

**Practice and Personhood in Professional Interaction:
Social Identities and Information Needs**

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This article reports two studies of “intermediary” conduct in naturally occurring online computer search interactions. The first study examines assumptions about professional practice and relational control as these are manifest in the “opening moves” produced by four intermediaries in interaction with two “users” each. The second study seeks to verify individual differences identified in the analyses reported in the first study. Specifically, the distribution of three pronouns “I,” “you,” and “we,” produced by intermediaries in their interaction with users was compared within and across intermediaries through log-linear analysis. Lack of significant within-intermediary variability indicates that the proportional distribution of the three pronouns sampled did not differ between the two interactions. Significant between-intermediary variability in pronoun distribution was, however, observed. The specific patterns of results gained through this quantitative study were consistent with those achieved interpretively in study one. Finally, the results of these studies are discussed within a proposed theoretic framework developed from the perspective of a constitutive theory of communication.

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This article is one in a series of studies exploring human, rather than technological aspects of information retrieval (e.g., Saracevic, Mokros, & Su, 1990; Saracevic, Mokros, Su, & Spink, 1991; Saracevic & Su, 1989). Specifically, this article reports two studies that explore the intersection between professional and personal or relational dimensions of “intermediary” practice during the presearch phase of a set of online computer search interactions that aim to address “user” information queries (cf. Borgman, 1989).

The first study examines and compares, through an interpretive microanalytic approach, explicit and implicit situation-defining assumptions contained in the initial talk, or opening moves, of four intermediaries in interaction with two users each. The second study seeks to verify, quantitatively, interpretive claims developed in the first study through an analysis of intermediaries use of pronouns in the course of their interactions with users.

The principle guiding this research is the belief that information seeking and provision does not occur in a vacuum, but is shaped and affected by the way that individuals convey regard for themselves and for each other. In the discussion we introduce a first approximation of a theoretic framework and vocabulary within which this principle may be situated.

**STUDY 1:
INTERMEDIARIES OPENING MOVES
IN PRESEARCH INTERACTIONS**

Saracevic et al. (1990) characterized the opening moves of intermediaries across the 40 interactions, from which we sampled the 8 that provide the data reported below, as follows:

the opening minutes are critical for the nature of the entire interaction process, that is, for whatever happens afterward. . . . In some 8 out of 10 cases the intermediary governs the opening gambit. In the few cases where the user predominates, he or she goes into detail about what they are going to do, or plan to do. Although it is the user that predominates in talk in these exceptional instances, this is not to say that the intermediary is passive in the process. Instead the intermediary creates the possibility by inviting the user to place the problem they present in a broader context. Thus, it may be suggested that *there are two prominent initial strategies employed by the intermediary in the opening gambit*. One strategy is to immediately begin to work with the user's problem and convert the problem's lexicon to a search lexicon. The second strategy is to ask the user to provide a broader context of the problem before beginning the process of search specification (p. 50).

These are interesting claims. They suggest that:

- There are individual differences in how intermediaries approach users in these interactions;
- These individual differences are apparent from the outset of each interaction;
- These individual differences may be described in terms of two general strategies;
- One strategy is preferred over the other; and
- Whichever strategy is chosen it influences the remainder of the interaction.

Saracevic et al. (1990) did not, however, provide examples or specific criteria that served as a basis for making these claims.

In this first study we examine potential evidence for these claims through an examination of the opening moves of four intermediaries, each in two interactions. It is to a description of the methodology employed in this microanalytic study that we now turn. We recognize that the lengthy discussion of method which follows, and also in the second study, contains a level of technical detail for which not all readers are prepared, whether due to lack of available time or desire, or lack of familiarity with our general approach. However, we encourage those readers interested in qualitative research, particularly how such research may be seen as systematic and rigorous, to work through these sections.

METHOD

Interaction Database

Videotapes of 40 online computer search interactions made in real-world settings provided the database for this study. Interactions included four librarians, two women and two men (referred to subsequently as F1, F2, M1 and M2), who conducted online searches with 40 different self-selected patrons. The 4 librarians each conducted between 8 and 12 searches, and all 4 conducted at least one interview with a male and female patron. Altogether, 14 patrons were women and 26 were men. Two of the librarians (i.e., F1 and M2) conducted searches exclusively on social science related topics whereas the other two conducted exclusively natural and physical science searches (i.e., F2 and M1). The area in which the librarians conducted searches (i.e., social sciences vs. natural sciences) represented their professional specialization. Fuller description of the study design, including data collection and videotaping procedure, characteristics of librarians and patrons, as well as details of the online searches conducted are reported by Saracevic et al. (1990).

Sampling Criteria and Procedure

From among the 40 interactions available our goal was to select 2 interactions for each of the 4 librarians, one with a female and the other with a male patron. Additional criteria used to identify potential interactions for study included:

- No evidence that the librarian and patron were acquainted prior to the search interaction (with the exception of telephone contact to set up the search);
- Availability on the videotape of the opening moments of the interaction;
- Sufficient patron command of the English language to ensure ease of comprehension (for librarian and analyst); and
- Technical adequacy of the video and audio track.

Our aim was to select the first eight tapes meeting the above criteria. For librarian F1, none of her interactions with female patrons satisfied all of the selection criteria. We, therefore, included an additional interaction with a male patron for her. The tapes selected bear interaction numbers: 9, 10, 30, 34, 36, 37, 39, and 42.

In order to identify these 8 tapes, 28 of the 40 available videotapes were reviewed. Two of the 20 interactions not studied further were excluded because of poor technical quality of the videotape recording. The remaining 18 interactions were excluded from further analysis because of:

- Prior acquaintance between the patron and librarian (i.e., social acquaintanceship, follow-up search of the same topic, prior search conducted with librarian); and/or
- Significant interaction prior to the onset of the videotaping.

Although prior acquaintance was an exclusion criterion, in no case were patrons and librarians truly unacquainted at the beginning of the videotaping, as most if not all patrons and librarians had set up the search over the telephone and had at that point briefly discussed the patron's information need. In addition, librarians had access to the patron's written query which included a brief statement of his or her information need together with key words and key publications related to the topic to be searched. Finally, it was also clear that patrons and librarians had at least introduced themselves prior to the videotaping. However, any interaction where the interactants introduced themselves for the camera as videotaping commenced, but gave clear indication through the nature of their interaction that they had already engaged in extended discussion of the patron's needs, were excluded.

Criteria for selecting videotapes were not established prior to this research, but evolved during the course of a review of all available videotapes. Videotapes were reviewed in common during which time each of three analysts independently noted points or phenomena of interest to them and/or noted a reason for excluding a given interaction from further analysis. Each analyst had the option of stopping the videotape at any point in time and reviewing the tape up to that point, or some specific segment of the tape. The independent views of the analysts were then openly discussed, with the evolving exclusion criteria and empirical phenomena of interest to analysts jointly contributing to the development of the research design and focus.

For the final selection of videotapes, exclusion criteria were only applied when consensus had been achieved between the analysts. It was the rule rather than the exception that each interaction was repeatedly reviewed and evaluated even if it did not qualify for further inclusion in this research. All empirical and theoretical positions that emerged in this fashion were continuously evaluated in the context of each new interaction examined. In addition, on several occasions we returned to videotapes previously reviewed in light of insights or problems raised by observations of another tape.

Approach to Analysis

An interpretive microanalytic approach influenced by the work of Pittenger, Hockett, and Danehy (1960), Goffman (1967), and Scheff (1990) was applied in the analysis of these eight user-intermediary interactions.

Microanalysis is an approach to the study of behavior that involves repeated scrutiny and transcription of permanent recordings such as videotapes and audiotapes. Such permanent recordings offer the opportunity to repeatedly review the material under question. This allows researchers to shift back and forth between induction and deduction, to identify phenomena of interest in the recordings and to test emergent (and existing) hypotheses while reviewing the recordings. Scheff (1990) has discussed this approach in terms of Charles Peirce's concept of abduction. Scheff (1990) wrote of the approach as follows:

abduction [refers to] the *rapid* shuttling back and forth between observation and imagination. . . . In effective social interaction and thought, one not only observes (induction) and imagines (deduction) but also constantly (in microseconds) checks one against the other . . . abduction is the process which enables participants to accomplish the incredibly complex process of understanding meanings *in context* (p. 31).

Thus, this approach may be seen as an ongoing process of hypothesis generation and testing. It first involves identifying contexts or frames of interactional conduct.

The experienced meanings of these contexts or frames are then explored by *vicariously engaging or putting oneself in the role of participants*.

This second step is highly interpretive, focusing as it does on the subjective qualities of interactive experience. The aim of this interpretive process is not to capture “the” subjective, particularly affective, experience of the interactants. Instead, the aim is to consider “what happened” within a framework of what might have happened. This makes it necessary to generate or imagine plausible alternatives to actions observed, referred to as counterfactual variants (Scheff, 1990). Thus, the researchers' interpretive experiences in the course of the analysis provide data in this research. In all cases these interpretive experiences were anchored to observable features of the interaction.

ANALYSIS

Preliminary Analysis

Structural Features of Search Interactions. The 8 interactions sampled, as is true of the entire corpus of 40 interactions, all shared the following structural features.

Prior to each interaction, the patron or user was asked to complete a written question or statement (i.e., the information query) within which he or she identified his or her information need and how this need related to his or her research aims. This written statement was submitted to the librarian prior to the search interaction.

Most generally, the search interaction may be divided into two stages: the presearch interview and the online computerized search. During the presearch interview the major tasks at hand were:

- Clarification of the user's query;
- Identification of an information system or database within which to conduct the search; and
- Translation of the user's query into a search statement acceptable to the information system within which the search was to be conducted.

During the second or search stage of the interaction the major tasks were:

- Evaluation of the adequacy and relevance of information obtained through the search statement (i.e., translated information query);
- Selection of a new database and/or reworking of the search statement in light of perceived inadequacy or questionable relevance of information output obtained by the initial search statement; and

- Decision as to when to stop the search process.

It was apparent in our review of the videotapes that the interactions differed in the extent to which these issues were explicitly discussed and interactively negotiated by the intermediary and user.

Analysis of Opening Moves

As mentioned, intermediaries had available prior to the onset of interaction a written statement prepared by the user in which the user defined the information need he or she sought to address through a computerized database search. One dimension on which opening moves of intermediaries may be compared is how this document is handled by the intermediary. Is it acknowledged? Is it read aloud to make sure that it is understood by the intermediary? And, is it treated as important?

Seeking a Broader Context. The four intermediaries studied showed notable differences in the way they handled these questions. One approach exemplified by F1 was to vaguely acknowledge the written query, but, rather than reading it aloud or asking a question about it, she momentarily placed it in abeyance and, instead, asked the user to provide a broader context for the query. The opening moves by F1 presented in examples 1 and 2, that are taken from interactions with M9 and M42, illustrate this:

1. F1 (M9): Okay. My first question I really have to ask you, Dick is, you got a very specific thing that you are looking for. But sometime you need a sort of a context, what do you want to do with this?
2. F1 (M42): All right, you've listed on here some classifications, some general, specific and related key words. There's nothing on here that tells me what you're looking for. I presume you're looking for something for a reason.

The strategy expressed in the two opening moves of F1 (Examples 1 & 2) assume that knowledge of the broader context within which the user's problem is situated may prove useful for translating the written query into a search statement. Certainly contextualization (such as history taking in medical encounters) is a legitimate concern for understanding a user's need or problem state across most provider-user encounters. However, by employing this strategy F1 implicitly conveys to the user that the written query is insufficient for her to work with in formulating a search. This may be legitimate. However, to ignore the written query and ask the user to provide an account puts the user in a position of

“defending” the intellectual agenda that has motivated his or her information search. Whereas this may offer a pride-promoting opportunity in so far as making oneself understood is concerned, it also carries the danger of being misunderstood, or of being challenged in a context where this is presumably not, from the user's perspective, expected.

All human actions may be said to have anticipated as well unforeseen consequences or byproducts. Valuation and devaluation of self is one such byproduct of these types of interactions. Devaluation as a potential byproduct may be quite clearly seen in Example 2. Through her move in Example 2, the intermediary creates a context within which it is hard to imagine, for the user, an experience other than defensiveness and disconfirmation. The context created is one of evaluation in which the expertise of the intermediary to gauge the relevance of the user's account is presupposed. By providing an account, the user acknowledges the intermediary's legitimacy to evaluate the user's written query. Suddenly at stake is not so much the user's information need but, instead, the user's sense of self worth. This is not to suggest that F1 intended through her opening move to devalue the user but that this is a reasonably plausible byproduct of her actions.

Setting the Agenda. The approach by F1 to opening the interaction contrasts with that employed by the three other intermediaries. F2, for example, approaches the user with an explicit agenda as seen in Examples 3 and 4. She uses the opening move to make this agenda explicit from the outset:

3. F2 (F10): Uhm uhm (let's see), hu- okay let me make sure that I understand what you want and what you've already looked in.
4. F2 (M36): We need to start with two things. One is I need to understand specifically, and precisely what you want.

In both Examples 3 and 4, she emphasizes her need to know what the user wants. Although it might be said this is also what F1 is after, the approaches differ dramatically. Whereas F1 broadened the context of the user's need, F2 narrows it. She legitimated the user's query in both examples (as well as the user's prior efforts in Example 3) and establishes that any source of misunderstanding is not inherent to the qualities of the user's expressed information need, and thereby questions of the user's competence, but of her inability to fully grasp the user's query. Moreover, she establishes that mutual understanding of the user's query is the foremost aim of their interaction and that this is seen as achievable. This cannot be said for F1. Agenda setting is most clearly illustrated in Example 4. There, F2 establishes that there are going to be at least two stages to the interaction (“We need to start with” implies that something else will follow) and that in the first stage that there are “two things” that need to be accomplished. In addition to seeking to understand what the user wants, the second of the “two

things” she aims to accomplish is to make sure that the user understands what will happen when they go online. She does this in every one of the interactions of hers that we reviewed, although as in Example 3, she does not necessarily introduce the two-part first stage agenda in her opening move. When she does not, she does so once she has, as she says, made sure “I understand what you want.”

Clarifying the Query. In her opening “agenda setting” move, F2 implies that the user's query will be the initial focus of discussion. Nevertheless, she does not directly refer to the user's written query in her opening. In this way she differs from M1 and M2 who both, already in their opening moves (Examples 5–8 below), work with the specifics of the written query. M1 and M2 do, nevertheless, differ in the way they go about doing this as we will now illustrate.

In Example 5, M1 refers directly to the written query, and provides an evaluation of the query “it does look fairly straight forward.” Implicit here is what F2 made explicit, namely that it is he, the intermediary, who needs to understand what the user wants.

5. M1 (F39): Okay, I was reading over your topic. You know, it does look fairly straight forward and I just have a couple of questions, and then I'm going to make you know some suggestions of how we might proceed.
6. M1 (M30): Okay. Uhhmmm. I don't do too many you know, searches in this area. So, you know, I really need to get, you know some, some information from you. You know, I notice you're into [biological engineering], but I know its, its, its, uh . . . not a biology topic.

Explicit is that this implicit agenda will be brief, that he is going to ask “just . . . a couple of questions.” Although the initial evaluation contained potential ambiguity for the user, namely conjecture as to what was unclear, by stating that just a couple of questions are going to be asked, M1 reinforces a sense of acceptance and legitimacy of the user's query which he had already foreshadowed by indicating that he had been “reading over your topic.” M1, in addition, explicitly spells out an agenda of what will follow the review of the query, that he will then “make . . . some suggestion of how we might proceed.” This opening move then suggests to the user that there will be three stages to the interaction:

1. Clarify the intermediary's understanding of the query;
2. “Suggestions” by the intermediary about how to proceed with the search; and,
3. Coparticipation (“we”) in conducting the search.

In Example 6, M1 again makes reference to the query. In this case rather than acknowledging that it is straightforward, M1 reveals his lack of understanding of the query and lack of familiarity with doing searches in the substantive area in which the query is situated. Unlike Example 5, only the first stage of the interaction is suggested to the user. There is no promise of suggestions or coparticipation in conducting the search. Instead, the message is that it will take some time for the intermediary to understand fully what the user wants. What is of interest in this move by M1 is how notably different it is from that of F1. M1 accepts responsibility for not understanding the query. In no sense does it seem that M1 is claiming that the query is inherently not intelligible. Thus, although this move is like that of F1, apparently motivated by a perceived need to broaden the context, it does not do so in an ambiguously broadening or disconfirming manner as is true of Example 1. Here the intermediary marks himself as on the defensive. This is apparent in the hedging maneuver (“I don't do too many, you know, searches in this area”) that begins his move. Through this maneuver M1 protects himself from the outset over questions of his competency by qualifying the range of his competency.

Working with the Query. Examples 5 and 6 have a very local or situationally-tailored quality to them. In this way they bear similarity to Example 2 and differ from Examples 1, 4, and 5. Characteristic of those examples (1, 4, & 5) is their highly rehearsed or stereotypic quality which, as in Example 1, immediately puts the ball in the user's court, or, as in Examples 3 and 4 serve as a sort of preamble that lays out what will be happening next, but not in any sense tailored to specific qualities of the user's query. Both opening moves by M2 shown in Examples 7 and 8 have this situationally-tailored quality. Indeed, both of these moves extend past those of M1 in that they immediately begin to work with concepts contained in the query.

M2 appears to accept implicitly the user's query. Yet there is no effort made by the intermediary to confirm the user, to defer to the user, or to inform the user of the impending agenda as was true in the moves of F2 and M1. Instead, M2 moves right into questions about terms in Example 7:

7. M2 (F34): Okay, the one thing I'm concerned about is [x]—I'm wondering what kind of a term we should use for that.
8. M2 (M37): That I wanted to ask,—okay. It's comparing [x] sectors. In other words, we really find out anything we can about organization or production of [y]—and what was this word?

He, thereby, acknowledges acceptance of the query since the focus is on its parts, that is terms. In Example 8 he aborts a question directed toward the user, and, instead, openly verbalizes his (emergent) understanding of the query. Of particular interest in Examples 7 and 8 is the use of the pronoun “we” by M2. F2 in

Example 4 and M1 in example 5 also used this pronoun. In discussing Example 5, it was suggested that this use of “we” foreshadowed a coparticipatory relationship once the search was initiated. M2 appears to emphasize this coparticipation theme from the outset, already in his opening moves.

CONCLUSIONS

We noted earlier that Saracevic et al. (1990) suggested a variety of claims about intermediary conduct in the openings of search interactions but had not substantiated these claims. These were that:

- There are individual differences in how intermediaries approach the interaction;
- These individual differences are apparent from the outset of the interaction;
- These individual differences may be described in terms of two general strategies;
- One strategy is preferred over the other; and
- Whichever strategy is chosen it influences the remainder of the interaction.

From our examination of opening moves in eight interactions, Claims 1 and 2 are clearly defensible. Claims 3 and 4 likewise appear defensible, although overly restricted. That is to say, although it might be argued that there are two general strategies exhibited across these eight interactions, to leave it at that ignores sources of diversity and commonality the inclusion of which provides a much more elaborated frame for discussing strategy. We will return to this issue in the discussion where we propose a theoretical model for making sense of our interpretive data. Finally, the fifth claim made by Saracevic et al. (1990) could obviously not be evaluated based on examination of opening moves alone.

Our interpretive analysis of openings revealed interesting differences in the use of the pronouns “we” as opposed to “I/you.” Quantitative analysis of the use of first and second person pronouns by intermediaries offers an approach to verify our interpretive conclusions in Study 1 and to examine the fifth claim made by Saracevic et al. (1990), albeit indirectly. Thus, rather than asking whether the opening move influenced the remainder of the interaction, we instead asked whether patterns of pronoun use within the opening move might be associated with distinct patterns of pronoun use during the course of each interaction. These analyses are reported in Study 2.

STUDY 2: ANALYSIS OF PRONOUNS

In everyday talk pronouns serve to define the speech situation (e.g., Silverstein, 1976). In their use they project their speaker's definition of the social situation and thereby constitute attitudes of relatedness, power, and membership. Thus the use of singular pronouns, "I" and "you," serves to establish that "this is a speech situation" and therein identifies the "shifting" status of participants in their roles as speakers and hearers. In the use of "I" and "you" the speaker establishes a sense of autonomy from his or her vis-a-vis. These pronouns emphasize the separateness, uniqueness of agency, of the two participants in the speech situation and also point to distinctions in responsibility of each participant. In contrast, the use of first person plural and third person pronouns appeal to solidarity and relatedness of the participants in the speech situation. Thus, the first person plural pronoun "we" indexes coparticipatory activities rather than separateness. The third person singular "he" or "she" or the plural pronoun "they" index the solidarity of the participants in the speech situation when they contrast the participants within the speech situation to "other(s)" outside of the speech situation.

In this study we report two analyses of pronoun use by the intermediaries we studied. The first examines within-intermediary variation in pronoun use while the second examines between-intermediary variation in pronoun use.

METHOD

Coding Pronouns and Making Counts

The interactional context of all pronouns used by intermediaries was identified through a computer search of the eight transcripts studied. Categories and counts of pronouns were made for each intermediary for each interaction. Although all pronouns were counted, the following analysis focuses primarily on first and second person singular pronouns "I" and "you" and the first person plural "we." These were by far the most commonly used pronouns.

The following decision rules were employed in making counts of these three pronouns:

- In "speech repair" contexts where a pronoun was repeated and talk was then continued, the pronoun was only counted once. For example:

"I, I, I'm not sure what we'll find."

- In “speech repair” contexts where the pronoun represented a “false start” and was subsequently replaced with another pronoun, only this second pronoun was counted. For example:

“I th, did you look this up yourself?”

- Uses of “you” as an indefinite personal pronoun were not counted. For example:

“you (1) got a very specific thing that *you* (2) are looking for, but sometimes *you* (3) need a sort of context, what do *you* (4) want to do with this?”

Here (3) is not counted while (1), (2) and (4) are.

- Pronouns that occurred in what have been called sociocentric sequences (Bernstein, 1962) were not included in the analyses reported in Table 1 and 2. The most common of these is the sequence “you know.” For example:

“*You know*, it does look fairly straight forward and I just have a couple of questions, and then I’m going to make *you know* some suggestions of how we might proceed.”

In this example neither “you” in the two “you know” sequences is counted. Instead, both were counted as sociocentric sequences. Sequences of talk of this type appear to differ functionally from other uses of “you” as they emphasize phatic and presuppositional communication, rather than specific personae in the speech situation. The use of “you know” (as well as other sociocentric sequences) is highly variable across speakers, habitual in the speech of some speakers, yet totally absent in the speech of others. These sequences are typically more rapidly produced than the surrounding talk and often with less amplitude or a change in pitch. It is common to miss the occurrence of these sequences in the transcription of everyday talk. Other types of such sequences also exist. One variant that contains the pronoun “I” is “I think” primarily used as a tag to the end of a completed subject-predicate construction. The use of sociocentric sequences was recorded, but was not discussed in this paper.

Approach to Statistical Analysis

For the purpose of analysis data were arrayed as a contingency table, and analyzed using log-linear methods developed by Goodman (1978). Models were statistically tested using the likelihood-ratio Chi-square statistic (G^2). The G^2 statistic is preferable to the familiar Pearsonian Chi-square statistic as it may be uniquely

partitioned to determine the contributions of various potential parameters included in the “saturated model:” a model that perfectly fits the observed data array.

ANALYSIS

Within-Intermediary Variation in Pronoun Use

Table 1 displays the frequency and percentage of intermediaries uses of “I,” “you,” and “we” counted according to the above decision rules for each of the eight interactions studied. Statistical analyses of the data in Table 1 tested the homogeneity of pronoun use across the two interactions for each of the intermediaries. These analyses reveal consistency in pronoun use across the two interactions for each intermediary. Thus, although the overall frequency of pronoun use (which is positively correlated with duration of the interaction and extent of intermediary time spent talking) differed between interactions, the proportions of each of the three pronouns was found to not differ significantly between interactions for any of the four intermediaries.

Between-Intermediary Variation in Pronoun Use

Since analyses of the data reported in Table 1 failed to show within-intermediary differences in the distribution of pronouns between interactions, pronoun data were collapsed across interactions for each intermediary for the purpose of analyzing between-intermediary variability. Table 2 displays these data and reports a test of independence between pronoun type and intermediary. Displayed along with the observed frequency of pronoun use for each intermediary are expected frequencies and standardized cell residuals (Haberman, 1973) resulting from the test of the model of independence. As indicated in the table, the four intermediaries differed significantly from one another in their use of the three pronouns studied ($G^2 = 61.06$, $df = 6$, $p < .001$). The standardized cell residuals refer to contribution of each cell to the overall deviation of expected from observed frequencies tested by the model of independence. These standardized residuals are comparable to z-scores ($M = 0$, $SD = 1$, Haberman, 1973). This makes it possible to identify systematically cells with significant deviations from what would be expected given the specified model being tested.

Analysis of the pronoun data in Table 2 indicates that, relative to the other three intermediaries studied, F1 preferred the use of first and second person singular pronouns (i.e., “I” and “you”) rather than first person plural (i.e., “we”). As reported in Table 1, while the pronoun “we” accounted for at least 32.5 percent of all pronouns generated by F2, M1, and M2 (with “we” accounting for almost half (46.6%) of the pronouns used by M2), “we” accounted for only 12.5% of pronouns produced by F1.

The use of singular pronouns, “I/you,” defines a situation in which autonomy is to be valued, in which the distinction between intermediary and user is to be

TABLE 1
Observed Frequency (OBS) and Percentage (%) of Pronoun Use
by Four Librarians Two Interactions with Library Patrons

	YOU		I		WE		TOTAL
	OBS	(%)	OBS	(%)	OBS	(%)	
FEMALE #1 (F1)							
Male (42) ¹	57	(53.3)	35	(32.7)	15	(14.0)	107
Male (9)	43	(55.8)	26	(33.8)	8	(10.4)	77
TOTAL	100	(54.3)	61	(33.2)	23	(12.5)	184
$G^2 = 0.55, df = 2, p = .76^2$							
FEMALE #2 (F2)							
Female (10)	52	(42.3)	28	(22.8)	43	(35.0)	123
Male (36)	13	(36.1)	10	(27.8)	13	(36.1)	36
TOTAL	65	(40.9)	38	(23.9)	56	(35.2)	159
$G^2 = 0.56, df = 2, p = .75^2$							
MALE #1 (M1)							
Female (39)	19	(25.0)	31	(40.8)	26	(34.2)	76
Male (30)	16	(39.0)	13	(31.7)	11	(29.3)	40
TOTAL	35	(29.9)	44	(37.6)	37	(32.5)	116
$G^2 = 2.47, df = 2, p = .28^2$							
MALE #2 (M2)							
Female (34)	20	(29.9)	16	(23.9)	31	(46.3)	67
Male (37)	31	(39.2)	11	(13.9)	37	(46.8)	79
TOTAL	51	(34.9)	27	(18.5)	68	(46.6)	146
$G^2 = 2.87, df = 2, p = .23^2$							

Notes: ¹ Number in parentheses refers to identification number of interaction in database

² G^2 refers to the likelihood-ratio chi-square statistic.

TABLE 2
Observed (OBS) and Expected (EXP) Frequencies
and Standardized Cell Residuals (STD RSDL) for a Test of
Independence of Pronoun Use across Four Librarians

LIBRARIAN	YOU	I	WE
Female #1 (F1)			
OBS	100	61	23
EXP	76.2	51.6	56.2
STD RSDL	2.7	1.3	-4.4
Female #2 (F2)			
OBS	65	38	56
EXP	65.9	44.6	48.5
STD RSDL	-0.1	-0.9	1.0
Male #1 (M1)			
OBS	35	44	38
EXP	48.5	32.8	35.7
STD RSDL	-1.9	1.9	.3
Male #2 (M2)			
OBS	51	27	68
EXP	60.5	41.0	44.6
STD RSDL	-1.2	-2.1	3.5
$G^2 = 61.06, df = 6, p < .001^1$			

Note: ¹ G^2 refers to the likelihood-ratio chi-square statistic.

maintained. The use of these pronouns emphasizes separateness. In contrast, the use of “we” emphasizes relatedness, a sense of solidarity and mutual rather than asymmetrical participation in the interaction. Implicitly this distinction in pronoun use also reflects the degree of shared understanding being presupposed in the speech situation.

CONCLUSIONS

Comparison of the distributions of pronouns verifies claims of individual differences in intermediary interactional style proposed by Saracevic et al. (1990) and identified in the interpretive analysis of opening moves reported in Study 1. It should, however, be noted that this conclusion is based on data that are removed from the context of their occurrence. This assumes unilateral, rather than interactive, production of these pronouns, an assumption that has been shown to be problematic in research where data are taken from interactional contexts (Duncan, Kanki, Mokros, & Fiske, 1984). An interactive analysis would minimally require attending to the user's behavior to make sense of the intermediary's behavior. Nevertheless, the tendencies for intermediaries to differ from one another and yet to remain constant across contexts would seem to indicate that the use of these pronouns by intermediaries is not merely interactively determined but may be seen to be indexical of these individuals' approaches to the definition of the situation.

DISCUSSION

Saracevic et al. (1990) suggested that two types of strategies are played out in the opening moments of user-intermediary interactions and that the specific choice of strategy influences the remainder of the interaction. The intermediary, they say, “controls” the interaction in 80% of the cases and does so by immediately working with the user's query. In the remaining cases where the user apparently talks most, they claim that it is, nevertheless, the intermediary who directs the talk by requesting that the user contextualize the query they have formulated. These interactions are, thus, all seen as controlled by the intermediary even though variability in the overtness with which control is exercised is clearly apparent. Although they identify these strategies, they conclude that “the specific choice of strategy has little effect on the structure of the search itself” (p. 50).

It is our contention that this conclusion fails to see that the activity of searching for information, of addressing an information need, does not exist in a vacuum. Instead, instrumental activities like information searches are embedded in a matrix of social responsibilities. Within this social matrix it is concerns about social and personal identity that are of primary importance, not resolution of an information need. Thus, although opening strategies employed by intermediaries may bear generic similarities when viewed from a task-oriented perspective, they reveal interesting differences when the social responsibilities and impact of

strategies are considered. The impact of differing instantiations of professional conduct, approached from this perspective, in the information-seeking context, merits increased attention not only in these types of interactions but in professional service interactions in general. In the remainder of this article, we explore a theoretical model for making sense of the relationship between instrumental and social activities in service encounters like the kind here analyzed.

Content and Relational Communication

One approach to the interpretation of the results is in terms of the distinction between content and relational dimensions of communication. After all, one of the more powerful and enduring contributions of communication theory is the recognition that in social interaction, participants do not merely convey substantive information but also provide a statement of how they regard others, project an image of themselves, and tailor these expressions to the contingencies of the social situation (e.g., Goffman, 1967; Ruesch & Bateson, 1951; Watzlawick, Beavin, & Jackson, 1967). As Pittenger, Danehy, and Hockett (1960) so elegantly put it in their pioneering microanalytic study of a psychiatric interview, “no matter what else human beings may be communicating about, or may think they are communicating about, *they are always communicating about themselves, about one another, and about the immediate context of communication*” (p. 229).

This aspect of participant conduct in social interaction has commonly been referred to as the relational as opposed to the content dimension of communicative action. Although powerful, there is clear danger, as Pittenger et al. (1960) noted, in distinguishing too sharply between content and relational dimensions as in the reification of these dimensions to the status of separate channels (e.g., verbal and nonverbal) or discrete messages (e.g., control) in empirical-based and theoretical discussions. Theoretically, the consequence of such reification is the reduction of communication to a process of information exchange in which communication is implicitly treated as a conduit (Mokros, 1993, 1995). Such a reduction is wholly antithetical to a constitutive view of communication, a view that implicitly served as the foundation for the theoretical distinction between content and relational dimensions of communication.

Definition of the Situation

A constitutive perspective assumes that communication creates or constructs the “social situation” within which the possibilities of personhood, relationship, and referential or “content” exchange are realized. Thus, communication from such a perspective is not reducible to a linear process of information exchange but is instead an interactive and systemic process (e.g., Mokros & Ruben, 1991). Within such a framework the concept of the definition of the situation becomes central to making sense of communication behavior and its products and byproducts.

It is through the “definition of the situation” that roles, values, and expressive possibilities of participants at a specific place and point in time are identified. Indeed, it is fair to say that in constituting the situation, acts of communication constitute individuals, assigns them identities and possibilities, and marks them on an ongoing basis as individuals of a certain type. From this perspective relational dimensions of communication are not a component of messages but provide the context within which all content messages are realized and within which they are made to be meaningful.

Interactants define the situation prior to entering into interaction with one another with what might be called a “framing definition.” This definition serves as the initial guide to action and evaluation and thereby provides a frame from and within which the interaction progresses. During the course of an interaction, this framing definition is creatively reshaped in all but the most ritualized contexts. Thus, situation defining is conceptualized as a dynamic interactive and negotiated process. Nevertheless it is fair to assume that some encounters are more prone to retain features of the framing definition than are others. These are encounters where an asymmetry in power or privilege is prominent. Professional service encounters like those studied in this research are particularly marked by this quality. In medical encounters this is expressed in the respective roles of doctor and patient, which although they may be played out in a variety of ways, nonetheless retain predictable features. The professional achieves privilege over the patron through his or her legitimacy as a professional. Distortions in the exercise of power are common byproducts of extending such privilege to the professional. Commonly these distortions are themselves incorporated into the privilege of professionalism, and are assumed/treated as natural, as, for example, in the paternalistic manner of much doctor-patient interaction.

The opening moments of social interactions between strangers (who are compelled to interact), as in the case of the interactions we studied, offer researchers an opportunity to examine how participants employ framing definitions of the situation. These moments invite stereotypic and quite automatic types of solutions to the problem of how, that is in what manner, to present one's self and engage with the other. These are moments when actions and expectations are typically highly scripted, from a cognitivist perspective, or highly ritualized, when viewed from a social interactionist perspective. Scripts and rituals provide resources for “getting going,” for opening up the interaction (but also restrict degrees of freedom and thereby serve to mechanize the interaction). They reduce the uncertainty as to what to do and what to expect. In the most basic sense, the performance of initial situation defining actions offers participants a glimpse of each other's social propriety and status.

Theories of Practice and Personhood

Situation defining may be said to be theoretically driven. We suggest that two types of theory come into play in service interactions referred to as theories of

(professional) practice and theories of personhood. A theory of practice addresses concerns about the role of the professional as provider: "What do I offer my patrons and how do I go about offering it." A theory of personhood addresses questions of identity: "How do I regard myself and others and how do I wish and expect to be regarded by others." Some aspects of both types of theories are clearly explicitly storable and intentionally instantiated by interactants. This is particularly true in so far as these theories are anchored in formal institutional discipline and training.

Yet, certain if not many types of actions are largely out of awareness and unstorable. This is particularly true for actions that reflect theories of personhood. Theories of personhood, we assume, underlie all social action and are instantiated in predictable, routinized ways. Routinization gives rise to what is commonly talked about as "taken for granted" ways of doing things social and seeing things socially. The theory that underlies this routinization, rather than being experienced as such, is manifest as "feelings" of how to act and how to proceed. These feelings are infinitely more open to reflexive examination, after the fact, than thoughtful planning prior to action. In those interactions where theories of practice come into play, these theories are embedded within theories of personhood. Thus, although a practitioner may be able to discuss a theory of practice in detail, awareness of the embeddedness of this theory within a theory of personhood and especially awareness of the interactivity of these types of theories is, we assume, largely out of awareness.

Particularly out of awareness is the expression of management or control of the interaction and the consequences of this control in its instantiation of these theories. Control typically refers to how role relationships in an interaction are defined, with specific reference to the question: "Who is in charge?" Appeals to differences in responsibilities associated with roles make overt claims about who is in charge and typically create asymmetrical patterns of interaction. Alternatively, control may be approached as a cooperative or negotiative issue. In such cases rather than exercising control overtly, the intermediary would likely promote a participatory interactional style. How control is played out, would minimally appear to involve attitudes toward *responsibility* and *participation* on the part of the intermediary. How these attitudes are played out also reveals differences in the expression of deference and demeanor, and will result in differing interactional byproducts, such as along a continuum of user-experienced confirmation to disconfirmation. It is within this framework that we invite interpretation of the data we have reported in this article.

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