

Integration of Quantitative and Qualitative Content Analysis in Media Research

Wilhelm Kempf

1. Introduction

Since the dispute between Berelson and Kracauer in the early fifties (see Berelson, 1952; Kracauer, 1952), the controversy about quantitative or qualitative content analysis focuses on two aspects: manifest vs. latent content, and representativity vs. exemplarity of the analysed texts. Both schools, quantitative and qualitative social science, seem to agree about the existence of a basic dilemma, according to which:

1. quantitative methods are suitable for the analysis of manifest content only; whereas
2. qualitative methods are time consuming, can rarely be applied to a large number of texts and, therefore, cannot meet the requirements of (statistical) representativity.

While quantitative analysis tries to escape this dilemma by emphasizing the importance of representativity and disregarding the significance of the latent content, qualitative analysis seeks the opposite way out by focusing on the latent content and disregarding the problem of representativity. None of these approaches is really convincing.

Using the example of war reporting and propaganda, I will first try to show that 'manifest' and 'latent' are not categorical terms, but that there is a continuum between 'manifest' and 'latent' content. The more refined propaganda methods are, the more are they hidden in the latent content. The analysis of propaganda, therefore, must not be restricted to the manifest content only. Based on these foundations I will then demonstrate:

1. The capacity of quantitative analysis for getting access to the latent content is underestimated and can be improved by use of advanced methods of data analysis.
2. Though it can be improved, the capacity of quantitative analysis for getting access to the latent content is, however, still limited. The more refined propaganda methods are, the more difficult it becomes to detect them by use of quantitative methods. Qualitative analysis is therefore unrenounceable.
3. The mere combination of quantitative and qualitative methods does not yet solve the sampling problem, and as long as representativity cannot be achieved,

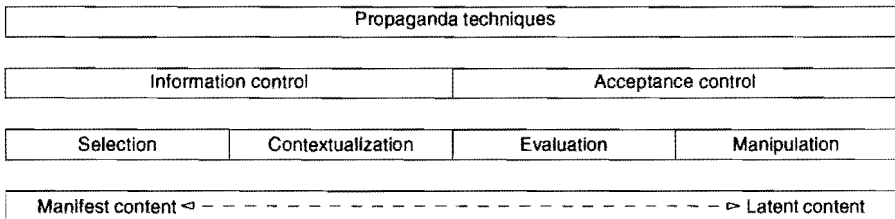
qualitative research can always be rejected by disqualifying the analysed material as an arbitrary selection which cannot serve as a basis of generalization. Advanced methods of data analysis, however, provide a methodological basis for integrating quantitative and qualitative methods, which solves the sampling problem.

2. Propaganda techniques

As we all know, the aim of war propaganda is to maximize public support for a war. In order to do this, propaganda applies various techniques, which can be roughly divided into:

- methods for controlling the information that is made available to the public, and
- methods for controlling whether the available information is accepted by the public (see Figure 1).

Figure 1. Means of propaganda



Selection of information is the most 'primitive' form of propaganda. It includes (1) emphasizing facts or arguments that increase support for the war, and (2) suppressing facts or arguments that reduce this support (see Chapter 1).

Both of these means deal with the manifest content, and our research question would be: *Which* facts or arguments are presented to the public and which are not? There is no problem in using quantitative content analysis to answer this question.

In democratic societies, however, information control rarely means simple black-and-white painting, and usually there is both positive and negative information to be covered. This brings about the problem of meaning. And, as we all know, the meaning of a text cannot be found on the surface of the text but must be searched for between the lines.

Even the meaning of a single statement is often not in the statement itself but depends on the context in which it is placed. Analysing *contextualization*, therefore, is a first step towards the analysis of latent content. Our research question will now be: How are facts and/or arguments combined with each other? Accordingly, we would not so much be interested in isolated facts or arguments, but in the *patterns* into which they are combined (see Kracauer, 1952).

From social psychology, we know that the more we are involved in a conflict, and the more this conflict has escalated, the more difficult it becomes to learn something about the reality of the conflict before it is determined in this or that way, and the more difficult it becomes to accept facts before they are interpreted (see Chapter 3). Propaganda also knows about that and, therefore, does not present plain facts but evaluates and interprets them; often it even replaces the facts with interpretation of the facts.

Our research question would now be: How are the facts evaluated? Or, since we already know about the relevance of contextualization: What patterns of facts, arguments and interpretations are presented to the public?

Analysing the *evaluation* of facts – or the replacement of facts by their interpretation – is a further step in the direction of both latent content and qualitative analysis: even if the analysis focuses on evaluations that are explicitly formulated in the text, we are now interested in aspects of the text which cannot be identified without entering into an interpretive process ourselves.

Although some aspects of the evaluative means of propaganda can be translated into variables for quantitative content analysis (see Chapter 12), the capacity of quantitative analysis for studying these aspects is limited. Therefore, in order to code large numbers of news items within an economic time load and with satisfying intercoder reliability ($Kappa > 0.65$), only rough indicators, which are still located more or less on the surface of the text, can be used for variable definition.

Finally, there are other aspects of latent content to which quantitative analysis has definitively no access: the dynamics of how a theme is developing during the text, as well as the *manipulative means* of propaganda, such as two-sided messages and double-bind communication.

'Two-sided messages' refers to a form of propaganda presentation which anticipates possible criticism and thus makes the propaganda more resistant to counter-propaganda (Lumsdaine & Janis, 1953). The critical point with two-sided messages, however, is that the counter-information must not be accepted by the public. This can be stimulated by incentives for social identification with the source of the propaganda message and, at the same time, incentives for social devaluation of the source of the counter message (see Chapter 10).

'Double-bind communication', on the other hand, refers to a form of communication pathology that was first described in the context of clinical psychology (Bateson et al., 1956). It is characterized by inherent contradictions in the propaganda message, and the lack of an option either to react to both of the contradictory messages or to withdraw from the situation. As a result of emotional involvement with both contradictory messages, it becomes difficult for the audience to query either of them (see Chapters 3 and 9). If the public has no access to independent information, it has no option other than to either believe the conclusions it is told by the propaganda or to withdraw into selective inattention, prejudice, evasive skepticism, etc. All these are consequences that serve the goals of psychological warfare by paralysing the capacity for resistance to the war (Kempf, 1994).

Both of these propaganda methods include some strictly manifest aspect, which is the information that is presented. They also include an aspect of weak latency, which is the coexistence of contradictory information within the same text; and they include some aspect of stronger latency, which is the (implicit or explicit) evaluation

of the respective sources. Finally, they include some strictly latent aspect, which is the functioning of these aspects within the overall direction of the text.

3. Latent styles analysis

In the following I will present a methodological approach, for which I have introduced the term *Latent Styles Analysis* (Kempf, 1997a, 2001). Based on a statistical method dating back to Lazarsfeld (1950), this methodology improves the capacity of quantitative content analysis for getting access to the latent content and provides a methodological basis for integrating quantitative and qualitative methods in the analysis of the same empirical material. For better understanding, I will not only describe the statistical procedures but will demonstrate the capacity of the methodology with an example from the Gulf War study of the *Journalism in the New World Order* project (Kempf, 2000). In this study, we analysed the media coverage of various issues, one of which was the presentation of alternative ways of settling the Gulf conflict (see Chapter 12).

Selection of information

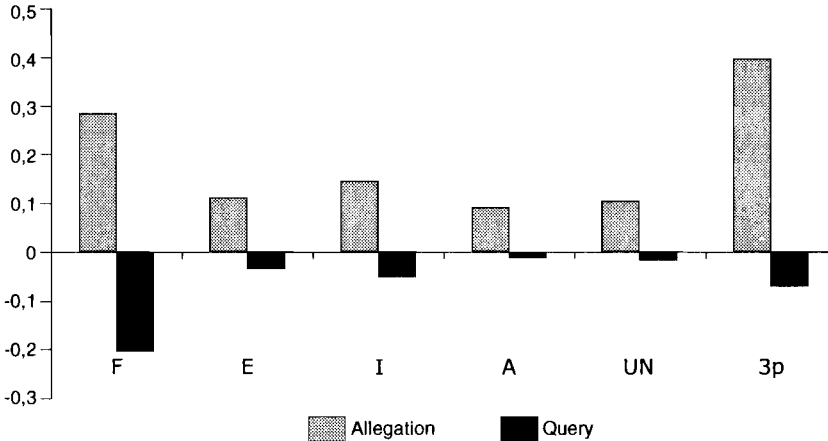
Traditional quantitative analysis revealed that the issue of alternative ways of settling the Gulf conflict was quite prominent in the Gulf War coverage. In both US and European media, this issue was among those themes that were covered most extensively. A total of $n=740$ (18.1%) of the analysed news items dealt with alternative ways of settling the war by allegation (+) or query (-) of one or several of the following arguments or issues:

- 1 military force against Iraq was the only possible or most effective way of settling the conflict;
- 2 economic embargo on trade with Iraq should be given or should have been given more time to be effective;
- 3 Iraqi initiatives for negotiations or peace talks;
- 4 coalition's or member-state's (excluding the UN) initiatives for negotiations or peace talks;
- 5 UN initiatives for negotiations or peace talks; and
- 6 third party or neutral initiatives for negotiations or peace talks.

As the overall frequency distribution in Figure 2 shows, all these issues or arguments were quite popular in the Gulf War discourse. Still, none of them were left completely undisputed.

This is not surprising. It illustrates what we already know about the media discourse in democratic societies: the media do not paint things completely in black and white, and usually present both positive and negative information. In particular, we see:

Figure 2. Alternative ways of settling the Gulf conflict: overall distribution of variables. F= Force against Iraq; E = Economic means; I = Iraqi initiatives; A = Allied initiatives; UN = UN initiatives; 3p = Third party initiatives



- force against Iraq was the most intensively and most controversially discussed mode for settling the conflict. In 28.4% of the relevant news items, it was presented as the only possible or most effective way. In 20.0% of the news items, this was denied, doubted or questioned; and
- third party or neutral initiatives for negotiations or peace talks followed in the second place (39.6% allegation; 6.8% query).

So far, as the study deals with the selection of facts and arguments, it seems that the media gave considerable support to a peaceful resolution of the conflict:

- there was a broad coverage of initiatives for negotiations or peace talks, especially from third parties; and
- the use of military force was rarely left undisputed.

This rather optimistic picture might change, however, if we take contextualization into account. Also, President Bush referred to peace initiatives in his war speech on 17 January 1991. But he did so in order to pin blame on Saddam Hussein for their failure and to portray military force as the only reasonable option that was left to the international community – although he himself, the USA and the whole world would prefer if they did not have to make use of it.

The overall distribution of arguments in Figure 1 seems to resemble this line of argumentation, and it might well be that the media coverage simply followed the same line of argumentation as the US president. In this case, there would be no reason for optimism at all.

Maybe none of the alternatives are correct, neither the optimistic nor the pessimistic one. In all probability, the media discourse was more pluralistic and included various lines of argumentation that went in different directions. But the frequency distribution in Figure 1 does not tell us about this.

Contextualization

As Kracauer put it in his dispute with Berelson: the direction of a text does not so much depend on the frequency of variables but on the patterns into which they are combined. In order to learn about contextualization we have to look at these patterns themselves, and we should not look on pairwise variables only (as in correlation studies) but at the patterns into which the variables are combined.

In our example, we have 12 binary variables. Accordingly, there are $2^{12} = 4096$ possible patterns. For several reasons, it will not be useful to simply count the frequencies of the various patterns. The number of possible patterns is too big. Only some of them will have a clear meaning; others will be nearby; and some will have no meaning at all.

On the other hand, we can expect to find a clear structure in our data: some patterns that are ideal prototypes of given meanings; some patterns that are not so typical but nearby; and others that do not appear in the data at all.

The task of statistical analysis will then be to identify classes of ideal and nearby patterns. This can be done by use of the statistical method of Latent Class Analysis (LCA), which describes the overall distribution of the data as a mixture distribution resulting from the blending of several latent distributions, each of which describes a specific (probabilistic) combination of variables.

In other words: the analysed news items are assumed to belong to one of several *latent classes*, each of which defined by a specific distribution of the content analytical variables and describing a specific *style* of combining them into the coding patterns that are manifest in the data.

LCA identifies the number of latent distributions that are blended in the data; it describes the (relative) size of the latent classes;¹ it describes the distribution of the variables within the latent classes; and it produces so-called membership probabilities, which tell how likely a given coding pattern is to stem from any of the latent distributions. Based on these membership probabilities, different media or different types of texts (say, news items and editorials, etc.) can be compared with respect to their (relative) preference of the various styles, and, finally, those texts which represent a style most clearly can be identified and selected for more in-depth qualitative analysis.

4. Statistical foundations²

Consider a sample of n coding units and k content analytical variables. Formally, coding units will be indicated by $v = 1, \dots, n$. Variables will be indicated by $i = 1, \dots, k$.

Each variable can be coded in several categories. For example:

0 = statement is not mentioned at all

1 = mere allegation of the statement

2 = factual corroboration and/or arguments in favour of the statement.

These categories may or may not be the same for all variables being analysed. Even the number of categories per variable (indicated by m_i) may differ. In the simplest case, only binary variables have to be dealt with. In our example, we have two types of binary variables: variables describing whether a given statement is either

- 0 = not allegeded, or
- 1 = allegeded

and variables, describing whether a given statement is either

- 0 = not queried, or
- 1 = queried

in the analysed coding unit. In general, the categories of a variable i may be indicated by $x = 0, \dots, m_i - 1$.

In constructing content analytical variables, one must make sure that the categories are exhaustive and mutually exclusive (see Holsti, 1969). In order to avoid pseudo-empirical results with respect to the relations between variables, one must caution against logical and terminological dependence of variables also. If Latent Class Analysis is to be applied to the statistical analysis of the data, logical and terminological independence of the variables is also a formal requirement of the statistical model.

Traditional quantitative analysis

Traditional quantitative analysis is based on the assumption of one style of coverage that is characteristic for all coding units. This style is described by the overall probability distributions of the variables (see Table 1, where $p_{ix} = p(X_{vi}=x)$ denotes the probability of a randomly chosen coding unit v being coded in category x of variable i).

Table 1. Overall distributions: the case of polytomous variables

Categories	Variables					
	1	...	i	...	k	
0	p_{10}	...	p_{i0}	...	p_{k0}	
:	:		:		:	
x	p_{1x}	...	p_{ix}	...	p_{kx}	
:	:		:		:	
m_i	p_{1m}	...	p_{im}	...	p_{km}	

In the case of binary variables, this table will have two lines only. Since each column sums up to 1, each of these lines contains the complete information on the probability distributions of the variables. Hence, one of these lines can be omitted (see Table 2).

Table 2. Overall distributions: the case of binary variables

Categories	Variables					
	1	...	i	...	k	
1	p_{11}	...	p_{i1}	...	p_{k1}	

As an example, Table 3 describes the overall distribution of our data on the coverage of alternative ways of settling the Gulf conflict by showing the probabilities $p_{i1} = p(X_{vi}=1)$ for each of the variables 1+, 1-, 2+, 2-,.... These are also the same probabilities shown in Figure 1.

Table 3. Alternative ways of settling the Gulf conflict: overall distribution of variables

	Variables											
	1+	1-	2+	2-	3+	3-	4+	4-	5+	5-	6+	6-
P_{i1}	0.284	0.200	0.111	0.031	0.145	0.049	0.092	0.008	0.103	0.016	0.396	0.068

Latent class analysis

Since it is not reasonable to assume that all coding units belong to the same style, the (manifest) probability distributions in Tables 1–3 may rather be mixture distributions, resulting from the blending of several latent styles. These latent styles may be indicated by $g = 1, \dots, h$.

In analogy with the description of (manifest) styles in Table 1–3, any latent style can be described by a set of (latent) probability distributions (see Tables 4 and 5).

Table 4. Description of latent styles: the polytomous case

Latent Style	Categories	Variables					
		1	...	i	...	k	
g	0	$p_{10/g}$	...	$p_{i0/g}$	...	$p_{k0/g}$
	:	:	:	:	:	:	
	x	$p_{1x/g}$	...	$p_{ix/g}$	...	$p_{kx/g}$
	:	:	:	:	:	:	
	m_l	$p_{1m/g}$	...	$p_{im/g}$	...	$p_{km/g}$

Table 5. Description of latent styles: the binary case

Latent Style	Categories	Variables					
		1	...	i	...	k	
g	1	$p_{11/g}$	...	$p_{i1/g}$	...	$p_{k1/g}$

Generally, $p_{ix/g} = p(X_{vi}=x | v \in g)$ denotes the probability of a coding unit v being coded in category x of variable i if that coding unit belongs to the latent style g .

If the probability distributions in Tables 1 and 2 result from the mixture of h latent styles, then the model Equation (1) holds, where $p_g = p(v \in g)$ denotes the probability of a randomly chosen coding unit to belong to the latent style g . In Latent Class Analysis, p_g is usually called the class size of class (style) g .

$$(1) \quad p(X_{vi}=x) = \sum_{g=1}^h p_g P_{ix/g}$$

The likelihood of a coding pattern $\mathbf{x}_v = (x_{v1}, \dots, x_{vk})$ can thus be expressed by Equation (2), where $p_{ixvi/g} = p(X_{vi}=x_{vi} | v \in g)$ denotes the probability that a coding unit v belonging to style g will be coded in that category (x_{vi}) of variable i , in which it is actually coded.

$$(2) \quad L(\mathbf{x}_v) = \sum_{g=1}^h p_g \prod_{i=1}^k p_{ixvi/g}$$

The likelihood of the full data matrix of n lines (= the coding patterns of a total of n coding units), finally, results from Equation (3). In order to identify the latent styles, this likelihood is maximized by use of the so-called EM algorithm of parameter estimation.

$$(3) \quad L(\mathbf{X}) = \prod_{v=1}^n L(\mathbf{x}_v)$$

In the case of our data on the coverage of alternative ways of settling the Gulf conflict, Latent Class Analysis identified nine latent styles, as shown in Table 6 (see also Figures 3–5).

Table 6. Alternative ways of settling the Gulf conflict: Latent styles and overall distribution of style characteristics

g	p_g	1+	1-	2+	2-	3+	3-	4+	4-	5+	5-	6+	6-
1	0.290	0.034	0.001	0.001	0.001	0.067	0.001	0.001	0.001	0.001	0.001	0.999	0.141
2	0.167	0.999	0.099	0.001	0.024	0.001	0.001	0.007	0.009	0.001	0.008	0.040	0.005
3	0.143	0.380	0.999	0.058	0.001	0.001	0.001	0.018	0.010	0.001	0.001	0.134	0.001
4	0.114	0.134	0.026	0.001	0.001	0.970	0.410	0.064	0.001	0.028	0.001	0.133	0.001
5	0.101	0.130	0.202	0.982	0.253	0.013	0.001	0.001	0.001	0.023	0.001	0.001	0.001
6	0.078	0.001	0.026	0.041	0.018	0.001	0.001	0.099	0.013	0.982	0.062	0.102	0.001
7	0.063	0.076	0.001	0.001	0.001	0.060	0.001	0.999	0.001	0.001	0.001	0.310	0.001
8	0.023	0.497	0.406	0.001	0.001	0.066	0.001	0.001	0.001	0.001	0.001	0.920	0.990
9	0.020	0.392	0.293	0.001	0.001	0.382	0.084	0.490	0.203	0.999	0.500	0.798	0.135
	1.000	0.248	0.200	0.111	0.031	0.145	0.049	0.092	0.008	0.103	0.016	0.396	0.068

Since binary variables were analysed, Table 6 contains only one line per latent style. Each of these lines corresponds to Table 5, with an additional column (p_g) added, which contains the class size parameters. The bottom marginal of Table 6 shows the overall distribution of the analysed variables and thus corresponds to Table 3.

Parameter estimation

Although the LCA model had already been suggested by Lazarsfeld as early as in 1950, no satisfying algorithms for parameter estimation were available until Goodman (1974) developed a stepwise procedure for estimating the unknown parameters p_g and $p_{ix/g}$. As Andersen (1982) shows, the Goodman procedure is a special case of the so-called EM algorithm by Dempster et al. (1977), and thus delivers a maximum-likelihood solution for the parameter estimates.

The rationale of the procedure is the following: If the unknown parameters p_g and $p_{ix/g}$ are known, then the conditional probability $p_{g/\mathbf{xv}} = p(v \in g | \mathbf{xv})$ that a coding unit v will belong to style g if it is coded with the coding pattern \mathbf{xv} can be computed from Equation (4).

$$(4) \quad p_{g/\mathbf{xv}} = \frac{p_g p_{\mathbf{xv}/g}}{\sum_{d=1}^h p_d p_{\mathbf{xv}/d}}$$

In this equation, $p_{\mathbf{xv}/g}$ denotes

$$(5) \quad p_{\mathbf{xv}/g} = p(\mathbf{xv} | v \in g) = \prod_{i=1}^k p_{ixvi/g}$$

Once, the so-called membership probabilities $p_{g/\mathbf{xv}}$ are computed from Equation (4), we can then compute the expected values e_g and e_{gix} of the frequencies

n_g = number of coding units which belong to style g , and

n_{gix} = number of coding units which belong to style g and are coded in category x of variable i ,

given the data matrix \mathbf{X} , from Equations (6) and (7).

$$(6) \quad e_g = E(n_g | \mathbf{X}) = \sum_{v=1}^n p_{g/\mathbf{xv}}$$

$$(7) \quad e_{gix} = E(n_{gix} | \mathbf{X}) = \sum_{v: X_{vi}=x} p_{g/\mathbf{xv}}$$

The sum in Equation (7) is taken over all coding units which are coded in category x of variable i .

Vice versa, the probabilities p_g and $p_{ix/g}$ can be computed if the expected frequencies e_g and e_{gix} are known:

$$(8) \quad p_g = e_g/n$$

$$(9) \quad p_{gix} = e_{gix}/n$$

and finally

$$(10) \quad p_{ix/g} = p_{gix}/p_g$$

The EM algorithm makes use of these results and estimates the parameters of the LCA model for a given number (h) of latent styles (classes) by use of a recursive procedure:

1. Choose starting values of the unknown probability parameters p_g and $p_{ix/g}$.
2. E-Step (Expected values): compute the expected frequencies e_g and e_{gix} from p_g and $p_{ix/g}$ and the data matrix \mathbf{X} .
3. M-Step (Maximum-Likelihood estimation): compute the parameters p_g and $p_{ix/g}$ from the expected frequencies.
4. Replace the former values of the probability parameters by the ones computed in the M-Step and go back to the E-Step of the algorithm.

This procedure is carried on until the maximum of the likelihood is attained.

For any given number (h) of latent styles (classes) the computation of a Latent Class Analysis thus results in Maximum-Likelihood Estimation of the parameters:

$$(11a) \quad p_g = p(v \in g)$$

for $g=1, \dots, h$, which is the class size of the respective style g (= probability that a randomly chosen coding unit will belong to style g).

$$(11b) \quad p_{ix/g} = p(x_{vi}=x \mid v \in g)$$

for $g=1, \dots, h$; $i=1, \dots, k$; and $x=0, \dots, m_i$, which are the class-specific category probabilities. Moreover, we also obtain estimates of the membership probabilities, which tell us, how likely it is that a given coding unit v with coding pattern \mathbf{x}_v belongs to a latent style g :

$$(12) \quad p_{g/\mathbf{x}_v} = p(v \in g \mid \mathbf{x}_v)$$

for $g=1, \dots, h$ and $v=1, \dots, n$.

Although the EM algorithm seems to be circular at the first glance, this is not the case, since in every E-Step the statistical information of the data matrix \mathbf{X} is reinterpreted on the basis of the results of the foregoing M-step.

From a logical point of view, this is analogous to the hermeneutic circle involved in qualitative analysis, which also is no circle, in fact, but rather a hermeneutic spiral, producing a deeper understanding of a text with every step of the process.

Uniqueness of the parameter estimates

In similarity with qualitative analysis, where often (or at least sometimes) there does not exist the one and only correct interpretation of a text, the solutions of the EM algorithm must not necessarily be unique. The likelihood function in Equation (3) may have several local maxima and even more than one global maximum.

1. If there exists one global maximum of the likelihood function, this can always be found by using the EM algorithm, if suitable starting values have been chosen. In order to avoid less likely solutions, it is advisable, therefore, to run the procedure from several starting values and to select the solution which has the highest likelihood.

2. If there are more than just one global maximum present, however, then more than just one latent structure can be found. They are equally good explanations of the analysed data matrix, and there is no criterion for deciding which one should be chosen.

In Latent Class Analysis, this problem is usually discussed under the somewhat misleading headline of 'identifiability' of latent structures.

Sufficient conditions for the identifiability of a latent structure in the surrounding of given parameter estimates have been formulated by McHugh (1956; 1958). According to his theorem, the latent parameters p_g and $p_{ix/g}$ are locally identifiable if the following conditions hold:

$$i) \quad n(C) - 1 = \prod_{i=1}^k m_i - 1 \geq \sum_{i=1}^k m_i - k + h - 1 = n(P) ,$$

where $n(C)$ is the number of possible coding patterns and $n(P)$ denotes the number of (independent) parameters to be estimated.

$$ii) \quad \sum_{u=1}^{n(C)} p(\mathbf{x}_u) = 1$$

iii) The functions $p(\mathbf{x}_u)$ are continuous and have continuous first- and second-order derivatives with respect to p_g and $p_{ix/g}$.

iv) At least $n(P)$ of the $p(\mathbf{x}_u)$ are functionally independent.

The first of these conditions is a necessary condition and states that the number of independent estimation equations must not be smaller than the number of parameters to be estimated.

Condition (ii) is highly redundant and follows directly from the model assumptions. As a consequence of (ii), the number of independent equations cannot exceed $n(C) - 1$.

While the first two conditions for identification are a simple matter of counting, the sufficient conditions are more complicated (see Rindskopf, 1987: 84).

Condition (iii) can be tested after parameter estimation only, though, according to McHugh (1956: 337), a violation of this condition is rather improbable.

Condition (iv) results from the circumstance that all $p(\mathbf{x}_u)$'s are polynomials in p_g and $p_{ix/g}$ (see Equation 1). Accordingly, the Jacoby Matrix

$$(13) \quad J = \partial p(\mathbf{x}_u) / \partial \mathbf{p}_w$$

must have full rank $n(P)$. (The term \mathbf{p}_w denotes the vector of all $n(P)$ independent model parameters).

Usually, the larger the size of the sample of coding units, the less critical the problem of identifiability becomes. As a rule of thumb, Formann (1984: 30) suggests, therefore, that the sample size (n) should always be chosen to be greater than the number of parameters to be estimated:

$$(14) \quad n > n(P)$$

Model selection

A crucial question for the application of Latent Class Analysis is to decide how many latent classes (styles) should be assumed. The best solution would be to assume

- as few classes as possible (which would result in a small number of parameters $n(P)$ to be estimated); and
- as many classes as necessary (in order to obtain a high likelihood of the observed data).

Accordingly, we would choose that solution (number of latent classes) for which the AIC Index (Akaike's Information Criterion) is the smallest (see Akaike, 1987):

$$(15) \quad AIC = -2 \ln(L(\mathbf{X})) + 2 n(P)$$

Alternatively, one might also use the BIC Index (Best Information Criterion), which puts a higher penalty on additional parameters (see Bozdogan, 1987):

$$(16) \quad BIC = -2 \ln(L(\mathbf{X})) + \ln(n) n(P)$$

As compared with the AIC, the BIC tends to favour solutions with fewer latent classes, though both criteria quite frequently produce equivocal results.

In the case of our data on the coverage of alternative ways of settling the Gulf conflict, the nine-class solution was chosen according to the AIC.

Table 7. Goodness of fit criteria for the Latent Class Analysis of the data on the coverage of alternative ways of settling the Gulf conflict

h	ln(L(X))	n(P)	L-ratio	df	AIC
1	-2869.618	12	1292.601	4083	5763.23
2	-2708.930	25	971.225	4070	5467.86
3	-2657.564	38	868.492	4057	5391.12
4	-2557.404	51	668.173	4044	5216.80
5	-2456.286	64	465.937	4031	5040.57
6	-2427.489	77	408.343	4018	5008.97
7	-2368.420	90	290.204	4005	4916.83
8	-2354.040	103	261.444	3992	4914.07
9	-2326.360	116	206.084	3979	4884.71
10	-2319.250	129	191.864	3966	4896.50

Saturated model: -2223.318

Together with the AIC, which has its minimum value at $h=9$ latent classes, Table 7 also shows the logarithmic likelihood of the data matrix ($\ln(L(\mathbf{X}))$), the number of independent parameters to be estimated from the data ($n(P)$), the results of a likelihood-ratio test (L-ratio), which compares the h -class solution with the so called saturated model, and the degrees of freedom ($df = n(C)-1-n(P)$) of this chi-square-distributed test statistic.

The saturated model assumes each possible coding pattern to be a class (style) of its own. Accordingly, it produces the best ever possible description of the data,

and the logarithmic likelihood of the saturated model, which is shown in the bottom line of the table, is the upper bound of $\ln(L(\mathbf{X}))$, which cannot be exceeded. At the same time, however, the saturated model describes the data by use of the highest possible number of parameters, which is $n(C)-1$, and thus results in a rather poor AIC.

In our example, the AIC of the saturated model would be

$$AIC = -2 \times (-2223.318) + 2 \times 4095 = 12636.64$$

The nine-class solution produces both a much better AIC and a likelihood which is as good as that of the saturated model: with $df = 3979$ degrees of freedom, the L-ratio statistic is far from statistical significance.

Contingencies with criteria variables

Once latent styles of coverage have been identified, we might be interested in their correlation with criteria variables like type of media (TV news, tabloid, regional press or prestige papers), type of text (news item or editorial), country (US or European media), the time spot during which an item was published, etc. This can be done by inspecting the (conditional) distributions of the latent styles within the subsample of items from different types of media, different types of texts, etc. These can be computed from Equation (17)

$$(17) \quad p_{g/y} = p(v \in g | Y=y) = \sum_{v: y_v=y} p_{g/\mathbf{x}v} / n_y$$

In this equation, y denotes the different categories of the criterion variable Y . n_y is the number of coding units which are coded $y_v = y$. The sum on the right hand side of Equation (17) is taken over all coding units which are coded in category y of the criterion variable Y . Statistical significance of differences between the various conditional distributions can be tested by the usual chi-square test for contingency tables.

As an example, Table 8 shows the usage of the various styles of covering alternative ways of settling the Gulf conflict in the USA, Germany and in the Scandinavian countries (see also Figure 6). In addition to the various styles of coverage, as identified by LCA, the complete non-coverage of this topic is included as 'Style 0'.

Table 8. Alternative ways of settling the war: Style usage in Western media (Chi-square = 544.20, $df = 36$, $p < 0.001$)

Country	USA	G	FIN	N	S	Total
Style 0	0.8691	0.6114	0.8259	0.8886	0.8440	0.8155
Style 1	0.0398	0.0459	0.0693	0.0421	0.0634	0.0525
Style 2	0.0271	0.0917	0.0178	0.0147	0.0169	0.0313
Style 3	0.0027	0.1319	0.0119	0.0029	0.0046	0.0267
Style 4	0.0229	0.0377	0.0214	0.0158	0.0113	0.0214
Style 5	0.0160	0.0249	0.0176	0.0119	0.0257	0.0188
Style 6	0.0068	0.0171	0.0107	0.0160	0.0203	0.0138
Style 7	0.0155	0.0124	0.0131	0.0065	0.0107	0.0117
Style 8	0.0000	0.0152	0.0068	0.0009	0.0008	0.0044
Style 9	0.0000	0.0118	0.0054	0.0005	0.0023	0.0037
Total	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

5. From quantity to quality

Latent styles

In case of the present data, Latent Class Analysis unveiled that the overall distribution is a mixture distribution of nine latent styles of coverage, which presented specific patterns of information to the public:

A total of 41.1% of the news items focused on the use of military or economic force against Iraq (see Figure 3).

1. 16.7% of the news items presented pure military logic that described military force against Iraq as the only possible or most effective way to settle the conflict (99.9%) and that did not take notice of any other alternative (see also Table 6, style 2).
2. Although nearly the same number of items (14.3%) doubted or denied the necessity or effectiveness of force against Iraq (99.9%) and sometimes referred to third party peace initiatives (13.4%), these items, however, did not reject the use of force unequivocally but even corroborated it quite often (38.0%) (see also Table 6, style 3).
3. Another 10.1% of the news items argued in favour of economic rather than military means (see also Table 6, style 5). Although it was said in these news items that the economic embargo on trade with Iraq should have been given more time to be effective (98.2%), only some of them explicitly doubted the need for military force against Iraq (20.2%). Moreover, these items also did not unequivocally favour the alternative of an economic embargo, but quite often doubted or denied it (25.3%), and sometimes they even described military force as the only reasonable alternative (13.0%).

Military logic obviously set the agenda even for those news items which were critical about the use of military force or which supported an economic embargo against Iraq.

One quarter (25.5%) of the news items focused on either of the war parties' initiatives for negotiations or peace talks (see Figure 4).

1. Although 11.4% of the news items took notice of Iraqi initiatives (97.0%) and sometimes also referred to neutral or third party initiatives (13.4%), these items often doubted, denied or questioned the Iraqi initiatives (41.0%) and tended to present military force as the only reasonable solution to the conflict (13.4%) (see also Table 6, style 4).
2. Those 7.8% of the news items, on the other hand, that reported about UN initiatives (98.2%) raised only little doubt about these initiatives (6.2%) (see also Table 6, style 6). They tended to link them both to third party (10.2%) and Allied initiatives (9.9%), and they made no positive reference to the use of military force (0.1%).
3. Another 6.3% of the items focused on Allied initiatives (99.9%) without any doubt or questioning (0.1%) and often contextualized them with third party or neutral initiatives (31.0%) (see also Table 6, style 7). Though these news items sometimes even referred positively to Iraqi initiatives (6.0%), they still showed some tendency towards the approval of military force (7.6%).

Figure 3. Military or economic force against Iraq. F= Force against Iraq; E = Economic means; I = Iraqi initiatives; A = Allied initiatives; UN = UN initiatives; 3p = Third party initiatives

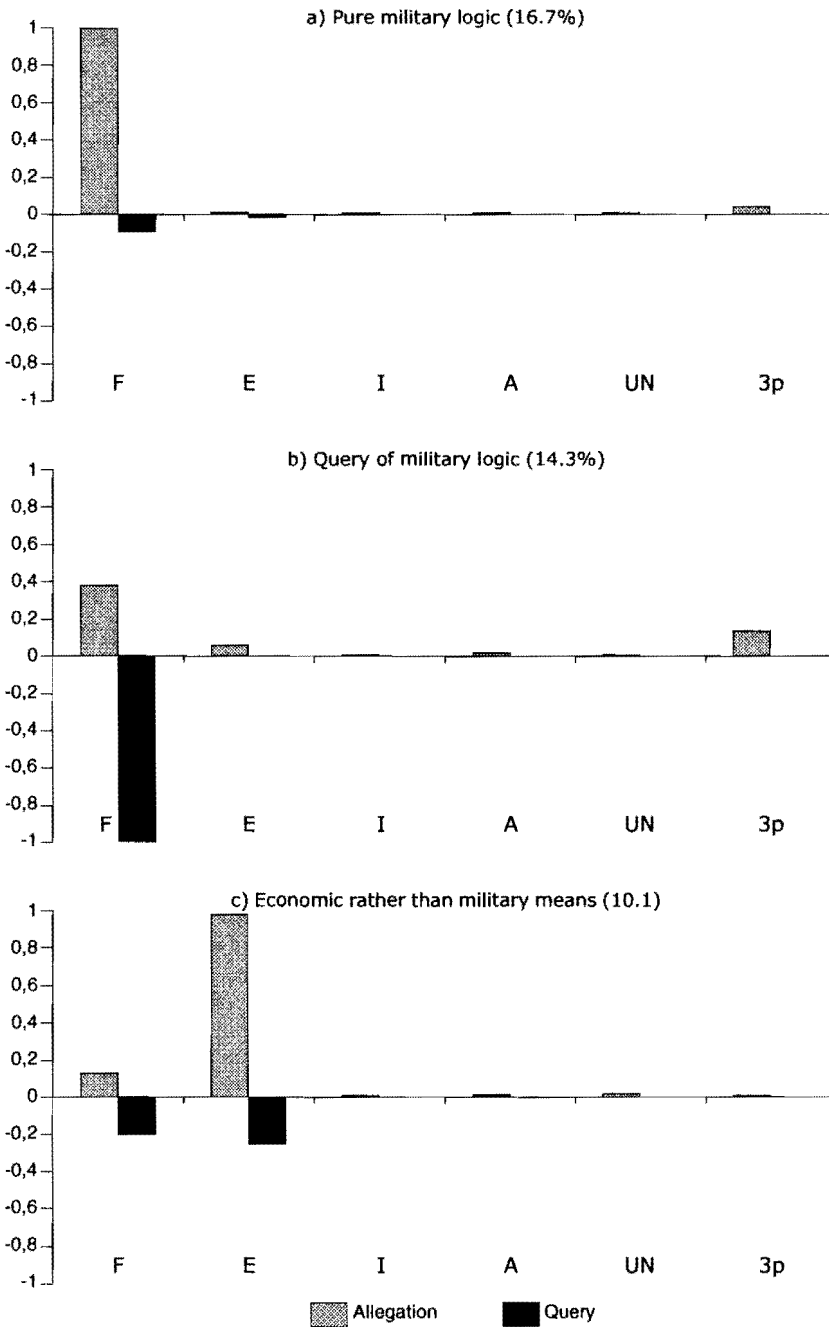
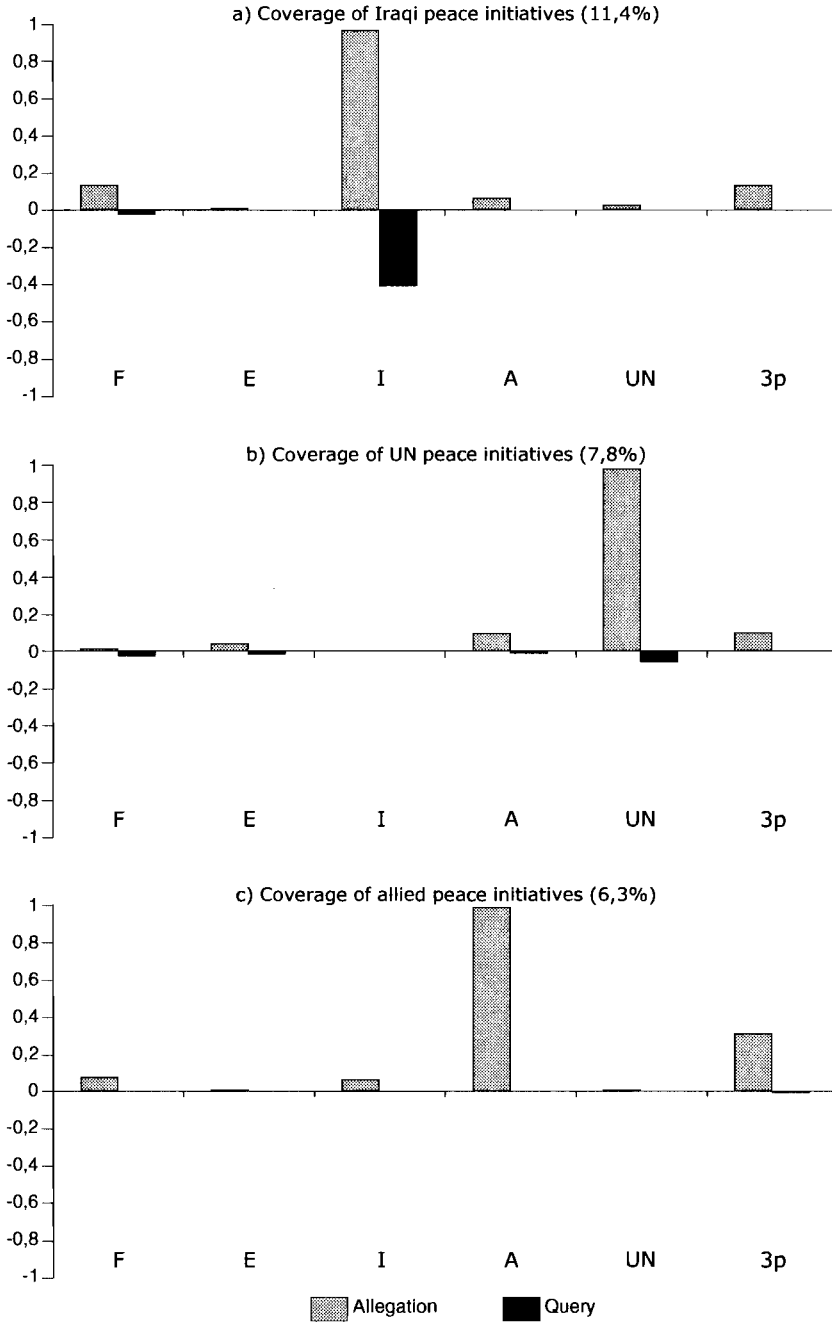


Figure 4. War parties' initiatives for negotiations or peace talks. F= Force against Iraq; E = Economic means; I = Iraqi initiatives; A = Allied initiatives; UN = UN initiatives; 3p = Third party initiatives



The comparison of these patterns unveils two basic principles of an escalation-oriented conceptualization of the conflict: idealization of Allied intentions, against which no doubt may be raised, and demonization of Iraqi intentions, which were highly mistrusted. Moreover, it mirrors the ambiguous role which the UN played in the conflict, which was defined as a UN war and, at the same time, one in which the UN was portrayed as some sort of neutral instance (see Meder, 1994).

One third (33.3%) of the news items focused on third party or neutral initiatives for negotiations or peace talks (see Figure 5).

1. The majority of these items (29.0%) reported or at least mentioned third party initiatives (99.9%) (see also Table 6, style 1). Although they sometimes doubted these neutral initiatives (14.1%), these items expressed only little approval of military force (3.4%) and even made some positive reference to Iraqi initiatives for negotiations or peace talks (6.7%).
2. A rather small number of news items (2.3%) put third party initiatives in the context of military logic (see also Table 6, style 8). In doing so, these items either presented arguments pro and contra or two-sided messages, and they showed a clear bias towards refuting the initiatives and backing up a military solution: Though third party initiatives were also mentioned positively (92.0%), they were doubted or denied nearly without exemption (99.0%), and the need of military force against Iraq was rather approved (49.7%) than questioned (40.6%).
3. The remaining 2.0% of the items referred to third party initiatives in the context of a comprehensive discussion of peaceful alternatives (see also Table 6, style 9): in most cases these items referred positively to third party initiatives (79.8%) and only sometimes did they express doubt about them (13.5%). The focus of the items was put on UN initiatives, which were however evaluated much more ambiguously (allegation: 99.9%; query: 50.0%). Allied initiatives were reported less often but with the same ambiguity (allegation: 38.2%; query: 20.3%) as the UN initiatives. Against Iraqi initiatives, on the other hand, which were given the same positive reference as the Allied ones (38.2%), only less doubt was expressed (8.4%).

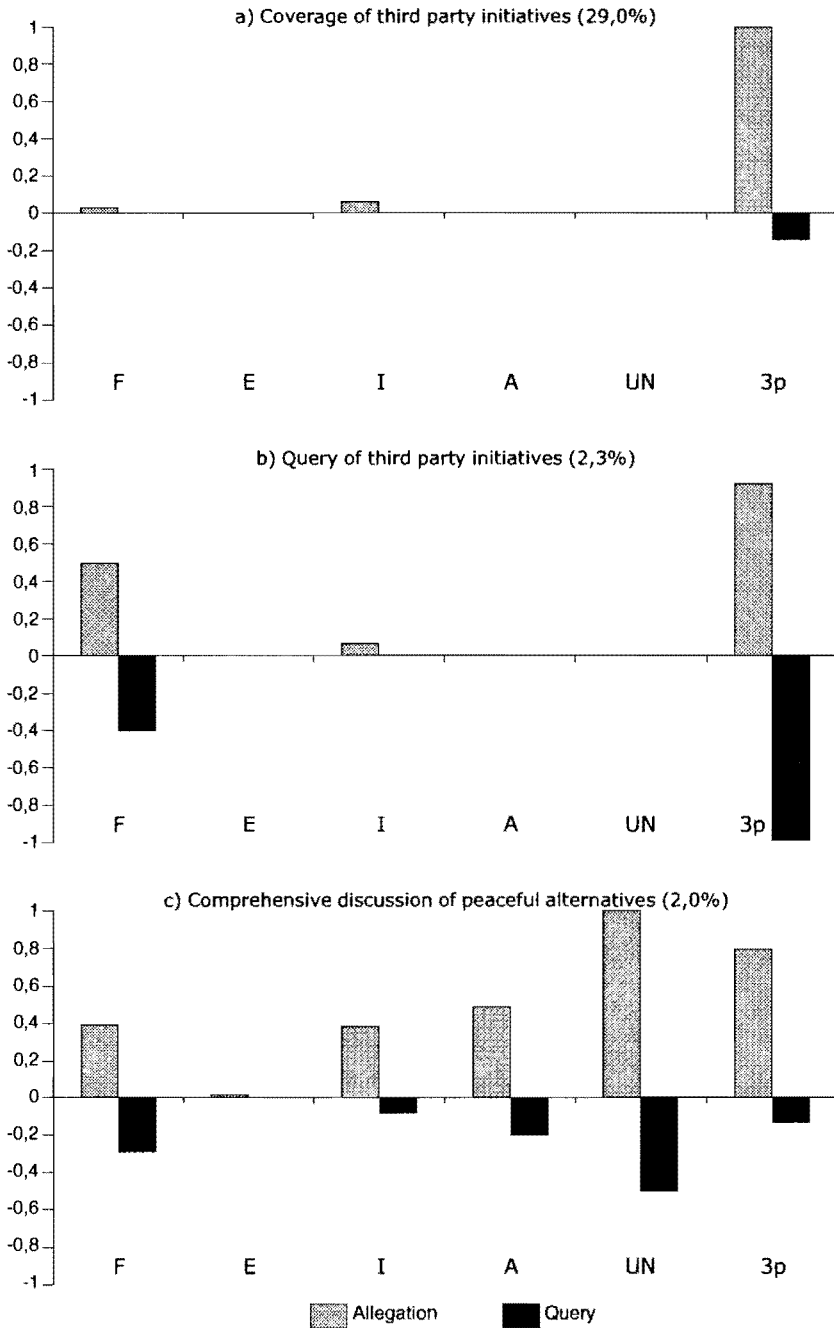
Although these news items were more critical about UN and Allied initiatives than they were about neutral and Iraqi initiatives, it cannot however be concluded that they took a pro-Iraqi point of view. Although they quite often questioned the need for military force against Iraq (29.3%), they rather approved of it (39.2%).

Style usage

Once different styles of coverage have been detected, we can achieve an even better understanding of the selection of facts during the Gulf War discourse by analysing things like

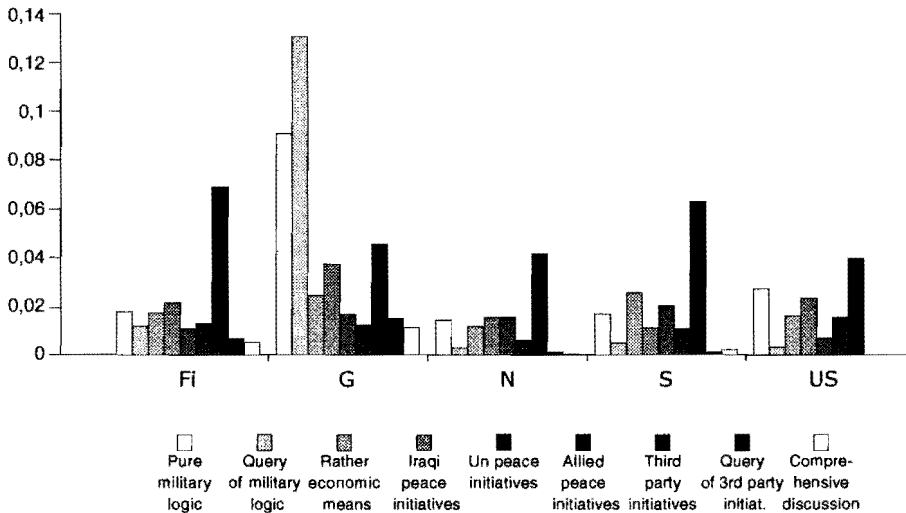
- changes of style usage during the course of the conflict,
- differences in style usage in different types of media, and
- differences in style usage in the various countries that were included in the study.

Figure 5. Third party or neutral initiatives for negotiations or peace talks. F= Force against Iraq; E = Economic means; I = Iraqi initiatives; A = Allied initiatives; UN = UN initiatives; 3p = Third party initiatives



Let us take a look at the last of these issues: how did German and US media select the patterns of information which they presented to their publics?

Figure 6. Alternative ways of settling the Gulf conflict: Style usage in different countries.



As Figure 6 shows, in the US media the presentation of alternative ways of settling the war was clearly determined by the strategic interests of the USA.

- UN and third party initiatives were paid much less attention than was the case in the European countries;
- there was extremely little questioning of military logic; and
- there was no comprehensive discussion of peaceful alternatives at all.

The German media, on the other hand, presented the most extensive and the most controversial discussion of alternative ways of settling the war:

- In particular, they followed the pattern of military logic three times as often as the average Western media;
- on the other hand, questioning of military logic was presented even five times as frequently; and
- a comprehensive discussion of peaceful alternatives was also presented three times as frequently as in the average.

Again, this result becomes meaningful only in the historical context of the Gulf War discourse. While the USA was the leading nation of the Gulf War coalition, Germany was not directly involved in the Gulf War. According to the valid interpretation of the German constitution (at that time), the deployment of German troops was restricted

to the defence of German (or NATO) territory. The Gulf War was used by German politicians and the media, however, in order to start a constitutional debate about the future role of the German military after the fall of the Berlin Wall and German reunification. In order to do this, they had to do two things: give attention to the arguments of the anti-war movement, which was very strong in Germany, and counterbalance this by emphasizing the unrenounceability of military force in order to stop dictators like Saddam Hussein – wherever they might rise in the world, and wherever they might affect German interests (see Kempf, 1994; Meder, 1998; Schlurhoff, 1998).

Linkage to qualitative analysis

At least one aspect of the results reported so far seems to be quite surprising: nearly a third of the news items that dealt with alternative ways of settling the Gulf War reported about third party peace initiatives in a way which seemed quite likely to display at least some critical distance to the Gulf War. By informing the audience about third party peace initiatives, they counterbalanced both the depiction of military force as the only reasonable alternative and the picture of its worldwide consent. The high proportion of news items which followed this pattern makes the Gulf War coverage look less biased than would have been expected.

On the other hand, we must be aware that the results reported so far only tell us about the control of information during the Gulf War. They do not, however, address the mechanisms of acceptance control. No doubt, there was a broad coverage of third party peace initiatives during the Gulf War, and, usually, these initiatives were not overtly rejected by explicit demands for (the continuation of) military force against Iraq. But the media might have used more subtle means of influencing the audience in order to reject these initiatives. In order to detect these means, a more in-depth analysis of the material is needed.

Latent styles analysis is a powerful method, which is apt to cope with several of the shortcomings of traditional quantitative analyses. At the same time, it preserves the advantages of quantitative content analysis and fulfills the requirements of both representativity and a systematic comparison of the sources. All the same, latent styles analysis is no substitute for qualitative analysis and it cannot supersede it.

Documents which are not simply agglomerations of facts participate in the process of living, and every word in them vibrates with the intentions in which they originate and simultaneously foreshadows the indefinite effects they may produce. Their content is no longer their content if it is detached from the texture of intimations and implications to which it belongs and taken literally; it exists only with and within this texture (Kracauer, 1952: 641ff.).

If these properties of a text are to be dealt with, there is no alternative to qualitative content analysis. Qualitative analysis is extremely time consuming, however, and this brings about the problem of representativity.

Qualitative analysts often claim that, though they cannot establish representativity of their analyses, their method is apt to reconstruct the typical instead. And, indeed, there are cases where representativity is not really a problem. If we, for instance, analyse President Bush's war speech on 17 January 1991, the speech stands for itself; it has relevance of its own; it is exemplary of itself. Maybe it is also typical of US

presidents' war speeches in general. Whether this is the case can easily be found out by comparison with other war speeches of other presidents, which still are a limited number of items to be analysed. The problem of statistical representativity simply does not arise.

In the present case, however, as we study the US and European media coverage of the Gulf War, the situation changes dramatically. There are thousands of thousands of news items, and only a handful could be selected for qualitative analysis. Hence, qualitative social science would suggest selecting some typical news items for analysis. But how can we identify items as typical before we have analysed them? In order to select some typical items for qualitative analysis, one would have to know in advance in which documents the typical is to be found.

Latent styles analysis can help to cope with this problem by selecting those coding units for further qualitative analysis which are most typical for the identified latent styles. For each latent style, those coding units can be selected which have the highest likelihood of belonging to the respective style.³ Conveying qualitative analyses of a so-defined sample of typical coding units can then unveil those aspects of the respective texts which cannot be covered by quantitative analysis (see Chapter 12).

6. Qualitative content analysis

In any conflict, there are own side's rights and intentions and other side's actions that interfere with them and threaten their pursuit. But the other side also has rights and intentions that are threatened by our actions. Last but not least, there are also common rights and common benefits, which may serve as a basis for mutual trust. So far, any conflict is open to either take a constructive course or to escalate into a destructive one. Which will be the case depends on whether the conflict is conceptualized as a cooperative (win-win model) or as a competitive process (win-lose model). Competitive processes tend to escalate the conflict, and the more a conflict has escalated, the more the parties in the conflict tend to idealize their own rights, intentions and actions, the more they tend to deny their opponent's rights and to demonize his or her actions and intentions, and the less they recognize common interests and common gains (see Chapter 3).

Media coverage of conflicts may either join into these escalation dynamics, by taking the position of either party in the conflict, or may counterbalance the escalation by emphasizing those aspects that can be realized from a position of critical distance only.

In order to investigate whether the media coverage contributes to the escalation or the de-escalation of a conflict, Kempf, Reimann & Luostarinen (1996) developed a qualitative method which analyses escalating and deescalating aspects of conflict coverage along a total of seven dimensions and three referential levels.

Evaluative means of propaganda I: cognitive representation of the conflict

The first three dimensions of the content analytical system deal with the cognitive representation of the conflict (see Table 9):

1. While escalation-oriented journalism conceptualizes the conflict in a way that gives support to war and military logic, de-escalation-oriented journalism keeps itself open for peaceful solutions and queries war and military logic.
2. While propaganda journalism evaluates the war parties' rights and intentions in an antagonistic way, peace journalism aims at a balanced evaluation of both parties' interests.
3. While propaganda evaluates the war parties' actions in a framework of confrontation, de-escalation-oriented journalism maintains a critical distance to both of them and focuses on chances for cooperation.

Table 9. Conceptualization of the conflict and evaluation of the war parties' rights, intentions and actions.

Escalating aspects: War propaganda		De-escalating aspects: Peace journalism	
1. Conceptualization of the conflict			
W1	Support of war and military logic	P1	Query of war and military logic
W1.1	Construction of the conflict as a competitive process	P1.1	Query of the competitive character of the conflict
W1.2	Emphasis on military values	P1.2	Query of militarism and military values
W1.3	Designation of military force as an appropriate means for conflict resolution	P1.3	Query of the adequacy or effectivity of military force
W1.4	Refutation of peaceful alternatives	P1.4	Demands for peaceful alternatives
2. Evaluation of the war parties' rights and intentions			
W2	Antagonism	P2	Balance
W2.1	Denial of rights of the enemy and demonization of his or her intentions	P2.1	Respecting of rights of enemy and unbiased description of his or her intentions
W2.2	Idealization of own rights and intentions	P2.2	Realistic and self-critical evaluation of own rights and intentions
W2.3	Denial of common interests or of possibilities for cooperation	P2.3	Critical distance to both war parties; emphasis on their common interests; support of anti-war oppositions; signals of peace readiness; mediation efforts
3. Evaluation of the war parties' actions			
W3	Confrontation	P3	Cooperation
W3.1	Justification of own side's actions and underlining of own correctness	P3.1	Critical evaluation of own side's actions
W3.2	Condemnation of actions of the enemy	P3.2	Unbiased evaluation of the other side's actions
W3.3	Conversion of indignation with the war into indignation with the enemy	P3.3	Redirection of indignation with the enemy against the war itself by critical evaluation of both sides' actions, description of both sides' harm and description of the benefit that both sides could gain from ending the war

Evaluative means of propaganda II: social identification and emotional involvement

The next two dimensions deal with incentives for social identification and emotional involvement in the war (see Table 10). ‘So great are the psychological resistances to war in modern nations’, wrote Harold Lasswell in 1927, ‘that every war must appear to be a war of defense against a menacing, murderous aggressor’.

Table 10. Emotional involvement and social identification.

Escalating aspects: War propaganda		De-escalating aspects: Peace journalism	
4. Emotional involvement in the conflict			
W4	Destructive emotions	P4	Constructive emotions
W4.1	Denial of threat to the enemy	P4.1	Recognition of threat to the enemy
W4.2	Confidence in own side's victory	P4.2	Recognition of the price of the victory
W4.3	Stimulation of the feeling of being threatened by the enemy	P4.3	Reduction of the feeling of being threatened by the enemy
W4.4	Stimulation of mistrust of the enemy, his or her allies, and of neutral third parties that try to mediate in the conflict	P4.4	Depiction of perspectives for reconciliation
5. Social identification and personal entanglement			
W5	Confrontative social commitment	P5	Cooperative social commitment
W5.1	Incentives for identification with own side's victims as 'worthy'; dismissal of the other side's victims as 'unworthy'; or minimization of suffering on both sides	P5.1	Incentives for identification with both sides' victims as victims of the war itself
W5.2	Incentives for identification with own side's (non-élite) actors; dehumanization of the other side's actors; and/or dehumanization of those who strive for a peaceful conflict resolution	P5.2	Impartiality towards both sides' (non-élite) actors and/or incentives for identification with those who strive for a peaceful conflict resolution
W5.3	Incentives for identification with the own side's élite; dehumanization of the other side's élite; and/or dehumanization of élites that strive for a peaceful conflict resolution	P5.3	Impartiality towards both sides' élites and/or incentives for identification with élites that strive for a peaceful conflict resolution

The purpose of war propaganda is to maximize the will of own soldiers and civilians to fight and to minimize the fighting spirit of the enemy. As regards the own public, this requires making it identify strongly with one's own side and maintain a delicate balance between the emotions of feeling threatened by the enemy and feeling confident that one's own side can win the war.

4. While escalation-oriented conflict coverage stimulates destructive emotions like mistrust of the enemy, his or her allies, and third parties that try to mediate in the conflict, peace journalism would rather try to reduce the emotional stress of the audience and to focus on perspectives for reconciliation. While propaganda stimulates confidence that the war can be won, de-escalation-oriented journalism would rather point towards the price that has to be paid for a military victory.
5. While escalation-oriented journalism aims at a confrontative social commitment and gives incentives for partial identification only with one's own side and rejec-

tion of those who strive for a peaceful conflict resolution, peace journalism would rather aim at a cooperative social commitment, rather try to stay impartial towards both sides and give incentives for identification with peaceful alternatives and their actors.

Manipulative means of propaganda I: communication disorders

Social identification also plays a crucial role in the last two dimensions (see Table 11), which deal with the communication disorders that are used by propaganda as manipulative means: two-sided messages and double-bind communication (see Chapter 10 for more detail).

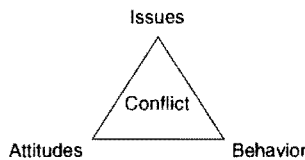
Table 11. Communication disorders

6. Two-sided messages	
#6.1	Anticipation of criticism
#6.2	Rejection of the anticipated information
7. Double-bind communication	
#7.1	Inherent contradictions
#7.2	Emotional involvement with both contradictory messages

Manipulative means of propaganda II: harmonization of referential levels

Conflicts take place not only on the level of the issues which are a matter in dispute, but they involve the levels of behaviour and attitudes as well (see Galtung, 1987). These levels are not independent of each other, and any modification of a conflict on one of these levels affects the complete system (see Figure 7). In conflict coverage, they correspond to different referential levels of the text (see Chapter 1), such as interpretations of the conflict context (issues), concrete descriptions of topical events (behaviour) and descriptions of mythical or religious dimensions of the conflict (attitudes).

Figure 7. Galtung's Conflict Triangle



Any successful propaganda is a coherent construction with tight links between the different levels. The different levels support each other.

- On the level of the *conflict context*, propaganda tells us the roots of the conflict, why it was unavoidable, what we are defending and why the enemy did attack.

- The level of *topical events* contains classical propaganda material, such as description of battles, expressions of support coming from other countries, heroic stories and stories of atrocity, etc.
- On the *mythical level*, finally, material about the logic of history, about the meaning of life, etc. is provided.

A typical pattern of war propaganda might be that single day-to-day stories are selected and written in a way that fits into the conflict context which supports the suggested identification and which enforces the myths. 'Myths, as we know, are told in the form of concrete stories, and the order of the elements in the story tells the myths' (Luostarinen, 1994: 3).

The harmonization of the referential levels leads to texts which often seem heterogeneous at the surface, but in their structure they repeat the same theme which has been chosen for the core message of the propaganda and thus seem to give proof to its truth from a variety of angles.

The content analytical method of Kempf, Reimann & Luostarinen (1996) adheres to these levels and their mutual dependence in terms of analysing the argumentative structure of a text: which level does it start from, how does the escalation process proceed through the various levels, and on which levels is it counterbalanced by the introduction of deescalating aspects?

7. Applied propaganda techniques

Applying this method of qualitative analysis to a selection of typical news items reporting about third party peace initiatives (see Kempf, 1997b) brought about results that demonstrated a gross orientation towards conflict escalation in the US and European media. Although the media placed high emphasis on reporting alternatives to violence, there was extremely little critical journalism that gave peace a chance.

As a basis for analysis, one typical news item was chosen from the quality press of each of the five countries that were included in the study. Two of these news items were published at the very beginning of the air raids against Baghdad in the *Washington Post* (USA) and in *Süddeutsche Zeitung* (Germany). The third item was published in *Helsingin Sanomat* (Finland) on the same day that reports about the bombing of the Amirya bunker provided evidence of Iraqi civilian victims for the first time. The other two items were published in *Aftenposten* (Norway) and *Dagens Nyheter* (Sweden) during Gorbachev's last peace proposals before the start of the ground offensive.

The only item that did not frame the peace initiatives in an escalation-oriented context was the article from *Helsingin Sanomat*. Reporting mainly on the level of day-to-day events about two (futile) diplomatic efforts to stop the Gulf War (the visit of Yevganij Primakov to Baghdad and the meeting of the non-aligned countries), this article involves quite a few escalating elements. Since most of these are denials of the efficiency of diplomatic or political means of conflict resolution, however, they seem to be rather unavoidable in reporting the events which are the topic of the article. As the article gives space to third party initiatives as an attempt to persuade Saddam Hussein to retreat from Kuwait, it also includes a number of de-escalating

elements: the questioning of military force as suitable; demands for peaceful alternatives; perspectives for reconciliation; and critical distance from both sides. Again, however, these are a result of the facts being reported and not of the specific journalistic presentation.

The articles from *Aftenposten* and *Dagens Nyheter*, on the other hand, are more or less straightforward propaganda, discrediting Gorbachev's peace plan either by expressing concern about the prospects of Saddam Hussein remaining in power (*Aftenposten*) or warning of the risk that 'the new Iraqi indulgence is merely a trick' (*Dagens Nyheter*). Both texts are dominated by escalating aspects, such as military values, framing the conflict in a win-lose model, negative references to mediation efforts and refutation of peaceful alternatives, emphasis on threat from the enemy and stimulation of mistrust of the enemy, demonization of enemy intentions, and incentives for identification with one's own side's elite.

Finally, more refined propaganda techniques were applied in the articles from the *Washington Post* and *Süddeutsche Zeitung*, which mentioned third party peace initiatives mainly in order to put the blame for the war on Saddam Hussein. Both these articles took up a last-moment peace initiative by Mikhail Gorbachev in order to portray the attack on Iraq as unavoidable. Both articles reported on Gorbachev's initiative to postpone the bombing only after assuring the audience that the Soviet Union had expressed support of the attack and put the Soviet reaction to the Allied attack on Iraq into the context of positive reactions all over the world. Some of the world's nations expressed concern but supported the war nonetheless. Only Cuba, North Korea and Iran condemned the bombing raids.

While the article from the *Washington Post* was clearly dominated by escalating aspects (mainly support of military solutions and construction of the conflict as a competitive process)ⁱ and followed a pattern of two-sided messages (expressing support for the war and anticipating possible counter arguments), the strategy of *Süddeutsche Zeitung* was even more refined. The article devoted much space to critical voices that regarded the outbreak of war as a tragic event (which was, however, unavoidable since Iraq had shown itself to be unyielding) and to Gorbachev's mediation efforts. The Soviet efforts were covered quite positively and in great detail. They were neither queried nor explicitly rejected. There were even incentives for social identification with Gorbachev. At a first glance, the article seems, therefore, to be a confusion of escalation- and de-escalation-oriented elements. Under closer inspection, however, the text breaks down into five sequences, which represent five argumentative steps towards the conversion of indignation with war into indignation with the enemy (see Chapter 12). The whole article has the form of a two-sided message, in which the positive coverage of Gorbachev's peace initiative plays an essential role. Criticism of Allied policy as well as indignation with the outbreak of war and the failure of the international community are turned against Saddam Hussein. In this scenario, the detailed description of the Soviet mediation efforts and the incentives for identification with Gorbachev serve to reinforce the outrage at Saddam Hussein. The more the Soviet mediators have striven for a peaceful settlement of the conflict, and the more this is appreciated by the article, the more it is justified to blame Saddam Hussein for the failure of the mediation efforts, the more responsibility can be attributed to Saddam Hussein, and the more it seems justified to fall back upon military means.

The differences in orientation towards conflict escalation and propaganda techniques applied in the analysed articles may be due to the events reported and their discursive context as well as to the overall direction of the respective papers.

The article from *Helsingin Sanomat* appeared during a phase of the Gulf War in which it had become visible for the first time that the Gulf War was not a clean and merely technical war between weapon systems but a real war that produced real casualties and also affected the Iraqi civil population. During that time-spot, it would not have been wise for propaganda to reveal itself openly and, moreover, the Finnish media were also much more hesitant about supporting the Gulf War and reported about it in a more detached way (see Kempf, 2000).

The articles from *Aftenposten* and *Dagens Nyheter*, on the other hand, were published during a phase of the war in which the enemy image of Saddam Hussein was well established. On the eve of the ground offensive, it was essential for propaganda to dismantle any initiative that could have disturbed the strategic plans of the military, and there was little risk in doing so quite openly. Public opinion had come to terms with the war already, and the peace movement (which was not so strong in Norway and Sweden) had nearly broken down.

At the outset of war, when the articles from the *Washington Post* and *Süddeutsche Zeitung* were published, the situation was quite different. There was still a strong peace movement (even in the USA, and more so in Germany); the enemy image of Saddam Hussein was much weaker; and a good deal of the public (especially in Germany) was still reluctant about the war and confused about its objectives. During this time-spot, it was essential for propaganda to integrate critical voices into its strategy, to intensify the enemy image, to justify the allied attack as an *ultima ratio* and to pin the blame on Saddam Hussein. Accordingly, propaganda had to be much more cautious and refined.

Notes

1. That is, i.e. the share of coding units (e.g. news items) that stems from each of the latent classes.
2. Reading of this section can be omitted without loss of continuity.
3. That is, selecting those news items that have the highest membership probability (see Equation 4) for that style.
4. De-escalating aspects – such as the (implicit) recognition of the price of military victory and the questioning of military force as suitable or necessary – are also reported, but little emphasis is given to them.