

## An Overview of the Classification of Doctors' Questioning in Doctor-Patient Conversations

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### Abstract

Questioning is the fundamental part in doctor-patient conversations. For accurate diagnosis and treatment, doctors usually seek information by questioning. The research of questioning is, therefore, essential to research into doctor-patient communication. It not only enhances the understanding of doctors' information seeking, but improves patients' ability of information provision. As to the research on questioning, knowing well of classification of questioning is the first step to comprehensively understand doctor-patient communication per se. Scholars generally study the classification of doctors' questioning from four perspectives. a) In terms of conversational process, there are mainly social history taking question, medical question, and psychological question; b) In terms of linguistic markers, there are wh- question, inverted auxiliary question and tag question; c) In terms of contents, there are open question and closed question; d) In terms of functions, information function and speech function are considered. Forms of each type of doctors' questioning vary with different perspectives, but there are no "good" questioning and "bad" questioning. All kinds of questioning are not isolated but related, even overlapping. Doctors' choice for different kinds of questioning depends on their diverse requirements.

**Key words:** Questioning; Doctor-patient conversation; Classification; Type

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### INTRODUCITON

"Doctor-patient conversation" is a dialogue between doctors and out-patients (including patients' family members) in the course of diagnosis and treatment. Since 1970s, plenty of researches on doctor-patient communication came forth, and increasing in recent years (see Byrne & Long, 1976; Frankel, 1979; Kleinman, 1978; Roter, 1977; Roter & Stewart, 1989). The procedure of a doctor-patient conversation often is: doctors' questioning — patients' answering — doctors' appraising — doctors/patients' questioning — patients/doctors' answering. It is obvious that questioning always plays an important role in conversations. Questioning in doctor-patient conversations is mainly studied from three perspectives: patients' questioning, doctors' questioning and interactions between doctors and patients. In one doctor-patient conversation, a doctor always takes at least 20% time to acquire information (Roter & Hall, 2006), during which the time for a doctor's questioning is up to 90% (West, 1984; Roter & Hall, 2006). Because of doctors' professional knowledge, they are always in a leading position. And they have the power to constrain topics, so they are a means of controlling the direction of the conversation and asserting power. Doctors' power sometimes may have side effects on the relationship between doctors and patients

Because doctors' questioning has the key influence on the research of doctor-patient conversations, so it has been much studied. Researches on doctor's questioning mainly involve: influence of various types of questioning on doctor-patient communication (see Bates, Bickley, & Hoekelman, 1995; Cassell, 1997; Heritage & Robinson, 2006; Macdonald, 2004; Heritage & Clayman, 2010); influence of social cultural factors on questioning (Ainsworth-Vaughn, 1998; Beisecker, 1990; Cordella, 2004; Ong et al., 1995); the study of questioning in specific disease (see Silverman, 1987); the study of questioning strategies (see Heritage & Clayman, 2010; Stivers & Majid, 2007); exploring questioning

– answering system (see Boyd & Heritage, 2006; Han Song, Kim, & Rim, 2007; Lee et al., 2005; Ray & Joshi, 2010). Though there are very broad perspectives and sufficient contents in research of questioning, the research of classification of questioning is far less than systemic. In this article, I have concluded classifications of doctors' questioning from four perspectives: a) conversation process; b) contents of questioning; c) linguistic markers; d) functions.

## 1. CLASSIFICATION IN TERMS OF CONVERSATION PROCESS

### 1.1 Social History Taking Questioning

In terms of conversation process, there are social history taking questioning, mental questioning and medical questioning. According to diagnosis and treatment process, “problem presentation” — “data collection”— “diagnosis”— “treatment”, before or immediately after patients' problems present, doctors often raise questions for patients' social status, age, nationality and history of disease, which we call social history taking questions. These questions are often developed in a branching structure in which specific clusters of diagnoses are successively pursued, or ruled out, in the process of differential diagnosis. A doctor usually takes 20%-30% of all questioning time for social history taking questions (Roter & Hall, 2006), which are often raised at the beginning of conversations, and can help doctors quickly and accurately know patients' social statuses. So it is a critically important dimension of medical care that is essential for accurate diagnosis and appropriate treatment (Bates, Bickley, & Hoekelman 1995; Cassell, 1997).

### 1.2 Mental Questioning

After knowing patients' social status, doctors need to know more about patients' psychological states. Those questions we call psychological questions. They can help doctors to know patients' anxiety, emotion and feeling, which are important to build harmonious relationship between doctors and patients. The typical psychological questioning model is BATHE (Stuart, 1986) (B-background, A-affect, T-trouble, H-handling and E-empathy). Questioning for background can encourage a patient to describe his mental states; questioning for affect helps a patient to tell his anxiety, fear, melancholy and other feelings; questioning for trouble let a patient tell the causes of emotional fluctuation; questioning for handling may help a doctor evaluate a patient's functional states; empathy is a doctor's understanding for a patient's psychological states.

### 1.3 Medical Questioning

During the process of a doctor-patient conversation, medical questioning is very important. Such questioning can help a doctor to directly acquire information, find out the cause, diagnose and treat. Medical questioning

often develops in a tree structure, with plenty of diagnosis details, by which doctors collect information, then make a judgment. Among all types of medical questioning, generic medical questions are the research emphasis. They are the simplest ones to acquire common information. After the research on 1396 medical questions, Ely and his colleague (2002) concluded 64 types of generic medical questions on the basis of semantics. Though medical questioning may help accurately diagnosis and effectively treating, it is full of terminologies and hard to understand. If a doctor paid no attention to a patient's comprehension and acceptability when he chooses medical questioning, harmonious relationship between doctor and patient may be damaged, which makes conversation lack of intimacy and seems indifferent.

## 2. CLASSIFICATION IN TERMS OF CONTENTS OF QUESTIONING

### 2.1 Open Questioning

Ibrahim (2001) referred to six types of doctor questioning, among which open questioning and closed questioning are two basic ones. Because of their significance, it is necessary to separately classify them in terms of content. In a doctor-patient conversation, open questioning is often raised by a doctor at the beginning of the conversation, which is regarded as one of the important features of good communication. For open questioning, doctors provide a chance for patients to convey their requirements and basic information. For open questioning in doctor-patient conversations, it usually includes three specific types (see Table 1): “General inquiry” questions, “Gloss for confirmation” questions, and “Symptoms for confirmation” questions.

**Table 1**  
**Three Types of Open Questioning in Doctor-Patient Conversations**

Question type	Example
“General inquiry” questions	How can I help? What's the problem? What can I do for you today?
“Gloss for confirmation” questions	Sounds like you're uncomfortable? So you're sick today, huh?
“Symptoms for confirmation” questions	So having headache, and sore throat and cough with phlegm for five days?

*Note.* Heritage & Clayman, 2010, p.106.

### 2.2 Closed Questioning

Closed questioning is usually raised at the middle and the end phases of a conversation, which confined a patient's answering, and not gave him chances to elaborate his medical problems or add any new information. However, closed questioning can let a doctor acquire information quickly and easily, and promote efficiency of diagnosis and treatment. There are three types of closed questioning

in doctor-patient conversations: yes/no interrogative, statement + interrogative tag and yes/no declarative question. According to Ibrahim's research, the ratio of a doctor's questioning for closed question is up to 97.21%, for open question is only 2.79%. The problem is that the over use of closed questioning may cause conversations to become cold and indifferent, lacking kindness.

**Table 2**  
**Three Types of Closed Questioning in Doctor-Patient Conversations**

Question type	Example
Yes/no interrogative	Are you married?
Statement+ interrogative tag	You're married aren't you?
Yes/no declarative question	You're married?

Note. Heritage & Clayman, 2010, p.140.

### 3. CLASSIFICATION IN TERMS OF LINGUISTIC MARKERS

Syntax and tone are important standards to classify questioning. Syntax includes object-predicate inversion and wh- moving; tone mainly includes rising and falling, rising expressing uncertainty and falling expressing certainty (see Table 3). Not only syntax and tone can be the standards to judge whether the clause is interrogative or not, but also discourse/context can also be (see Table 4).

**Table 3**  
**Syntax/Tone Standards' Classification**

Syntax/tone	Example
WH	When will the test results be back?
SWH	The test results will be back when?
Yes/No	Are the test results back?
TG	The test results are back, aren't they?
QF	The test results are back, right?
PH	The test results are back?

Note. Ainsworth-Vaughn, 1998, p.83.

**Table 4**  
**Discourse/Context Standards' Classification**

	Discourse/ context
D	The test results are back... (pause).
DD	I wonder whether the test results are back.
QQ	I have a question. It seems important to know the test results.

Note. Ainsworth-Vaughn, 1998, p.83.

### 4. CLASSIFICATION IN TERMS OF FUNCTIONS

#### 4.1 Informational Function

Systemic functional linguists believe that a conversation is unfolded with a series of information units in a

particular order which goes one after another, continuous and successive, and without interval (Halliday, 2004). Information, in terms of the grammatical meaning, involves given information (or predictable) and new information (or unpredictable). Questioning has the functions of eliciting and appealing new information and confirming given information. So from the perspective of information function, there are two types of questioning in the doctor-patient conversation: a) Questioning for seeking information, e.g. "When did you have a phlebotomy?"; "I want you to tell me about this stomach pain you are having"; b) Questioning for the verifying and repairing conversational mistakes, e.g. "Did you say have a pain on the right shoulder?"

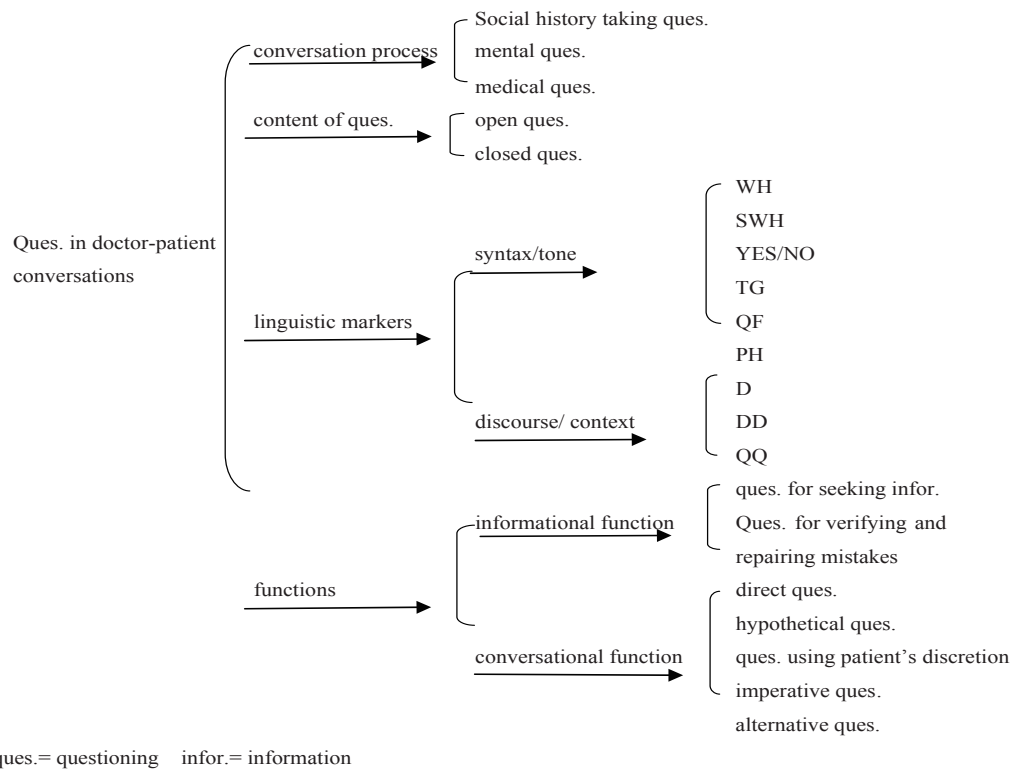
#### 4.2 Conversational Function

From the perspective of conversational function, questioning can be classified as a) direct or neutral questioning, e.g. "What's wrong with your son?" b) hypothetical questioning. It is the questioning for verifying whether patients have understood doctor's questioning, e.g. "So when you stand up, it's worse?", "And so the first thing this morning you got up out of bed, and you felt dizzy. Is that [[what you are saying]]?" c) questioning using patient's discretion, e.g. "And do you know what it was then?" d) imperative questioning, asking for oral service, e.g. "So I've got here that you're feeling sort some vertigo this morning, some sort of dizziness? Tell me about that!" e) alternative questioning, e.g. "So does the room spin around or is it that you just feel light-headed?"

Besides the classification of questioning in terms of informational and conversational functions, we also have other types in terms of function such as on the basis of pragmatic function including explanation questioning, analysis questioning, appraisal questioning and application questioning. But types based on informational function are more common and more frequently used, because information seeking and acquiring propel the doctor-patient conversations.

### CONCLUSION

The research on doctors' questioning in doctor-patient conversations has made significant achievements. Doctors, sociologists and linguists have conducted considerable theoretical and empirical researches on questioning. Especially for empirical researches, they did much by means of recording, interviewing, transcribing and so on, produced plentiful and comprehensive data. The results were valuable for doctor-patient interaction. For the classification of doctors' questioning, we may conclude it as follows:



**Figure 1**  
**Classification of Doctors' Questioning in Doctor-Patient Conversation**

After my study of the classification of doctors' questioning, I found the following features as: a) The discrepancy of classification may influence the course of a conversation. There is discrepancy between the types classified in terms of different perspectives, which inevitably impose different influences on conversations. For example, doctors' open questioning is closely related to patients' satisfaction. When doctors encouraged patients to present his state of illness with open-questioning, patients would give more positive response; for medical questioning, doctors should consider patients' comprehension and acceptability, otherwise the relationship between them may be stiff. b) Different choices of questioning are affected by some internal and external factors. Internal factors, such as gender, age, cultural diversity, nature and severity of disease, and external factors, such as change of scene, both may influence doctors' choices of different types of questioning. c) All types of questioning are not isolated, but intersectional or even overlapping. For example, social-history questioning, psychological questioning and medical questioning in terms of the process of diagnosis and treatment, are overlapped with open questioning or closed questioning. There is no clear distinction between "good" and "bad" questioning. Doctors may choose different types of questioning to meet information needs. They could also infer from patient's response and appraise patient's ability to answer. Researchers may develop their studies based on one or more classifications mentioned above.

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