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The play of tropes in the discourse of knowledge workers: Examining technical support services

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ABSTRACT

This research in progress uses tropes and Critical Discourse Analysis (CDA) to examine technical support exchanges recorded over a one-year period. Tropes, such as metaphor, metonymy and synecdoche, function to close lexical gaps in a speaker's vocabulary thereby extending a speaker's expressive potential. Technical support exchanges are critically dependent on successful communication between knowledge worker and client. Knowledge workers are domain experts, possessing a good command of the semantics within their domain. Clients, on the other hand, have far less of a command of this domain which they must traverse in order to communicate their problem. This paper proposes that tropes offer both clients and knowledge workers the ability to expand their semantic range and establish common meaning. CDA will be used as a sociolinguistic frame for examining different types of utterances and the way they are tied together to create meaning, but also critically examine social context.

Keywords

Critical discourse analysis, linguistic analysis, tropes, technical support services, knowledge workers, critical theory.

INTRODUCTION

This research in progress will focus on communication between client and technical specialist during support calls. Technical support services under the name of help desk, client services, client assurance, or customer support, are a critical component of information systems implementation and use. With the increasing complexity of IT systems, the growing demands and expectations of users, and the move to a more distributed computing environment which places more responsibility on the end user, technical support services have become central in the successful deployment of an any information system. Technical support service is defined as "an accessible service point which will provide on-demand advice, information or action to aid the user in carrying out an IT-related task" (Marcella and Middleton 1996, pp. 4). During these exchanges, technical support specialists are expected to possess both sophisticated technical skills as well as a highly expressive potential. We can think of support specialists as knowledge workers¹ (Pentland 1992) who are (technical) domain experts while clients, who reach out for support services, find themselves outside their area of specialization, outside their domain of knowledge. Knowledge workers as domain experts have a good command of the technical language and concepts and are positioned to answer client's questions; to guide them through the unknown domain. Clients who reach out for support find themselves in an unfamiliar domain and often times lack the appropriate vocabulary to describe a problem or perhaps even what they might see on their computer screen. This lexical gap may lead to a sense of confusion, frustration or irritation on the part of both client and knowledge worker. Ultimately, the success of the support interaction is dependent on communication; the ability of the client to express the problem and the support staff to understand the meaning of the utterance in order to search for a solution. Yet, only a few studies have focused on technical support services communication and knowledge dissemination (c.f. Eschenfelder, Heckman and Sawyer 1998; Pentland 1992).

This study will use two theoretical approaches, tropes (or figurative speech) and CDA to examine how knowledge work in the form of technical support is accomplished. The paper includes a more extensive description of tropes in order to understand their relevance to technical support exchanges, but briefly tropes, as used in this paper consist of metaphor, metonymy and synecdoche. Metaphor states an equivalence between terms taken from separate semantic domains; it sets up an A is B relationship between the two terms. Metonymy is the use of one term to refer to another that is related to it. The two terms come from the same semantic domain but don't necessarily share common features. And synecdoche uses one term to signify a larger part, where both the term and the larger part come from a common domain. In this paper, it proposed

that tropes are used between technical support specialist and user in order to close the communication gap between the two. Discursive exchanges between technical specialist and client are examined to explore this proposal. CDA is then used as the larger theoretical frame to identify power relationships during these exchanges. When data are analyzed, this paper hopes to show 1) how tropes, as linguistic devices, are used to close lexical gaps between technical specialist and client and 2) how they organize social interaction and reproduce the social order.

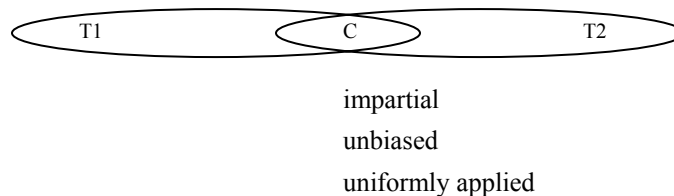
The Play of Tropes – Metaphor, Metonymy and Synecdoche

Philosophers of language have long examined the role of tropes in vocabulary (Alston 1964; Henle 1962). According to these scholars, no vocabulary is without interstices or ‘holes’ and tropes, especially metaphor, function to seal these holes. In this way, tropes function to counter what has been termed the ‘designative inadequacy’ (Weinreich 1964) of lexical systems. Tropes mitigate these lexical gaps because they introduce new meanings and thereby extend the semantic range of language as well as increase the speaker’s expressive potential.

The concern with the relation among metaphor, metonymy, synecdoche, and irony has given rise to notion of the ‘play of tropes’ (Fernandez 1986) in anthropological studies. This notion implies a focus on the entirety of the tropes in dynamic relation as they interact and are interpreted by social actors. Of the various tropes, those most often examined are metaphor, metonymy and synecdoche. However, metaphor has undoubtedly occupied a privileged position in the minds and writings of scholars.

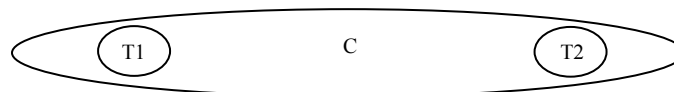
To begin, metaphor states an equivalence between terms taken from separate semantic domains (Sapir 1977). It consists of the employment of an attribute of a given semantic domain as a representation of an attribute of a different domain, on the basis of a perceived similarity between the two attributes (Turner 1991). Metaphor presents us with an A is B relation where A is the “tenor” and B the “vehicle.” The meaning that is generated by the interaction of the two is considered the “ground.” For instance, in this metaphorical expression “justice is blind,” justice is the tenor, the thing that we want to know more about and blind is the vehicle, the part that explains justice to us in terms of concrete and more familiar notions. The ground is the meaning produced by the combination of the two terms. In this interactional model, the ground of the two members of the metaphoric equation necessarily entails the creation of a new meaning, not simply the recognition of a preexisting one (Richards 1950; Black 1962).

Metaphor can be illustrated as follows:



Where T1 is the first term (the tenor), in this case justice. C represents the common features and common ground and T2 the second term (the vehicle), in this case blind. We start with term one and then move to term two by way of a group of shared features.

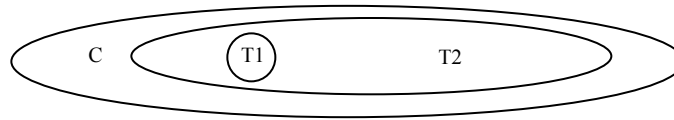
Metonymy is the use of an entity to refer to another that is related to it. Metonymy can be illustrated as follows:



Metonymy replaces or juxtaposes contiguous terms that occupy a separate place within what is considered a common semantic domain. For instance, “She likes to read Homer” (=she likes to read Iliad). In this case Homer (T1) is juxtaposed to signify Illiad (T2), T1 and T2 share a common domain but do not share common features. In this case, Homer is used to expand the speakers expressive potential in order to convey the meaning to the listener. It allows someone not familiar with Illiad to understand the meaning of the sentence. It provides the speaker with several options for conveying meaning to the

listener. The inventory of linguistic terms available to convey meaning is increased when a metonymy is deployed by a speaker.

And finally, similar to metonymy, synecdoche draws both its terms from a common domain but one term is included as a “part for the whole.” For instance, in the synecdoche “all hands on deck,” hands (part) signifies the entire body or person (whole). Synecdoche can be illustrated as follows:



here hands (T1) are indexical of the whole person (T2) but both are part of a common domain.

In general, the use of tropes is not simply a game of substitution but rather a creative exercise where the interplay of two disparate terms provides insights that may reveal important and deep understandings not otherwise available. The use of these devices in discourse serve to expand the speaker’s repertoire of linguistic terms used to convey meaning. Through the use of these devices, speakers organize their interactions and fundamentally construct their social world.

TROPES AND THE STUDY OF INFORMATION SYSTEMS

Researchers in the field of information systems have begun to use a linguistic lens in their studies. A cursory sampling points to research on organizational semiotics (Clark 2001; Lehitinen and Lyytinen 1994) genre analysis (Yates and Orlikowski 1992, Yates, Orlikowski and Okamura 1999) and more recently discourse analysis (Wynn, Whitley, Myers, and DeGross 2002, Sayer and Harvey 1997; Suchman and Bishop 2000; Alvarez 2001; 2002). However, the specific use of tropes in information systems research is lacking. A few researchers have examined the role of metaphor as it relates to information technology implementation and use. For example, Hirschheim and Newman (1991) were perhaps the first to argue for the importance of symbolism in the form of myths, metaphor and magic during information systems development. By using all three symbolic forms they provide a nuanced reading of the behavior of users of an information system which are faced with very complex and uncertain tasks. In another study, the anthropomorphic metaphor which ascribes human-like characteristics to the computer is explored (Marakas, Johnson and Palmer 2000). This study comments on subsequent positive and negative implications of anthropomorphism on computer use. Kaarst-Brown and Robey (1999) use the metaphor of magic as an interpretive lens to examine five cultural archetypes. They find the metaphor of magic reflects assumptions about the power of information technology as well as illuminate the irrational and contradictory aspects of information technology. Kendall and Kendall (1993) examine the language of IS users to find the existence of metaphors. Kendall and Kendall suggest that systems development methodologies should match the existing metaphors and not suppress them. These studies foci is at a more macro level, where the metaphor serves somewhat as a leitmotif of the organization or society in general. Urquhart (1999) takes a more “linguistic” focus, similar to this paper, and examines systems analyst and client interaction through the lens of theatrical metaphor. To some degree, she wrestles with the problem of communication across disparate domains such as that of analyst and contrasted with that of client.

In addition to examining how lexical gaps between technical specialist and client is achieved, part of the purpose of this paper is to examine how tropes organize social interaction and reproduce social order by invoking the larger theoretical framing of critical discourse analysis (Caldas-Coulthard and Coulthard 1996; Fairclough 1989, 1992, 1995). Critical discourse analysis views discourse, that is language use in both speech and writing, as a form of “social practice” (Fairclough and Wodak 1997) and argues that the context of language is crucial, particularly the relations between language and power (Caldas-Coulthard and Coulthard 1996; Fairclough 1989, 1992, 1995). This provides the basis for a possible critique and transformation of existing practices and social meanings. Discourse encompasses speech as well as text but can also include nonverbal communication (facial expressions, body movements, etc) and visual images (photographs, films, etc) (Chouliaraki and Fairclough 1999). This paper specifically focuses attention on interactional talk at work and uses sociolinguistic methods (Schiffrin 1994) to analyze discourse. These methods provide the tools and techniques for examining discourse units and the manner in which they are tied together to form meaning. However, because critical discourse analysis sees discourse as a social practice this implies a dialectical relationship with the situation, institution and social structure that frames it (Fairclough and Wodak 1997). Therefore, discourse is socially constitutive as well as socially shaped; it constitutes objects of knowledge, subjects or social identities, and relations between people. It both contributes to sustaining certain social

arrangements but also to transforming them. As Fowler suggests, critical discourse analysis goes “beyond the formal structure of Language as an abstract system, toward the practical interaction of language and context” (1996:10).

The critical component of critical discourse analysis denotes a concern with critiquing the manner in which the social is produced and sustained through semiotic practices. This concern places an emphasis on identifying power relations and demystifying the processes that produce and reproduce these relations and eventually leads to significant social changes. To accomplish this, CDA argues that there is a degree of “distortion” in all mediums of representation (such as language) that functions to create and maintain power imbalances. That is, they can help produce and reproduce unequal power relations between, for example, manager and worker. The critical linguistic seeks to expose these opaque aspects of power that tend to be unclear or normalized by people. In other words, discourse can be seen as an opaque power object which CDA aims to make more transparent. Through discourse examination, topics of power inequalities usually along the lines of race, class, gender, sexuality and occupation are exposed. However, it is important to note that the focus on misrepresentation does not assume that there is a problem of simply having something be represented as distorted: “there is not necessarily any true reality that can be unveiled by critical practice, there are simply relatively varying representations” (Fowler 1996:4). Critical discourse analysis therefore, demystifies what is taken to be ‘common sense’ by defamiliarizing it and signaling its functions and consequences in sustaining the social order. This demystification sets the conditions for possible emancipation and social change.

This paper will use CDA as a larger theoretical frame and tropes as an analysis strategy in order to gain a glimpse into how they are used to extend meaning between client and knowledge worker, but also look at how the use of certain tropes may function to construct and reconstruct hierarchies. Through a close analysis of tropes used during knowledge performances (as clients reach out for help), this paper hopes to show how these discursive forms serve to affirm or deny the authority of the trope-maker and define or redefine relations within existent metaphoric domains that also configure relations between participants.

METHODOLOGY

There is no single method prescribed by critical discourse analysis for collecting and analyzing data. Critical discourse analysis is in fact an ‘approach’ for understanding social phenomena and not method or a series of rules that determine how one is to collect data. Critical discourse analysis data collection is places its methodology in the hermeneutic tradition rather than the analytical-deductive tradition. Similar to grounded theory, lines between data collection and analysis are blurred and data collection is iterative, requiring analysis after every data collection exercise. One collects data, analyzes, revises questions, expands or omits concepts, then collects more data and may begin the cycle again. However the approach is “modified” from standard grounded theory (Glaser and Strauss 1967; Turner 1981) in the sense that the research does bring certain theoretical orientations and perspectives to the data. One expects, for example, that power relations are negotiated and that certain forms of domination exist in particular social contexts that must be uncovered by the researcher.

While data collection and analysis may blur, unlike other approaches in the hermeneutic tradition, critical discourse analysis does rely on linguistic material and categories for analysis. A definitive list of linguistic devices relevant for critical discourse analysis cannot be given partly because the nature of the research problem will determine the linguistic features that are of interest. Meyer (2001) presents a good summary of several preferred methods of various theorists. The linguistic features most relevant for this study are based on those proposed by van Dijk (2001). These include:

- stress and intonation;
- word order;
- lexical style;
- coherence;
- local semantic moves;
- topic choice;
- rhetorical figures;
- syntactic structures;
- false starts;
- turn taking;
- hesitations and repairs.

Interpretation and analysis strategies are also not prescribed in a unified sense for critical discourse analysis. For the purposes of this paper, footings, facework and frames (Alvarez 2001, 2002) based on the work of Erving Goffman (1981)

will be used. Footings refers to social roles which define the relationship between speakers. As speakers communicate linguistically, they choose from a wide range of social attributes and roles that are made available to them and which they perceive as best fit to the situation. In one moment the speaker may be concerned about the health and well-being of an employee, in another moment the same speaker may vying for control of resources. As people speak they shift footing, move in and out of social roles. Face, on the other hand, “is an image of self delineated in terms of approved social attributes – albeit an image that others may share” (Goffman 1967:5). The showing and saving of face takes the form of verbal statements or through prosodic and linguistic markers such as change in tone or hesitation. Facework is necessary, because “face is something that is emotionally invested, and that can be lost, maintained or enhanced and must be constantly attended to in interaction” (Brown and Levinson 1978:61). And finally, framing is defined as the speakers’ instructions to the listener about what has been said and how to understand the utterance (Bateson 1972; Goffman 1974; Tannen and Wallat 1987). It provides a metamessage about the context (Tannen 1986). Through subtle signals like pitch, voice, intonation, and facial expression the contextual information is jointly created. Gumperz (1982) refers to these signals as “contextualization cues” which may be prosodic, paralinguistic and non-verbal. Footing, face and frame are powerful means of negotiating social identity and legitimating preferred styles of communicating in the predominantly asymmetrical interactions of workplace settings. (Sarangi and Roberts 1999).

RESEARCH SITE

The organization chosen for the study is State University² a large public research university located in the northeastern United States. The annual budget of State University exceeds \$.5 billion. It has enrollments of 24, 000, faculty of 1000 and staff of approximately 3600. The data collection will take begin in early spring of 2004 and continue for approximately one year. The site is the help desk department of the IT organization within State University. The help desk has 9 full time staff and the IT organization has approximately 145 full time staff. This help desk department supports all the academic and administrative computing on the campus. Systems that are supported included a major ERP system (implemented within the last year) and most standard office desktop applications.

Data will be collected through the recording of phone calls received and answered by the help desk. Although technical support staff will be notified of the possibility, recording will be random and unknown to the caller and staff member. All recordings will be transcribed and analyzed using methods described above. The theoretical frame and some preliminary analysis will be presented at the conference in August 2004.

¹ The term knowledge worker is invoked here with some qualification. The term knowledge worker has been used in a somewhat exaggerated and uncritical manner by many researchers to signify the new elite and highly qualified professional and managerial employees. Knights and Willmott (1993) contest this definition by arguing that it loses sight of the presence of knowledge in the majority of other forms of work activity. While acknowledging this problematic, this paper takes the position that recent developments in information technologies have changed the organization of work in the direction of knowledge intensification and dissemination; knowledge workers such as those who provide technical support, are in the forefront of this development.

² Pseudonym is used.

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