Corpus-Based Linguistic Approaches to Critical Discourse Analysis

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Why Are Corpus Linguistics and Critical Discourse Analysis Combined?

In language and communication research, a wide range of theoretical frameworks and methodological approaches have been employed, among which are corpus linguistics (CL), critical discourse analysis (CDA), and an innovative combination of CL and CDA (Baker et al., 2008).

CL is an empirical method of linguistic analysis and description, which uses corpora as the primary data and starting point. It accommodates the full evidence from the corpus and analyzes this with the aim of finding "probabilities, trends, patterns, co-occurrences of elements, features or groupings of features" (Teubert & Krishnamurthy, 2007, p. 6) and arrives at generalizations about language phenomena. Basic CL research methods include the generation and study of word lists, key words, collocates, and concordances, backed up with measures of statistical significance. CL is primarily quantitative and interested in the local context of situation, namely the analysis of concordance, which is "a collection of the occurrences of a word-form, each in its own textual environment" (Sinclair, 1991, p. 32). Corpus linguistic methods have been applied to address discourse-level phenomena, namely "characteristics associated with the use of a language feature," "realizations of a particular function," "characterizing a variety of language," and "mapping the occurrences of a feature through entire texts" (Conrad, 2002, p. 75). CL has also been employed in CDA research.

CDA views "language as discourse and as social practice" (Fairclough, 2001, p. 21) and studies the relationship between language and ideology (e.g., van Dijk, 1997; Fairclough, 2001; Wodak, 2001). Following Halliday's (1985) approach that perceives "language as firmly rooted in its sociolinguistic context" (Orpin, 2005, p. 37), CDA is comprised of three stages: description of text, interpretation of the relationship between text and interaction, and explanation of the relationship between interaction and social context (Fairclough, 2001, pp. 21–2).

CDA has been criticized for its methodological weakness, mainly due to its qualitative approach to linguistic analysis, which results in "fragmentary [and] exemplificatory" text types (Fowler, 1996, p. 8). Others, including Widdowson (1996, 2000a), criticize CDA for lacking in academic rigor, primarily because data analysis tends to bear out the analyst's subjective preconceptions (Orpin, 2005, p. 38). Stubbs's (1997) criticisms of CDA are mainly concerned with its lack of representativeness in the short or fragmentary texts and randomly selected data, as well as the failure on its part to make generalizations of the results of CDA research because the linguistic features are rarely compared with norms in the language (Orpin, 2005, p. 38).

In response to this criticism, Stubbs (1997) suggests using CL methodology to bolster CDA, specifically through using random sampling, analyzing a large collection of text, and comparing the textual features under study with language norms captured in a corpus in

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order to make reliable generalizations about typical language use. Responding to Widdowson's (2000b) position paper, "On the Limitations of Linguistics Applied," Stubbs (2001) points out that although Widdowson raises important issues about text interpretation, his argument is flawed: "since he does not discuss the inherently quantitative, variable, and comparative nature of corpus data, he cannot directly discuss the relations between textual, cognitive, and social phenomena" (p. 149).

The challenge of marrying the qualitative methods of CDA, which examine grammatical or lexical choices made to express social processes and social phenomena, and the quantitative CL methodology, which is mainly used for studying the lexicogrammatical and collocational patterns of lexical items (Sinclair, 1996), is to decide "which aspects of the CDA approach can be best served by corpus analysis" and "to find a point or points of entry into the data" (Orpin, 2005, pp. 38–9).

Research Studies Using CL Approaches to CDA

Some studies have usefully and effectively combined CDA and CL methods by comparing frequencies of words and phrases and collocational and syntactic patterning (Orpin, 2005), including investigation into pronoun use in sexism and language (Stubbs, 1992); transitivity choices in the encoding of causation and agency in geography textbooks (Stubbs & Gerbig, 1993); analysis of representations of the EU in the British press (Hardt-Mautner, 1995), representations of women in the news (Caldas-Coulthard, 1993); the diachronic study of *ethnic*, *racial*, and *tribal* between two corpora, namely the pre-1985, 18-million-word Birmingham Collection of English Texts and the post-1985 Bank of English, at that time 167 million words (Krishnamurthy, 1996); comparison of representations of the foreign in the British and Polish press (Galasinski & Marley, 1998; see below); business texts about ecological issues (Alexander, 1999); British parliamentary debates on European integration (Bayley, 1999); analysis of New Labour rhetoric (Fairclough, 2000); and the reporting of the 1995 Yorkshire drought (Jeffries, 2003).

Using a transcribed political interview from a corpus of 65 interviews recorded from the BBC between 1985 and 1990, Simon-Vandenbergen (1997) investigates "modal (un)certainty in political discourse" (p. 341). The term "modal certainty" refers to devices speakers use "to convey a high degree of commitment to the validity of their propositions" (p. 344) as "means of 'intrusion into the speech event' [to] express interpersonal meanings" (Simon-Vandenbergen, 1997, p. 344). The study analyzes the most important interpersonal choices identified in the political interview, namely modal auxiliaries and adverbs (*will*, *going to*, and *would*); modality expressed by lexical verbs (*I think, I suppose*); modality expressed by conditional clauses; modality expressed by nouns (*possibility*, *chance*, *likelihood*, etc.); usuality (*continuously, constantly*, *ever ever*, *never*); evaluative adjectives that express grading (*incredible*, *remarkable*, *great*), including superlatives and degree words (*completely*, *relatively*, *somewhat*, etc.); quantifiers (*all*, *any(thing/body)*, *none*, *most*, *the majority*, *many*, *a load of*, *very few*); scaling by syntactic means, that is, repetition and parallel structures; metalinguistic comments with a modal value; marked choices of person; the lexical register of deception and imagination; and lastly the modal function of intonation (Simon-Vandenbergen, 1997, pp. 345–50).

Beaugrande (2001) converts Widdowson's (2000b) position paper into a miniature data corpus and conducts a corpus-based CDA by subjecting the paper to analysis by the three methods criticized in it, namely Halliday's functional linguistics, Sinclair's CL, and Fairclough's CDA. The corpus is analyzed in terms of frequent words, such as *reality* and its other forms, *argue* attested in verbs and nouns, and the concordances of these words, to uncover "some interpretative possibilities that might otherwise not be realized" (p. 118).

In Hong Kong, Flowerdew (2004) examines a corpus of 140 speeches, interviews, press conferences, and other pronouncements either delivered by or involving the first chief executive of the Hong Kong Special Administrative Region (SAR) of the People's Republic of China (PRC), Tung Chee-hwa, after the return of Hong Kong from Britain to Chinese sovereignty on July 1, 1997. Flowerdew's findings show that Tung's discourse has an emphasis on the development of a "knowledge-based" economy in relation to the free market (2004, p. 1553), and when Tung speaks about the economy in a positive manner, very often he is referring to the state of the Chinese, rather than Hong Kong's, economy (p. 1567). Tung's discourses show an attempt to downplay the role of democratic development and to emphasize both that Hong Kong people are believers in Confucian values and Hong Kong people's essential Chineseness, trying to "establish a new identity for the people of Hong Kong" (pp. 1575–6).

Also in Hong Kong, Cheng (2004) reports on the analysis of 12 public speeches made by Tung Chee-hwa between October and December 2001, at two levels of meaning making: collocational and intonational. The study provides evidence for the ways in which a public speaker constructs a relationship with the audience and the ways in which the speaker conveys particular meanings and ideological positions by means of making lexicogrammatical and intonational choices, both directly and indirectly. Cheng (2004) concludes that, first, some of the findings are less generalizable to other contexts where public speeches are made by political leaders because those examined in this study are specific to Hong Kong; second, political discourses and perhaps other genres in the public domain tend to transmit short-term priorities or agendas, albeit reflecting underlying values, as opposed to longer-term values and beliefs; third, politicians need to generate "buzz collocations" and "buzz idioms" to drive home their messages, but these also need to be reworked and repackaged from time to time, which may add to the temporary nature of some patterns of language use in the context of political speeches; and lastly, unique patterns of discourse intonation choices are found based on the key words and collocates examined.

Sotillo and Wang-Gempp (2004, p. 91) focus on quantitative and qualitative analyses of a 46,300-word corpus of online political discussions with residents of five northern New Jersey towns as participants. Their study analyzes the use of "epithets, hyperbole, lexical choices, word collocations, verbs of collocation, and personal pronouns" in the corpus, and by using a CDA framework, it examines the discursive practices in terms of social classes, power relations, and conflicting political ideologies.

In another study, Orpin (2005) examines a group of eight words that are semantically related to *corruption*, namely *corruption*, *sleaze*, *bribery*, *graft*, *malpractice(s)*, *impropriety/ties*, *nepotism*, and *cronyism*, in a corpus of 800 texts from 4 of the 17 subcorpora of British newspapers: the *Guardian*, the *Independent*, *The Times*, and the tabloid *Today*. By analyzing the semantic profiles, identifying the geographical locations the words refer to, and comparing the connotational similarities and differences of these words. Orpin (2005) finds that words with a noticeably negative connotation tend to be used when referring to activities in countries including Italy, Pakistan, South Korea, India, and Malaysia (pp. 56–7), while less negative words are used when referring to similar activities in the international pages of the British press (p. 57). The instances of language use are compared against the norms of language use as reflected in the then 323-million-word Bank of English (p. 59). Orpin (2005) draws on CDA theory to interpret the ideological stance shown, including in Britain the growing dissatisfaction with the then Conservative government, the public concern over deregulation and greater private ownership of previously public assets, and shifting awareness of corruption from abroad to Britain (pp. 57–8). Orpin concludes by declaring that corpus methodology is employed not to replace qualitative analysis but to complement it in order to back up CDA assertions with reliable, empirical evidence (p. 59).

O'Halloran (2007) studies one aspect of CDA, namely how metaphors in texts are used to express ideology, along the lines of Lee's (1992) analysis of metaphors in a hard news text. Examining a corpus of newspapers of 260 million words from six newspaper subcorpora from 1999–2003, the Bank of English, O'Halloran examines the collocational and lexicogrammatical patterns of words that Lee identifies as metaphors, namely *simmering*, *erupted*, and *swept through*. Whereas Lee (1992) argues that *simmering* and *erupted* are used metaphorically for volcanoes, O'Halloran's (2007) hard news corpus study finds that "across different forms of the lemma, 'erupt', there would seem to be a *cline of delexicalisation* from 'eruption(s)' to 'erupt(s)' to 'erupted'" (p. 20), in that the past tense form *erupted*, as well as *has been simmering*, has a semantic association with human phenomena rather than volcanoes, while the collocational pattern of *eruption* reveals meanings "associated with volcanoes inside and outside the hard news register" (p. 20). This study therefore concludes that the corpus-informed interpretation of metaphor at the register level—hard news texts in this case study—has the advantage of avoiding both "pretextual metaphorical lexicalization of textual data" and "producing a misleading overall interpretation of textual data identified as metaphorical from the perspective of readers who have been routinely exposed to the text's register" (O'Halloran, 2007, p. 20).

Koteyko, Nerlich, Crawford, and Wright (2008) use corpus linguistics techniques and (critical) discourse analysis to examine "the assumptions, judgements, and contentions that structure two discourses of MRSA [methicillin-resistant *Staphylococcus aureus*]" (p. 223). They employ the analytic tools of frame analysis (Entman, 1993) and story line (Hajer, 1995). Entman's (1993, p. 52) linguistic framing works "to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described," and Hajer's (1995) story lines function to position actors and to attribute blame, responsibility, urgency, and responsible behavior (Koteyko et al., 2008, p. 226). The CL tools of word lists and collocation are also employed as analytical tools to move frame analysis and story lines beyond subjective judgment (Van Gorp, 2007). The study begins with manual qualitative analysis of "media coverage, scientific literature and policy documents dealing with the spread of MRSA in UK hospitals" (p. 227), as a result of which two frames of "simple/not simple or not rocket science/no silver bullet" (p. 227) and several key words that are indicative of these frames, the adjectives *simple*, *basic*, and *proper* (p. 228), are identified. The qualitative approach is followed by "quantitative pattern recognition" (p. 227) by comparing the concordances of the three adjectives in a corpus of 801 British national newspaper articles (1995–2006) and a corpus of key UK government policies on MRSA and infection control in hospital settings (1998–2006) (p. 229). The empirical evidence collected from specialized corpora and computational tools validates qualitative "hunches" (p. 239) that coverage of MRSA is based on a "simple/not simple discursive dichotomy, which is evoked in different discourses . . . to blame others and to defend oneself against blame" (p. 239), and that the dominant frame of "simple cleanliness" is used to advocate solutions to MRSA problems, while that of "complexity" is used to challenge government policy or give defensive reasons as to why policies dealing with the problem of MRSA fail (p. 239).

Another recent example of combining CL and CDA is Baker et al. (2008), which adopts a corpus-assisted CDA methodology to examine the discursive presentation of refugees, asylum seekers, immigrants, and migrants (RASIM) in the British press over a 10-year period (1996–2005). Baker et al.'s project starts by investigating aspects of the wider context surrounding the issue of RASIM in the UK in order to inform the selection of texts and form a 140-million-word corpus. Focusing on the notions of keyness and collocation, the project examines the corpus to find out the relative frequencies and emerging statistically significant lexical patterns primarily involving the four key terms: *refugee(s)*, *asylum*

seeker(s), *immigrants(s)*, and *migrant(s)*, followed by the analysis of their concordances. Then selected parts of the textual corpus are qualitatively analyzed by drawing from relevant migration-related information in order to contextualize the findings of the text-based analysis.

Other studies are corpus-informed, using a corpus as a resource for data. For instance, Galasinski and Marley (1998) conduct a comparative quantitative content analysis of two corpora from the British and Polish press (10 national daily newspapers and 10 national weeklies from Britain and Poland) to identify agency in foreign news; the results are then used "as a frame for a qualitative critical linguistic analysis" (p. 565). While quantitative content analysis reveals "some of the media coverage of the moment" (p. 565), CDA complements this by revealing "long-standing patterns of discursive representations with their systemic biases and preferences" (p. 565). For example, in both presses, "coverage of the foreign is dominated by reporting in terms of either business and politics, with the former favoured in Britain and the latter in Poland" (p. 585). In addition, quantitative content analysis shows ambivalence in the British media's attitude toward Russia, which usefully informs a qualitative content analysis of "negativity" (p. 586).

Musolff (1997, p. 230) suggests that the discourses of terrorism are "metaphorical-cocktails of political jargon," and the discourses are expressed in terms of four dichotomies established through the metaphors of terrorism being good vs. evil, law vs. lawlessness, civilization vs. barbarism, and freedom vs. tyranny, all of which create illusory and metaphorical representations of terrorism being the possession of weapons of mass destruction (WMDs).

Future Directions for Corpus Linguistics and Critical Discourse Analysis

Increasingly, more studies have integrated CL and CDA to address social concerns, processes, and phenomena, by taking advantage of the complementary methods and approaches unique to these disciplines. Many of the corpora used in CDA studies so far are specialized ones, primarily media and political discourses. Future studies could explore other text types, such as feedback commentaries in education (Hyatt, 2005), academic classroom discourse (Csomay, 2006), and business media discourse (Koller, 2005), and integrate CL, CDA, and other fields such as intercultural rhetoric (Connor, 2004) and cognitive metaphor (Koller, 2005).

CL can also be combined with different theoretical approaches to CDA, including French discourse analysis (Pêcheux, 1982), critical linguistics (Kress & Hodge, 1979), social semiotics (Hodge & Kress, 1988), sociocultural change and change in discourse (Fairclough, 2001), sociocognitive studies (van Dijk, 1980), and the discourse-historical method (Wodak, 2001).

SEE ALSO: Biber, Douglas; Corpora: Multimodal; Corpus Analysis of Political Language; Corpus Linguistics: Overview; Critical Discourse Analysis: History and New Developments; Fairclough, Norman; Leech, Geoffrey; Multimodal Corpus-Based Approaches; Sinclair, John; van Dijk, Teun A.; Wodak, Ruth

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