

A Wasted Miracle?

Literacy and the New Media

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The Problem

Thinking of television, the social critic Mayra Mannes once said: “We are a generation who wasted a miracle” (quoted by Frederick Williams (1992:351)). The implication was that television had an enormous potential for education and enlightenment which had been largely disregarded and neglected by those responsible for the new mass medium. In this chapter, which represents an expansion of arguments and data put forward in previous publications (Broddason, 1992, 1996), I shall not attempt to disprove Ms Mannes’ lamentation, but perhaps qualify it.

According to Warwick B. Elley “Most education systems emphasize voluntary reading as an important objective, and the majority of teachers rated highly the instructional aim of fostering students’ interest in reading.” (1994:65). At the same time, there is a sense of uneasiness, and even urgency, among educationists and researchers that in spite of all the progress of education systems in the modern age, all is not quite well (for a recent overview see Roe and Muijs, 1997). Examples are readily available to fuel the uneasiness. Leisure reading in the Netherlands declined between 1975 and 1995 (Knulst and Kraaykamp, 1997:147). In Great Britain leisure book reading among adolescents declined substantially between 1971 and 1994 (Benton, 1995: 460). In spite of increasing levels of education, the vocabulary of adult Americans is diminishing and their reading of books and newspapers is declining (Glenn, 1994).

Specifically, the electronic media of communication – mass and otherwise – are held to blame for a decline in reading: “Excessive television viewing is held (particularly by teachers) to be one of the factors contributing to a national decline in reading skills...” (Burstall, 1991: 486). Gavriel Salomon notes the following:

The verdict seems to be in: There is a relationship between televising and reading ability. However, it is neither a very strong relationship – nothing of the kind doomsday visionaries would vocally claim – nor a uniform one over ages, ability levels, and sexes (1987:15).

Salomon finds that “while less than ten weekly hours of TV appear to have a slight positive effect on reading, televiewing in excess of ten weekly hours has a negative effect” (Salomon, 1987:15). And Susan B. Neuman found that “reading scores diminished sharply for those students watching more than 4 hours of television per day” (Neuman, 1988:437). She found very little correlation, however, between television viewing and reading ability among moderate viewers. In a more recent publication Neuman comes to the practical conclusion that “...media selection in teaching might be related more to its convenience, its cost, and its efficiency in achieving particular learning goals, rather than the medium’s perceived cognitive benefits” Neuman, (1992:133–134). In a recent three-year panel study involving more than 800 subjects Koolstra and van derVoort find support for theories positing that television viewing exerts a reductive effect on children’s leisure-time reading, and in particular on the frequency with which children read books. They further suggest that the reductive effect of television on book reading may be cumulative (Koolstra and van derVoort, 1996:26).

Implicit in the discussion of reading vs. television viewing is the assumption that reading is in itself more desirable than television viewing. Although this kind of argument is beyond scientific proof we may perhaps find indirect support for it in research which has shown that people feel more active and concentrated when reading than when watching television (Kubey and Csikszentmihalyi, 1990:83, 101, 135). According to these authors: “[R]eading is significantly more demanding cognitively: it is more active and involves more alertness, more concentration, more challenges, and more skills than television viewing” (1990:135). However, the same authors also serve us with this reminder: “Regardless of the reason, it is clearly the case that very complex ideas can be readily and inexpensively transmitted via television. We might keep this in mind when considering why television is only occasionally used in this manner” (Kubey and Csikszentmihalyi, 1990:189). In one study it was found that educational television programmes, positively contributed to the development of scientific literacy independent of other factors, and, further, that “Time spent watching television, a frequently implicated factor in poor achievement, was unrelated to scientific literacy” (Reynolds, 1991:68). In this context it may also be worthwhile to note Gavriel Salomon’s argument that “it is not the quantity of televiewing that necessarily affects reading or reading ability, except in extreme cases, but rather the *quality* of televiewing: how it is done” (1987:16). He speculates that what he calls “elaborate televiewing” requires more or less the same skill as elaborate reading. However, according to Salomon, many children relinquish the necessary effort when it comes to television. The difference is not only inherent in the media but also in the way they are perceived (1987:20–21). It should be noted that Salomon’s conclusions have been challenged by Dutch scholars who report, among other things, the following: “Whereas previous experimental media comparison studies have shown that adults remember more from print news than from tele-

vision news, the reverse was found in the present study conducted with children" (van der Molen, Walma and van der Voort, 1997:88).

In this context it is important to note that the reading experience is no longer necessarily confined to the printed page. In particular, the use of electronic media of communication may involve a considerable amount of reading. This applies in certain instances to television viewing and more generally to the use of home computers. Consequently, in order to assess changes in reading habits among young people, we need to go beyond traditional printed materials and consider as well the reading of texts that appear on the electronic screens in the home. The subtitles of foreign television programmes are an important source of reading matter for youths in many small countries of the world (or, more accurately, countries belonging to small language areas). Also, those youths who spend their time on the IRC, on the web or are engaged in e-mail communication are most of the time actually reading text or writing. The significance of subtitled television programmes has been noted by several researchers, among them Beentjes and van der Voort (1993); Cohen and Salomon who suggest that having to read subtitles increases the concentration of the viewing behaviour and may contribute to a greater retention of programme content (Cohen and Salomon, 1979:162); and more recently Valgeirsdóttir, who reports on reading ability and television viewing with reference to comparative findings from the extensive IEA study. Her results demonstrate a positive relationship between the viewing of subtitled television programmes and reading ability (Valgeirsdóttir, 1993:62-63). Other researchers have paid attention to a closely related kind of communication – captioned television – and reaped some highly interesting findings: "Captioned television appeared to provide a particularly rich language environment which enabled students to learn words incidentally through context as they developed concepts in science" (Neuman and Koskinen, 1992:104). Griffin and Dumstre also report gains in vocabulary, but only among subjects exposed to a relatively high dose of captioned television sessions. (Griffin and Dumstre, 1992:202). According to one source "The instructional applications as well as the creative applications are virtually limitless. Closed-captioned television just might be the most underrated technology of the past decade" (Rickelman, Henk, and Layton, 1991:599).

The research project

Elsewhere I have described how the research project *Children and Television in Iceland* was started in what I have termed the era of *Television and Society* (during which television constituted something of an intrusion in people's lives and was regarded with apprehension and excitement), continued into the era of *Television in Society* (during which people grew accustomed to television) and now is carried further in the present era of *Television Society* (during which

TABLE 1: Changes in the Icelandic Media Landscape 1968-1997

1st Survey: 1968	2nd Survey: 1979	3d Survey: 1985	4th Survey: 1991	5th Survey: 1997
One radio channel*	One radio channel*	Two radio channels	Several radio channels	Several radio channels
Sound cassettes unknown	Sound cassettes widespread	Sound cassettes widespread	Sound cassettes widespread	Sound cassettes widespread
One terrestrial TV channel**	One terrestrial TV channel	One terrestrial TV channel	Two terrestrial TV channels	Four terrestrial TV channels
Satellite TV unknown	Satellite TV unknown	Satellite TV unavailable	Satellite TV accessible to a limited extent	Satellite TV widely available in multiple channels
Video cassette players unknown	Video cassette players unknown	Video cassette players in many homes	Video cassette players in most homes	Video cassette players in most homes
Internet just invented	Internet restricted	Internet restricted	Internet restricted	Internet widespread
5 newspapers	6 newspapers	5 newspapers	6 newspapers	4 newspapers

* This disregards the American forces radio channel at Keflavík Airport which had reached the South West of Iceland since the early 1950s, and enjoyed considerable popularity among young people in the area until the establishment of the second channel of the State radio in 1983.

** In 1968, Akureyri in the North was entirely without television, whereas Reykjavík in the South-West and Vestmannaeyjar in the South – apart from the recently established State Television Service – still had some limited access to the American forces television which had been in operation at Keflavík Airport since the mid-1950s. In 1968 7% of my respondents in Reykjavík and Vestmannaeyjar said they had good reception of the Keflavík television in their homes and claimed to watch it often. Another 11% said they had good reception of the American station, but hardly ever watched it. Soon after 1968 the Americans changed to closed circuit technique and thus the station disappeared entirely from the Icelandic media scene.

television has become a major agent of social integration and even an object of worship (Broddason, 1995, 1996; (see also Dayan and Katz, 1992; Tichi, 1991)).

The empirical findings presented below derive from this research project dating back to the year 1968 when I conducted my first questionnaire-type survey among six hundred-odd Icelandic youths. This and subsequent four surveys – accumulated over a period of 29 years with virtually identical sampling procedures – now constitute the research project *Children and Television in Iceland*. Subjects were randomly chosen from among the school population of three different communities in Iceland (see Table 2 for sample sizes and response rates. Previous reports from the project include Broddason, 1970, 1992, 1994 and 1996, and Broddason and Hédinsson, 1983). As the name of my research project indicates it is not primarily focused on the issue of reading, although the development of book reading and the relationship of book reading to other activities is the subject of the present chapter.

TABLE 2: Randomly sampled 10–15 year olds from the school populations in three Icelandic communities (Reykjavík, Akureyri and Vestmannaeyjar) Number of respondents in the three communities, and total response rates in the five surveys

	1st Survey: 1968	2nd Survey: 1979	3rd Survey: 1985	4th Survey: 1991	5th Survey: 1997
Community:					
Reykjavík	372	484	491	492	488
Akureyri	130	182	200	203	228
Vestm.eyjar	99	129	133	122	141
<i>Total:</i>	601	795	824	817	857
Sample size	733	864	896	961	984
Response rate:	82%	92%	92%	85%	87%

On basis of the survey results that are presented below we may discuss with a fair degree of confidence (always keeping in mind that we are dealing with self-reported behaviour) how book reading among Icelandic youths has changed in quantitative terms over the years and they can be of help in assessing the impact and opportunities provided by the most recent media of communication.

The Icelandic society – together with its Nordic neighbours – is generally considered among the most literate in the world. It is also a highly democratic society. If we accept the common assumption that the latter is fairly meaningless without the former, changes in reading habits ought to interest us. James Carey has pointed out that even though literacy can give rise to a form of de-

mocracy, it also produces instability and inconsistency because the written tradition is participated in so unevenly (Carey, 1992:164). Literacy may actually decline through disuse, and if a sector of a society turns away from books and reading this is bound to have repercussions far beyond the persons involved.

The empirical findings which I shall report in this paper provide some evidence as to considerable shifts, in quantitative terms, in the voluntary reading habits of Icelandic youths. As my findings span nearly three decades it is a fair assumption that they reflect some important social and cultural changes that have occurred during this time. Table 1 provides an overview of the development of the Icelandic "media landscape" during the period covered by the surveys. The data that I shall mostly dwell on are based on answers to the following question:

"Have you read any books during the last 30 days?"

In an explanatory note that accompanied the question the respondents were asked not to include books with direct connection to the school work. Thus to all intents and purposes this is a question about leisure-time reading. The question was put in exactly the same manner in all five surveys, and the respondents gave their answer by simply writing down the number of books which they thought that they had read. The mean scores obtained in each of the five surveys are presented in Table 3, both in the form of overall means, and for each of the three communities separately¹.

TABLE 3: *"Have you read any books during the last 30 days?"* Randomly sampled 10-15 year olds from the school populations in three Icelandic communities (Reykjavík, Akureyri and Vestmannaeyjar) Mean number of books 1968-1997.

	1st Survey: 1968★	2nd Survey: 1979	3rd Survey: 1985	4th Survey: 1991	5th Survey 1997
Community:					
Reykjavík	3.9	6.6	4.7	2.6	2.6
Akureyri	4.7	6.5	3.4	2.9	2.8
Vestmannaeyjar	3.2	7.4	3.4	3.0	3.1
<i>Overall mean</i>	<i>3.9</i>	<i>6.7</i>	<i>4.2</i>	<i>2.8</i>	<i>2.7</i>
<i>Standard deviation of mean</i>	<i>4,3</i>	<i>7,0</i>	<i>5,0</i>	<i>3,6</i>	<i>4,0</i>
No. of responses	572	784	796	787	830
No answer	29	11	28	30	27
Total:	601	795	824	817	857
Significance:	.03	ns	.001	ns	ns

★ 10-14 year olds

Table 3 yields several pieces of information. Most importantly, it demonstrates an overall decline in book reading among Icelandic youths during the period of study. It may also be noted that the trends (the strong upward turn between 1968 and 1979, the decline between 1979 and 1991, and the levelling out between 1991 and 1997) have identical directions in the three communities. The relatively high figures recorded in 1979 may have their explanation in a new genre of literature, the *comic book*, that hardly existed in 1968, but enjoyed considerable temporary popularity at the end of the 1970's. In 1985 and subsequent surveys a separate question which had dealt with comic magazines, was reworded in order to include the comic book genre as well. This action has undoubtedly affected the responses.

When we are asking about the number of books that have been read by a respondent during a short time-span the absolute figures are by the very nature of the phenomenon bound to be quite low. If we consider the figures in relative terms, however, we note that the overall drop in book reading between 1985 and 1991 amounts to 33% (from 4,2 books on average in 1985 to 2,8 books in 1991). This overall decline has been halted, at least for the time being, by 1997. When we look at the figures for the individual age-groups however, we note that the overall picture of levelling is due to a substantial *recovery* of book reading among the youngest respondents, whereas the highest age group *continues* the downward trend; in fact it is only in the middle age-group that the levelling-off phenomenon survives a closer scrutiny (Table 4).

TABLE 4: "Have you read any books during the last 30 days?" Mean number of books according to age.

	1st Survey: 1968	2nd Survey: 1979	3rd Survey: 1985	4th Survey: 1991	5th Survey: 1997
10-11 year-olds	4.2	7.8	4.9	3.6	4.5
12-13 year-olds	4.1	7.3	4.4	2.6	2.5
14-15 year-olds*	3.0	4.8	3.3	2.3	1.6
<i>Overall mean</i>	<i>3.9</i>	<i>6.7</i>	<i>4.2</i>	<i>2.8</i>	<i>2.7</i>

* Only 14-year-olds in 1968

That girls read more books than boys is a well-established phenomenon. Even when we look at individual age-groups we find that this pattern holds almost without exception (Table 5). Although the figures vary from one survey to the next, the relative decline in book reading with increasing age follows a similar pattern over the years. Thus we are led to conclude that the deep dives in book

interest among adolescents are tied to the life cycle of each generation and have some fundamental causes. That the figures differ so widely between surveys indicates Zeitgeist effects and even generation effects (see for instance Hédinsson, 1981; Broddason and Hédinsson, 1983; Rosengren, 1994). The contents of Table 5 confirm well documented previous findings to the effect that leisure book reading declines during adolescence (Beentjes og van der Voort, 1989:65; Rosengren and Windahl, 1989:97; von Feilitzen, 1976:105; Broddason, 1996:124).

TABLE 5: "Have you read any books during the last 30 days?" Mean number of books according to age and gender.

	1st Survey: 1968		2nd Survey: 1979		3rd Survey: 1985		4th Survey: 1991		5th Survey: 1997	
Age:	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
10-11	3.4	5.1	7.6	8.1	5.0	4.8	3.3	3.9	3.8	5.1
12-13	4.4	4.0	6.8	7.8	4.3	4.5	2.4	2.9	2.1	2.9
14-15*	2.4	4.0	4.7	5.0	2.3	4.2	1.7	2.9	1.2	2.1
<i>Overall means</i>	3.5	4.4	6.4	7.0	3.8	4.5	2.4	3.2	2.2	3.2
Gender diff. signif.	.02		ns		ns		.002		.0002	

* Only 14-year-olds in 1968

The consistent decline in book reading *on average* over a long period of time, demonstrated in Tables 3-5 above, leaves us in no doubt that something is happening to the status of books and book reading among successive generations of young Icelanders. The high standard deviations (Table 3) indicate at the same time a considerable spread around the means. At all times we have had a number of respondents who have reported very heavy reading and we have also had those who said they did not read a single book during the last 30 days preceding the survey. It might be argued that a decline in itself is not a matter for great concern as long as it does not drop below a certain level. For instance, a moderate reduction in the numbers of heavy readers might worry us less than a substantial increase among the non-readers. A moderate reader might become a heavy reader and vice versa. A non-reader, on the other hand, is probably less likely to become a reader. Hence, the dividing line between those who do not read books at all and those who do at least some book reading is arguably of particular importance when we are studying long-term

trends in reading habits. Table 6 shows the development with regard to these groups as they appear in my surveys over the years. A "heavy reader" is here defined, rather arbitrarily, as someone who reports reading 10 books or more "during the last 30 days." The "non-readers" are those who report reading no books during the same period. Of course they may have read any number of books during the last 60, or 90, or 120 days. Table 6 casts the levelling-off pattern observed between 1991 and 1997 in a fresh light. The ranks of the "heavy readers" have stopped dwindling while the proportion of "non-readers" continues to expand, leaping quite dramatically from 18% in 1991 to 27% in 1997. As clearly shown in Table 7, the figures for 1997 are very strongly age and gender dependent.

TABLE 6: *"Have you read any books during the last 30 days?"* Percent "Non-readers" (who claim no book reading), "Intermediate readers" (1-9 books) and "Heavy readers" (who claim reading 10 or more books).

	1st Survey: 1968 %	2nd Survey: 1979 %	3rd Survey: 1985 %	4th Survey: 1991 %	5th Survey 1997 %
"Non-readers"	11	11	15	18	27
"Intermediate readers"	79	69	72	76	65
"Heavy readers"	10	20	13	6	8

TABLE 7: *"Have you read any books during the last 30 days?"* Percent "Non-readers" (no book reading), "Intermediate readers" (1-9 books) and "Heavy readers" (10 or more books) According to Age and Gender. 1997 Survey.

	Boys			Girls		
	10-11 %	12-13 %	14-15 %	10-11 %	12-13 %	14-15 %
"Non-readers"	16	31	48	7	19	32
"Intermediate readers"	74	62	51	72	74	64
"Heavy readers"	10	7	1	21	7	4
	100	100	100	100	100	100
N:	118	134	168	126	119	165

Gender difference significant $p < .0000$

Age differences significant $p < .0000$

Reading and Television

In the first part of this chapter a number of sources were referred to where television's negative influence on reading, reading ability or knowledge acquisition was reported or discussed. Other sources that indicated television's positive influence in the same areas were also quoted. That the same authors occasionally appear to support conflicting viewpoints at different times is only natural, considering the complexity and the fluidity of the issues involved, as well as the variety of research methods at our disposal.

In an earlier publication dealing with data from the four first surveys I concluded that negative correlations between book reading and television viewing did not emerge from my material. Now, adding evidence from the fifth survey, I return with a very similar message. With one exception, correlations are weak and inconsistent. The exception is provided by 12-13 year old boys. They show a significant negative correlation between book reading and television viewing (Pearson's $r = -.21$, $p < .01$). Lack of correlation at the individual level, however, does not in any manner diminish our findings that book reading among Icelandic youths is consistently declining in the long term and further that the numbers of youths who read very few books seems to be dramatically increasing.

But does this long-term decline of book reading mean that young people are actually *reading less* than before? The answer to this important question is not straightforward. Although I am not in a position to furnish a definitive answer I shall attempt an informed speculation and in the process return to the quote from Mayra Mannes on which this chapter opened.

TABLE 8: Use of PCs and the Internet at home. 1997 Survey. Percentages of total sample according to gender.

	Boys %	Girls %	All %
Use a personal computer in the home at least once a week	77	53	65
Claim to be regular Internet users	34	20	27
Regard themselves as e-mail users	35	21	28
Have their own home-page	11	4	7
Total number of respondents	439	418	857

The 1997 survey was the first occasion on which we included questions relating to computers and the Internet. The results were somewhat staggering: No less than three quarters of the boys and more than half of the girls claim to use their home computer "at least once a week" (Table 8). A sizeable minority claim to be regular Internet users and quite a few actually have their own home page on the Internet. These are 10-15 year old youths in March 1997. Although I have not attempted to elicit exact figures as to the time involved in this activity it should be obvious that some other activities must be suffering. Television viewing would be a likely candidate, but my data lend no support to that hypothesis. Table 9, which shows the time spent on terrestrial television, video, cable and satellite transmissions all combined, indicates a slight increase between 1991 and 1997. Within these categories (not shown in table) some reshuffling has occurred, however, with cable and satellite viewing going up and video viewing going considerably down. But as already indicated, the total picture points to a slight increase in overall viewing time. Between 1991 and 1997 two daily newspapers folded. This seems to have minimally affected newspaper reading among my respondents, presumably because these papers had already lost most of their following by 1991. Newspaper reading is positively related to age, to about the same extent that book reading is negatively related to age².

TABLE 9: Self-Reported Television viewing, video viewing, cable and satellite viewing in 1991 and 1997. Averages according to age.

	10-11 year olds	12-13 year olds	14-15 year olds	Total
1991	14:33	16:10	16:33	15:45
1997	15:03	17:47	16:25	16:22

Taking all this into consideration we may assume that the use of the various media of communication among Icelandic youths has not diminished between the fourth and the fifth survey. Quite the contrary, it may have increased, and what is more, it almost certainly has become more diversified. For advocates of literacy and reading, it is particularly relevant to note that computer use (except some games) inevitably means almost constant and intensive reading and sometimes a considerable amount of writing. So, a youth who turns away from a book and to the computer is probably not turning away from reading. Admittedly though, much of the time spent on computers involves games that may not require much reading. Among my respondents only 10% say they never play computer games. At this point it is also appropriate to acknowledge that books are already being published in an electronic form. So

far, it is mainly textbooks and reference works, but there is every reason to expect electronic book publishing to increase in leaps and bounds in the near future. An editor at McGraw-Hill is quoted in a front-page article in the *New York Times*: "I am a book person and I never believed I would want to give up the books I carry around with me. But I'm starting to think of myself more as a content provider...We know we are standing on the edge of a precipice" (NYT, 1998).

Conclusions

Finally, I wish to return to the idea of *television as a vehicle for reading and language learning*. I have already referred to a number of sources that have recognized the potential of captioned or subtitled television programmes for literacy training. The policy of national television systems in the industrialized world with regard to these matters may be conveniently divided into three categories.

The *first category* includes the English-speaking peoples (the United States, the United Kingdom, Canada, Australia, New Zealand, Ireland etc.). Television programmes in these countries originate almost exclusively within their own cultural sphere; their production language is English and the programmes are subsequently transmitted in English to their English-speaking audiences. The policy is simply to produce and broadcast in English to the English-speaking world. Under these conditions any translation problems are eliminated before they arise. In particular, television in category one countries provides viewers, young and old, with a constant reinforcement of their oral culture. We may conclude that television in these countries is a *champion of cultural identity and (to different degrees) of national culture*.

The *second category* consists of the more populous countries of continental Europe (e.g. Germany, France, Spain, Italy, Russia etc.). The majority of television programming in terms of transmission hours in these countries is produced in their respective native languages, but they also depend heavily on imports. And these imports for the most part come from English-speaking countries. In order to accommodate their publics, television stations in these countries substitute the original English sound track with a new sound track in the appropriate host language; a custom commonly known as *dubbing*. Thus viewers in these countries can enjoy foreign programmes in their native language. This operation drastically alters the original work and quite likely interferes with whatever message is intended. A few examples ought to suffice to bring home my point. Watching series like *Seinfeld* or *Inspector Morse*, films like *High Noon* or *Gone with the Wind*, or major productions like *Roots* or *Brideshead Revisited*, not to mention Shakespearean drama, without the original sound track is a radically different experience compared to watching the original version. Whatever the merits of such dubbed programmes, they are no longer

identical with the cultural entities that left their production facilities. One obvious disadvantage is the simple fact that the words spoken do not correspond to the lip movements of the actors on the screen. Another, perhaps more subtle problem, is that the voice does not belong to the body. As a result viewers in these countries are spared being exposed to spoken English (which of course is the whole point). Leonard Shlain makes a point that is relevant in this context: "...in many instances, the listener's eye gathers more about the meaning of the speaker's message than does his ear" (Shlain, 1998:40). Looked at from a different angle, another consequence is that they miss an opportunity to increase their *knowledge* of English. We might also want to consider that these viewers are the recipients of a curiously hybrid product where the visual stimulus derives from one cultural sphere and the aural stimulus from another. As is the case with category one countries, television in category two celebrates the oral culture. But because this is done in a visual setting that is totally at odds with the language we may at least suspect that television in category two contributes to *cultural confusion* among the viewers.

The *third category* is made up of small to medium-sized countries that do not belong to one or another of the major continental language spheres (the Nordic countries, the Netherlands, Portugal, Israel etc.). In these countries, restricted economic resources make for a much more acute dependency on foreign television programmes than in countries belonging to the second category. *Iceland*, with a population of some 270 thousand, may serve as an extreme example of countries thus situated. Over the years about one third (or slightly less) of the programming hours of the Icelandic national broadcasting monopoly has consisted of native productions, one third (or slightly more) has consisted of productions originating in English-speaking countries, and the rest has been imported from other countries, mainly European. In the mid-1980s, when the monopoly was abolished, a new commercial television station flooded the market with British and American programmes and films, whereas the former monopoly slightly increased its share of Icelandic material. Television viewers in other category three countries are faced with a less massive Anglo-American assault, but the difference is a matter of degree rather than kind. Counting the number of programming hours alone, however, tells only part of the story because the imports are usually among the most popular programmes with the highest viewing figures. The same economic considerations that lead category three countries to resort to large-scale imports of television programmes prohibit them from taking the dubbing solution favoured by the more populous countries. Instead they use *subtitles*. The situation in the Netherlands is typical:

On Dutch television...at least one third of the programs broadcast are foreign programs, 94% of which are subtitled...Because many foreign programs, especially U.S. programs, are more popular than domestic programs, more than 40% of the Dutch programs watched by Dutch viewers are subtitled... (Koolstra, van der Voort and van der Kamp, 1997:132).

Television viewers in category three are thus served vast amounts of programming which originates in the Anglo-American culture. Further, they receive original versions, i.e. versions where the sound track has not been altered. Added to this they are given a text in their own native language at the bottom of the screen which fairly faithfully (albeit with some shortcuts) delivers the content of the dialogue on the screen. Thus, category three viewers are massively exposed to the *intact* visual and aural stimulus of a foreign culture. At the same time they are offered the *added* visual stimulus of written translation. As an extra bonus they are allowed to become familiar with spoken English, and may at their own convenience gradually move away from the subtitles to the dialogue of the characters on the screen. For the absolutely youngest viewers the subtitles offer a powerful incentive to master the art of reading because they realize that this will open up to them the world of foreign (exotic, adult) television. And as soon as they have come to grips with the subtitles they can graduate into learning the foreign language spoken on the screen. What they may miss is the exposure to the spoken language of their own culture. And most definitely, they miss the immediate connection between the screen culture and their own culture that category one viewers are given. On a somewhat speculative note, as indicated above, I wish to conclude that television in category three countries serves as a *vehicle of literacy, foreign language learning and cultural diversity*. In other words, there is a case to be argued to the effect that television in category three countries is not a wasted miracle.

As discussed above, my own research results and those of others indicate that in the long run book reading is declining. And, in spite of uneven results, the weight of the evidence indicates that this development can to a considerable extent be explained by television viewing. There is also evidence that reading is more demanding cognitively than television viewing, that it is more active and involves more alertness, more concentration, and more skills (Kubey and Csikszentmihalyi, 1990:135). However, this finding is hardly based on the kind of television viewing that category three audiences indulge in. The Dutchman, Icelfander, Norwegian etc. who has sat in front of his or her television receiver for a whole evening may very well have read through the equivalent of ten or more sheets of typewritten text. One month of moderate television viewing may include a reading experience equivalent – in quantitative terms – to a sizeable novel. There is some empirical proof regarding the effects of reading subtitles. Koolstra, van der Voort and van der Kamp, report that they found support for the hypothesis that the development of children's decoding skills is promoted by watching subtitled foreign television programmes (1997:145). However, they also found that television viewing exerted an inhibitory effect on the development of children's reading comprehension. This effect was confined to entertainment programmes (Koolstra et al., 1997:145, 146).

Summing up, television can be a champion of cultural and national identity, given the right kind of circumstances. In other circumstances television can turn into a servant of cultural confusion. And, finally television may be seen as a vehicle of literacy, reading exercises and language learning.

Notes

1. In each of the four surveys a tiny number of respondents gave figures which we could not accept because of the vast number of books that they claimed to have managed to read. Such extreme answers exert a very heavy influence on the calculation of the means and consequently it was necessary to exclude them. It was decided to reject the answers of all who claimed to have read 40 books or more during the previous 30 days. This might seem a far too liberal criterion, but I preferred to err on the positive side in view of the direction of the argument in the rest of the chapter.
2. The correlation between age and newspaper reading is Pearson's $r = .26$ whereas the correlation between age and book reading is Pearson's $r = -.28$. Controlling for gender causes practically no change.

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