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Database of Variables for Content Analysis

Causal Attributions (Framing)

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KEYWORDS
journalism, press content, framing

ENTRY IS CONNECTED TO

- framing devices
- cultural motifs

BRIEF DESCRIPTION

Causal attributions are an element of a frame (Entman, 1991). Furthermore, a causal attribution organizes the anatomy of a problem within a text. Hereby, causal attributions provide explanations of problems in terms of their expectations, the underlying reasons or the causes that led to one or more problems depicted in the text.

FIELD OF APPLICATION/THEORETICAL FOUNDATION

The causal attributions variable is used in both deductive and inductive framework analyses (e.g., Boesman & Van Gorp, 2018; Cools et al., 2024; Van Gorp, 2007, 2010). Frame analyses with a socio-constructionist approach (Van Gorp, 2007) discuss a strong correlation of causal attributions with cultural motifs (Gamson & Modigliani, 1989). However and in the context of journalistic articles in particular, the main aim tends to depict the facts and problems of an event that is being discussed and to be able to understand and solve it. To that, causal attributions are – presumably – more closely linked to the problem definition than to the cultural motifs. In other words, not every problem may be underpinned by a cultural dimension in a press release, but it is far more likely to be underpinned by a causal attribution.

REFERENCES/COMBINATION WITH OTHER METHODS OF DATA COLLECTION

Causal attributions refer to a causal interpretation of an event or an actors' statement, while also highlighting certain aspects of cultural motifs. This may be a result of "discursive negotiation".
Example studies: Pentzold & Knorr (2024), Pentzold & Fischer (2017), and Van Gorp & Vercruysse (2012)

EXAMPLE STUDY ON VAN GORP & VERCRUYSSE, 2012

Authors: Baldwin Van Gorp and Tom Vercruysse
Research questions: What are the dominant frames used to represent dementia and what alternative frames could be proffered?
Object of analysis: An inductive frame analysis to examine the various ways in which the media define dementia both in news aggregates and in audio-visual material from the internet. The aim is to find indications of how and what conceptions people gain of dementia through news, audiovisual material, novels, and public health brochures. Hereby, the analysis followed an initial three-step coding procedure: First, the authors conducted the material inductively by coding key terms, with regular feedback moments to discuss potential divergences. This first phase ended when no new frames were detected, followed by an axial coding procedure of the whole material during phase two. Here, every new passage from the material had to be connected to at least one frame package so to verify the pre-defined frames from phase one. Third and lastly, frame packages were created by linking both *reasoning devices* and *framing devices* with a *cultural theme*.
Time frame of analysis and analyzed media type: The sample consisted of a representative selection of Belgian newspaper coverage from March 1, 2008 to July 1, 2010. In addition, books about de-

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mentia (n=20) were examined together with (audio-)visual material (n=14) based on the search results for "dementia" on www.imdb.com and www.youtube.com. Finally, public health brochures of dementia were part of the sample (n=15).

INFORMATION ABOUT VARIABLE

Variable/name definition: Frames/frame packages that define dementia

Scale: Nominal

Level of analysis: In the beginning by paragraph level, then the whole text as the frames began to emerge more clearly.

Sample operationalization: A frame / frame package consists of seven elements. These are the following: (1) cultural theme; (2) definition of the problem; (3) cause (why is it a problem?); (4) consequences; (5) moral values involved; (6) possible solutions/actions; (7) metaphors, choice of vocabulary.

Values: The qualitative analysis resulted in a total of twelve frame packages (six frames and six counter-frames). Each consists of a central cultural theme, a definition of dementia, the causes and possible consequences, the moral evaluation and possible future scenarios of dementia. (1A. Dualism of body and mind vs. 1B. Unity of body and mind; 2; The invader; 3. The strange travelling companion; 4A. Faith in science vs. 4B. Natural ageing; 5. The fear of death and degeneration; 6. Carpe diem; 7A. Reversed roles vs. 7B. Each in turn; 8A. No quid pro quo vs. 8B. The Good Mother)

Reliability: First, both authors coded independently of each other and met to discuss differences. This resulted in tentative frames which were used for further qualitative research of the material. Then, the frames found were discussed with experts (in a workshop setting).

Codebook: Description of the sample (newspapers and audiovisual material) can be found at the end of the article (appendix of Van Gorp & Vercruysse, 2012).

INFORMATION ON PENTZOLD & KNORR, 2024

Authors: Christian Pentzold and Charlotte Knorr

Research questions: With which imaginaries do journalistic reports make sense of Big Data? (RQ1) How do these imaginaries evolve over time? (RQ2) To what extent are the imaginaries similar or different across countries? (RQ3)

Object of analysis [and analyzed media type]: The project Framing Big Data (DFG 2021-2024) analyzed the media-communicatively articulated frames on "Big Data" in online newspapers and magazines from three countries: South Africa, Germany, and the United States. No visual material was collected or examined. In total, material from 26 newspapers and magazines was analyzed. The time frame ranged from 2011 to 2020 (N=1,456). Articles had to contain the keywords "big data" or "dataf*" (e.g., datafication, datafied) in the headline, sub-headline and/or first paragraph (sampling criteria).

To analyze the frames manually, it was assumed that frames are organized according to three levels analysable in a press text. First, the *reasoning devices*, followed by – secondly – the *framing devices* (references, argumentation patterns, idioms, metaphors, topoi) and – thirdly – the *cultural motifs*. Coming from a socio-constructionist approach, a cultural motif is the anchor of an idea expressed in a text (Van Gorp, 2010, p. 7). It is connected to a social problem. To understand this connection, the problem definition, causal attribution, treatment recommendation, and moral evaluation associated with the coded cultural motif were analyzed (cf., Van Gorp, 2010, p. 91-92; Entman, 1991, p. 52). These four elements are the *reasoning devices* of a frame. They are accompanied by the so-called *framing devices* which are stylistic devices, catchphrases, metaphors, and references. To that end, for the manual frame analysis on Big Data in the press aggregates, we developed codes for framing devices (1), reasoning devices (2), and cultural motifs (3). All three elements form part of a frame package (Van Gorp, 2007, 2010).

To build the frame packages, we followed procedures of both block modeling and cluster analysis. First, a block modeling was conducted – as introduced by White for structural analyses (White et al., 1976) – to prepare the data set for the cluster analysis. Then, the coded cultural motifs, the reasoning devices, and the framing devices that correlated strongly in the data set (a total of 9 variables and 34 codes) were chosen. With that, a hierarchical cluster analysis (Ward method) was conducted (Matthes & Kohring, 2008, p. 268). Binary variables were calculated for each of the codes of the nine variables.

Time frame of analysis: 2011, Jan 1 – 2020, Dec 31

Codebook: Public_Codebook_FBD_fin.pdf

INFORMATION ABOUT THE VARIABLE

Variable name/definition: Causal Attributions

Scale: Nominal

Level of analysis: Whereas the formal categories in the manual content analysis were coded at the level of a single news item, the individual frame elements were coded at the level of propositional units. A propositional unit (= analysis unit) can be connected to several codes that are assigned to either a framing device, a reasoning device or a cultural motif. Not all but some frame elements had to be present in the news item, and at least one reasoning device. Furthermore, at least one reasoning device should be tied to a framing device and/or cultural motif to prove that the propositional unit contains semantic relationships and not just elements of "raw text" (van Atteveldt, 2008, p. 5).

Sample operationalization: Causal attributions are part of reasoning devices that include a problem definition, a causal attribution, a treatment recommendation, and a moral evaluation. To identify a causal attribution, we asked: What causes, reasons or expectations are associated with big data while others are ignored? How does an articulated cause, reason or expectation shape a concrete problem of big data while hiding others? Either as expectations (following the conviction/ hope etc. to ...) OR reasons (in order to...) OR as causes (because of ...) for big data. (multiple causal attributions can be coded per article; but only one per propositional unit)

Values: see Table 1.

Reliability: α = .669 [Krippendorff's alpha, intercoder reliability. A total of seven reliability tests were conducted, five of them during the coding phase and two as part of two pretests. Five coders were involved in four tests, four coders were involved in three tests. All tests were conducted in the period July 2022 to December 2022].

Table 1. *Values used for the variable causal attributions described for Big Data (Pentzold & Knorr, 2024).*

Code	Label	Description
1	advances in health and medicine, self-optimization	(mostly expectations associated with Big Data); Big Data is used to predict future health and to cure / heal diseases; also research purposes for scientific purposes (to find something out)
2	military/governmental exploitation	new technologies (AI, drones and robots) collect data and/ or can be used for surveillance and defense, for military intelligence, police investigations, data for security: push-pull between privacy and security in the digital age
3	data as resource to make profit / sell data, also meta data;	Advances in workflows: detailed information about consum-ers/workers/employees: data profiles (consumers, economic dimension), profiling social behavior and mobility patterns, consumer behavior, social media marketing, analyzing meta data to predict the future of what people will buy (not) buy, predicting consumer trends, changes on the labor market, economic developments, the machines that store data and the technologies that collect it are becoming increasingly efficient. this can save costs.
4	detailed information about voters; behavioural microtargeting (political dimension)	voter mobilization; predicting voting behavior
5	networked architectures (macro)	databases are globally connected, the technical infrastructures are already established, lower costs for data collection and storage, people are proceeded into data; free Services from companies for the price of some data, monitoring as default citizens get used to
6	risks of datafication are abstract, not considered (macro)	lack of citizen interest and privacy interests in Big Data, “trends and changes are neglected”
7	deficient laws	politically not regulated, in-transparency of contracts, police investigations are not regulated, grappling with balance of power: who will make decisions for us in the future? Ubiquitous mass surveillance; lack of expertise in handling Big Data (lack of organization of accumulated Big Data), persistence of data as data shadows (in the most negative sense: identities can be stolen)
8	Terror attacks in the past	Big data analyses to prevent terrorist attacks like 9/11
9	something else/ nothing detected	data pollution, data exhaust

Note: No multiple coding.

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