-olds by gender, age and SES

	<i>Television</i>		<i>Video</i>	
	<i>UK</i>	<i>NL</i>	<i>UK</i>	<i>NL</i>
Total group	147	114	31	16
Sex				
Boys	151	113	33	18
Girls	144	114	28	14
Age				
9-11	127	104	34	15
12-14	157	123	31	17
15-17	157	114	27	15
SES				
Low	155	125	34	17
Medium	145	110	28	15
High	131	97	24	14

Netherlands viewing drops also in the oldest age group. Lower SES children spend more time watching television than do higher SES children.

In the British sample, results have been analysed separately for households with and without cable; in the Netherlands almost all households have cable. This reveals some interesting differences. In Britain, children having access to satellite or cable watch considerably more television than those without such access. Girls with cable or satellite are particularly likely to watch more (21 minutes a day more compared with only 12 minutes a day more for boys), bringing their viewing up to the level of that of the boys, as it is in the Netherlands where almost all children have access to cable. Having cable in the UK makes most difference to younger children.

British children also spend much more time watching videos. Boys and working-class children in both countries watch slightly more. However, there are no significant differences in the amount of time spent watching videos for Dutch children of different ages, whereas the trend in the UK is for younger children to watch more.



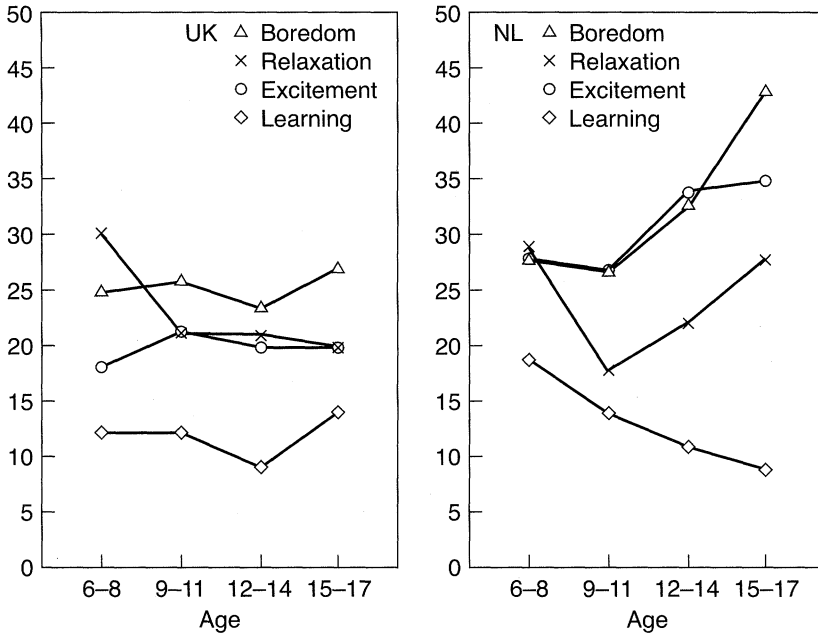


Figure 1 Age trends in reported uses for television in Britain (UK) and the Netherlands (NL) (percentages choosing television).

*Gratifications* Figure 1 shows how many children in the different age groups choose watching television for each of four types of uses. In both the British and the Dutch sample, relatively few children choose television for learning. Children choose television more often to relieve boredom, for relaxation and for excitement.

However, British children's perceptions about television's aptness to fulfil the four specified uses differ substantially from Dutch children's perceptions in other important ways. First, the percentages in the Dutch sample are generally higher, indicating that more Dutch children are inclined to choose television rather than any of the other media options for the specified purposes than are British children. A second difference is that only the Dutch sample shows an age trend for three of the four uses. Older Dutch age groups (12-14 and 15-17 years) choose television more often to relieve boredom, for excitement and for relaxation than do younger age groups, whereas there is no such trend in the British data. Apparently, in terms of these three uses, television becomes more important to Dutch children after middle childhood.

The gratifications connected with video watching in the UK and the Netherlands are reasonably similar. Almost no one associates watching videos with learning about things and very few (10 percent at most) in any age group choose a video to relieve boredom or for relaxation. In both countries excitement is the gratification most commonly associated with watching videos. However, in the UK an interesting age-related trend appears and among those aged 12 + , more choose a video for excitement than choose television. Although around the same percentage of 15- to 17-year-olds in both countries choose a video for excitement (UK 25 percent; the Netherlands 22 percent), this figure is still well below the numbers choosing television in the Netherlands.

*Print media (books, comics, magazines and newspapers)*

*Time spent* The group of non-readers was much larger in the UK than in the Netherlands. Reading books was claimed as a leisure activity by 89 percent of Dutch children aged 6–17 years old, magazines by 92 percent, comics by 88 percent and newspapers by 73 percent; the corresponding percentages for the British children are considerably lower: 56 percent said they read books, and 28 percent read comics. In the UK questions about any newspaper and magazine reading (as with the estimates of time spent per day for all the activities) were only asked of those aged 9–17. Even among this older age group only 50 percent read magazines and 27 percent read newspapers.

It is therefore unsurprising, when we come to consider the time estimates, to discover that, as a population, British children aged 9–17 years old spend much less time than Dutch children reading books, comics, magazines or newspapers.

The same trends for gender and age are found in both samples. Girls in both countries spend more time reading books and magazines but less time reading comics and newspapers than boys do. Older children spend less time reading books and comics but more time reading magazines and newspapers than do younger children. No SES trend is found for magazines, comics or newspapers. In the Netherlands there is only a slight tendency for the children from higher SES families to read more books; this trend is greater in the UK, as it was in the case of access to PCs in the home.

However, if we focus only on those who read, we find that British children who read books spend *more* time doing so than their Dutch counterparts (see final row in Table 4). British children also spend more time reading newspapers than do Dutch children. Only in the case

**Table 4** Mean number of minutes per day spent on leisure time reading by British ( $N = 984$ ) and Dutch ( $N = 1016$ ) 9- to 17-year-olds by gender, age and SES

Subgroups	Books		Comics		Magazines		Newspapers	
	UK	NL	UK	NL	UK	NL	UK	NL
Total group	16	22	2	9	9	11	5	6
Sex								
Boys	13	16	2	12	7	9	5	6
Girls	18	27	1	7	10	12	4	5
Age								
9–11	20	28	3	12	8	9	2	2
12–14	15	20	1	10	9	12	3	4
15–17	12	17	1	6	9	11	9	11
SES								
Low	13	19	2	8	9	10	5	5
Medium	17	23	1	11	8	11	3	6
High	21	25	1	10	9	11	4	6
Readers only	30	24	7	11	13	11	13	8

of comics do Dutch readers spend more time per day than British readers.

*Gratifications* In both samples, comics are rarely first choice for any of the gratifications we asked about. Magazines fare little better with only a maximum of 9 percent in any age group choosing them to counteract boredom in the UK and 5 percent in the Netherlands.

On the other hand, sizeable proportions of children in both countries choose both books and newspapers for at least one of the four gratifications. Children in both countries are most likely to associate reading books with learning (see Figure 2). This is especially so for the youngest children (aged 6–8). However, the general trend in both countries is for fewer older children to choose reading books for any of the four gratifications.

Few British children in any age group use books to relieve boredom or for excitement. In the Dutch sample, however, books are more often

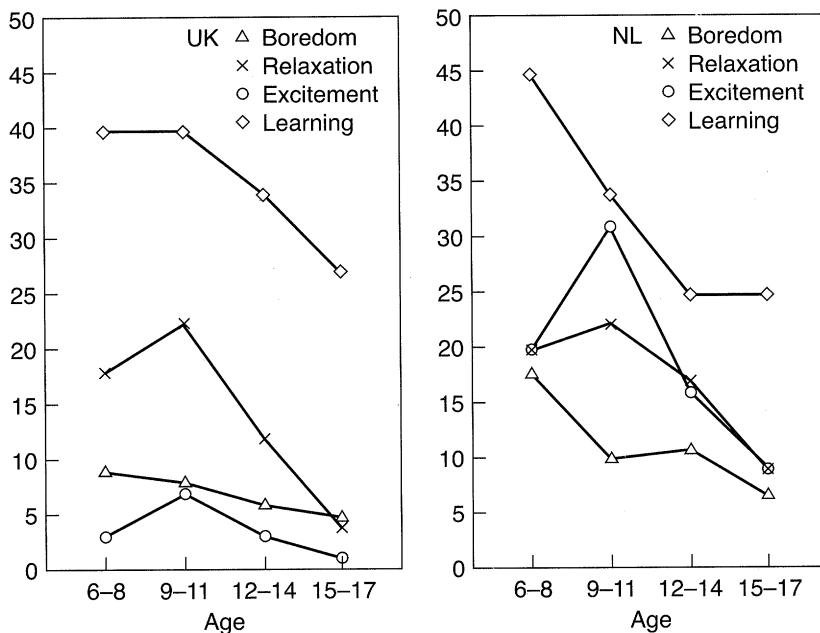


Figure 2 Age trends in reported uses for books in Britain (UK) and the Netherlands (NL) (percentages choosing books).

chosen for these purposes, especially by younger children. Dutch 9- to 11-year-olds are particularly likely to find books exciting. The percentages of Dutch children in this age group that choose books for excitement and relaxation are even higher than the corresponding percentages that prefer television for these purposes.

Newspapers, especially in the Netherlands, are increasingly chosen for learning among older age groups. This contrasts with the age trend for books, which are less often chosen for learning by older children.

### *Playing electronic games and PC use*

*Time use* More Dutch children than British children play electronic games and use personal computers in their leisure time. Electronic games are played by 88 percent of Dutch and 64 percent of British children; the corresponding figures for PC use are: the Netherlands 71 percent, UK 36

**Table 5** Mean number of minutes per day spent on electronic games and computer use by British ( $N = 984$ ) and Dutch ( $N = 1016$ ) 9- to 17-year-olds by gender, age and SES

Subgroups	Electronic games		PC (not for games)			
	UK	NL	Total time		Internet & email	
			UK	NL	UK	NL
Total group	30	24	12	14	2	1
Sex						
Boys	47	35	14	17	2	1
Girls	13	14	10	11	2	0
Age						
9-11	32	23	7	9	1	0
12-14	34	26	11	14	2	1
15-17	25	23	18	19	2	1
SES						
Low	34	26	10	14	1	1
Medium	27	23	16	15	3	1
High	22	22	14	14	3	1
Users only	48	27	33	18	8	4

percent. We asked about Internet use *anywhere*. In the UK and in the Netherlands access is mainly through school: 19 percent of British children have personally used the Internet, but only 4 percent have done so at home. In the Netherlands 28 percent have used it anywhere, including 6 percent at home.

Surprisingly therefore, when we turn to look at estimates of the amount of time spent, Dutch children on average spend *less* time than British children playing electronic games and, surprisingly, only slightly more time using PCs and if anything less time on Internet and email. In addition, as shown in the last row of Table 5 (users only), the mean time spent per day by those British children who do use PCs or play electronic games would appear to far outstrip that of PC users in the Netherlands.

Similar gender- and age-related patterns emerge in both countries. Boys spend much more time with electronic games and a little more with

PCs than do girls. Use of electronic games peaks at 12–14 years and use of the PC increases steadily with age. The lowest SES group in both the Netherlands and the UK spend most time with computer games, and in the UK least time with PCs and Internet. There is surprisingly no SES effect in the Netherlands for PC or Internet use.

*Gratifications* British and Dutch children differ considerably with respect to the purposes for which they use electronic games. In the British sample, electronic games are predominantly chosen to relieve boredom and for excitement, whereas Dutch children choose electronic games less often for excitement and boredom relief and also use electronic games for relaxation. As we might expect, few children in either country choose electronic games for learning.

Only tiny percentages choose to spend time with a PC when they are looking for excitement, relaxation or relief from boredom in either country. However, a major difference emerges between the two countries when we consider the percentages who would choose a computer if they wanted to learn about things: 30 percent of British children, compared with only 4 percent of Dutch children would turn to a computer if they wanted to learn about things. In the UK, girls are as likely as boys to make this association. A third of middle-class children, compared with a quarter of working-class children do so and it peaks at around the age 12–14, when 37 percent choose a computer for learning about things.

In the case of PCs we also asked what children used the PC at home for. Three uses are most commonly reported by British and Dutch PC users in all age groups: playing games, writing and drawing (see Table 6).

The popularity of playing games and drawing on the PC is highest among children aged 9–11 years, and decreases somewhat among older children. Writing on the PC becomes more and more common as children get older. In the other types of PC use, however, some remarkable differences emerge between British and Dutch PC-using children. Looking up information on the PC is found among many more British compared with Dutch children in all age groups. In addition, the use of databases and spreadsheets is much more common among the oldest British children than among their Dutch peers. The younger Dutch children, on the other hand, outnumber their British peers on maths and number work, and in the two older age groups (12–14 and 15–17) more Dutch children use the PC for programming.

**Table 6** Percentages of British and Dutch 6- to 17-year-olds (users only) who use the PC at home for each of eight purposes, by age

Types of PC use	Age 6-8		Age 9-11		Age 12-14		Age 15-17	
	UK	NL	UK	NL	UK	NL	UK	NL
Playing games	81	95	88	96	76	93	65	84
Writing	46	40	62	74	63	89	84	91
Drawing	40	59	44	69	42	51	31	42
Looking up information	16	6	35	14	44	24	33	25
Maths/number work	16	35	12	35	14	15	15	10
Database/spreadsheets	1	1	5	2	18	12	40	18
Programming	3	1	5	5	8	20	12	21
Internet	1	2	5	5	8	9	11	11

## Discussion

Compared with the Netherlands, children's interest in a visual culture is clearly more developed in Britain, which is illustrated by the greater prevalence of screen-based media equipment in children's own rooms, and the greater amount of time British children spend using these media. The only screen medium to which British children devote *less* time compared with Dutch children is the PC, that is if only children's PC use 'not for games' is taken into consideration. However, this finding does not necessarily contradict the conclusion that the visual culture is more developed in Britain than in the Netherlands. When the PC is not used for games, the most commonly reported use is a word-oriented rather than an image-oriented activity, namely writing, which means that the PC is primarily used as a print medium.

One possible explanation for the finding that British children watch more television than Dutch children is that British children have more opportunities to view because they are far more likely to have the necessary equipment in their bedrooms. In both countries, having a television set in the bedroom was found to be associated with watching around half an hour longer daily. Another factor that may have contributed to a more visual culture in Britain is the relatively high quality of programming provision. The BBC with its well-established and enviable reputation for producing quality programming has set high standards for the commercial broadcasters in Britain. Possibly, the

relatively high standard of television programmes in Britain has increased parents' acceptance of the medium, resulting both in more emphasis on buying televisions and video recorders for the home and in longer viewing times.

Although Dutch children watch less television than their British counterparts, they are more inclined to choose television when they want excitement. Moreover, as Dutch children grow older, there is an increase in the percentage of children who choose television for excitement, whereas in the British case, there is little age-related variation in the use of television for excitement. The increase in television-induced excitement found among older Dutch children is remarkable, because research carried out two decades ago (Brown, 1976) showed that children's tendency to choose television for excitement *decreased* with age. Possibly, the greater attraction television offers to today's Dutch young people results from the fact that most Dutch commercial stations broadcast a great many programmes of dubious reputation which young people find very attractive, including Dutch-language and American soap operas, dating shows, reality shows and infotainment programmes about sex. Similarly, the limited supply of such fare on British terrestrial channels may help explain why more British children say they would choose a video for excitement than would choose television. A qualitative study (as yet unpublished) that preceded the British survey pinpointed teenagers' interest in horror films and videos, and it may well be that video fulfils for British children some of the functions Dutch children find in television.

Whereas British children own more viewing equipment than Dutch children, and spend more time on viewing television and videos, the reverse is true for the printed media. Fewer British than Dutch children own a shelf of books. The proportion of readers is substantially smaller in Britain, and as a population, British children therefore spend less time than Dutch children reading. Only in the case of newspapers and magazines do reading levels in the two countries closely approximate each other. Possibly, newspaper reading is not less important for British children than for Dutch children because Britain has a series of tabloid daily newspapers that are considerably more accessible than Dutch newspapers. Qualitative research that preceded the British survey showed that magazines were seen as contemporary and immediate. Valued differences from books involved the fact that magazines required less concentration, they had pictures and were visually attractive and that they need not be read in linear order — all features likely to appeal to a more visually tuned-in population.



British children not only spend less time than Dutch children reading books, but they also are less likely to choose books when they want excitement. If we assume that there are as many quality books available in English as there are in Dutch, this difference in the gratifications associated with reading by Dutch and British children point to a culture in the Netherlands which is somewhat more likely to encourage children to associate reading with pleasure. Indeed, the qualitative phase of the British research consistently uncovered negative associations with books. Books were seen as boring, old fashioned and out of date, too much effort, inaccessible and often disappointing.

The above-mentioned findings clearly suggest that the shift from a print to a visual culture that was foreseen by McLuhan (1964) has progressed further in Britain than in the Netherlands. Of course, the survey data reported here cannot provide insight into the factors that are responsible for this shift. As noted in the introduction to this article, however, there are clear indications in the Netherlands that the advent of television helped to create a decrease in reading (Knulst, 1991; van der Voort, 1991). Between 1955, when television began in the Netherlands, and 1985, when nearly all Dutch households owned a television set, the amount of time Dutch young people spent reading books was at least halved. Because penetration of television has nearly arrived at saturation point, there is a possibility that nowadays reading is being displaced by PCs and games machines rather than by television.

The shift from one-way, mass communication towards more interactive communication between medium and user is still in its infancy, but it is plain that the interactive media are coming. In Britain, children devote more time to electronic games and PC use than to reading, and the amount of time spent with interactive media by Dutch children is only marginally lower than the time spent reading. Although domestic access to PCs is nearly twice as common in the Netherlands than in Britain and the proportion of children who are PC users is almost twice as large in the Netherlands, Dutch children on average spend only slightly more time than British children using PCs. Hence, the relatively small group of British children who do use a PC are more intensive users (who on average spend more than half an hour a day on PC use). Compared with Dutch PC users, British PC users also are more inclined to perceive PCs as a learning tool, possibly because British children are more likely to be introduced to PCs via school rather than at home.

If we consider the *total* time spent with any of the media we have looked at (television, video, computer games, PC, books, comics,

magazines or newspapers) we find that British children spend more time than Dutch children at home with the media (UK: 2 hours and 52 minutes; the Netherlands: 2 hours and 16 minutes). One possible explanation is that British parents have more worries about the safety of the outside environment (e.g. Hillman et al., 1990) and therefore are more inclined to keep their children at home (Sanger, 1997). Alternatively, British children may choose to stay longer at home because they are less satisfied with the provision of leisure opportunities outside the home than Dutch children are. The latter explanation receives support from the finding in our survey that two-thirds of British children (64 percent) compared with only one-third (33 percent) of Dutch children say that there are not enough things to do in the area where they live. Moreover, dissatisfaction with things to do in the area proves to be associated with watching more television in both countries (19 minutes more per day in the Netherlands, and 22 minutes more in the UK).

Similar gender differences emerge in both countries across the great majority of measures we have looked at. The present study confirms the finding from previous research (e.g. van Lil, 1989) that screen media (video, comic books, electronic games and the PC) are used more by boys, whereas books receive more attention from girls. However, unlike earlier research conducted in the Netherlands (e.g. van Lil, 1989), the present study suggests that Dutch girls watch as much television as boys do, a finding that may have resulted from the fact that the programmes broadcast by today's Dutch commercial stations are better in keeping with the programme preferences of girls (e.g. soaps). Similarly, there are indications in the British survey that satellite and cable television can increase the amount of television watched by girls by offering them programmes that are not currently found on the terrestrial channels. These findings suggest that the frequently mentioned claim that boys are more screen oriented than girls are may hold true only in the case that television fails to offer girls the type of programmes they like to watch.

Age-related differences in media use found in the two countries are highly comparable. In both countries, amount of time spent reading books and comics decreases with age, while time spent with newspapers increases. Also in both countries, time spent with electronic games peaks in early adolescence, while time spent on serious computer use increases steadily with age. However, there is a cross-national difference in the relationship between age and amount of television viewing. Among Dutch children, television viewing reaches a peak at the ages of 12–14,

after which viewing decreases, whereas among British children, there is no difference in viewing time between the two oldest age groups.

In general, the *direction* of the SES-related differences in media use found in the two countries is highly similar. However, in a number of important instances, the *absolute difference* between the social grades in Britain is greater than in the Netherlands. For example, in Britain fewer than half as many working-class children compared with middle-class children have access to a PC at home (35 percent of low SES children compared with 75 percent of high SES children). In the Netherlands the penetration is not so skewed: 78 percent of children from low SES homes have access to a PC, compared with 94 percent from high SES homes. As a result, the percentage of Dutch working-class children outstrips the percentage of British middle-class children with PCs at home. Such differences between information-rich and information-poor households are important as they involve new kinds of inequalities of information access. The same pattern was also observed in children's ownership of books. The difference between social grades in the Netherlands was negligible (high 97 percent, medium 97 percent and low 92 percent) while in Britain there was a significant positive social grade trend (high 79 percent, medium 69 percent and low 57 percent).

In conclusion, this has been a limited exercise comparing children's media use in two countries. Yet it has enabled us to interpret the data obtained in the two countries more confidently. It is, after all, a matter of judgement as to whether we interpret the fact that 64 percent of British children have books in their bedrooms as a matter for congratulation (the majority have books) or concern (as many as a third do not have books). The comparison with the Netherlands, a similar European country with a comparable GNP, helps to clarify our interpretation of this British finding. We have suggested that the greater penetration of books and PCs throughout the Dutch child population may produce a community of readers and (serious) computer users which is somewhat less socially stratified than in the UK. British children who use these media may spend more time with them, but are part of a smaller elite, reflecting a more stratified society. We await further analysis which will position Britain and the Netherlands in relation to other European countries in these regards.

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