## "Act promptly, make your god happy": Representation and Rhetorical Relations in Natural Language Generation

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The Sumerian proverb in the title is invoked by Julian Jaynes (1976) as he documents the laborious process of coming to consciousness. This activity is the cognitive labor that enables us to arrive at a question about the precise relationship between two types of knowledge, or ask if "rhetorical relations [are] the realizations of intentions, or should . . . be discarded as simply a misconstrual of intentions proper?" It is the legacy of that arrival we are discussing when we raise issues around intentionality, and I do not think it is coincidental that the proverb quoted in Jaynes' investigation can be read in its English translation as being among the earliest evidence for a claim of a mental state of intentionality: not only does the proverb demonstrate that we possess a state of awareness about "how to live", it also presents that consciousness as the instilling of action coincident with the having of the mental state. The "god" whispers to the other half of the bicameral brain; the ability to act lodged there responds as to a direct physiological stimulus. What is not quite so obvious is that, as the presence of intention makes itself known, so do the effects of a necessary rhetorical relationship. This paper takes the position that rhetorical knowledge is embedded in intentional knowledge, and that the two can be said not merely to have a close relationship but to interact demonstrably in a reflexive one.

The difficulty of dealing with intention vis-a-vis rhetorical relations rests first in making the assumption that either or both exist and affect language use to greater or lesser degrees, as several of the abstracts collected here debate. Of more concern for this discussion, however, seems to be the acknowledgement at least tacit in most of the papers that extending language constructs into language construction involves multiple levels of implication and/ or complex interweavings of elements. In short, we are having the present discussion because this second requirement arises from our dealing with language in use, and not language as an object for analysis, as Sanders particularly points out. Implicitly as well as explicitly we are assuming that our inquiries are about the operation of language, and cannot be answered by a simple system indicating unidirectional (non-recursive) coherence, nor in settling for a two-part classificaton of text as information and persuasion.

As a result, this contribution begins with an orientation toward language use as social action (Heap, 1989b) and seeks to account for intentions/rhetorical relations in natural language generation as a matter of both the multiple goals of discourse (Kinneavy, 1980) and dynamic character of language use-shown, for example, in Conversation Analysis (Sacks, Schegloff, and Jefferson, 1974)-rather than by description of linguistic objects. A major concern, then, is to understand language-use-as-

discourse both in action and as action, highlighting its resulting "aboutness". To begin to do so here, I will examine the ways in which the proverb, an artefact of a much earlier world in which thinking and acting had not been declared separate entities, is about the intentional state, and demonstrates an embedded rhetorical relationship which is also its agency of intentional action.

First, let us accept a definition of "intentional" as being involved in cognitive activity based on wishes and desires and proceeding through "directions of fit" and "conditions of satisfaction" (Searle, 1983). Such mental being is at the core of this Sumerian wisdom. The whisper of the god indicates having the desire to act, the thinking; the reception or hearing, the understanding, of that whisper shows the direction of fit by yielding advice to do something, in this case to "act". Thus, the proverb demonstrates conditions of satisfaction rising both from the injunction to promptness and from the expected out-come-"make your god happy". Taking the proverb as a text of the intentional state, we can examine the function of the rhetorical relations tacit to the intentionality's existence as a text.

For, putting forward claims about the function of rhetorical relations begins with a prior claim, that intentionality possesses representation in itself. To speak or write in relation to the intentional state is to deal in the representation of representation (Searle, 1983). We must be extremely careful with the distinctions we make here, however. It is highly tempting to see representation as only a container for "stateness". Both communication theory based on "encoding" concepts and casual location of speech acts as posterior to intention result in seeing language as somehow "representative of", with sets of signa acting as carriers, sent from a cognitive site through a conduit called text (Frawley, 1988). But in this proverb, we have a topic of cognitive relations echoed exactly in the activity of the rhetorical ones: the thinking, understanding and acting of text production-inventing, arranging, styling-are present as material relations of the thinking, understanding and acting present as the substance of the proverb. Formulating a statement on "how to live" is not a message relayed or translated, but an entry into an intentional state effected because there has been entry into an intentional state. Entry is, quite simply, an action accompanied by a set of strategies for designing behavior under material conditions-making semantic choices, applying the rules of syntax, choosing formats and internal arrangements to create the objects we think of as documents and to render the "aboutness" we find in the rhetorical relations its text owns.

The conclusion approaching through the line of reasoning I am taking meshes with Searle's observation that the intentional state requires being able to be present as conditions (p. 23). These conditions can take many forms-pronomenalization, juxtaposition, paralleling, arranging as a string, arranging as a block, turning into graphics. Doing so has created what is usually identified as the relations of logic (Morrison, 1988) and customarily taken as the nature, and effect, of rhetorical relations. But whether we identify them as expression, analysis, logic or any other category, considering these relations as a matter of intentional representation requires that we see them as design for action. Making language choices and/or constructing a text is not a matter of realizing intentionality, but of intentionality's being present, under conditions. Acts of design clean up "physical messiness" as a matter of releasing the tacit into the explicit (Dennett, 1988). Intentionality and rhetorical relations share a presence of active connection-thinking toward acting on the one hand, and acting toward thinking on the other. Mutual support results, and also mutual dependence, or reflexiveness: each is the set of conditions of the other being present, in the world.

And what, then, is the role of language? Since language consists of signa, it must be a representationat least in its semantic aspects-and, in turn, provides representation of the representation through ordering it as grammar and syntax. But this is the aspect under which we study language-as-object, not language-in-use, and tend to treat parole with the set of analytic devices applicable to langue (Saussure, 1972). They are not, however, interchangable phases of the character of language, and mixing them up tends to obviate the operation of language as a system of signs-that it provides the grounds of and claims for representation through which we, quite simply, accomplish knowing about (Addis, 1989). Thus, the formulation of intention and its presentation within the context of discourse (Heap, 1989a) are both required to accomplish the work of the first major phase of language-in-use, its "aboutness", in which intention and rhetoric reflexively generating the content of discourse.

In addition, my own work with writing and speaking for scientific purposes has shown me that intentional knowledge cannot be made fully to be present unless there is some accommodation for mode of awareness: that is, what is represented is seldom of concern to the system of representing, but how to represent, the mode, is crucial for purposive communicaton. That is, we cannot graft a language sys tem onto intentionality, but we can employ its modality-iconic, indexical or symbolic (Frawley, 1988)-as the agency for discourse relations (Burke, 1962). Taking into account the iconic, visual character of language used in engineering design as the evidence of its rhetoric means taking into account the direction of fit as evidenced in the language condition under which intentional states appear phenomenonally (MNH, 1992). As Dennett notes, there is little evidence that the relationship is syntactic (p.216), or even, I think, a "logical" one (MNH, 1991). We tend to accept descriptions from linguistic science-those emphasizing logical relations as fundamental to having meaning-just because syntax produces a phenomenon accounted logical (Morrison, 1988) and seemingly consonant with "arrangement", the rhetorical relation most literally, and thus obviously, acting to order the inchoate. More useful is the potential of Dennett's "economies" and other relational action that introduces at least the possibility of recursiveness, as germane to the conditions of this or that intentionality, both necessary and reflexive to intentionality, and knowledge, being present at all.

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