A discussion of discourse patterns in the professional interactions of lawyers and physicians suggests that these encounters are programmatic exchanges to which the psycholinguistic rules of processing and inference can be applied. In these professions, the constraints of normal discourse patterns interact with the conventions of giving and getting information in monologues or interviews. It is proposed that discourse analysis be used in such areas to design patterned language protocols for structuring inferential processes for effective communication. Examples are drawn from the communicative needs inherent in giving jury instructions and in conducting a doctor-patient interview. (MSE)
USING PATTERNED DISCOURSE IN THE LANGUAGE OF LAW AND MEDICINE

Ronald A. Hoppe and Joseph F. Kess

Departments of Psychology and Linguistics
University of Victoria
Victoria, British Columbia
Canada V8W 2Y2
(604) 477-6441/658-5994 (home tel.)
(604) 721-7528/721-7429 (office tel.)

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IN PROFESSIONAL LANGUAGE ENCOUNTERS, THE NONPROFESSIONAL conversational partner must be typically led through the specific inferential steps that the legal or medical professional intends them to proceed through in order to achieve the intended aim and no other. Depending on the task, the discourse may take the form of a lengthy oral instruction or a programmatic dialogue, both of which have as their intended aim information transferral, that is, the dissemination of some essential information, to be followed by some task to be performed on the part of the non-professional hearer or conversational partner. As an example of a lengthy oral instruction, one might cite the jury charge given by presiding judges at the time juries must retire to prepare their verdicts in criminal proceedings; as a typical example of programmatic dialogue, one might cite the tutorial exchange that physicians engage in with their patients with prior to eliciting decisions regarding patients' informed choices as to the subsequent course of treatment. In both types of discourse, the procedural objective of setting out the requisite steps to have the correct decision inferred is exactly the same, but the information delivery is often complicated by the constraints of what appears to be normal discourse. Unlike ordinary discourse exchanges, however, these encounters usually revolve around information-for-decision tasks which must not only be fulfilled, but fulfilled correctly if the episode is to have any value. Tasks like jury charges in law or doctor/patient consultation in medicine offer typical instances in which the structuring of inferential processes is crucial; in such pseudo-discourse the hearer must be led through a series of complex cognitive steps so that he must not only come to understand and store the appropriate information, but he must also be directed into a narrow sphere of correct possible decisions on the basis of the information the discourse attempts to convey.

This paper suggests that such professional encounters are in reality programmatic exchanges, or should be considered to be such, in that the psycholinguistic rules of processing and inference should be brought to bear in these exchanges in the same way that attempts have been made to include them in the creative design of effective written documentation. However, one other crucial factor needs to be integrated in such professional encounters for the successful realization of the object of such professional language exchanges. This additional feature is that the principles of discourse analysis should be employed to design patterned language protocols which effectively convey the desired inferences through the inescapable medium of discourse expectations as measured by normal ordinary exchanges. As its overall objective, this paper attempts to outline patterned discourse protocols for the structuring of inferential processes in areas like law and medicine where the constraints of discourse interact with the conventions of monologue deliveries or dialogue consultations and interviews.

This presentation will last 30 minutes, and has both language educators and business educators as its intended audience. The paper will also present specific examples of patterned discourse protocols for both legal and medical professional encounters, demonstrating how basic psycholinguistic principles of information processing and inference-making can be effectively laid out in the discourse of professional language encounters.
THE PROBLEM ADDRESSED BY PATTERNED LANGUAGE FORMATS

Many professional language formats which involve discourse exchanges are not realizing their informational objectives, and so we may speak of 'discourse design', or the use of patterned discourse in professional areas like the language of law and medicine. It is worth considering what typically happens in such professional language encounters. The nonprofessional listener or partner is supposedly led through a series of inferential steps that the legal or medical professional intends them to pay attention to. Let me be even more specific by giving an example for each of these settings, legal and medical. Let us also note that the specific example is chosen within a context in which information given precedes a decision taken, so that the incidents are even more narrow than just language exchanges with lawyers, judges, or physicians. As a legal example, let us employ the jury charge given by judges to juries to guide them in preparing their verdicts in criminal trials; as a medical example, let us employ the consultation that doctors coordinate with their patients in order to elicit patients' decisions as to the elected course of treatment when there are options to be selected among by the patient. The discourse examples chosen represent the continuum of discourse types available in such professional exchanges, ranging from the lengthy monologue (judges to juries) to the conversational dialogue (doctors to patients). Both intend information transferral, to be followed by some decision on the part of the nonprofessional listener or conversational partner. Each type of discourse delivery is often complicated by the expectations that govern how we interpret ordinary discourse. But this is unlike ordinary discourse in that the encounters focus on information-for-decision tasks that must be fulfilled correctly if the language exchange is to achieve its maximum value. Very simply, juries are to reach possible correct verdicts within the law, and patients should choose the correct course of treatment.

This paper suggests that such professional encounters are in reality programmatic exchanges, or should be considered to be such, and that such such exchanges offer ready
applications for the psycholinguistic rules of processing and inference. The other crucial factor that is needed to maximize the efficacy of such professional encounters is the inclusion of the principles of discourse analysis. We typically derive the desired inferences through the inescapable medium of discourse expectations as measured by normal ordinary exchanges. Though we would wish to suggest patterned discourse protocols as a principle in some areas of law and medicine, we do not believe that such goals will be fulfilled by a language style that is colloquial or unnaturally simple. Indeed, the formality, if not ritual, of such settings require that the language form be precise and accurate at the same time that it is intelligible. Solutions to such discourse problems are not to be found in the naive expectations of adherents of the plain language movement. The problem, we submit, is one of design, not of simplicity.

In its application, patterned language formats should be expected to take the form of discourse organizes information transferral within the framework of normal discourse presentations. A critical assumption in establishing discourse protocols in specific formats like law and medicine is that such inferential structuring is more than just simple comprehension. The framework of knowledge is usually not one that is familiar or specific enough to establish a frame of reference, within which one can organize incoming information. There has been considerable work both on structuring frameworks for machine intelligence (see Schank and Abelson, 1977, and Schank and Burstein, 1985) and for human processing (see Bower, Black, and Turner, 1981, Kintsch, 1985, Kintsch and Van Dijk, 1978, Van Dijk, 1979, 1981, and Van Dijk and Kintsch, 1983), as well as on the role of bias and context in the interpretation of meaning (see Hoppe and Kess, 1986, Kess and Hoppe, 1983, 1985). That frame of reference is as important, moreover, for understanding the discourse as it is for the storage and subsequent recall of the important features of that discourse when the decision(s) have to be made. One must assume that the same structures must underlie both inference-making from discourse and the way in which these inferentially-derived "facts" are recovered from storage at some later time.
In sum, it is obviously in the interest of both parties to professional discourse, the professional as well as the non-professional, to ensure that the information is conveyed clearly, directly, and informatively, in a sequence of inferential steps that supports the non-professional co-locutor's arrival at a decision which is ultimately his alone.

LITERATURE REVIEW

There has been a burst of insightful literature in the new field called 'discourse analysis', with commentary into what constitutes the pragmatic dimensions for human discourse and how interacting participants derive impressions and information from such encounters (De Beaugrande, 1980; Goodwin, 1981; Tannen, 1984; Van Dijk, 1979, 1981, 1985; Van Dijk & Kintsch, 1983). There is now even considerable work in what characterizes text and discourse in the practice of disciplines like law (Atkinson & Drew, 1979; Charrow, 1981; Danet, 1980, 1984, 1985; Drew, 1985; Goodrich, 1984) and medicine (Cicourel, 1981, 1985; Pendleton & Hasler, 1983). Some of this recent work has even attempted to grapple with specific tasks in these disciplines, as for example, the work on refining jury charges (Charrow & Charrow, 1979; Elwork, Sales & Alfini, 1982; Kess, 1985; Kess, Hoppe & Copeland, 1985; Myers & Jones, 1979; Sales, Elwork & Alfini, 1977; Severance & Loftus, 1982; Severance, Green & Loftus, 1984) and the work on the role of the language of power in settings like the courtroom (O'Barr, 1981, 1982) and the clinic (West, 1984).

A LEGAL EXAMPLE: JURY INSTRUCTIONS

Let us look more closely at the type of discourse problem offered by the instance of jury instructions. This is an orally-delivered one-sided presentation, probably best thought of as a form of monologic oral documentation. In fact, such one-sided monologic presentations are not uncommon, and range in drama and scope from jury charges to broadcast
emergency instructions. Such professional language requires an ordered sequencing of inferential steps equivalent to a hierarchical progression through the information, followed by a similar hierarchical progression through the decision points that relate to the technical information. Such discourse probably also requires highlighting of key points (in some discourse equivalent of boldface or italics), as well as overt indicators of when the discourse has taken a turn into a different direction, indicating a new set of steps to be attended to. However, needless repetition may not be helpful, since it presents a violation of Grice’s Cooperate Principle, and may send the listener off mistakenly looking for further inferences to be made from this recycling of old information. Every care must be given to the results of a discourse set in which the non-professional receiver of information is prohibited from interacting directly with the originator (jury to judge). One way of achieving this is by following a patterned language format which ensures that the following three vital features of a jury charge are attended to in the development of the charge. (Note that we are here concerned with schemas and scripts, and not with the specifics of sentence processing; for discussion of processing specific syntactic constructions like nominalizations, whiz deletions, and so on, see Kess, Hoppe, and Copeland, 1985, and Kess and Hoppe, in press).

1. state the law: comprehensibility
2. schema progression through technical information relevant
3. directly address the task the jury must perform in light of info

Obviously, the aim of such protocols for juries must be to increase the the percentage of technically 'correct' decisions in criminal proceedings in the legal setting. But comprehensibility of individual sentences, we have learned, is not a sufficient criterion for ensuring comprehensibility of the entire text, in this case a jury charge. Given that many judges tend to simply read the legal code directly, or in some slightly modified version, it may be wise to simply allow this appeal-proofing tradition continue. However,
once it is established that the law has been presented and jury charge may be considered relatively safe from appeal on these grounds, the judge can simply re-state the law in professional, but more comprehensible language to the lay jury (point 1 above), but at the same time providing a discourse set of directions though the technical information (point 2 above). And perhaps most importantly, the jury must be instructed in the discourse as to where it must make decisions, and on the basis of which information (point 3 above). Decisions are best processed as calls for decision when they are specifically pointed out as decision points, and directly addressed as decisions to be taken by the listener (for example, You must do/decide. . . . . . . Moreover, within this frame of reference, decision paths which are obscured by the surface structure format of the syntax should be untangled by this approach to signalling which decisions are to be made (for example, disjunctives like You must either...or... should be given as If x is true, then you must...; if y is true, you must...).

A MEDICAL EXAMPLE: DOCTOR-PATIENT INTERVIEW

Imagine as a typical conversational dialogue the exchange that doctors and patients might participate in as the consultation session after certain diagnostic tests have suggested a limited course of action. An even more specific example of this is the tutorial-like conversation that obstetricians have with expectant parents when a test like ultra-sound suggests Caesarean section as a likely possible choice on the parents' part, instead of a protracted trial of labor. A number of non-medical rules operate here, rules like what governs conversational turn-taking and how conversational cohesion is maintained, as well as how we typically try to make inferences in a conversation. Note that in such a dialogue—a dialogue which is not really a conversation as such—those rules of inferential processing must interact with the rules of discourse analysis.
There are three areas in such doctor-patient interaction that can profit from recent insights in the fields of psycholinguistics and discourse analysis. These three areas have to do with sentence processing, thematic structure, and the interpretation of indirect speech acts. First of all, some sentence patterns are easier to process from a psycholinguistic point of view, and thus easier for the average hearer to comprehend. Such considerations have little to do with simplicity, but are really reflective of the fact that some "simple" structures are easier to deal with than others from a processing point of view. Thus, information or decision paths which are obscured by the surface structure format of the syntax should be untangled by a patterned language format which avoids using negatives, singly, doubly, or multiply. For example, compare It is not the case that San Francisco is not south of Los Angeles, or even the seemingly less complex San Francisco is not north of Los Angeles, with San Francisco is north of Los Angeles. Now, everyone knows where Los Angeles and San Francisco are in respect to one another. Recall now that not everyone knows the technical information that is about to be imparted in the doctor-patient consultation! Yet note the processing difficulties you had with the first two sentences containing negatives. Similarly, relative clauses should be introduced with markers like which, that, who, etc., rather than as embedded clauses which do not signal closure. Contrast The doctor expected to perform the surgery failed to appear with the same sentence, The doctor who was expected to perform the surgery failed to appear. As a final example of many more that could be cited in the area of surface format, note that disjunctives with or can be confusing, and phrases like You must either... or... should be given as branching paths, like If x is true, then you must...; if y is true, you must...).

Secondly, the organization of information in a typical professional exchange could profit from a thematic structuring of the essential informational focus of the consultation. Non-professional conversational partners should be guided in the inferences they
make regarding the range and importance of information presented to them by professional conversational partners. Patients may require an ordered sequencing of inferential steps equivalent to a hierarchical progression through the decision points that relate to the technical information. The discourse delivery may also require highlighting of key points (in some conversational equivalent of boldface or italics), as well as similar indicators of when a new topic has been introduced and the old one terminated or when discourse on the previous topic has turned in a new direction. Doctors can thus provide a thematic set of discourse directions though the technical information, by instructing the patient where he/she must make a decision, and on the basis of which information. Lastly, decisions are best processed as calls for decision when they are specifically pointed out as decision points, and directly addressed as decisions to be taken by the listener (for example, You must do/decide.

Lastly, much in professional discourse is filtered through the normal expectations one has regarding asymmetrical conversations, and as a result, many indirect speech acts may not be correctly or easily interpreted. The fact is that the information transferral task is often interfered with because of the discourse expectations by both parties, and in such a way that neither of their interests is served as adequately as they might be. The correct inference may not be taken, or if vague and ambiguous, may not be available for renegotiation because of the way such asymmetrical conversations are organized. One important feature which needs to be recognized in any attempt to apply patterned language to the doctor-patient exchange is that the non-professional conversational partner, the patient, is not an interactant in the normal sense of discourse exchanges, but is typically a weaker partner in discourse matters like topic initiation, question advancement, conversational recycling, and so forth. Note how this is matched by forms of respectful address, that is, who gives first-name as opposed to title-last-name in naming exchanges. Such weak partners are typically inhibited from querying the originator too severely or
too directly for a variety of sociolinguistic reasons. For one thing, questions asked too
directly, too severely, or too persistently are often perceived as a challenge to the status
of the one questioned, rather than as just a quest for information.

A patterned form of language would furthermore try to make inferences are direct
as possible, without ambiguity. For example, Try not to lift anything for the first day, as
an injunction to an out-patient who has undergone a minor surgery is simply too vague,
and in fact, is ambiguous in at least two ways. The illocutionary force of this indirect
speech act is really that of command, and should be tagged as such. Moreover, is the
"first day" the day of the operation or is it the day after? One of the inherent strengths
of being a professional is that one knows the facts of the business so well; one of the
inherent weaknesses of over-familiarity with the "facts" is that one tends to forget that
the non-professional does not know them, and is usually ill-equipped to read the correct
inference into the conversational gambit. This is readily resolved by a programmed lan-
guage format; for example, an injunction like Please do not lift anything for the first
two days removes the indirectness of the command, and makes it even more explicit by
signalling a command follows by the addition of the word please. Contrary to what eti-
quette books may suggest to you, please sees its real function as a discourse marker sug-
gesting I command you, pay attention, another command is to follow.

In medicine, physicians obviously have an informed preference for the choice of
decision given by patients or the path of action patients should follow in remediation.
However, it is ultimately the patients' decision point, and so the consultation between
doctor and patient usually follows a course of physician laying out the information and
subsequent alternatives, with the patient taking the final decision for the path of action
to be followed. In such instances where physicians have a statable preference for a
technically 'correct' choice, an awareness of the psycholinguistic principles of how infor-
mation is processed and inferences derived may smooth the doctor-patient interaction,
even pointing it in the desired direction. Here it should be pointed out that such 'discourse designed' dialogues between doctor and patient will continue to be conversations, funneled through the filter of what appears to be normal discourse, with all of the social amenities, pleasantries, and approved 'bedside manner' conditions that traditionally constitute the benign and smoothing essence of such professional exchanges. But such self-aware discourse will also include features expected to maximize the correct inferences made by patients, for the obvious reason that comprehension will be either enhanced or eroded by the pragmatic conditions which underlie its comprehension and establish its conversational acceptability to individual patients. We would hope that these suggestions would enhance the general level of satisfaction of patients, and by implication, for doctors as well.
BIBLIOGRAPHY


