

# CULTURAL INFLUENCE ON THE RELATIVE OCCURRENCE OF EVIDENCE TYPES

## 1 INTRODUCTION

Persuasive texts, such as advertisements or public information brochures, are written to convince the readers to behave in a certain manner, like buying a DVD-player or stop smoking. These texts are generally characterised by pragmatic argumentation, by which an action is recommended on the basis of its favourable consequences. In order to enhance the persuasive power of these texts, writers can support their claims with different types of evidence, like statistical information or anecdotes. The text writers' preference for certain types of evidence might be influenced by their cultural background. A cross-cultural corpus study consisting of Dutch and French persuasive brochures will be presented. We will first outline our theoretical framework by discussing the role of pragmatic argumentation (section two) and evidence types (section three) in persuasive communication.

## 2 PRAGMATIC ARGUMENTATION IN PERSUASIVE COMMUNICATION

One of the most used argumentation schemes in persuasive communication is pragmatic argumentation. Pragmatic argumentation is commonly regarded as a subcategory of causal argumentation (see, e.g., Perelman & Olbrechts-Tyteca, 1969; Garssen, 1997). The simplest form of pragmatic argumentation looks like (1):

- (1) action A leads to consequence B  
B is (not) desirable  
thus: action A is (not) desirable

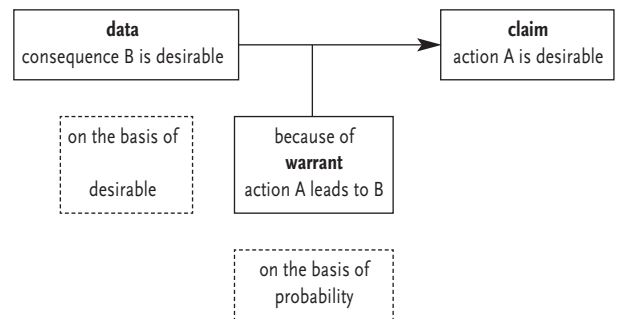
Pragmatic argumentation 'permits the evaluation of an act or an event in terms of its favorable or unfavorable consequences' (Perelman & Olbrechts-Tyteca, 1969, 266). There is thus a 'transfer of a given quality from the consequence to the cause' (1969, 268). Traveling by train, for example, is a good thing, because it allows avoiding traffic-jams, or – an example of a negative variant – we should not buy this software package, because it will raise our costs by 24 percent.

Feteris (1997, 2002) has developed an instrument for the analysis and evaluation of pragmatic argumentation. The two main critical questions for the evaluation of pragmatic argumentation are about the normative judgment – B is desirable – and about the empirical judgment – A leads to B (Feteris, 1997). It seems that, in everyday persuasive communication, the desirability of the effects is only rarely supported by evidence. This goes for public discourse (Schellens & De Jong, 2000), and especially for advertising (Schellens & Verhoeven, 1994). In advertising, products and services are recommended by paying attention to their benefits. In fact, people usually buy products to reach a certain goal (see, e.g., Gutman, 1982). The desirability of these goals – like freedom, beauty, or comfort – is rarely supported by evidence, because it is self-evident. The probability that an action leads to (un)desirable consequences, however, is often supported by evidence. If a text writer decides to support this probability, he can choose from a large range of evidence types, which we will discuss in the section below.

## 3 EVIDENCE TYPES IN PERSUASIVE COMMUNICATION

The concept of evidence is best understood by reference to a model of argumentation that has been developed by Toulmin (1958). This influential model is based on the process of argumentation, which can be divided into three stages. The first stage is the expression of a claim. In the second stage, the defender has to come up with data or evidence to support this claim. In the third stage, finally, the defender has to show that 'the step [from the data] to the original claim or conclusion is an appropriate and legitimate one' (Toulmin, 1958, 98). This step is called the warrant, which means 'if data, then claim'. Argumentation schemes are characterised by their warrant. The warrant of pragmatic argumentation, as we have seen, is 'if the consequences are desirable, then the cause is desirable too'. A warrant can be supported by a backing; the relationship between the warrant and its backing is similar to that between the claim and the data. The scheme of pragmatic argumentation applied to the model of Toulmin (1958), in which both the warrant (probability) and the data (desirability) can be supported, is given in figure 1.

Figure 1 Desirability and probability in pragmatic argumentation.



Both the desirability and the probability can be supported by what is generally called evidence. There seems to be an agreement in the field of argumentation and persuasion effects research about the meaning of evidence, and the different types of evidence. We define evidence as *data – fact or opinion – that is used as an argument to increase adherence of a claim*. Evidence types in argumentation studies are usually divided into examples (anecdotal evidence), statistics (statistical evidence), and testimony (source evidence). Experimental studies on the persuasiveness of evidence types have also concentrated on these evidence types, and – more recently (Hoeken, 2001) – on causal evidence. The distinction between these four categories is further supported by the fact that they are connected to the most general argumentation schemes (see Garssen, 1997), and that there is a strong relation with research methods in social science (see Hoeken & Hustinx, this volume).

In research on evidence types, relatively little attention has been paid to the argumentative framework in which the concept of evidence is situated. Evidence types, however, are strongly related to

argument types. In short, evidence is data, whereas an argument type is data, warrant and claim. One type of evidence does not necessarily bring about one type of argumentation scheme. The type of argument depends on the claim, as we will show in the light of the following example (2) of anecdotal evidence.

(2) Last Tuesday, when he drove home, Frank called his sister. He could not avoid the oncoming car and got a heavy accident.

This piece of evidence can be used to support the general claim that using a cell phone while driving is dangerous; the argument type is that of generalisation from one case to all cases. The same evidence can be employed to add support to a specific claim that John, who often uses his phone in the car, runs the risk of an accident. The argument type then is comparison, in which a certain case is compared to a similar another case.

To conclude, by putting evidence in an argumentative framework, the relevance of argumentation schemes has to be taken into account, which – in turn – leads to an adaptation of the definitions of evidence types. Table 1 shows the new classification of evidence types that we will discuss in detail below.

**Table 1** Classification of types of evidence.

- statistical evidence
- anecdotal evidence with regard to representativeness
- anecdotal evidence with regard to analogy
- causal evidence with regard to prediction
- causal evidence with regard to explanation
- source evidence (can be used alone or in combination with one of the other five types)

*Statistical evidence* is quantitative numerical information about a number of cases. Examples of statistical evidence are '150 000 Dutch citizens are depressed', '24% of the people in this sample are depressed', or 'The risk on a accident doubles with 0.5 gr. of alcohol' (in the latter case, the number of cases on which this relationship is based, is not specified).

The main characteristic of *anecdotal evidence* is that it consists of one or a few cases, like example (2). As we have shown above, anecdotal evidence can lead to different argument types, depending on the claim. We therefore make the distinction between anecdotal evidence with regard to representativeness and anecdotal evidence with regard to analogy. *Anecdotal evidence with regard to representativeness* is the presentation of one case or a few cases that are supposed to be representative of the group to which they belong (generalisation). *Anecdotal evidence with regard to analogy* is the presentation of one case or a few cases that are similar to another case or a few other cases<sup>1</sup> (comparison).

Most of the classifications in argumentation schemes distinguish between prediction – from cause to effect – and explanation – from effect to cause. *Causal evidence with regard to prediction* consists of one or more causes why an event or phenomenon will occur. *Causal evidence with regard to explanation* consists of an effect that must have been caused by one or more factors.

The last type of evidence will be referred to as *source evidence*, factual information or opinions that are stated by a source other than the arguer. Source evidence usually does not add new information to support a claim; it is often a restatement of the claim. Source evidence can be used in combination with the other types of evidence, like anecdotal or causal evidence, which is common in everyday persuasive communication. Statistical evidence, for example, is 'usually provided by reliable sources' (Brosius, 2000, 19). If source evidence is merely a restatement of a claim, the source often is an expert or authority. In argumentation studies the definition of an authority has always been quite problematic (see, e.g., Walton, 1997). We define an expert as 'an individual or group possessing superior knowledge regarding the product class

[topic, etc.] endorsed. The endorser has obtained this knowledge as a result of experience, study, or training' (Friedman & Friedman, 1979, 63). We further distinguish between six types of sources on two dimensions. The first dimension is the authority dimension: authority – no authority. The second dimension – identification – results in a segmentation of increasingly identified sources: an anonymous source, a source designated by name, and a celebrity. This distinction corresponds with early experimental studies on persuasiveness of endorsers.

To summarise, there are three main groups of evidence: 1) source evidence alone, 2) source evidence + one of the five other evidence types, and 3) one of the five other evidence types alone. Imagine a text that states that older people should be vaccinated against the influenza virus, and that provides the positive consequence that those who are vaccinated will not get the influenza. The desirability of this consequence is not supported, because it speaks for itself. The probability that the vaccination does lead to the mentioned consequence can be supported by different types of evidence. The text writer could for example refer to a successful study among 500 participants (statistical evidence), to a researcher of a School of Medicine that states that vaccinated people will not get the influenza (source evidence, authority), to a story of an old couple that has successfully benefited from this treatment since a few months (anecdotal evidence with regard to representativeness), or to the fact that the vaccination consists of ingredients that attack microbes that are necessary for the influenza to develop (causal evidence with regard to prediction).

#### 4 RELATIVE OCCURRENCE OF EVIDENCE TYPES IN THE NETHERLANDS AND FRANCE

Some studies have focused on the relative persuasiveness of evidence types (see, e.g., Hoeken, 2001), but no attention has been paid to the relative occurrence of evidence types in real life persuasive communication. This relative occurrence of evidence types might nevertheless be an indication for the intuition of writers of persuasive texts about what types of evidence are more convincing than others. Moreover, studies on evidence types have implicitly supposed that the relative persuasiveness of evidence types was independent of the cultural background of the subjects who judged these evidence types. There are indications, however, that the relative persuasiveness and occurrence of evidence types are influenced by culture. Expert evidence, as a type of source evidence, could be used more frequently in cultures that are characterised by a high power distance between, for example, laymen and experts. Power distance is one of the five dimensions that describe cultural differences (Hofstede, 1980). It is defined as the degree to which less powerful people expect and accept an unequal distribution of power. Claims of experts might therefore be more easily accepted in cultures with a high power distance, because of respect for these experts.

By means of a cross-cultural corpus study, we have investigated the relative occurrence of evidence types, and especially the cultural influence on this relative occurrence. The study will be discussed in the sections below, starting with the research questions (4.1), the material (4.2), the procedure (4.3), and ending with the results (4.4).

##### 4.1 Research questions

As we have just said, the use of the different types of evidence in real life persuasive communication might give an indication of which evidence types text writers believe to be the most persuasive. The first research question is thus: *what is the relative occurrence of the types of evidence in persuasive communication?* We do not have specific expectations about this relative occurrence. Schellens and De Jong (2000) were interested in what types of argument are used in persuasive information brochures. We cannot use their results, because 1) their focus was not on quantita-

tive information about the occurrence of argument types, 2) they considered all the argument types (and not just those in support of pragmatic argumentation), and 3) an argument type is not the same as an evidence type, as we have explained in section 3.

The second research question is formulated as: *is there a cultural influence on the relative occurrence of evidence types in persuasive communication?* Culture seems to play a role in pragmatic argumentation, which is about reasoning (the probability that A leads to B), and about values (the desirability of B). In fact, cultures differ in their reasoning processes (see for a review, Nisbett, Peng, Choi, and Norenzayan, 2001), and in their preferences for certain values (Hofstede, 1980). There is at least one type of evidence that we expect to occur more frequently in one culture than in another, namely expert evidence (the expert as a type of source evidence). As we have just explained, the occurrence of expert evidence might be related to the degree of power distance. In general, France has a high power distance, whereas Holland is characterised by a relatively low power distance (Hofstede, 1980). We therefore hypothesise that the relative occurrence of expert evidence in persuasive communication is higher in France than in the Netherlands.

#### 4.2 Material

In order to test a cultural influence on the relative occurrence of evidence types in persuasive communication, we have set up a cross-cultural corpus study with Dutch and French persuasive public information brochures. Advertisements were not taken into account, because of their lack of explicit verbal argumentation in comparison with brochures. The selected brochures had to meet the following conditions: freely available for all citizens, and a persuasive character. We will specify these two points below.

During the period October 2001 – May 2002 we have collected Dutch and French public brochures. In both countries we have searched for brochures with direct personal interest for the reader (e.g. health), and fundraising brochures with a more public interest. The percentage of fundraising brochures in the final Dutch and French corpus is comparable: 46.7% for the former, 40.0% for the latter.

In Holland, it was quite easy to find these brochures, because they are available in all the public libraries and town halls. We have found 124 Dutch brochures in the public libraries and town halls of Amsterdam, Den Bosch, Nijmegen, and Veldhoven. In France, public information brochures are mainly distributed by the instances that publish them; there are only a few institutions that offer a range of different brochures. By far the most important is the French Committee for Health Education (le CFES, le *Comité français d'éducation pour la santé*) that belongs to the French Ministry of Health. We have contacted several institutions, but only the CFES and the Local Hygiene and Health Service (*Le service communal hygiène et santé*) in Rennes have sent a number of brochures. We then contacted 45 French fundraising institutions on the basis of an online database ([www.yeba.org/annuaire](http://www.yeba.org/annuaire)), and an Internet company that groups the most important French fundraising institutions ([www.aidez.org](http://www.aidez.org)). In total we have collected 79 French brochures.

The collected brochures were not all persuasive. The distinction between informative and persuasive proved to be quite problematic. From a theoretical point of view, the difference of scope is clear. The aim of informative brochures is to provide information to the reader in order to help him form an opinion or make a decision; the goal of persuasive public information is to change the reader's attitude or behaviour in a direction proposed by the text writer (Koelen & Martijn, 1994). From an empirical point of view, the distinction is often harder to make: 1) persuasive brochures are often presented in an informative way (as we found out in a small pre-test with 35 Dutch brochures; see also Schellens & De Jong, 2000), 2) brochures may have multiple objec-

tives, like informing and persuading (De Jong & Schellens, 2000), 3) and Dutch governmental public information is often a combination of information and persuasion (Koelen & Martijn, 1994). We have found a way out of this problem by using pragmatic argumentation as the basic structure of a persuasive information brochure. That is, if a brochure presents some kind of behaviour with its (un)favourable consequences, we consider it as a persuasive public information brochure, how informative the style may seem.

The assumption that pragmatic argumentation is common in persuasive public information brochures has proven to be very adequate. In the first stage, the initial group of collected brochures has been divided into informative (N = 101) and persuasive (N = 102) on the basis of their content and topic. In the next stage, some brochures were deleted from the persuasive group: they were still informative (e.g., explanation of a law), they belonged to a uniform series, or they contained too much concrete tips (an accent on different actions, and not on their consequences). Only three of the remaining 53 brochures that we expected to be persuasive did not provide consequences or (dis)advantages of the favoured behaviour (5.66%). We can therefore conclude that the use of pragmatic argumentation as a means of distinction between informative and persuasive public information brochures is successful. A handful of brochures even literally refer to the scheme of pragmatic argumentation:

- (3) 'Considering these disadvantages it is understandable that people who do not smoke themselves, do not want to be exposed to passive smoking either' (*Rookoverlast? U kunt er wat aan doen*)

This selection process is presented in detail in table 2 below. Finally 30 of the 40 available Dutch brochures – published between February 1998 and 2002 – and 20 French brochures – published between 2000 and 2002 – have been analysed (see appendix for the titles of the brochures).

Table 2

Dutch and French informative and persuasive brochures.

country	informative	persuasive	series	inf.	tips	no tips	no pragmatic	total	rest
Netherlands	63	61	9	5	5	2		30	10
France	38	41	10	4	6	1		20	0

#### 4.3 Procedure

The 50 persuasive information brochures have been analysed with a top-down approach, that is, with a previously determined perspective, in this case, pragmatic argumentation. The procedure consists of three stages: 1) determining the intended behaviour, 2) searching for the (un)favourable consequences or the advantages and disadvantages, 3) seeking evidence in support of the probability<sup>2</sup> that the behaviour leads to the consequences. We have deliberately noted down consequences and (dis)advantages in the second stage. As we have seen in section 2, pragmatic argumentation is a subcategory of causal argumentation in a sense that an action (cause) will lead to a favoured consequence. In persuasive texts, however, consequences are sometimes presented as advantages (attributes of an object). Example (4) is straightforward: buying the 307 SW will lead to a favourable consequence. (4) buy the Peugeot 307 SW consequence: you can take with you lots of luggage

- (5) buy the Peugeot 307 SW advantage: lots of luggage space

Example (5) is semantically identical, but there is one difference.

The action does not lead to the car having lots of luggage space. There is no favourable consequence, but a favourable attribute of the object. Although this is still argumentation on the basis of advantages, we see that there is no direct causal component. The reader has to infer from (5) that he will be able to take with him lots of luggage (4). What is the consequence for the concept of evidence? When arguments in the brochures are presented like (5), evidence can support the claim that an object has a certain characteristic, but not that an action leads to a consequence.

Only verbal arguments were taken into account in the analysis, and not visual arguments, such as an image of a person. Questions whether that person can be linked to certain statements in the evidence or the claim or not, are then hard to answer.

After an agreement between three persons about the exact procedure, the 50 brochures (that contained in total 127 pieces of evidence) have been analysed by one person on two occasions (the second analysis has only produced four modifications). Then 14 doubtful cases have been discussed by the three persons, which has led to only three changes. All cases of support of the consequences' probability have been counted; the total number of cases of evidence in a brochure varied from zero to ten ( $M = 2.54$ ,  $sd = 2.43$ ). The relative occurrence of an evidence type was counted by dividing the total number of occurrences of that type in all brochures by the overall number of evidence instantiations.

#### 4.4 Results

The corpus study has been conducted to indicate the relative occurrence of evidence types in persuasive brochures, and to determine whether this occurrence is culture-dependent. In the discussion about the results below, we will – unless necessary – concentrate on the four traditional types of evidence: statistical, anecdotal, causal, and expert evidence<sup>3</sup>.

**Table 3** Relative occurrence of evidence types in the Dutch and French brochures.

evidence type	Dutch	French	total
anecdotal	27.27*	32.79	29.92
statistical	16.67	42.62	29.13
causal	43.94	14.75	29.92
expert	9.09	21.31	14.96

\*Percentages may exceed 100%, because cases that combine expert evidence with another type of evidence are counted in both categories; it is also possible that percentages do not sum up to 100%, because instantiations of source evidence in which the source is not an expert are counted in the total, but are not presented in this table.

The first research question was about the relative occurrence of the types of evidence in persuasive public information brochures. When the Dutch and French brochures are taken together, the four types of evidence are not equally present ( $\chi^2 = 30.61$ ,  $df = 2$ ,  $p < .001$ ). More specifically, statistical, anecdotal, and causal evidence are all three more frequent than expert evidence (all  $\chi^2$  above 4.45, and  $p < .05$ ). In the Dutch brochures, the four types of evidence are not equally present ( $\chi^2 = 28.16$ ,  $df = 3$ ,  $p < .001$ ). Causal evidence is the most frequent type of evidence; anecdotal evidence is more frequently used than expert evidence, whereas statistical evidence is midway between anecdotal and expert evidence. In the French corpus, the distribution of the types of evidence is unequal too ( $\chi^2 = 17.21$ ,  $df = 3$ ,  $p < .001$ ): statistical and anecdotal are the most used types of evidence, and expert evidence and causal evidence the least used.

The influence of culture on the relative occurrence of these evidence types comes up in the second research question. As can be seen by comparing the second and third column in table 3, the

relative occurrence of the four types of evidence is different in the Netherlands than in France, and thus culture-dependent ( $\chi^2 = 30.00$ ,  $df = 3$ ,  $p < .001$ ). We will now specify this cultural difference by discussing the relative occurrence of the four types of evidence. In the first place, our hypothesis was that expert evidence is more frequently used in France than in the Netherlands because of a difference in power distance. This is confirmed, not only quantitatively ( $\chi^2 = 5.00$ ,  $df = 1$ ,  $p < .05$ ), but qualitatively as well: 11 of the 13 French cases of expert evidence were experts designated by name, whereas only 2 of the 6 Dutch experts were indicated by name; see example (6). An example of expert evidence with anonymous experts is given in (7):

(6) 'According to the Academy of Health Sciences, cigarette smoke is 'the most important source of domestic air pollution'...' (*Le tabagisme passif*)

(7) 'Studies demonstrate it: those who eat lots of fruit and vegetables, have a lower risk to get cancer...' (*Geef kanker mindere kans, eet volop groente en fruit*)

Although expert evidence is more frequent in the French brochures than in the Dutch, there is no difference in the occurrence of source evidence, whether without or in combination with other types of evidence ( $\chi^2 = .71$ ,  $df = 1$ ,  $p < .80$ ). The use of sources (ordinary people, experts, etc.) is thus equal in both corpora, but experts are more employed in the French corpus.

Statistical evidence, in the second place, is more frequent in the French brochures ( $\chi^2 = 11.58$ ,  $df = 1$ ,  $p < .001$ ); not only statistical evidence without source evidence ( $\chi^2 = 6.85$ ,  $df = 1$ ,  $p < .01$ ), but statistical evidence in combination with source evidence as well ( $\chi^2 = 4.74$ ,  $df = 1$ ,  $p < .05$ ). In the third place, causal<sup>4</sup> evidence occurs more in Dutch brochures than in French brochures ( $\chi^2 = 14.26$ ,  $df = 1$ ,  $p < .001$ ). In the fourth place, anecdotal<sup>5</sup> evidence is as frequent in the Dutch as in the French corpus ( $\chi^2 = .51$ ,  $df = 1$ ,  $p < .50$ ). There is nevertheless a remarkable difference in anecdotal evidence with or without source evidence. An anecdote in combination with source evidence is more used in the Dutch corpus ( $\chi^2 = 5.03$ ,  $df = 1$ ,  $p < .05$ ), and anecdotes without a source are far more employed in the French brochures ( $\chi^2 = 12.66$ ,  $df = 1$ ,  $p < .001$ ). An example of the former is (8) and an example of the latter is (9):

(8) 'Nelly (55) is a volunteer. "It started about 10 years ago. I moved to a flat, and terribly missed my garden ..."' (*Handen uit de mouwen voor de natuur*)

(9) 'Abdoulaye (3 years old) weighs 5,5 kilos, the weight of an average 4 years old child in France. Two nutritionists [...] take charge of him and his mother in Chad ...' (*La faim c'est quotidien*)

The difference between these examples lies in the perspective: in (8) a person gives the anecdotal information himself, and in (9) the information is presented by the text writer<sup>6</sup>.

#### 5 CONCLUSION AND DISCUSSION

The persuasiveness of texts, in which an action is recommended (or advised against) on the basis of its positive (or negative) consequences, can be increased by providing evidence that the action does really lead to the consequences and that the consequences are indeed (un)desirable. The occurrence of evidence types in everyday communication might be an indication for the intuition of text writers about which types of evidence are more convincing. The claim that the relative occurrence of evidence types is influenced by culture, is supported by a corpus study, which consisted of 30 Dutch and 20 French persuasive public information brochures. Expert evidence was more frequent in the corpus of France, a country that scores high on power distance compared to the Netherlands. Besides this difference, there are also differ-



ences in the relative occurrence of evidence types that we cannot explain on the basis of values (Hofstede, 1980): statistical evidence, and anecdotal evidence without source evidence were more frequent in the French corpus; causal evidence, and anecdotal evidence in combination with source evidence occurred more in the Dutch brochures.

Although this corpus research seems to indicate that the relative occurrence of evidence types is culture-dependent, three methodological remarks have to be made. In the first place, when counting the use of different types of evidence, we assume that text writers are able to make a choice in favour of a certain type of evidence, whether consciously or not. This means that, in the ideal situation, all possible evidence types are appropriate. One may question, however, whether all types of evidence are always equally available and appropriate. Taking into account a large number of brochures can partly solve this problem. The number of brochures that have been involved in this corpus study is not extremely high, but we have explained the reasons for that in section 4.2 (see also table 2). Not only the number of brochures, but the total number of cases of evidence as well is a solution to the problem mentioned above. The number of evidence instantiations for the probability that actions will lead to certain consequences is 127, a considerable number to draw conclusions upon. This leads to a second remark, namely about the way the relative occurrence of evidence types is counted. In addition to the procedure we have selected – considering all cases of evidence that were present in the corpus – one could also opt for a more conservative one. In that procedure, differences between brochures in the number of cases of evidence are reduced by neglecting the number of cases for one type of evidence in a brochure. Essential is whether the type of evidence occurs, and not the number of occurrences. When, for example, causal evidence occurs three times in one brochure, it is only indicated that causal evidence is

present in that brochure. Since choosing this procedure would imply a reduction of cases of evidence from 127 to 58, we have opted for the other method<sup>7</sup>. The third and last remark is about the reliability. As we have indicated in section 4.3, the 50 brochures have been analysed by one single person. Although there are indications that the analysis is quite reliable (the second analysis, for example, has only produced four modifications), it has to be done again by other persons.

Besides a new analysis with a few more brochures and other judges, we have another suggestion for further research. The type of interest in the brochures might be an interesting factor to explore. One can distinguish between brochures with direct personal interest for the reader (e.g. health), and brochures with a public interest (e.g. Amnesty International). As Schellens and De Jong (2000) indicate, an appeal on rules or principles to judge the desirability of the consequence of an action can be expected in brochures with an idealistic and / or collective interest. In these brochures, the desirability of the consequences is not directly speaking for itself for the reader. Public information brochures that are written with a public interest might thus want to support the desirability of the consequence of the proposed action. This corpus study does in fact confirm this: evidence to support the desirability of the consequences is more frequent in brochures with a public interest than in brochures with a direct personal interest ( $\chi^2 = 5.15$ ,  $df = 1$ ,  $p < .05$ ). As both types of brochures differ in the occurrence of support for the desirability of consequences, they may also differ in the relative frequency with which evidence types are used to support the probability that an action leads to (un)favourable consequences. The distinction between brochures with a public or a personal interest might thus lead to a better insight into the relative occurrence of evidence types in persuasive communication, and into the cultural influence on this relative occurrence.

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- and without another type of evidence. Statistical information given by an expert in a brochure is thus counted as statistical evidence, and as expert evidence at the same time.
- 4 In none of the brochures causal evidence by explanation occurred. This is understandable, because in order to support the probability that an action will lead to certain consequences, one has to provide causes why these consequences will occur (causal evidence by prediction).
- 5 Anecdotal evidence with regard to analogy did not occur in the corpus, probably because of the general claims that are usually employed in public information ('People that drink have a higher risk to get involved in a car accident'), leading to anecdotal evidence with regard to representativeness. A specific claim ('William, who drinks, has a higher risk to get involved in a car accident') would bring about an analogy.
- 6 This distinction seems to be important for the persuasiveness of evidence types, since Gibson

## NOTES

- 1 In argumentation studies analogy has traditionally been divided into literal analogy (where the two cases being compared belong to the same class), and figural analogy (A is to B as C is to D). Figural analogy is not taken into account in this study, because its use in persuasive communication is supposed to be very limited.
- 2 In the rest of this paper we will only discuss evidence in support of probability, and not of desirability. The (un)desirability of the consequences or of the current situation was only supported in 36.00% of the brochures, and – moreover – the total number of cases of evidence in support of the desirability was only 40.
- 3 The eleven types of evidence (see section 3) have been regrouped in this way: 1) statistical evidence with and without source evidence, 2) anecdotal evidence with regard to representativeness / analogy, with and without source evidence, 3) causal evidence with regard to prediction / explanation, with and without source evidence, and 4) expert evidence (an expert as source evidence), with

- and systems of thought: holistic versus analytic cognition. *Psychological Review*, 108 (2), 291-310.
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- Schellens, P.J., & Jong, M. de (2000). Soorten argumenten in de voorlichting. *Tijdschrift voor Taalbeheersing*, 22 (4), 288-308.
- Schellens, P.J., & Verhoeven, G. (1994). *Argument en tegenargument. Een inleiding in de analyse en beoordeling van betogende teksten*. Groningen: Martinus Nijhoff.
- Toulmin, S.E. (1958). *The uses of argument*. Cambridge: Cambridge University Press.
- Walton, D.N. (1997). *Appeal to expert opinion: arguments from authority*. University Park, PA: Pennsylvania State University Press.
- and Zillmann (1998) have shown in their experiment that citation in an anecdote is more convincing than just paraphrasing in an anecdote.
- 7 We have also carried out the same analysis with the conservative procedure, in which 7 of the 16  $\chi^2$ -tests lead to another result.

## APPENDIX

### Dutch brochures

- Amsterdam heeft wat met Managua (s.d.)
- De ervaring van je leven (s.d.)
- De o is weer in de maand: tijd voor de griep prik! (July 2001)
- Fietsersbond voor fietsers die meer willen (s.d.)
- Geef een kind als Joli een betere toekomst! (s.d.)
- Geef kanker minder kans eet volop groente en fruit (autumn 2000)
- Geef om dit kind (s.d.)
- Handen uit de mouwen voor de natuur (2001)
- Heerlijk smullen! (s.d.)
- Het kindje links is de moeder (s.d.)
- Het leven is hart ... zorg er goed voor (s.d.)
- Hou de spanning erin ... (s.d.)
- Ik zoek een huis waar ik voor donker binnen moet zijn (February 1998)
- In Nederland bent u vrij om lid te worden van Amnesty International (2001)
- Klein chemisch afval bij u thuis (December 2000)
- Max Havelaar meer dan lekker (October 1998)
- Mist, halveer je snelheid, verdubbel je afstand (s.d.)
- Nederlanders naar Srebrenica (February 2001)
- Omdat u als klant in geldzaken lang niet vanzelf koning(in) bent (s.d.)
- Over gewicht (June 1999)
- Pas bij nul houden we op met tellen (s.d.)
- Reuma? Kom maar op! (s.d.)
- Rookoverlast? U kunt er wat aan doen (s.d.)
- 'Sport'vissen is niet zo sportief ... (s.d.)
- Tabak (December 1998)
- Teken van geweld (2002)
- Veilig internetten (October 2001)
- Wat doet drank met u? (September 2000)
- Wel eens een vluchteling de weg gewezen? (s.d.)
- Zuivere koffie (s.d.)

### French brochures

- Accro à la musique, pas à la drogue! (s.d.)
- Alcool, savoir plus risquer moins (February 2001)
- Amnesty, comment ça marche? (s.d.)
- Avec vous le défi de la solidarité (October 2001)
- Baleines et dauphins en liberté avec SOS Grand Bleu (s.d.)
- Écoute cancer (January 2002)
- Et vous, avec l'alcool, vous en êtes où? (s.d.)
- Femmes et tabac (s.d.)
- Guide pratique pour faire le point sur votre consommation d'alcool (s.d.)
- Hépatite C et usage de drogues (August 2001)
- La faim c'est quotidien (s.d.)
- Le dépistage, dès qu'il y a un doute ... (June 2001)
- Le tabagisme passif (s.d.)
- Legs et donations en faveur du CCFD (s.d.)
- Les premières fois (s.d.)
- Œuvrer ensemble à l'éducation des orphelins de la Police (2002)
- On ne peut par dire qu'on ne peut rien faire (s.d.)
- Protection rapprochée roller (s.d.)
- Quand je serai grande, j'inventerai un vaccin contre la vitesse (2000)
- Si chacun fait un peu, c'est la vie qui gagne (s.d.)