University of Szeged Doctoral School in Linguistics Theoretical Linguistics PhD Program

# Is that an answer to the question? Analyzing the opening turns of physiotherapist-patient interactions

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Dissertation

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2022

I hereby declare that the present doctoral thesis is my own, independent work.

Budapest, 2022. October

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#### **ACKNOWLEDGMENTS**

First of all, I am eternally grateful to my supervisor, Prof. Enikő Németh T. DSc, who trusted and supported me all along this difficult journey. She is a role model for me both as a researcher and a teacher, as well as a person.

Dr. Heidi E. Hamilton, my mentor as a Fulbright grantee at Georgetown University, Washington D.C., had a crucial role in developing my analytical skills in the field of healthcare communication. Without her, this work would probably be non-existent. I also had fruitful discussions with Dr. Marissa Fond at Georgetown University, who provided valuable insights into my data. Special thanks to the Fulbright Program and the Hungarian Fulbright Commission, who made this all possible.

My friend and co-analyzer, Cecília Sarolta Molnár was always there for me, no matter whether it was about an academic or a personal crisis. She managed to put on a good face and show interest even when some of the data needed to be reanalyzed. Sometimes her motivation helped me to get through my own desperation.

Sarah Bigi and Maria Grazia Rossi, the editors of the upcoming 17th International Pragmatics Conference panel book, had a major impact on my research. Their reviews of my chapter and our following discussion improved my classification of patients' answers enormously.

I would like to thank Klára Soltész-Várhelyi for introducing me to the mysteries of statistics. Her educational videos were enlightening, and I truly enjoyed our consultations.

The comments and opinions of Dr. Lívia Ivaskó and Dr. Ágnes Kuna, the opponents of the first version of this thesis, improved the overall quality of my work. Furthermore, all the anonymous reviewers of my papers forced me to crystallize my thoughts and thereby contributed to my professional development.

No words can express, how much I owe to Jan, my partner, who was my emotional fortress along the way. Additionally, he did everything from household chores to walking our dog, so that I can solely focus on writing (and freaking out). I have to look for another excuse from now on.

Last but not least, I would like to thank all the physiotherapists and patients for finding the courage to participate in this research.

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#### **TRANSCRIPTION CONVENTIONS**

Note that only symbols that are relevant for the purpose of the present work are presented below. Source: Sidnell 2010

- [ Separate left square brackets, one above the other on two successive lines with
- [ utterances by different speakers, indicate a point of overlap onset, whether at the start of an utterance or later.
- ] Separate right square brackets, one above the other on two successive lines with
- ] utterances by different speakers, indicate a point at which two overlapping utterances both end or where one ends while the other continues, or simultaneous moments in overlaps which continue.
- (1.5) Numbers in parentheses indicate silence, represented in tenths of a second; what is given here in the left margin indicates 1.5 seconds of silence. Silences may be marked either within an utterance or between utterances.
- (.) A dot in parentheses indicates a "micropause", hearable, but not readily measurable without instrumentation; ordinarily less than 0.2 of a second.
- . The period indicates a falling, or final, intonation contour, not necessarily the end of a sentence.
- ? A question mark indicates rising intonation, not necessarily a question.
- , A comma indicates "continuing" intonation, not necessarily a clause boundary.
- :: Colons are used to indicate the prolongation or stretching of the sound just preceding them. The more colons, the longer the stretching.
- A hyphen after a word or part of a word indicates a cut-off or self-interruption, often done with a glottal or dental stop,
- hhh Hearable aspiration is shown where it occurs in the talk by the letter h the more h's, the more aspiration. The aspiration may represent breathing, laughter, etc.
- (hh) If it occurs inside the boundaries of a word, it may be enclosed in parentheses in order to set it apart from the sounds of the word.
- .hh If the aspiration is an inhalation, it is shown with a dot before it.
- (()) Double parentheses are used to mark the transcriber's descriptions of events, rather than representations of them: ((cough)), ((sniff)), ((telephone rings)), ((footsteps)), ((whispered)), ((pause)), and the like.

- (word) When all or part of an utterance is in parentheses, or the speaker identification is, this indicates uncertainty on the transcriber's part, but represents a likely possibility.
- () Empty parentheses indicate that something is being said, but no hearing (or, in some cases, speaker identification) can be achieved.

#### Modifications

- WOrd Upper case indicates some form of stress or emphasis. (Originally it indicates loud talk)
- (..) Stands for silences, which duration is 0.2–0.5 sec
- (...) Stands for silences, which duration is 0.51-1.0 sec
- (1.5) Silences longer than 1.0 second were measured.

#### **1** INTRODUCTION

The present work analyzes interactions between physiotherapists (PT) and patients during their first encounter, i.e. first visit. If we put this area of research into context, we can establish the fact that these interactions belong to the field of healthcare communication, and within that to the investigation of communication between healthcare professionals (HCP) and patients – as opposed to e.g. interprofessional communication or public health messages. Consequently, PT-patient interaction is a type of institutional discourse. This feature has important implications for the participants involved as well as for the analyst since neither of them can ignore the fact, that these conversations are task-based interactions. The main tasks to be achieved are the establishment of a diagnosis and, based on that, an appropriate treatment plan, none of which could be reached without adequate communication. Hence, the task determines, influences, or constrains the way of communication. On the other hand, the way of communication, i.e. the applied communicative strategies affects the achievement of the task in turn – **how** effectively or **if** the task is achieved at all. Therefore, the study of healthcare communication, in this case, HCP-patient communication, is not only interesting and relevant from a linguistic-pragmatic perspective, but it also has implications for the outcome of the visit – as we will see in the next section.

#### **1.1** Relevance of the topic – Why study healthcare communication?

The importance of healthcare communication research is supported by several studies, whose results indicate that communication has a direct or indirect effect on patient outcomes. Research shows that positive therapeutic alliance, positive outcome suggestions, i.e. encouraging positive expectations about treatment effectiveness, increasing practitioner empathy,<sup>1</sup> and valuing patient autonomy all seem to improve pain and treatment satisfaction (Hall et al., 2010; Howick et al., 2018; Mistiaen et al., 2016; Oliveira et al., 2012; Street et al., 2012; van Osch et al., 2017). Furthermore, clinicians' information-giving strategies may have a positive significant effect on patients' recall and health-related behavioral outcomes. That is, different framing strategies, e.g. structuring versus non-structuring of information, the use of visual methods to illustrate key points, and persuasive and cognitive aid strategies may enhance patients' recall and health behavior (Lie et al., 2022). The benefits of proper information provision are evident since if a patient is not able

<sup>&</sup>lt;sup>1</sup> Communication may have a positive effect on (health) outcomes via the modulation of placebo responses (context effects) (Annoni & Miller, 2016; J. M. Bensing & Verheul, 2010; Blasi et al., 2001).

to understand or remember what they were told, there is no way for them to follow recommendations. In other words, ineffective information giving can lead to non-adherence to treatments. Not only framing strategies, which help information recall, may improve patient adherence, but studies show that physician's communication generally is significantly related to adherence (Haskard Zolnierek & DiMatteo, 2009). This finding may seem logical if we think about the fact that providing information, i.e. education, is a necessary and useful, but not a sufficient requirement for enhancing adherence. Apart from understanding and recalling the heard information, patients also have to be motivated (believe in the treatment) and they should have a strategy to be able to follow the treatment recommendations (DiMatteo et al., 2012; van Dulmen et al., 2007). It is hard to argue that communication is inevitable in pursuing these goals.

In sum, there seems to be a convincing amount of evidence supporting the idea that the quality of communication within healthcare encounters really matters. The following question arises, however: how do we know what counts as good or effective communication?

Before we direct our attention to the next section, a final note is necessary here, since so far, we have only discussed the features of the medical interview generally. The study of healthcare communication covers a broad area of research, therefore it is important to repeat here that – as it was mentioned at the beginning – PT-patient interactions belong to the wider field of healthcare communication between HCPs and patients. The first encounter between HCP and patient is of special importance since this is the occasion when, on the one hand, participants start to build the relationship, and, on the other hand, the exploration of the patient's problems is necessary. These basic tasks are the same during the initial encounters between PTs and patients – the focus of the present work. Furthermore, PTs also have to come to a diagnosis and recommend therapy based on that. Therefore, the considerations described above and the basic structure and objectives of the visit to be presented later (2.2) can be adapted to physiotherapy sessions as well.

#### **1.2** Aims, methods, and the data

The aim of the research is to explore 1) the characteristics of physiotherapists' opening questions (OpQ), which initiate the problem presentation phase of the visit (see 4.2.1), 2) the patterns in patients' answers to those questions, and to see 3) if and how these two relate to each other. Therefore, rather than testing hypotheses, the dissertation tries to answer four research questions connected to these aims, presented in the following section. Since the nature of the research

question also determines the method(s) that could best provide an answer, some methodological considerations are also discussed below. The second part of this section will introduce the data.

#### 1.2.1 Research questions and basic methodological considerations

Based on the exploratory analysis of the data on the one hand, which mainly focused on the beginning of the interactions, i.e. the problem presentation phase (see 4.2.1), and on personal experience on the other, four research questions were formulated. These are the following:

- 1) What type of opening questions (OpQ) are used by physiotherapists (PT)?
- 2) What kind of answers (second turn -T2) are provided by patients?
- 3) (How) can we explain the variety of answer types provided by patients?
- 4) Is there a relationship between the question and the answer types?

Answering the first research question fulfills the first aim, the second and the third questions are connected to the second aim, while the last question is related to the third aim of the research. We can divide these four questions into two major groups: questions that need a qualitative approach to be answered (1-3) and one question (4) that needs both qualitative and quantitative analysis for its answer.

Furthermore, the first two questions imply a descriptive method based on microanalysis (see 2.3.2). The aim was to systematically explore and present what occurs in the data regarding the content and characteristics of PTs' OpQs and patients' T2s. Yet, the approaches taken in order to answer the first and the second question differ. In the case of the opening questions (OpQ), the analysis was both theory- and data-driven. In other words, the starting point for the classification of OpQs was previously described question types. It was soon realized, however, that these categories do not suffice in the case of the present corpus, so the necessary modifications and extensions of categories were based on the data (see part 4.1.1 later). The identification of the categories for patients' answers on the other hand was solely based on the data, i.e. it followed an inductive method (see part 4.2.3 later).

The microanalytic method (see later) applied in the investigation of the first two research questions needs some further elaboration. First, the main unit of analysis included three interrelated layers: 1) OpQs separately, 2) T2s separately 3) OpQ-T2 relations in a qualitative sense. Second, the analysis was conducted on a turn-by-turn basis, where the examined utterances or turns are

question-answer pairs, i.e. adjacency pairs (Schegloff & Sacks, 1973). Therefore, the analysis, as well as the transcription, were rooted in the method of Conversation Analysis (CA) (see 2.3.3). However, in order to be able to understand and explain the explored phenomena, the consideration of the wider context was found to be indispensable. Since, as it will be discussed later, explanation of events and context (other than what interlocutors orient to) are not among the main points of interest within CA (proper) (Teas Gill & Roberts, 2012), the analysis included the perspectives of discourse analysis (Schiffrin et al., 2001) and linguistic pragmatics as well (Levinson, 1983). This resulted in a more complex analysis of the data, which appreciates the "general cognitive, social, and cultural perspective on linguistic phenomena in relation to their usage in forms of behavior". In short, a "general functional perspective on language" (Verschueren, 1999:7,11) was applied in the present work.

In answering the third question, the exploration of different theories about common ground was needed, in order to see if there is an existing framework that provides sufficient explanation for the variety of patients' answers (see chapter 5). The reason why common ground was considered a crucial aspect in this context is the following. As it was already mentioned before, physiotherapist-patient conversations are task-based interactions. The first major task is to identify the patient's reasons for the visit, i.e. what their problems and concerns are. PT's OpQ pursues this goal, which could also be expressed as a search for common ground regarding the patient's problems. Part 4.2.1 and chapter 5. will discuss this topic in detail.

The last question is very different from the first three in the sense that a quantitative approach, i.e. statistical analysis is also needed for it to be properly answered. Part 4.3 will cover this area of interest. For more details about the methodology, see the relevant sections later: 4.1, 4.1.1, and 4.2.2-4.2.3, respectively.

#### **1.2.2** General description of the data

Originally 79 audio recordings were made, but in two cases the recorder was switched on late, so these two recordings were excluded from the analysis. As a result, 77 interactions between physiotherapists (PT) and patients were included in the analysis. All the recorded interactions were **first visits** of the patients at the given physiotherapist. However, before the official visit, PTs may have met their patients in order to agree on the exact time of the appointment. The institution, where the recordings took place is a major hospital in Budapest (Hungary) that specialized in

musculoskeletal problems, its main profile being rheumatic diseases. Data was collected between 2018 July and 2019 May. The research was approved by the Scientific and Research Ethics Committee of the Medical Research Council, Budapest, Hungary (ETT TUKEB 34846-2/2018/EKU).

Convenience sampling was applied in the case of both the PTs and the patients. Twenty-two physiotherapists (all female) from 7 different departments or units of the hospital agreed to take part in the research, and each recorded 3-5 sessions with different patients (N = 77). The demographic data of the participants – including PTs' clinical experience – are summarized in Tables 1 and 2.

Table 1 Descriptive Statistics – Physiotherapists

	Age Clin	ical experience (year)
Valid	22	22
Median	27.000	2.750
Mean	31.091	7.015
Std. Deviation	9.909	10.149
Minimum	23.000	0.170
Maximum	59.000	38.000

Table 2 Descriptive Statistics – Patier	us	
		c

	Age of patient	
	male	female
Valid	12	65
Missing	0	2
Median	62.500	67.000
Mean	59.167	65.569
Std. Deviation	15.135	12.035
Minimum	37.000	35.000
Maximum	82.000	86.000

The context of the recordings and the physiotherapy treatments in the above-mentioned hospital is the following. All of the recorded patients were inpatients, who spent 2-3 weeks (depending on the certain department) in the institution, receiving several kinds of treatments on a daily basis. These include one-on-one and group physiotherapy, massage, electro-, and aquatherapy, as well as medical treatment. Every patient in the hospital receives individual physiotherapy and the first meeting is always about the assessment of the patient's actual status. So, the recordings reflect the usual course and manner of this process. It is important to emphasize that all of the participating

patients were **new patients** for the treating PT, although they may have been regular patients at the hospital. In other words, recorded patients may have been treated in the hospital previously, but met their present PT for the first time, so no established relationship existed between the participants.

In most cases, when the patient arrives to the hospital, s/he is examined by a medical doctor before the first physiotherapy session. As a result, the medical records of the patient are available to the PT by the time of their meeting. This factor will be relevant in the analysis later (part 4.1, especially 4.1.2). However, time issues may interfere, and PTs are not always able to read the records in advance. The PTs were asked to provide this information, i.e. whether they have read the patients' records before their meeting or not, but in 18 cases these data are missing. In 38 cases the PTs did read the patient's medical records before the first sessions. However, it is not clear in many of these cases, whether this fact was shared with the patient or not. As a result, this aspect was not considered in the research.

As for the recordings, the researcher was not present during the meetings. The positive consequence of this is that there were fewer disturbing factors for the participants, so the circumstances of the recording were more similar to the normal way of conduct. The limitation of this practice, however, is that no observational field notes could be taken. The participating PTs were instructed to start the recorder before the beginning of the first visit, and only to stop it when the visit was over.<sup>2</sup> The beginning of the main part of every session was transcribed by the author, using EXMARaLDA software (Schmidt & Wörner, 2014). The main part of the visit was operationalized as starting with PT's opening question (OpQ), i.e. with the question that was supposed to elicit patient's concerns – so it is not the true/real start of the visit. Before the OpQ, different practices were present among the PTs. Some informed the patient about their scheduled treatments (e.g. time, location), some made them fill out the paperwork for the research, and some did the basic introductions. Only general notes were made about these activities before the OpQ. Transcriptions ended when PT shifted towards the activity of history-taking, i.e. started to pursue the details of a symptom, or when PT changed the topic of talk (about patient's concerns) in another way. However, when it was necessary for the demonstration of the style of the conversation, or

 $<sup>^{2}</sup>$  In the hospital, where the recordings took place, more PTs work with their patients at the same time, in the same treatment room. In case of six PTs however, at the beginning of the data collection, a separate room was used for the recordings, in order to avoid the noises from others. This fact may have influenced PTs' (and their patients') behavior, as it was an unnatural working environment for them, i.e. not what they have been used to.

when something, which could be interesting for further research, was going on, a part of the historytaking was also transcribed. So, beyond the minimal content requirement that patient's problem presentation seemed to be over, there were no strict rules made about where to end the transcription. The decision was made considering the interest of further analysis in the future. The total amount of time transcribed is 03:11:38 (hh:mm:ss), the shortest time segment being 23.74 seconds and the longest being 07:23.27 (mm:ss), with an average of 02:31.29 (mm:ss), median = 02:17 (mm:ss) and SD = 01:34.03(mm:ss).

The transcriptions are based on the conventions of conversation analysis (Sidnell, 2010), but I made some modifications in the indication of silence since the focus of the research did not make the exact measurement of silence necessary. The used symbols are the following:

- (.) indicates a micropause (< 0.2 sec), as in CA conventions
- (..) stands for silences, which duration is 0.2–0.5 sec
- (...) stands for silences, which duration is 0.51–1.0 sec
- Silences longer than 1.0 second were measured.

#### **1.3** The structure of the dissertation

The second chapter gives a brief introduction to some healthcare communication models that are recommended based on theoretical grounds (2.1). These models are compatible with the needs of the biopsychosocial model that is also introduced along the way (Engel, 1977). Next, in section 2.2, the basic structure and functions of the medical interview coupled with some relevant communicative skills are presented, which are adaptable to PT encounters as well, since it does not make sense to talk about effective communication without determining the goals of the interaction. In other words, only by considering whether a certain aim was reached or not can we decide if some technique works or not. Section 2.3 describes the basic methods that are applied in healthcare communication research. It includes a more detailed discussion about conversation analysis (CA) in section 2.3.3 since this method formed a major knowledge base for the present work. The last section of the chapter (2.4) gives a brief overview of the research conducted in the field of PT-patient communication.

Chapter 3 is a theoretical discussion about the characteristics and types of questions generally (3.1-3.2) and within the medical context (3.3). It highlights the difficulties of defining a question

in linguistics and adopts a general definition of questions involving functional and sequential considerations.

The fourth and longest chapter includes the demonstration of the processes and the results of the data analysis. It discusses the types and characteristics of PTs' opening questions (OpQ) and the categories of patients' subsequent answers (T2) in separate sections – 4.1 and 4.2, respectively. The last section of this chapter (4.3) is set out to quantitatively determine, whether there is a relationship between the features of the OpQs and the categories of the T2s.

Chapter 5 aims to provide a theoretical framework, which could explain the variety of answers that patients give to OpQs, and especially the observation that many times it seems like patients were not answering the question. The concept of common ground (5.1) and the socio-cognitive approach (5.2) form the basis for these considerations.

The conclusion and main findings of the research are summarized in Chapter 6, along with the formulation of some recommendations that could be implemented in practice (6.2), and thoughts about future research (6.3).

#### **2** THE STUDY OF HEALTHCARE COMMUNICATION

#### 2.1 Healthcare communication models and recommendations

Several healthcare communication models and recommendations exist in the field of HCP-patient communication. Without the intention of being exhaustive, I briefly describe a few relevant ones below.

The Kalamazoo consensus (Makoul, 2001) synthesized the essential elements of five doctorpatient communication models resulting in seven essential sets of communication tasks: 1) build the relationship, 2) open the discussion, 3) gather information, 4) understand the patient's perspective, 5) share information, 6) reach agreement on problems and plans, and 7) provide closure. The Information-Motivation-Strategy Model (DiMatteo et al., 2012) is based on a narrative review of research on (non)adherence and proposes a model that could help practitioners in improving patient adherence. According to the model, first, patients need the right information, so that they understand what and why they are supposed to do, and so that they are able to participate in decision-making. Furthermore, patients have to believe in the efficacy of their treatment and become motivated to commit to it. Last, they should be able to apply the appropriate strategies in order to overcome practical barriers to treatment adherence. Motivational Interviewing (MI) (Rollnick et al., 2008) is another well-known method in healthcare communication. Originating in the field of psychology (applied especially in dealing with substance use disorders), it became widespread in healthcare settings generally, since it helps people change their behavior – a basic requirement in managing long-term conditions. The goal of MI is to activate patients' own motivation for change and improve their adherence via the use of the following three core communication skills. Asking open questions followed by active listening in order to understand the patient's problems, and properly informing the patient about their condition and its treatment. The Patient-centered Interviewing Method (Smith et al., 2013) includes 5 steps to be achieved during the first part of the visit: 1) setting the stage for the interview, 2) chief concern/agenda setting, 3) opening the history of present illness (HPI), 4) continuing the patient-centered HPI, and 5) transition to the doctor-centered HPI, while the recommendations of the Four Habits Interviewing Model (Smith et al., 2013) are the following: 1) invest in the beginning, 2) elicit the patient's perspective, 3) demonstrate empathy, and 4) invest in the end. The Calgary-Cambridge Guides (Silverman et al., 2013) will be presented in more detail in the next section.

Although the descriptions above presented only the main aspects of each model, similarities can be recognized among them. The common feature of these recommendations is that they are all based on the tenets of patient-centered communication, which has become a central requirement in healthcare settings since the emergence of the biopsychosocial model (Engel, 1977). This model challenged the biomedical perspective, which defines disease only in terms of somatic parameters (deviations from biological norms), and ignores the possibility that psychosocial issues may also play a role in patients' illness experience. However, beliefs about the disease, its effect on patients' life, social contexts and expectations about the treatment, or other behavioral aspects may all be important factors when considering illness. This is further supported by the fact that the presence of biological deviations is not even a sufficient condition for a person to see themselves as being ill. In other words, illness experience is not dependent on biological parameters. Following from this changing illness (conception, a new approach to clinician-patient communication was also needed. Engel himself wrote that "the most essential skills of the physician involve the ability to elicit accurately and then analyze correctly the patient's verbal account of his illness experience" (Engel, 1977:132).

Thus, the biopsychosocial model and its perspective warranted patient-centered communication. Patient-centered communication is defined as 1) eliciting, understanding, and validating the patient's perspective (e.g., concerns, feelings, expectations), 2) understanding the patient within his or her own psychosocial context, 3) reaching a shared understanding of the problem and its treatment, and 4) sharing power, by offering the patient meaningful involvement in choices that are related to his or her health (Epstein & Street, 2007:2).

So far, we have seen why patient-centered communication became important and what its goals are within the consultation. However, we have still not spoken about the skills that are needed in reaching these goals.

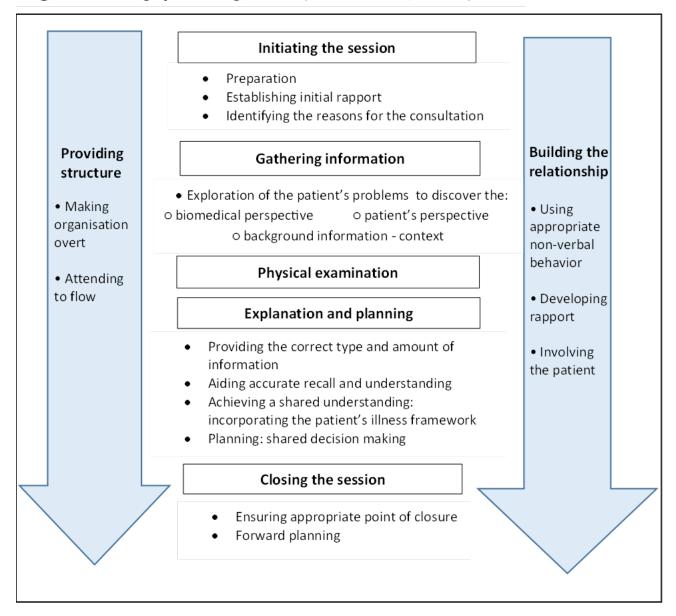
#### 2.2 Communication skills and the phases of the visit

It is impossible to talk about required or recommended communication skills without discussing the structure of a medical visit. Since each phase of a consultation has a certain function with different tasks and goals to achieve,<sup>3</sup> various communication strategies are required at each stage. It also follows that it makes sense to link certain communication skills with the actual phase or communicative function of the visit. In other words, first, we determine the given phase and its function or goal within the overall consultation, and only then can we make recommendations about the tools, i.e. the communication skills that may foster the attainment of that goal. Consequently, whether a certain communication style or skill is effective or not can only be determined by considering the goal(s) and outcomes it is meant to pursue (de Haes & Bensing, 2009).

Although different models exist representing the functions or structure of a medical interview, (see for example de Haes & Bensing, 2009; Epstein & Street, 2007; Silverman et al., 2013), the core of these models are the same. The only difference involves the number of functions determined in each concept. Below the Calgary-Cambridge Guides (Silverman et al., 2013) are presented, which thoroughly integrate the structure of the visit with the (communication) tasks and the objectives to be achieved (Figure 1).<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> Often the communication models use the term function of the clinician-patient communication and do not connect it to the phases of the visit. However, these two terms, although not the same, are closely related. Each phase of the visit has a certain function, but this is not a one-to-one relationship. A certain function, e.g. fostering the relationship can run all along the interview. Whether the term function or phase (or related terms like structure or framework) is used, also depends on the context, i.e. whether the discourse is about the research or the teaching of medical communication skills, respectively. These considerations should be kept in mind even though the text may suggest that these terms are synonyms or interchangeable.

<sup>&</sup>lt;sup>4</sup> The figure is used with the permission of Jonathan Silverman.



The complete guide defines 73 core communication skills fitted into the framework of tasks and objectives presented in Figure 1. As it is evident based on the figure, the Calgary-Cambridge Guides – just like the other models – integrate the biopsychosocial perspective into the medical interview. Furthermore, an important feature of the complete Guides is that they integrate the highly interrelated content (what) and process (how) skills. For example, if we take the Gathering information part or task of the visit, the biomedical perspective (e.g. symptoms), the patient's perspective (e.g. effects on life) and the context (e.g. past medical history) are the content areas to

be discovered at this stage. Process skills, on the other hand, are those communication strategies, which best help the exploration of the needed content. These include the question style, attentive listening, facilitative responses, etc.

Table 3 below, based on the works of Silverman et al. (2013), de Haes and Bensing (2009), and King and Hoppe (2013), highlights some of the process skills recommended during a medical interview.

Six Task (Silverman et al., 2013)	Process skills (Silverman et al., 2013)	Six Function (de Haes & Bensing, 2009)	Best practice skills (King & Hoppe, 2013)
Initiating the session	<ul> <li>Greet patient</li> <li>Appropriate opening question</li> <li>Listen attentively</li> <li>Confirm list and screen for further problems</li> <li>Negotiate agenda</li> </ul>		<ul> <li>Open-ended questions</li> <li>Listen actively</li> <li>Elicit patient's full set of concerns</li> <li>Elicit patient's perspective</li> <li>Clarify and summarize information</li> </ul>
Gathering information	<ul> <li>Use open and closed questioning techniques</li> <li>Listen attentively</li> <li>Facilitate patient's response</li> <li>Clarify and summarize</li> <li>Explore patient's ideas, concerns, expectations</li> </ul>	Gathering information	
	<ul> <li>Organize explanation</li> <li>Repetition and summary</li> <li>Check understanding</li> <li>Elicit patient's beliefs, reactions, and feelings</li> <li>Involve patient</li> <li>Negotiate a mutually acceptable plan</li> </ul>	Providing information	<ul> <li>Explain nature of problem and approach to diagnosis, treatment</li> <li>Emphasize key message</li> <li>Check understanding</li> </ul>
Explanation and planning		Decision making	<ul> <li>Explore patient' preferences and understanding</li> <li>Encourage patient to participate</li> </ul>
		Enabling disease- and treatment-related behavior	<ul> <li>Assess patient's readiness to change health behaviors</li> <li>Elicit patient's goals, ideas, and decision</li> </ul>
Closing the session	<ul> <li>Contract with patient regarding next steps</li> <li>Summary, plan of care</li> <li>Final check if patient agrees</li> </ul>		
Providing structure	• Signposting, transitional statements		
Building the	<ul> <li>Accepts legitimacy of patient's views and feelings – non-judgemental</li> <li>Use empathy</li> <li>Provide support</li> </ul>	Fostering the relationship	<ul> <li>Greet patient</li> <li>Listen actively</li> <li>Encourage patient participation</li> </ul>
relationship		Responding to emotions	<ul> <li>Express empathy</li> <li>Acknowledge and explore emotions</li> <li>Provide help</li> </ul>

**Table 3** Communication skills in the medical interview

The list is not meant to be exhaustive, it only demonstrates some relevant elements from a basic set of communication skills linked to the framework and functions of the interview. The table also shows, how the different models or guides can be linked, and that they are compatible with each

other: while Silverman et al. (2013) define six communication tasks and provide necessary process skills connected to them, de Haes and Bensing (2009) developed six functions of the medical interview. King and Hoppe (2013) summarize the best practice for patient-centered communication, arranging them around de Haes and Bensing's six functions. Table 3 integrates these seemingly different perspectives, showing how the tasks and functions can be brought together and that the related skills are essentially the same. If we observe the table carefully, we can see that the basic tasks/functions/phases are the same in the two approaches (de Haes & Bensing, 2009; Silverman et al., 2013), they are only structured differently. For example, de Haes and Bensing's Gathering information function is compatible with Silverman et al.'s Initiating the session and Gathering information tasks. Or the latter authors' Explanation and planning phase is divided into three functions in the work of the former ones. Still, these different approaches cover the same tasks and skills. It is important to note, however, that while Silverman et al.'s work was developed for teaching purposes, de Haes and Bensing proposed their framework (six functions with endpoints or outcomes) in order to enhance research methods in healthcare communication. These different objectives obviously influence the approach and perspective one takes when examining the medical interview.

Now that we have familiarized ourselves with (part) of the basic communication skills recommended and required during a medical visit, it should be emphasized that this is not a rigid system with fixed rules to follow. The main point is that clinicians should be able to flexibly use the basic set of communication skills since every patient, disease, or clinical field is different. To put it differently, choosing from the basic set of skills, communication should be tailored to the patient and adapted to the situation (Carrard & Schmid Mast, 2015; van Dulmen, 2011). In order to understand this requirement better, let us clarify the concept of patient-centeredness from this perspective. First, patient-centered can be conceived as opposed to disease-centered, which contrast influences the content of the consultation, i.e. the topics to be discussed – biopsychosocial versus biomedical. Second, the concept of patient-centered care can be placed opposite to doctor-centered care, which is about who is having control over the consultation. Obviously, patients differ in their preferences regarding the position they would like to take along these two dimensions. Thus, patient-centered communication also means that the clinician is sensitive to the patient's position along these axes and can adjust his/her communication skills to the required type of consultation (Bensing, 2000).

As a final remark, healthcare communication models and recommendations about skills should be based on empirical evidence acquired by the observation and analysis of real-life encounters. In other words, recommendations should follow from the results of scientific research. The next section gives an overview of the research methods applied in the investigation of healthcare encounters.

#### 2.3 Research approaches to medical interaction

When we talk about the methods that are used in the research of medical interaction, it is important to keep in mind that the chosen method constrains our understanding of the data, in this case, the understanding of the process of communication. A method is basically a sense-making tool, which determines the possible claims that can be made about the gained knowledge. A method also influences what phenomenon a researcher pays attention to, i.e. what the focus of the investigation is (Kertesz & Rakosi, 2012; Kertész & Rákosi, 2014; Thompson et al., 2014).

#### 2.3.1 Quantitative and qualitative research paradigms

There are two basic research paradigms used in science, namely the quantitative and the qualitative approaches. Generally, quantitative research paradigms examine "questions and phenomena that can be controlled, measured, counted and analyzed by statistical methods" (Malterud, 2001b:397). This approach, especially the use of randomized controlled trials (RCT) is seen as the gold standard within medical sciences. However, quantitative methods cannot grasp the interactional and interpretive elements present in clinical care (Malterud, 2001b). This is the point where qualitative research methods, by investigating the meaning of social phenomena, can be applied in order to gain a more complete picture of clinical practice. "Qualitative research methods involve the systematic collection, organization, and interpretation of textual material derived from talk or observation" (Malterud, 2001a:483).

Qualitative methods aim at understanding rather than explaining phenomena, although lately, the latter became more of an expectation within the qualitative research of healthcare communication (Britten, 2011). Furthermore, qualitative methods are perfectly fit to identify new questions within a certain topic of interest. Because of the typical properties and requirements of the two paradigms, the approaches of quantitative and qualitative research methods should

complement each other, so that a better understanding of clinical practice and medical interaction is gained (Kreps, 2011; Malterud, 2001b; Neumann et al., 2011).

There are three main ways in which the two basic research paradigms might be combined. First, qualitative studies can be preliminary to quantitative research. Second, they can be applied parallel (mixed methods), and third, qualitative research can serve to explain or explore the findings of a quantitative study (Britten, 2011). The next section considers, how these different approaches are used in the analysis of healthcare interactions.

#### 2.3.2 Healthcare communication research

In the case of medical interaction, there are three interdependent stages of research: description, analysis, and interpretation. Description means the transformation of audiovisual observations into data, so it basically covers the transcription procedures and rules that convert speech into written text. Transcriptions are reductive by nature and, additionally, already represent the examiners' interests and what counts as relevant information for them (Ochs, 1979). Therefore, it is important that during the stage of the analysis, researchers move back and forth between the transcription and the original recording. The interpretation stage is the transformation of findings into meaning (e.g. satisfied patients are more compliant). This stage is influenced by the methods and procedures of description and analysis, and it may be prone to bias. To sum up, methodological decisions at each stage influence findings (Mishler, 1984), or to put it different, it is inevitable that the investigator has an effect on the research (Malterud, 2001a). Therefore, reflexivity, i.e. the identification of the researcher's preconceptions, and their effect on the research is an important component of qualitative research (Malterud, 2001a; Zörgő, 2017).

There are three main methods used in the analysis of medical discourses: process analysis, micro-analysis, and methods that combine these two. The works of Charon et al. (1994) and Heritage and Maynard (2006) give a concise summary of the first two, described below.

Process analysis is based on the works of Barbara Korsch and her colleagues (Francis et al., 1969; Freemon et al., 1971; Korsch et al., 1968 – all quoted by Charon et al., 1994 and Heritage & Maynard, 2006) and Robert Bales (Bales, 1950 – quoted by Charon et al., 1994 and Heritage & Maynard, 2006). This method works with a taxonomy of behaviors, like asking questions, giving information, showing approval, etc. The coding of utterances is usually mutually exclusive and analysts count the appearances of tokens or instances belonging to these certain categories.

However, the content or context of the talk is not considered. The main goal of this approach is to link different behaviors to outcomes (e.g. satisfaction, compliance, health status, etc.), and to search for generalizable findings, using statistical methods. At the same time, process analysis ignores the interactive nature of the conversation. One widely used example of a coding system is the Roter Interaction Analysis System (RIAS) (Roter & Larson, 2002). RIAS uses mutually exclusive and exhaustive categories, which are organized into two major groups: task-focused (e.g. asking open or closed questions, information giving) and socio-emotional behaviors (e.g. building a relationship, activating and partnership building, expressing empathy). The approach of process analysis corresponds to the "speaking to patients" heading used by Hydén and Mishler's (1999) typology.

The other main approach to medical communication is microanalysis, or "speaking with patients" in Hydén and Mishler's term (1999). This method investigates the nature and structure of interactions at the individual level. The main idea is that talk is socially produced, jointly constructed, dynamic, and can only be interpreted with the consideration of the content of the situation and its context. Furthermore, the intention of and the relationship between the speakers are also important in understanding meaning. Two main methods of analysis within this approach include conversation analysis (see next section) and discourse analysis. It follows from this approach that the sample sizes are smaller than that of process analysis.

Hydén and Mishler (1999) use two more headings that describe the main topics and domains of interest or research perspectives in the field of medical communication. One is "speaking about patients", and the other is "speaking by patients". The first one focuses on the clinician's task to integrate information from various sources apart from patients' accounts, like laboratory findings and research literature. In this way, the objectification of patients may happen, i.e. the person is reduced to a collection of signs and symptoms. Jones (2013) calls this phenomenon virtualization or virtual bodies, which are the external representations of the body, separated from it in time and space.

The second, the "speaking by patients" paradigm is interested in patients' stories elicited outside the clinical setting. The examination of illness narratives is "guided by a view of narrativization as a way of meaning-making, where illness events and symptoms are framed within lifeworld contexts" (Hydén & Mishler, 1999:182).

As we can see from the descriptions above, process analysis and microanalysis represent the two basic research paradigms of quantitative and qualitative approaches. The former has a more static understanding of language use, where data can be coded and counted, so it can handle huge data sets. The latter on the other hand has a dynamic view on language use and considers discourse as being interactively co-constructed, so the goal is to understand situated interpretation. It follows that the datasets are smaller in the qualitative approach (Hamilton & Chou, 2014).

The present work applies mixed methodology, although the main body of the research is based on microanalysis. A microanalytic perspective was necessary since a thorough examination of PTs' opening questions (OpQ) and patients' answers cannot ignore the content of the utterances, the context of the situation, or the genre of the discourse. Additionally, a quantitative analysis was also conducted in order to determine, whether the type of the OpQ influences the category of the answer. Hence, a classification, i.e. coding system was developed based on the microanalytic findings. The basic methodological considerations were discussed in section 1.2.1. In addition, relevant sections (4.1, 4.1.1, and 4.2.2.-4.2.3) include more details about the applied methodology.

#### 2.3.3 Conversation Analysis (CA) in Medical Communication

First, a short description of the basics of conversation analysis is needed to understand, how this method can be useful in healthcare communication research. A most important point is that CA investigates real-life conversations.

There are three main questions CA is interested in when examining naturally occurring interactions: "1) How do speakers 'make sense' or 'make meaning' when they talk, and, similarly, how do listeners know what speakers 'mean' when they talk; 2) How does an utterance's meaning affect subsequent talk; and 3) How does an utterance's meaning affect speakers' 'relationship' with each other?". The core assumptions of CA are the following: "a) talk is a form of social action; b) meaning making is a product of the interaction order; and c) analysts prioritize members' meanings" (Koenig & Robinson, 2014:119-120).

CA states that the participants of an interaction are engaged in different activities, which have an overall structural organization. This organization is important because it "shapes and constrains the production and understanding of social action" (Koenig & Robinson, 2014:126). The smaller units of the social action are the turns of talk. CA has a main focus on turn design, i.e. how turns are constructed in order to perform a certain social action. Turn design is also important, because a turn is shaped by immediately previous actions, and at the same time it constrains what actions may follow, i.e. what counts as a contextually appropriate reaction. In other words, a participant's conversational action is doubly contextual: it is both context-shaped as well as context-renewing. In this way, turns build up organized sequences, like adjacency pairs (e.g. questions and answers) within the overall activity (Heritage & Maynard, 2006; Koenig & Robinson, 2014; Maynard & Heritage, 2005; Schegloff & Sacks, 1973). Hence, it is important to analyze turn of talk, since it shows a speaker's understanding of the previous turn, so participants display their understanding on a turn-by-turn basis (Sacks et al., 1974). This idea can be used in the construction of analysis as a next-turn proof procedure (Sidnell, 2012). By taking all these aspects together, we can see that CA has a co-constructive approach to communication research (Heritage & Maynard, 2006; Maynard & Heritage, 2005).

The above-described organization of interactions and the performance of different activities are carried over from the everyday world into clinical practice. It follows that the analysis of the medical interaction can be done at three (interrelated) levels. Researchers may examine 1) the overall structure of the visit, 2) the sequence structures through which certain sub-activities and tasks are executed, and 3) the turn design of those sequences (Heritage & Maynard, 2006). While CA focuses on **what** activities and **how** those certain activities are being accomplished, it does not try to explain **why** participants behave as they do. In other words, motives for behavior or the effect of social factors (e.g. gender, institutional identity, power) on the medical interaction are not considered within CA (Teas Gill & Roberts, 2012). Only those contextual factors are important in the analysis, which speakers orient to within the interaction (Ehrlich & Freed, 2010).

### 2.4 Communication during physiotherapy sessions

The method of conversation analysis is also commonly used in the examination of physiotherapistpatient interactions. Many of the studies referred to below (Cowell et al., 2019; Keel & Schoeb, 2016, 2017; Parry, 2009, 2013; Parry, 2004a, 2004b, 2005; Schoeb et al., 2014) adopt a conversation analytic approach.

Physiotherapy helps people in managing their pain and restoring or maintaining their movement and function after an injury, illness, or disability. Physical exercises are the cornerstone of this profession, exercises that may be painful or challenging, so it is very important that patients understand exactly what and why they have to do in order to get better. Especially, since certain exercises are to be done not only during the treatment sessions but in the patient's home as well. As a first step in the therapy process, however, physiotherapists (PT) should get a clear picture and understanding of patients' problems (whether physical or psychosocial), so that they can properly address patients' agenda. Therefore, the communicative component is of major importance in this kind of healthcare setting as well. Whether it is about the interactional management of patients' physical incompetence, or providing accounts for treatment actions and recommendations, the way PTs communicate with their patients may impact patients' motivation, cooperation, or the success of the whole therapeutic process (Parry, 2009, 2013; Parry, 2004b, 2005).

Although healthcare communication models (see 2.1) were developed in the context of doctorpatient interactions, patient-centered care, and the biopsychosocial approach are expected to be implemented in the physiotherapy practice as well. Furthermore, the basic structure of the visit, described in 2.2, is also adaptable to the physiotherapy context. In sum, although different types of consultations exist within healthcare (professions), which have different features, tasks, and goals, the patient-centered approach, the basic set of communication skills, and the structure of the visit are essentially the same in these different contexts. Depending on the profession, the type of consultation, and the individual patient, some or other skill(s) may be more or less important, there may be a bigger or smaller emphasis on a certain phase of the visit, but overall, the basic "toolkit" and the underlying principles are the same (Parry, 2009; Silverman et al., 2013).

The fact that the original interest in healthcare communication is rooted in the context of doctorpatient interactions is reflected in the literature as well since the vast majority of research in the field is devoted to this special topic. However, lately, there is also a growing interest in the research of physiotherapist-patient interactions.

As it was mentioned above, PTs too are required to apply a patient-centered, biopsychosocial approach during the treatment sessions. Nevertheless, Hiller and colleagues (2015) and Hiller and Delany (2018) found that there is a discrepancy between theory and practice, as PTs' communication in Australia was biomedically focused and characterized by practitioner-centered features, such as PTs' control of communication, or the observation that PTs make the decisions about treatment goals. This is in line with the results of Cowell and colleagues (2019), whose research was conducted in England. They found similar PT-focused communication in the way PTs react to patients' presented concerns. This included PTs' disengagement with patients' emotional concerns or their selective treatment of concerns by pursuing symptom behavior rather

than emotional cues. Furthermore, Topp and colleagues' (2018) survey among German PTs showed that 242 (67.8%) out of the 357 responding PTs reported using a paternalistic approach in decision making. In addition, the researchers found that knowledge about shared decision-making, an essential requirement in patient-centered care, was low among the participants, as 216 PTs (60.5%) did not know about this concept. It is also interesting to note that in accordance with the practitioner-centered, paternalistic approach, PTs seem to have an ideal image of the successful patient, who is rational, motivated, compliant and self-managing (Ahlsen et al., 2020; Hiller & Delany, 2018).

Nevertheless, the asymmetry between the participants may not only originate in PTs' attitudes, but patients may also contribute to the asymmetric relations within the interaction. This phenomenon seems apparent during goal-setting in physiotherapy treatment sessions, where patients may not know or feel entitled to claim knowledge about appropriate goals. For example, patients do not necessarily know, which problems react to what kind of therapy, since this area of knowledge is the expert's domain. Hence, asymmetry is interactionally produced, and these difficulties may contribute to the low occurrence of goal-setting episodes, as well as to the low rate of patient involvement. Still, these interactional difficulties may be reinforced by healthcare professionals' practice to control goal-setting. Yet another discrepancy between patient-centered care in theory and practice (Keel & Schoeb, 2016, 2017; Parry, 2004a; Schoeb et al., 2014). According to Parry (2005), part of the reason behind the discrepancies between official recommendations and practice is that the former do not consider or understand the collaborative, dynamic, and context-dependent nature of the (clinical) interaction.

Now that we have gained a general overview of the field of healthcare communication and communication during physiotherapy sessions, let us narrow our focus to the investigation of questions, which is one of the central issues of the present work.

#### **3** QUESTIONS

Proper questioning is the prerequisite for soliciting the necessary information from the patient. As we have seen previously (2.2), the recommendations for healthcare communication all include the use of open-ended questions – at least at the beginning of the visit. However, the topic of questions and question design is more nuanced than that. First of all, the notion of an open(-ended) question presupposes a binary distinction between open and closed questions, which is mainly based on the grammatical properties of the sentence and does not capture the subtle differences between question designs (Robinson, 2006). This idea seems to ignore the existing linguistic research on this topic. So let us have a closer (linguist's) look at questions generally and in the context of health care!

#### **3.1** The question of questions – What is a question?

The first question to be cleared about questions is what utterance is to be considered a question. Although generally, people seem to have no problem in identifying questions, linguists have been faced with problems, when trying to define a question as such. One possible cause of these difficulties is that like in the case of analyzing language generally, there are more components to be considered in order to decide if an utterance is a question or not.

These include grammatical form (syntax – interrogative form), semantic content, and pragmatic function. Prosody and epistemic asymmetry are also thought to be factors that contribute to questions' properties. Yet, intonation is not a reliable indicator of questions, since not all questions have rising intonation and not every utterance with a rising intonation can be considered a question (Hayano, 2012). Also, epistemic asymmetry only characterizes standard questions. In sum, it is difficult to come up with a definition of a question that combines formal, interactive, and pragmatic criteria at the same time (Ilie, 2015).

For this reason, I adapt Ehrlich and Freed's (2010:6) general definition of questions, which takes an interactive and pragmatic perspective and considers both functional and sequential dimensions. According to this definition, a question is an utterance that, on the one hand, solicits information, confirmation, or action (and/or is treated by the respondent as such). On the other hand, it creates a slot for the hearer to produce a responsive turn.

It follows from the second criterion that questions should be examined together with the answers given to them, as a basic unit of discourse (Kiefer, 1983), or in CA terms as adjacency pairs

(Stivers, 2012). Examined together, we can see that questions may influence the answers given to them, in other words, question design may shape and constrain answers, as well as express bias towards a preferred answer (see 3.3 later). In Semin's (2000) words, language can be viewed as a structuring resource – we structure the representation of reality as well as the communicative exchange. For example, an answer to a question changes the epistemic status of the questioner and through this fact has behavioral consequences.

After reviewing the difficulties of defining questions, the next section gives an overview of the typology or classification of questions.

#### **3.2** Open versus closed questions – Types of questions

This section focuses on questions relevant to the present work, namely standard questions, which request information unknown to the questioner.<sup>5</sup>

According to Kiefer (1983), based on their semantic structure, there are four types of questions in Hungarian: 1) yes-no or polar questions, 2) alternative questions, 3) constituent interrogatives and 4) open questions. In the former two categories, no interrogative word is present and they expect the responder to choose between the given alternatives. In contrast, the latter two categories do include an interrogative word and the filling in of a variable is expected. In the English language, the latter two categories fall under the wh-questions (Ilie, 2015), also called content questions (Hayano, 2012). These different labels also reflect the difficulties caused by the fact that different question typologies classify and name the groups of questions based on the primary aspect they examine (e.g. syntax, semantics, pragmatics). Next, if we look at the responses to the different kinds of questions, we find the following.

In the case of a yes-no or polar question, a preference can be expressed towards the expected answer, while with an alternative question there is no expected answer. The interrogative word in a constituent question determines the syntactic and semantic category of the set of answers, whereas the syntactic and semantic category of the set of answers is not determined in open questions (Kiefer, 1983) – in other words, the semantic component or range is unspecified (Tsai, 2006). Furthermore, if the question's constraint on the choices of the respondent is considered, two main categories of questions emerge. One is the closed questions, which include the yes-no and the

<sup>&</sup>lt;sup>5</sup> For a basic description of nonstandard questions (e.g. examination questions or rhetorical questions), see Ilie (2015).

alternative questions. The other category is the open or open-ended questions,<sup>6</sup> represented by whquestions. The former limits the number of possible answers, while the latter allows the respondent to answer more freely (Ilie, 2015). So, the two polarities differ in the information load of the answer. While open questions may solicit a theoretically infinite set of answers, closed questions limit the number of possible answers to a finite set (Tsai, 2006). To put it differently, open questions elicit information that is important to the respondent, while closed questions ask for information that is important for the questioner (Rollnick et al., 2008). However, rather than talking about open versus closed questions, Tsai (2006) proposes a continuum along which the scope of openness varies.

It has to be noted though that the classification of questions and their expected answers based on syntactic-semantic criteria is not without problems. For example, not only wh-questions can be open. There are situations, where a simple yes or no as an answer to a yes-no question is pragmatically inappropriate (Tsai, 2006), so pragmatically, a yes-no question can have a whinterpretation (Kiefer, 1980). To go further, for an utterance to be understood as a question, syntactically it does not even have to be a question at all (Tsai, 2006). This observation is in accordance with Schirm's opinion (2007), which emphasizes that the description and classification of questions cannot ignore the pragmatic aspects of the utterance, namely the conversational situation and the context.

So far, we have seen that the classification of questions involves the examination of possible answers as well. Another reason to examine question-answer sequences together, rather than just questions alone, is that if an elliptical answer is given to a question, the full answer can only be reconstructed if we know the question asked (Kiefer, 1983). In these cases, there is a tie by ellipsis, since the subject-predicate clause of the question is presupposed in the unexpanded answer (Mishler, 1984:142). Although Mishler mentions this phenomenon connected to yes-no questions, it can appear with other types of questions as well, and this aspect will be important in the analysis of my data, as we will see later (part 4.2.3.3).

In summary, not only the definition, but the typology of questions is also problematic. The difficulties include the main aspects of consideration, i.e. whether syntactic, semantic, pragmatic,

<sup>&</sup>lt;sup>6</sup> In the literature, both of the terms (open and open-ended question) are used with the same meaning. In this work, I use open question from now on, unless a reference to a certain publication is made, in which case I use the term as it is present there.

or functional features are taken into consideration, and the fact that in many cases it is impossible to examine questions separately from their answers.

#### **3.3** Questioning in medicine

Examining questions in medical discourse is a main area of research, partly because of the relationship between questions and power. Power can be defined as implementing one's agenda and in this sense, there are two kinds of power to be differentiated in medical interaction. One is the control over future action, like the outcome of the talk, e.g. if patients follow clinicians' recommendations. The other kind of power is the control over the emerging discourse, i.e. who and when will speak next, and what s/he will talk about. Hence, asking a question means claiming power over the emerging talk (Ainsworth-Vaughn, 2001). Questions achieve this by setting topical and action agendas, conveying speakers' presuppositions, beliefs, and epistemic stances, and by positing preferences toward the expected answers (Hayano, 2012; Heritage, 2010).

#### **3.3.1** Features of questions in healthcare settings

First of all, medical questions set topical agendas by requiring information about a certain issue from the patient (typical in history-taking questions). Furthermore, questions require the performance of certain actions from the respondent, e.g. to answer with yes or no, to give information, to clarify, or to give an explanation. Thereby, questions set action agendas. The second feature of doctors' questions is that they embody presuppositions about the patients' health status, life circumstances, etc. According to Boyd and Heritage (2006:160) "in general, wh-questions tend to embody more presuppositions than Yes/No questions". Compare for example "*What kind of contraception do you use*?"<sup>7</sup> (ibid.:159) versus "Are you using any contraception?"</sup> (ibid.:160). Third, questions. Depending on the affirmative ("You have your gall bladder?" (ibid.:162)) or negative framing ("No heart disease?" (ibid.:162)), questions may prefer yes (in the former case) or no (in the latter case) as an answer (Boyd & Heritage, 2006).

The physician's choice on whether to use positive or negative polar/yes-no question depends on several factors. In the medical context, routine history-taking questions orient to the principle of

<sup>&</sup>lt;sup>7</sup> Boyd and Heritage quote this example from Cassell, 1985:101.

optimization and the principle of recipient design. The question design in the former is geared towards a "best case" or "no problem" scenario, while in the latter, it displays orientation and sensitivity towards the patient as a person (Boyd & Heritage, 2006; Sacks et al., 1974). Another factor influencing polar/yes-no questions' design comes from immediately prior contextual evidence. Generally, positive polar questions are used, if there is no compelling contextual evidence against the proposition under question – so they accept both neutral and supporting contexts.<sup>8</sup> The case of negative polar questions is more complicated since they can be divided into two groups. In one case, the speaker's belief is questioned (outer negation), which is compatible with contexts, where there is no compelling evidence for the proposition under question, i.e. the context is neutral or against it. In the other group of negative polar questions, an inference is being questioned (inner negation), where there is compelling contextual evidence against the proposition under question supporting contexts (Büring & Gunlogson, 2000; Ladd, 1981). In sum, the design of polar/yes-no questions is influenced by both wider (social) as well as more local discursive contexts. It is important to note, however, that the previously quoted authors examined questions in English and German languages.

It follows from the characteristics described above that on the one hand, physicians' question design is influenced by contextual factors. On the other hand, the question design – including syntactic, semantic, pragmatic, functional, and suprasegmental factors – itself may influence and constrain patients' answers, thereby controlling the interaction and displaying power. However, questions can also share power by showing interest in the answer (Ainsworth-Vaughn, 2001). For example, even yes-no or declarative questions may expect a wider scope of answers, which is not restricted only to (dis)confirmation. These questions can invite patients to elaborate on a certain topic, to give more details, or to account for a (dis)confirmation (Deppermann & Spranz-Fogasy, 2011).

Furthermore, and in line with CA principles, questions may be also used to display doctors' understanding of patients' previous turns. Deppermann and Spranz-Fogasy (2011) found that the syntactic forms of wh-questions, verb-first (V1)/yes-no questions, and declarative questions show increasing degrees of understanding. So, "while questions prospectively ask for knowledge which is missing, retrospectively they presuppose some knowledge which is treated as being already understood from the patient's prior turns" (ibid.:114). This level of embodied presupposition is

<sup>&</sup>lt;sup>8</sup> For the definitions of compelling and contextual evidence see Büring & Gunlogson, 2000:7.

growing from wh-questions (*"What makes you afraid?"*– thematic knowledge), via V1 questions (*"Did you have an accident?"* – knowing relevant alternatives) to declarative questions (*"And here a cat scratched"* – most probable state of affairs) (all three examples: p114, Table 1). As a result of these properties, wh- and V1 questions are appropriate for opening up topical sequences during history-taking, while declarative questions may close topical sequences by checking already achieved understanding.

As we can see, the conclusions of Boyd and Heritage (2006) contradict that of Deppermann and Spranz-Fogasy (2011) regarding the level of embodied presupposition in wh- and polar questions. However, these seemingly contradicting opinions may be the result of differing contexts, and the different goals these questions pursue. Yet another case, which demonstrates the difficulties one encounters when analyzing questions.

Examining questions in a more sensitive context, Callon et al. found (Callon, Beach, et al., 2016) four inductively generated categories of questions addressing substance use among patients living with HIV. These categories are the following: 1) open-ended questions (*"How's the drinking going?"*), 2) normalizing questions (asking about the time of last use: *"When was the last time you used any drugs?"*), 3) closed-ended questions (*"Are you using any drugs?"*), and 4) leading towards non-use questions (*"And you've remained clean from drugs and alcohol, correct?"*) (Callon, Beach, et al., 2016:1144; Table 4). According to their results, open-ended and normalizing questions were significantly more likely to elicit an accurate disclosure of substance use.<sup>9</sup>

Another study by Callon and colleagues (Callon, Saha, et al., 2016) investigated how different question types elicit patients' disclosure about antiretroviral medication non-adherence. In their study, four inductively generated primary question categories emerged. The first group included broad, open-ended questions about patients' experience with the medication (*"So, the medications, how is that going?"* (ibid.:1110)). The second group is that of clarifying questions about medication, which were mostly closed-ended (*"Are you still taking the Combivir, Viread and Sustiva?"* (ibid.:1111)). The third category of positively-framed questions focused specifically on the issue of medication adherence with closed-ended questions (*"Using all your medicines* 

<sup>&</sup>lt;sup>9</sup> Note that the normalizing questions have more presupposed content about substance use than do closed-ended questions. However, in this context patients and providers had an established relationship, increasing the likelihood that providers knew about patients' past substance use. This factor, on the hand, makes the normalizing questions reasonable, on the other hand, lowers the barrier for disclosure by normalizing substance use (Callon, Beach, et al., 2016).

*regularly*?" (ibid.:1111)). And the last category of negatively-framed, mainly closed-ended questions also focused on the issue of medication adherence, but the questions included words like "missed" or "skipped" (*"Now have you missed any*?" (ibid.:1111)). Leading questions, which lead the patient to deny non-adherence, were to be found both among the positively- and the negatively-framed questions (*"you're taking all your medications right*?" (ibid.:1109) vs. *"You haven't been missing any of the medicine, right*?" (ibid.:1111)). The interesting finding of the authors was that negatively-framed questions that explicitly ask about missed doses were 3.64 times more likely to elicit non-adherence disclosure than all other question types. A possible explanation is that a question like *"have you missed any doses*?" (ibid.:1112) does not allow for varying interpretations as opposed to the vagueness of broad questions, which are not specific enough for the goal of asking about medication adherence. Likewise, the interpretation of the word "regularly" used in positively-framed questions may differ among people. The authors also suggest the normalizing effect of negatively-framed questions toward non-adherence.

There are two main conclusions to be drawn from this section. First, although physicians' questions may constrain and influence patients' answers, this theoretical effect is far from being definitive. Second, depending on the focus of the inquiry or research question, the medical context, the phase of the visit under investigation, and the role, goal, or function of the studied questions, several kinds of classifications may emerge with differing results regarding the questions' effect on the answers they elicit.

In the next section, I will narrow my focus to visit opening questions, which are the most relevant to my research.

#### **3.3.2 Opening questions**

Healthcare professional's opening question initiates the problem presentation phase of the visit, which is about identifying the reason(s) for the consultation. Open questions at the beginning of the visit give patients the chance to freely present all of their problems. So, during the problem presentation phase of the visit – initiated by the clinician's opening question, patients are licensed to tell their stories in their own terms and according to their own agenda (Heritage & Robinson, 2006b; Tsai, 2006; Tsai et al., 2014). As a result, and in accordance with the biopsychosocial model (Engel, 1977), the physical, as well as the possible psychosocial components of patients' problems, may be elicited.

Heritage and Robinson (2006b) studied 302 primary-care visits examining how the form of physician's initiating questions affects the substance of patients' problem presentation of acute medical problems. The authors found five basic types of questions that initiated problem presentation. The first type (Type 1), general inquiry questions (*"What can I do for you today?", "How can I help?"* (ibid.:92)) show an agnostic stance towards patients' problems and allow patients to present their problems in their own terms. However, this type of question can also address a specific problem or response (*"Tell me about this pain"*<sup>10</sup> (ibid.:92)). Still, the main property of general inquiry questions is that "they do not constrain the content, extent, or precise form of patients' responses" (Heritage & Robinson, 2006b:92). These questions resulted in the longest problem presentations.

The (generalized) gloss for confirmation questions is the second type (Type 2) of opening questions (*"So you are sick today. Huh?"* (ibid.:93)). These questions have a yes-no format,<sup>11</sup> but, because only general and limited knowledge is expressed, they may also invite an expanded detailing of the problem. Yet, compared to general inquiry questions the content and the extent of patients' answers are more constrained in this case.

The third type (Type 3) of opening questions are the symptom(s) for confirmation questions (*"So having headache and sore throat and cough with phlegm for five days?"* (ibid.:95)). These questions require (dis)confirmation as a next action, inviting no elaboration of the problems.

The fourth type (Type 4) was the *How are you*? questions, which can result in ambiguity regarding the expected topic of the answer – whether it invites a nonmedical general evaluation or the elaboration of medical problems from the patient. Lastly, the fifth type (Type 5) of opening questions is the history-taking questions (*"You have any fever?"* (ibid.:97)), which skip the problem presentation phase altogether. These questions are closed-ended and greatly constrain patients' responses.

The authors found that general inquiry questions (Type 1) elicited longer problem presentations including more than one current symptom than did confirmatory questions (Type 2 and 3). However, in another study, examining the openings of 83 primary care visits involving patients with chronic pain, the authors found that the use of broad open-ended questions alone did not necessarily elicit a complete visit agenda. The reason behind this result is that physicians started

<sup>&</sup>lt;sup>10</sup> In this case, pragmatically the utterance functions as a question (see 3.1-3.2 for a discussion about the difficulties in defining and classifying questions).

<sup>&</sup>lt;sup>11</sup> To be precise, the quoted question is a tag question.

discussing the first topic mentioned by patients, without establishing patients' full agenda (Hood-Medland et al., 2021).

As can be seen from Heritage and Robinson's work (2006b), the degree of openness varies among questions. Even among open-ended questions, which are considered to cover broader areas, we can differentiate between three main levels of openness: questions that address 1) all patient problems (*"What brings you to the hospital?"*) – equals general inquiry questions, 2) everything about a specific group of problems (*"Would you tell me about your illness?"*) – roughly matches the generalized gloss for confirmation questions, and 3) everything about a certain health problem (*"How are your eyes and vision?"*) (Tsai, 2006:50). Although, for the second level, the syntactic forms of the examples given by Heritage and Robinson (2006b) are different from that of Tsai's (2006) – yes-no (closed-ended) versus wh-questions, respectively, the two perspectives can be brought together, since both types of questions may invite an elaborated answer within the scope of the problem. However, with different contexts and patients, the yes-no question form may only elicit (dis)confirmation and the patient may need further encouragement for elaboration.

The relevance of examining the opening questions of visits lies in the finding that in the case of open-ended, general inquiry opening questions patients report "significantly more positive evaluations of physicians' listening behavior and positive affective/relational communication" (Robinson & Heritage, 2006:282). This kind of patient satisfaction may increase adherence to medical recommendations (see 1.1).

As mentioned before, questions communicate the presuppositions and epistemic stance of the speaker. This may already be relevant at the beginning of the visit, namely how physicians design their opening questions. Robinson (2006) examined 182 audio and videotapes of primary care physician-patient visits and found that questions are formed differently according to physicians' understanding of patients' reasons for the visit. The question type is adjusted to cases of new, follow-up, or chronic-routine visits.

In order to solicit new concerns, physicians use questions like "*What brings you in to see me?*, *What's the problem?*" (Robinson, 2006:25), which communicate a lack of knowledge about patients' problems. In case of follow-up concerns, the opening question (e.g. "*How is it?*" (ibid.:29)) displays physician's knowledge of and prior experience with a certain problem. At the same time, the question also requires an evaluation of or an update on that particular problem. In the case of chronic-routine visits, which happen on a regular basis, there is also the possibility that

patients have new concerns. The question's format in these situations ("*What's new*?" (ibid.:36)) communicates the physician's knowledge about the basic problem, at the same time addresses possible new issues as well. However, if the question is formed differently ("*Anything new*?" (ibid.:37)), the negative-polarity item "anything" shows a preference for a No-type answer, i.e. that no new concern is reported, as opposed to the Yes-type response preference of the previous form ("*What's new*?") (Robinson, 2006). This is in line with the finding of Heritage et al. (2007), who examined the effect of two types of questions in reducing patients' unmet concerns – those identified by patients in previsit surveys, but not talked about during the visit. The authors found that the question form with positive polarity ("*Is there something else you want to address in the visit today*?") was significantly more effective in eliciting patients' additional concerns than the negatively polarized form ("*Is there anything else you want to address in the visit today*?"), without affecting visit length.

It is important that physicians' opening questions fit the kind of visit they are opening (new, follow-up, or chronic-routine visits), because this may influence patients' opinions about physicians' competence and credibility (Robinson, 2006).

After the discussion of questions generally, and describing the characteristics of questions as well as opening questions in medical encounters, the next section presents the findings about PTs' opening questions in the analyzed data.

## **4** DATA ANALYSIS

## 4.1 Data Analysis 1. – Physiotherapists' Opening Questions (OpQ)

As it was described in 1.2.2, PTs' opening questions (OpQ) are not to be understood as utterances at the very beginning of the visit, i.e. questions opening the visit itself, but are defined as opening the problem presentation phase of the visit. So, in many cases, the interaction was already ongoing, before the occurrence of the OpQ. For example, some PTs informed the patient about their scheduled treatments (e.g. time, and location), some made them fill out the paperwork for the research, and some did the basic introductions. These initial preparations were left out from the transcription – only basic notes were made about the action.

The analysis yielded identifying four main types of opening questions: 1) Wh-OpQ, 2) Embedded OpQ, 3) Closed OpQ, and 4) OpQ based on medical records (see 4.1.1 for more details). Furthermore, it focused on describing six general characteristics of the OpQs: 1) whether there is a reference to the patient, 2) whether there is a reference to the institute (the hospital, where the visit took place), 3) verbs used that take the patient as one of their arguments (lexical, copula, or none), 4) thematic role assigned to the patient (agent versus non-agent), 5) whether the PT explicitly expresses that she is interested in current problems, and 6) whether the words *panasz* 'complaint' or *fájdalom* 'pain' are used in some form or another (e.g. noun or adjective) to ask about patients' problems (see 4.1.4).

The coding procedure went as follows. All the OpQs were separately collected into an Excel table, each line corresponding to one OpQ, and one column for each of the examined features, i.e. variables mentioned above. After the author examined each aspect of every OpQ and coded them accordingly in the Excel table, a co-analyst (PhD in theoretical linguistics) also coded all the OpQs along each variable independently. Doubtful cases were later discussed and decided jointly. Except for the OpQ main type and the used verbs, all the other variables were coded as binary categories. The former two were dichotomized by the author for the sake of statistical analysis (see 4.3).

## 4.1.1 Main Categories or strategies of the Opening Questions (OpQ)

In order to make the context and the process of the analysis clear, some introductory remarks are necessary before describing the four main categories of OpQs identified in the data. Therefore, first I briefly emphasize the relevant theoretical considerations that were discussed in sections 3.1-3.2. Next, building on this background, I present the main points of Tsai's (2006) typology of open

questions, which was the starting point for the present analysis. Following this theoretical foundation, in the last part of this section, the results of the analysis are reported.

As it was described in part 3.1, I adapt Ehrlich and Freed's (2010) definition of questions: for an utterance to be treated as a question, it must fulfill functional as well as sequential dimensions. The former means that an utterance is considered a question, if it solicits information, confirmation, or action (and/or is treated by the respondent as such), while the latter requires that it creates a slot for the hearer to produce a responsive turn (ibid.:6).

It follows from this definition that the classification of questions is methodologically difficult since both formal and functional aspects should be considered. Furthermore – as a result of the sequential dimension – semantically and pragmatically, questions should be examined together with the answers given to them (Kiefer, 1983),<sup>12</sup> as a discourse unit, or as adjacency pairs (Schegloff & Sacks, 1973). It further complicates the matter that there are cases (as we will see later), when the discourse context is also important in the analysis of question-answer pairs, not to mention the epistemic stance of the questioner (Hayano, 2012; Heritage & Robinson, 2006b).

This complexity is apparent in Tsai's work (2006), who identified 6 syntactical formats within general and biophysical open questions (Table 4), but at the same time analyzed and took into consideration the semantic scopes the open questions convey, and the pragmatic adequacy of the answers as well.

Format	Example
Wh-Q	What problems bring you here today?
Yes-No Q	You got some problems?
Indefinite enumeration	<i>Do they (family members) have anything, like hypertension or diabetes?</i>
Sentential fragment	(Any) other?
Statement ('tell me')	Tell me the symptoms you have
Continuer marker ('and')	And?

Table 4 Syntactical formats of general and biophysical open questions (Tsai, 2006:100-101)

<sup>&</sup>lt;sup>12</sup> The term *answer* is rather used from a syntactic-semantic perspective, while the term *response* reflects more of a pragmatic perspective. However, I will use these terms interchangeably in a sense that both express a reaction to a question.

In the case of the three sentential forms that are relevant to my data analysis, the conveyed semantic scope means the following. First, depending on the interrogative word used in Wh-Qs, different scopes of indefiniteness are conveyed. Compare *Mi a jelenlegi panasza?* 'What is your current complaint?' and *Hol van fájdalom?* 'Where is pain?' While the wh-word in the former question allows for a theoretically infinite and unspecified set of answers, the wh-word in the latter question specifies the syntactic and semantic category of the answer. In other words, it is required that the variable in the question is filled in: a noun phrase, the naming of a body part is needed in the response. So, the acceptable set of answers is more constrained in the latter question format. This difference is obvious in Kiefer's (Kiefer, 1983) differentiation between constituent and open questions among wh-questions (part 3.2).

Second, the yes-no format is a polar question, also referred to as a closed question. However, the latter label considers the possible set of answers again. Namely, there are only two ways to answer these kinds of questions, with confirmation or with disconfirmation. Nevertheless, Tsai (2006) recognizes that there are situations, where a simple "yes" to a yes-no Q is pragmatically inadequate. As a result, a polar question may function as an open question. Consider, for example, *Van-e panasza?* 'Do you have complaint?' – in case of a positive response, an appropriate answer needs to contain some elaboration, so the yes-no question has a pragmatic wh-interpretation (Kiefer, 1980).

The third and last relevant sentential form from Tsai's (2006) classification is the statement or tell me format. This is another example that shows the inseparable and intricate interaction between the form and the function of a sentence or utterance. Here, the sentence has an imperative structure but functions as an open question.

As it was mentioned before, it is an additional difficulty in the classification of question(-answer pair)s that – beyond the syntactic, semantic, and pragmatic aspects – there are cases when the prior context is just as important in defining the scope of openness of a question (Tsai, 2006). This observation is apparent and important in my data as well (see later in 4.1.2).

In sum, the difficulties – arising from the complexity of the matter – that are present in the definition of questions (part 3.1), are also apparent in the classification of questions. As a result, it is hard to come up with a typology that reflects all the above-mentioned aspects in a unified manner. This challenge is inherent in my analysis of opening questions (OpQs) as well, as it is described below.

Opening questions (OpOs) are used to elicit patients' concerns, i.e. they initiate the problem presentation phase of the visit. 77 first meetings between physiotherapists (PT) and patients were analyzed.<sup>13</sup> In the case of one recording, however, no OpQ could be identified, so 76 OpQs were classified. The original basis for the classification of physiotherapists' OpQs in my data was Tsai's (2006) 6 sentential forms that she identified within general and biophysical open questions (Table 4). Three comments are needed at this point though. First, since Tsai was analyzing open questions generally in doctor-patient communication and not just opening questions, some of her categories are redundant for my work. At the same time, second, Tsai's typology was not sufficient to cover the variety of OpQs that I encountered during the observation of the corpus, so I modified and extended her categories. So, the final classification of OpQs was theory- and data-driven at the same time. Third, and most importantly, although the starting point for the creation of categories was Tsai's syntactical forms and therefore the names of the categories created may reflect the formal structure of the question, the classification was made based on the assumption that different types of questions may affect or even constrain the possible answers. For this reason, we should think about the different groups of questions as questioning strategies - one of many possible linguistic choices (conscious or not) that must be made when someone uses a language (Verschueren, 1999), rather than as formal categories.

Keeping these considerations in mind, the four main categories of OpQ strategies created are the following: 1) Wh-OpQ, 2) Embedded OpQ, 3) Polar/Closed OpQ (equals Tsai's (2006) yes-no Q, and 4) OpQ based on medical record (Table 5).

<sup>&</sup>lt;sup>13</sup> Originally, 79 recordings were made, but in case of two, the recorder was started too late, so these were excluded from the analysis.

Main category	Example
Wh-OpQ	Mi most a panasz hol van fájdalom <sup>14</sup>
(N = 23)	'What is the complaint now where is pain'
Embedded OpQ	És akkor hallgatom Önt hogy milyen panaszokkal érkezett most hozzánk?
(N = 41)	'And then I am listening to you with what complaints did you arrive to us now?'
	Mesélje el hogy (.) mi a problémája amivel most bejött hozzánk. <sup>15</sup>
	'Tell me the story of (.) what your problem is, with which you came in to us now.'
Polar/Closed	Van-e fájdalma.
OpQ	Is-E pain.POSS.3SG
(N = 4)	'Do you have pain.' ('Is there pain that you have.')
OpQ based on medical record (N = 8)	((anamnézisben szereplő magas vérnyomás és szív problémák átbeszélése)) rendbenh akkor mozgásszervi panaszként? azt látom hogy: ö: .h hogy a dereka és a jobb térd. van itt nekem írva? (.) .h akkor ez (.) ez így helyes:?
	((PT discusses info on high blood pressure and cardiac problems written in the medical record)) 'all righth then as musculoskeletal complaint? I see that: uh: .h that your low back and the right knee. I have it written here? (.) .h then this (.) this is correct:?'
	és akkor () ö Andor én már olvastam pár dolgot, de azért ö () szeretném először magát megkérdezni hogy milyen panasszal érkezett.
	'and then () uh Andor I already read some things, but still uh () I would first like to ask you with what complaint did you arrive.'

Table 5 Main categories of physiotherapists' Opening Questions

## Wh-OpQ

The Wh-OpQ category includes interrogative sentences (utterances) that contain an interrogative wh-word, like *mi* ('what'), *hol* ('where'), or *milyen* ('what kind of').

## Embedded OpQ

The origin of the Embedded OpQ category was Tsai's (2006) statement format since the syntactical form of these kinds of questions in the data is that of a declarative or an imperative sentence. However, these sentences all included an embedded clause with an interrogative word.

<sup>&</sup>lt;sup>14</sup> The punctuation marks or the lack thereof reflect the transcription conventions.

<sup>&</sup>lt;sup>15</sup> the English correlate of the Hungarian verb *mesél* is 'tell a story'.

#### Polar/Closed OpQ

The OpQs within the Polar OpQ category in my data are all of the form *van-e* ('is-E' – 'is there'), so they are all positive *-e*-interrogative polar questions. The feature of these questions with the *-e* interrogative particle in Hungarian is that they are compatible only with a neutral, non-biased context and speaker (Gyuris, 2017). This means that there is no preference for a positive or a negative answer. Nevertheless, as Tsai (2006) and Kiefer (1980, 1983) noted before (see above), pragmatically, a simple positive answer is not sufficient in these cases, it needs further elaboration from the part of the answerer.

The common feature of the first three categories of questioning strategies (Wh-OpQ, Embedded OpQ, Polar/Closed OpQ) is that they can be examined separately from the preceding discourse structure. In other words, considering the discourse structure, they open up a new discourse unit (that of the problem presentation phase) with no immediate, topically connected previous context. For this reason, we may call these questions within this framework standalone questions.

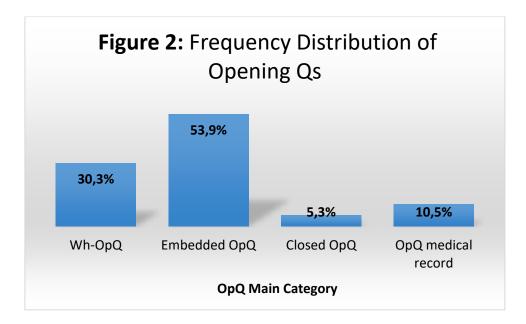
The fourth category, i.e. the OpQ based on medical records on the other hand (see Table 6 later), is closely connected to and structurally-functionally inseparable from its immediately preceding context.

#### OpQ based on medical record

In these cases, the "real" OpQ is immediately preceded by PT explicitly telling or reading out loud the symptoms from the patient's medical records, or by PT explicitly expressing that she has read and knows the problems from the medical record. So, in this way, the question and its prelude together open up a new discourse unit, which phenomenon we may call here a combined question. A further consideration in these cases is that the immediate context of the OpQ may influence (constrain) the answers, since patients may not intend to repeat already known information (Heritage, 2011; Heritage & Robinson, 2006b).

Multiple questions, like the Wh-OpQ example in Table 5 did not influence the classification. If several questions were asked in a wh-question form, the OpQ was classified as Wh-OpQ. If more questions were included in an embedded clause, the OpQ was categorized as Embedded OpQ, and the same is true for the OpQ based on medical record: if multiple questions appear as inseparable from their immediately preceding context, where the topic is PT's knowledge about medical records, then the OpQ was considered as OpQ based on medical records.

Figure 2 shows the frequency of each of the main OpQ categories.



As we can see, Embedded Ops form the biggest group in the data, while there are not many Closed OpQs or OpQs based on medical records present in the corpus. Regarding the last two, it is worth mentioning that out of the four cases of Closed OpQ, three belong to the same PT, and out of the eight cases of OpQ based on medical records, five belong to the same PT. This means that these two PTs used the same type of OpQ with all their recorded patients. Looking through the data, it generally seems like PTs have their own preferred way or strategy of asking. However, this factor was not examined closely in this research, since the main point of interest is not **why** PTs ask the way they do, but **how** they ask, i.e. **what** type of questions they use. Furthermore, the point of the analysis was to see, if these properties have consequences for patients' answers.

Out of the four main categories, the Embedded OpQ and the OpQ based on medical records deserve some more detailed description. The Wh-OpQ and the Closed/Polar OpQ are not going to be discussed in more detail than what has already been described above, since these questions are not unlike standard questions characterized in sections 3.2-3.3. First, I present the opening questions based on medical records as a special category, describing all eight cases belonging to this group. The reason for beginning with this category is that – according to my knowledge – it is a novel type of OpQ, which has not been described in the literature yet (recall that the origin of the other three categories is Tsai's (2006) classification (Table 4). Second, I will talk about the Embedded OpQs, the biggest group and the only one, where a subclassification of the occurring cases was needed. This category is also somewhat special in the following manner. It resembles

Tsai's (2006) statement format (*Tell me the symptoms you have,* see Table 4) since these OpQs are also in the form of a declarative or an imperative sentence. However, they are different in a way that they all include an interrogative clause, like *Tell me, what symptoms do you have*.

## 4.1.2 Opening questions based on medical records

As it was described previously, the OpQ based on medical records category is fundamentally different than the other three main categories (Wh-OpQ, Embedded OpQ, and Polar/Closed OpQ). This is the result of the observation that in this case the OpQ and its preceding context cannot be separated from each other, the analysis has to focus on them together as a unit. This will become apparent if we have a closer look at the eight instances present in this main category (Table 6). Boldfaced items in the table represent those relevant parts of the utterance that create the connection between the preceding context and the actual question. In other words, which prove that we cannot make sense of the question without considering the previous part of the discourse unit. We will see that although there is this overall common feature of connectedness, there are very different patterns of executions.

#### Table 6 Opening Questions based on medical records

(1) GYT: ((gyógytornász összefoglalja a problémák kórtörténetét az orvosi anamnézis alapján)) És akkor aktuális problémának? most ugyanez a: jobb alsó végtagba sugárzó fájdalom a derékszakasztól, .hh és a jobb karba sugárzó fájdalom nyaki gerincből tehát ezek[ről] tudunk. ö tehát ez így helyes ahogy le van [írva] ezek szerint. jó. .h oké. ezek közül a fájdalmak közül? .h ö:: melyik panaszosabb ami a mindennapjaiban zavarja
 DT: ((DT gyungerizes the history of grapheres head on the medical gyunger)) 'And

PT: ((PT summarizes the history of problems based on the medical records)) 'And then as the current problem? Now this same the: pain referring to the right lower extremity from the low back, .hh and the pain referring to the right arm from the cervical spine so we know about these. uh so this is correct like it is written then. (.) good. .h okay. from among these pains? .h uh:: which causes more complaint that disturbs you in everyday life'

(2) GYT: jó. akkor .h a:z orvossal történt betegfelvételbe itt bele tudtam nézni a gépbe?
 (10-2) úgyhogy ö: már (.) azért így ismerem az anamnézisét, .h és erről szeretném kérdezni hogy Ön ö is mesélje el nekem hogy mi az aktuális panasza most. (..) .hh tehá:t amit a:

<sup>&</sup>lt;sup>16</sup> Code for the PT and patient. The number before the dash signifies the PT, the number after the dash signifies the number of the patient the certain PT recorded, e.g. 10-1 means PT 10, first recorded patient.

	PT: 'good. then .h I could look into the medical admission with the doctor here in the computer? so uh: already (.) I kind of know your history, .h and about this I would like to ask that you uh also tell me the story of what your actual complaint is now. () .hh so which the:'
(3) (10-3)	<i>GYT: ((gyógytornász az orvosi anamnézis alapján tisztázza az alapbetegséggel (sclerosis multiplex) kapcsolatos információkat)) ezen kívül bármilyen olyan mozgás: ö szervi (.) .h problémája van-e. () tehát volt-e bármilyen kopásos megbetegedés, <sup>17</sup> .hh törés, .h () esés, () ami</i>
	PT: ((PT clarifies information about the primary disease (multiple sclerosis) based on medical records)) <b>'apart from this</b> is there some kind of musculo: uh skeletal (.) .h problem that you have. () so was there some wear and tear disease, .hh fracture, .h () fall, () that'
(4) (10-4)	<i>GYT: ((gyógytornász ismerteti az anamnézisben található információkat, amelyek között szerepel egy korábbi gerincműtét)) jó. MOST ö: milyen fájdalmakra pansz:szosan érkezett. tehát hogy mik a fájdalmas pontok .hh (.) a:: gerincével van gond?</i>
	PT: ((PT discusses information in the medical record, in which a previous spinal surgery is present)) <b>good.</b> NOW uh: with what pains complaints did you arrive. so what are the painful spots .hh (.) the:: there is problem <b>with your spine</b> ?
(5) (10-5)	GYT: ((anamnézisben szereplő magas vérnyomás és szív problémák átbeszélése)) rendbenh akkor mozgásszervi panaszként? azt látom hogy: ö: .h hogy a dereka és a jobb térd. <b>van itt nekem írv[a?</b> (.) .h]
	<i>B:</i> [ <i>igen</i> ,]
	GYT: (.) akkor ez (.) ez így helyes:?
	B: ez így [helyes:]
	GYT: <b>[ez így helye]s</b> m:ió- <b>melyik</b> ami (me) mindennapokban <b>jobban</b> zavarja. () <b>melyik</b> ami most <b>rosszabb</b> . aktuálisan.
	PT: ((PT discusses info on high blood pressure and cardiac problems written in the medical record)) 'all righth then as musculoskeletal complaint? I see that: uh: .h that your low back and the right knee. I have it here writte[n? (.) .h]
	P: [yes,]
	PT: then this (.) this is correct:?
	P: this is [correct]
	PT: [this is corr]ect since whe- which one is that (me) disturbs you more in everyday life. () which one is that is worse now. currently.
$(6)^{18}$ (11-1)	GYT: és akkor () ö Andor én már olvastam <b>pár [dol]got? de azért</b> ö () szeretném először magát meg[kérdez]ni hogy milyen panasszal érkezett.

<sup>&</sup>lt;sup>17</sup> Remember that the *van-e* form ('is-E' – 'is there'), more specifically the *-e* particle in a positive polar question in Hungarian neutralizes the preference for a positive or a negative answer. *volt-e* is the past tense of *van-e*. In Hungarian, *kopásos megbetegedés* is a layman's term for degenerative joint disease, which is the deterioration of the joint tissue (cartilage) related to aging.

 $<sup>^{18}</sup>$  (5) and (6) are repeated from Table 5.

	PT: 'and then () uh Andor I already read <b>some things? but still</b> uh () I would first like to ask you with what complaint did you arrive.'
(7) (12-1)	GYT: na akkor azt mondja el nekem Sára, <b>mondom</b> már elolvastam <b>mindent</b> az anamnéziséről, .hh hogy ö () most hogy bejött a: kórházba, (.) ö mije fáj a <b>LEGjobban</b> . tehát mije a <b>legkritikusabb</b> ? (.) melyik ízülete.
	PT: 'now then tell me that Sarah, <b>I am telling you</b> I have already read <b>everything</b> about your history, .hh that uh () now that you came into the: hospital (.) uh what hurts the <b>MOST</b> for you. so what is the <b>most</b> critical for you? which of your joints.'
(8) (12-2)	GYT: ((gyógytornász előre elmondja, hogy mindent elolvasott a számítógépen – hangosan fel is olvassa, szakmai zsargont használva)) jóhh és akkor azt tehát hogy ezek amiket így (bár) elol[vastam meg]néztemh MOST mi a mije a legpanaszosabb melyik ízület a legkritikusabb ()
	PT: ((PT tells in advance that she read all the medical records in the computer – also reads it out loud, using medical jargon)) 'goodhh and then that so <b>these</b> are what I like read and checkedh NOW what is what is with the <b>most</b> complaint for you which joint is the <b>most</b> critical ()'

GYT: gyógytornász, B: beteg, PT: physiotherapist, P: patient

If we examine the eight occurrences within the OpQ based on medical records category in more detail, we find the following (the relevant parts are boldfaced in the table). In excerpt (1), the PT first has the patient confirm that the symptoms written in the records are part of the common knowledge (*tehát ezekről tudunk* 'so we know about these') and that they are correct (*tehát ez igy helyes ahogy le van irva* 'so this is correct like it is written').<sup>19</sup> Note the use of the deictic elements (*ezek* 'these', *ez* 'this'), which signify the utterances' close connection with the preceding discourse, in other words, they create cohesion (Fetzer, 2012). After having confirmed that the written information is true and known, comes the "real" OpQ, which also includes deixis (*ezek közül* 'from among these'). This fact is important in two ways. First, it shows that there is a structural connection-cohesion between the "real" OpQ and the preceding context – without it, we couldn't identify the referent, so discourse-wise the Q and its immediately previous context cannot be separated. Second, with the choice of this strategy, the PT constrains the patient's opportunity to freely answer the question. This is achieved doubly – on the one hand, PT only allows the patient to choose from the written and known symptoms. On the other hand, even this choice is further restricted as the patient has to choose the one symptom that is a bigger problem, that disturbs her

<sup>&</sup>lt;sup>19</sup> The patient's overlapping confirmations (*igen* 'yes' twice) are omitted from the excerpt, but signed in the Hungarian version. The reason for this is that the PT has falling intonation in both cases, and no silence within her utterance. So, it seems optional and not expected from the patient to produce a confirmatory turn.

the most in everyday life (*melyik panaszosabb ami a mindennapjaiban zavarja* 'which causes more complaint that disturbs you in everyday life').

It is important to notice that although an interrogative wh-word is used in the "real" OpQ, which is supposed to convey an unspecified scope of answers, this question we are dealing with is not open at all. On the contrary, if one observes the question and its context together, it becomes obvious that the patient can choose one (the worse) symptom out of two. So, in this context, the wh-question functions as an alternative question. In other words, with this kind of questioning strategy, the patient is given no chance to add new symptoms or to come up with new problems.

In excerpt (2), we have a different strategy. In this case, the PT only tells the patient that she has read and knows the information written by the doctor at the patient's admission. Here again, the connection between this part of the discourse and the following "real" question is warranted by the use of a deictic element (*erről* 'about this') creating cohesion, one that implies that the question concerns the previously mentioned medical records. Note, however, that here the structure of the (embedded) question leaves more room for the patient to freely answer (*mi az aktuális panasza most* 'what your current complaint is now'). Still, the fact that PT explicitly expresses her knowledge about the patient's problems may influence the answer, since the patient may not want to repeat preexisting knowledge (Heritage, 2011; Heritage & Robinson, 2006b) – although, the epistemic stance of the PT is mitigated by her use of *azért igy ismerem* 'I kind of know'. (It is interesting to note that after the patient started her problem presentation, the PT got back to reading the related information from the medical record.)

Excerpt (3) shows another pattern again, the similarity with the previous two being the connective function of the deictic expression *ezen kivül* 'apart from this' between the information from records and the "real" OpQ. The same deictic phrase also limits the scope of possible answers, since the patient is not allowed to talk about concerns connected to her primary disease (multiple sclerosis), but only about musculoskeletal problems (which fit the profile of the institution). Interesting to observe that there are actually two questions in a row in this excerpt. Furthermore, syntactically they are both positive polar *-e*-interrogative questions, which means a non-biased context (Gyuris, 2017) on the one hand, and that a simple "yes" as an answer is pragmatically inappropriate on the other. As a result, they function as open/wh-Qs (Kiefer, 1980, 1983; Tsai, 2006), but the scope of openness decreases from the first to the second question. While the first question inquires about musculoskeletal problems generally, the second question immediately

restricts the answer by listing examples. The effect is obvious if we consider that the patient gives answers item by item (see (76) later), i.e. she reacts to the examples about the fracture, falling, and degenerative disease separately. We also have to notice that the PT's utterance is unfinished. Although, it is not obvious if PT cuts herself off because the patient started to answer, or deliberately kept the end of the utterance open to sign that there are other possible problems not mentioned yet. In the latter case, this kind of question would fit into Tsai's (2006) indefinite enumeration form of open questions (Table 4). However, I argue that this form of open question is less open than the given examples in Table 4 since it restricts the area of concerns the patient may talk about – to that of internal medical problems in Tsai's example versus musculoskeletal problems in my data.

Excerpt (4) differs from the first three in a sense that the connection and cohesion are not thanks to a deictic element but a content word (*gerinc* 'spine'), which appears in the final declarative question that by the way offsets the effect of the previous two wh-questions. If it was not for this last declarative question (*a gerincével van gond*? 'there is problem with your spine?'), the OpQ used by PT10 with her 4<sup>th</sup> patient would have been classified as a Wh-OpQ, since the discourse marker  $j\delta$  'good' signifies that the review of the medical record is over and a new topic is about to be introduced (Schirm, 2020).

At a first glance, excerpt (5) is very similar to the first one (1). In both cases, the PT tries to confirm the validity of the written records. However, if we have a closer look, we can discover some important differences. In (1) the phrase *ez igy helyes* 'this is correct' is part of an utterance with falling intonation and one including no silence that would indicate that an answer is expected. So, basically, the PT uses a declarative statement – makes a declaration supposing the truth of the content. In (5) on the other hand, both the phrases of *van itt nekem irva?* 'I have it here written?' and *ez igy helyes:*? 'this is correct?' have rising intonation and become declarative questions. This is further supported by the fact that both create a slot for a response – by the presence of silence/micropause after the former and by giving the floor to the patient for a confirmatory answer in the latter. In sum, these are real questions expecting answers.

The last parts of the first (1) and fifth (5) excerpts however are the same. The PT asks the patient to choose the symptom from the list that disturbs her more, which is currently worse. So again, although a wh-interrogative word is used (*melyik* 'which one') the question in this context actually

becomes an alternative question – out of a list of two problems choose the worse one. Also, there is no room for the patient to mention new concerns that are not written in her records.

Excerpts (6) and (7) are similar in the sense that the PTs do not explicitly cite the symptoms from patients' medical records, they only refer to the fact that they have read and know the problems written there. In this sense, excerpt (2) also belongs to this pattern. Nevertheless, the connections between the two main parts of PTs utterances – the expression of knowledge about problems and the request that the patients also tell their concerns – are created differently in the three cases. As mentioned before, in (2) deixis is used. In (6) connectives *de azért* 'but still' are applied, while in (7) an intervening clause (*mondom* 'I am telling you') expresses the preexisting knowledge. An additional difference between (6) and (7) is the expressed strength of the epistemic stance of the PT: while in (6) it is mitigated by the phrase *olvastam pár dolgot* 'read some things' (similar to case (2) – see above), in (7) the PT claims to know everything *elolvastam mindent* 'read everything'. The last difference is that the PT in excerpt (7) further constrains the answer of the patient by only asking for the most painful and critical problem.

In sum, although patients' problems are not explicitly mentioned by the PTs in excerpts (2), (6), and (7), the explicit expression of the knowledge about them may influence patients' answers, who might not want to repeat preexisting knowledge (Heritage, 2011; Heritage & Robinson, 2006b).

In the last excerpt (8), the PT reads out loud the patient's history, problems, and imaging results, using medical technical terms, as it is probably written in the computer. She also refers back to this fact, i.e. that she read and is aware of the problems, by using deixis – *ezek amiket* 'these are which'. In this context, the following question about the most bothering, most critical joint or problem may constrain the patient's answer in two ways. First, it could be understood that the patient can only choose from among the previously listed concerns, and second, naming only the worst problem is expected. So again, there seems to be no room for the patient to mention new symptoms that may not be present among the listed items.

In sum, opening questions based on medical records may constrain patients' answers in a way that they provide a given set of already stated symptoms from among which the patients may choose. As a result, these kinds of questions leave little room for the patients to come up with possible new concerns.

## 4.1.3 Embedded opening questions (OpQs)

These types of questions differ from the other three categories in the sense that the clause including the real question, i.e. the main point of the utterance is embedded. As it was mentioned in part 4.1.1, the origin of this category is Tsai's (Tsai, 2006) 'Statement' format, since syntactically these sentences are declaratives or imperatives. However, they function as questions. This is in line with Searle's speech act theory, which says that asking a question is a special case of requesting, as the speaker is requesting information from the hearer (Searle, 1969), both of which belong to the 'directives' category of illocutionary acts in his later work (Searle, 1976). The illocutionary point of directives is that the speaker attempts to get the hearer to do something – in case of a question the speaker tries to get the hearer to perform a speech act, namely to answer.

In this category, five subgroups were created based on four dimensions, which are not hierarchically ordered. First, whether the speech act is direct or indirect (Searle, 1975). Second, whether the illocutionary act is made explicit by a performative expression, or stays implicit (Austin, 1962; Searle, 1969, 1989/2001; Verschueren, 1999, 2000). Third, what illocutionary act is performed by the utterance, and fourth, what verb is used, by which the illocutionary act is expressed explicitly or implicitly. Two illocutionary acts were identified among the Embedded opening questions (OpQs), questions and requests, respectively. To avoid confusion, some clarifying remarks are needed at this point.

Searle (1969) considers request and question as different types of illocutionary acts. At the same time, he recognizes that there are overlaps between the kinds of illocutionary acts, and, as a consequence, he regards questions as a special case of requests – as it was mentioned above. This idea became crystallized in his later work (Searle, 1976), where Searle offered a taxonomy of five basic categories of illocutionary acts: representatives, directives, commissives, expressives, and declarations.<sup>20</sup> For our purposes, only the category of directives is relevant, its illocutionary point being that the speaker tries to get the hearer to do something. Hence, both questions and requests belong to the illocutionary act of directives.

It is important to add some further considerations at this point. Since the three basic sentence types of declarative, imperative, and interrogative are grammatically distinguished in most languages, Croft (1994) set out to develop a speech act classification based on major sentence types. However, as pointed out by others (Kissine, 2013; König & Siemund, 2007), the idea of a

<sup>&</sup>lt;sup>20</sup> For a detailed description of each category, see Searle, 1976:10-16.

speech act classification based on sentence types, i.e. to connect linguistic form with illocutionary function is problematic and oversimplified. The three basic sentence types are compatible with various speech acts, so it is only the communicative/illocutionary potential that is encoded in grammar, speech act distinctions cannot be based on it, since the specific function of an utterance is the result of the interaction between formal-semantic properties and contextual factors (König & Siemund, 2007). This observation is apparent in my data as well, since – as it was pointed out earlier (4.1.1) – the main feature of Embedded OpQs is that they function as questions, although the utterances are in the form of either a declarative or an imperative sentence type.

It is also worth noting that Searle's (1976) speech act theory perspective – namely that the illocutionary point of directives is to get the hearer to do something – is also consistent with Ehrlich and Freed's (2010:6) general definition of questions described in part 3.1 and repeated here for the sake of convenience. This definition of questions takes into consideration functional and sequential dimensions as well and states the following: a question is an utterance that, on the one hand, solicits information, confirmation, or action (and/or is treated by the respondent as such). On the other hand, it creates a slot for the hearer to produce a responsive turn. However, while Searle considers questions and requests as cases or subtypes of directives, in the analysis of my data of Embedded OpQs, I feel that a reversed perspective is necessary. According to this view, these utterances all function as questions as their main characteristic, but the exact (case of) illocutionary act and/or the performative verb – in case it is made explicit – by way of which this function is realized, differs among the utterances of this group. In other words, the main speech act performed by the analyzed utterances is that of a question, i.e. request for information. Nevertheless, this main function is accomplished via different strategies and differing actual illocutionary acts. This aspect forms the basis for the creation of subclasses within this main category of opening questions and this distinction and differentiation is necessary for answering the fourth research question, whose goal is to explore whether there is a relationship between the question and the answer types.

After this short theoretical discussion, which hopefully made it clear, how the present work relates to or rather applies and at the same time differs from Searle's speech act theory (1969, 1976), I describe the subclassification of the Embedded OpQs. As it was mentioned above, five subgroups were created along four dimensions. First, if the speech act is direct or indirect (Searle, 1975). Second, if the illocutionary act is made explicit by a performative expression – a performative verb or noun as an illocutionary force indicating device –, or it stays implicit (Austin,

1962; Searle, 1969, 1989/2001; Verschueren, 1999, 2000). It is important to clarify here that performative expressions are part of metapragmatic reflections, which are linguistic choices that show that language users are aware of the activities they are engaged in, or in other words, they show language users' reflexive interpretations of the ongoing activities (Verschueren, 1999, 2000). However, in the present analysis, the explicit-implicit dimension is considered only in relation to the performed illocutionary act. In other words, whether the metapragmatic reflection realized as a performative expression defines the illocutionary act being performed or not. So, as we will see, there may be cases, where a metapragmatic reflection shows speaker's awareness of the language activity she is involved in, but it does not express the type of illocutionary act being performed. These cases were analyzed as implicit.

The third dimension is about the type of illocutionary act that is being performed by the utterance, and the fourth examines what verb is used in the utterance, by which the illocutionary act is expressed explicitly or implicitly. Though the numbering of the considered aspects may suggest otherwise, they are not hierarchical in order. Table 7 below summarizes the five subgroups of the Embedded OpQ category. Remember that the majority of OpQs (41 out of 76 (54%)) belong to the Embedded category.

 Table 7 Subgroups of Embedded OpQs

Ι	Implicit direct request, verb: <i>mesél</i> literally 'tell the story' ( $N = 10$ )
II	Implicit direct request, verb: <i>mond</i> 'tell' $(N = 3)$
III	Explicit direct request, main verb as a performative verb: <i>kér</i> , which is literally 'request' but in the examples below it will become obvious that in the English translation 'ask' is more appropriate. Embedded verb: <i>mond</i> 'tell'. $(N = 5)^{21}$
IV	Explicit indirect question, main verb as a performative verb: <i>kérdez</i> 'ask', or the verb's noun form <i>kérdés</i> 'question' as a performative expression ( $N = 19$ )
V	Implicit indirect request, verb: <i>hallgat</i> 'listen' $(N = 4)$

In the following, I demonstrate each subgroup with relevant examples and some explanations for the different subcategories and the various cases within them. The coding of the physiotherapist and patient is the same as before (PT-patient): e.g. 3-1 signifies the first recorded patient of PT number 3.

<sup>&</sup>lt;sup>21</sup> It is interesting to note that all five cases are from the same PT.

## I Implicit direct request, verb: *mesél* 'tell the story' (N = 10)

(9) 3-1
Mesél-je el hogy (.) mi a problémája amivel most bejött hozzánk.
tell-IMP.DEF.3SG PFX that
'Tell me the story of what your problem is with which you came in to us now'

## II Implicit direct request, verb: *mond* 'tell' (N = 3)

(10) 21-1	
Mond-ja	milyen panaszai vannak mivel érkezett most hozzánk.
Tell-IMP.DEF.3SG	
'Tell me	what complaints you have with what did you arrive to us now'

In the first two subclasses, the imperative mood of the verb shows the illocutionary force of the utterance, namely that they are to be taken as requests (directive). However, there is no performative verb or other expressions that explicitly expresses the type of exact illocutionary act that is being performed. Hence, these kinds of utterances are direct speech acts where the performative part stays implicit (Austin, 1962; Searle, 1969, 1989/2001)

# III Explicit direct request with the main verb *kér* 'request', embedded verb *mond* 'tell' (N = 5)

## 1) performative verb

(11) 9-2

Zsuzsa	akkor	kér-em	mond-ja	el	nekem	hogy
Susan	then	request-DEF.1SG	tell-IMP.3SG	PFX	me.DAT	that
mivel van	panasz, h	ol van fájdalom,				

with what there is complaint, where is pain,

'Susan, then please tell me what complaint there is, where pain is,'

## 2) performative verb with verbal modifier

(12) 9-1

Jó,	akkor	az-t	szeret-ném	kér-ni	Mari,	hogy
Good	then	that-ACC	like-COND.DEF.1SG	request-INF	Mary	that

mond-ja	el	nekem	hogy	(.) mivel van panasza hol van fájdalom.
tall n m 200	DEX	ma DAT	that	with what you have complaint where is not

tell-IMP.3SG PFX me.DAT that

with what you have complaint where is pain

'Good, then I would like to ask you Mary to tell me what you have complaint with where pain is'

## IV Explicit indirect question with either the verb *kérdez* 'ask', or its noun form *kérdés* 'question' (N = 19)

## 1) performative verb

(13) 6-1

N:a és akkor	az-t	(1.2) az-t	kérdez-ném	első kör-be	hogy
s:o and then	that-ACC	C(1.2) that-ACC	ask-COND.DEF.1SG	first round-in	that
mi a panasza mi	ivel érkeze	ett ide			

what is your complaint with what did you arrive here

'So and then I would like to ask you in the first round, what your complaint is, with what did you arrive here'

## 2) performative verb with verbal modifier

(14) 15-3

Az-t	szeret-ném	meg-kérdez-ni	hogy
that-ACC	like-COND.DEF.1SG	PFX-ask-INF	that

(.) mivel érkezett az intézetünkbe milyen panaszokkal.

with what did you arrive to our institute with what complaints

'I would like to ask you with what you arrived to our institute with what kind of complaints'

## 3) noun as a performative expression

(15) 6-2

az	lenne	az	[első]	kérdés-em	hogy	
that	is.COND	the	[first]	question-my	that	
.hh ö:: milyen panaszokkal érkezett hozzánk.						

.hh a::h with what complaints did you arrive to us

'My first question would be with what complaints you arrived to us'

It is common in the third and the fourth group that the performance of the given illocutionary act, request (III), and question (IV), respectively, is explicitly expressed within the utterances. So, a

performative expression is used in these groups, which names the type of speech act/illocutionary act that is being performed. According to Searle (1989/2001), only these kinds of utterances count as performatives within speech act theory. So the notion of performatives equals what Austin calls (1962) "explicit performatives". The performative expression can be a performative verb: (11)-(14), or even a noun: (15) (Searle, 1989/2001). The latter is called a semi-performative or a non-central case of performatives by Verschueren (1999), keeping in mind that nouns describe rather than perform acts. We can also see that there are differences in the degree of politeness among the utterances: the presence of the verbal modifier *szeret-ném* (like-COND.DEF.1SG) in (12) and (14) results in a more polite, conventionalized way of asking, although the conditional form in (13) also expresses politeness (Kuna & Hámori, 2019). However, (12) and (14) could also be regarded as a class of semi-performatives, which contain verbal modifiers (Verschueren, 1999).

Regarding the direct-indirect speech act dimension, in group III the imperative mood of the embedded verb (*mond-ja*, tell-IMP.3SG) shows the illocutionary force of the utterance, hence these are direct requests. Note that the only difference between groups III and II is the presence of the performative expression in the former, which defines the illocutionary act. Group IV, on the other hand, represents indirect question acts, since the utterances are only descriptions or statements of the fact that a question is being performed and not direct forms of questions themselves. Still, the speaker obviously expects an answer to the embedded question. Hence, the speaker issues a question by way of making a statement.

#### V Implicit indirect request, verb: *hallgat* 'listen' (N = 4)

(16) 11-3

jóh	n:a	hallgat-om	Nórá-t	hogy
goodh	SO	listen-DEF.1.SG	Nora-ACC	that
milyen pan	asszal érke	zett () az intézmén	ıybe ()	

with what complaint did you arrive to the institute

'good. .h so I am listening to Nora with what complaint you arrived to the institute

The utterances in the last group, like in groups I and II, do not include any performative expression, so again, the illocutionary act stays implicit. Note, however, that the presence of the verb *hallgat*-

*om* (listen-DEF.1.SG) does show the speaker's awareness of the language activity she is involved in, so it functions as a metapragmatic reflection. Nevertheless, it does not name the speech act being performed as opposed to the cases in groups III. and IV. Furthermore, unlike groups I and II, the main verb, which is in present indicative, does not signal the illocutionary force of the sentence. As a consequence, the speaker issues an indirect request by way of making a statement.

In connection with the explicit-implicit dimension of the illocutionary act, it is an interesting consideration that the more explicit the illocutionary force is, the more salient it becomes. In this way, the speaker can direct or control the attention of the addressee, since a more elaborated illocutionary act is more specific, which makes it easier to access, hence it becomes more obvious to the hearer. Similarly, along the direct-indirect dimension, a direct illocutionary act is also more salient, i.e. it is easier to access the intended function of the utterance, which in this way gets more into the center of attention (Hámori, 2010).

Another aspect worth considering among the cases of Embedded OpQs is that of perspectivity, which also plays a role in attention management. In groups I and II, the imperative mood of the verbs *mesél-je* (tell (the story)-IMP.DEF.3SG) and *mond-ja* (tell-IMP.DEF.3SG) directs the attention to the patient, while in groups III, IV, and V the use of the main clause verbs in the first person singular – *kér-em* (request-DEF.1SG), *kérdez-ném* (ask-COND.DEF.1SG) and *hallgat-om* (listen-DEF.1.SG) – puts the PT into the focus of attention. As a result, by applying these various strategies, different participants in the interaction are selected as primary (Hámori, 2010).

Before closing this section, I would like to compare my analysis of Embedded OpQs to the work of Kuna and Hámori (2019), who examined similar examples – not necessarily OpQs though – in doctor-patient interactions. In their paper, the authors consider all three verbs *hallgat-om* (listen-DEF.1.SG) 'I am listening', *mesél-jen* (tell-IMP.INDEF.3SG) 'tell me a story' and *szeret-tem volna meg-kérdez-ni* (like-PAST.DEF.1SG is.PAST.COND PFX-ask-INF) 'I would have liked to ask' (where the conditional form expresses politeness) as belonging to the same type of metapragmatic reflections, namely those, whose object is to refer to the immediate language activity. However, for the purpose of my analysis, I argue that the utterances containing these kinds of verbs are better to be analyzed involving the speech act perspective described above for two reasons.

First, the consideration of whether the illocutionary force of the utterance is expressed explicitly by a performative expression or it stays implicit, enables us to differentiate between verbs like *hallgatom* 'I am listening' and *meséljen* 'tell me a story' on the one hand and *szerettem volna*  *megkérdezni* 'I would have liked to ask' on the other. All of these verbs invite the hearer to produce a responsive turn, i.e. they are directives. Yet, in the case of the first two, without the speaker explicitly expressing (in the sense described above) this point of the utterance. In other words, while all three verbs are metapragmatic reflections, i.e. they show language users' reflexive interpretations of the activities they are engaged in, in the case of *hallgatom* 'I am listening' and *meséljen* 'tell me a story' the illocutionary force of the utterance is implicit. Second, by taking into consideration the distinction between direct and indirect speech acts, it is possible to differentiate between *meséljen* 'tell me a story' and *hallgatom* 'I am listening'. In the first case, the illocutionary force of the utterance is directly signaled by using the imperative mood of the verb, while in the second case, the indicative mood does not reveal the point of the utterance as being a request. In sum, if it is needed for the purpose of the research – like in the case of my data, including the speech act perspective described in this section provides a more fine-grained analysis.

As a final remark, note that if it were not for the context of referring to the existing knowledge about medical records, examples (2), (6), and (7) in Table 6 would belong to the Embedded OpQ category.

After presenting and describing the main categories of physiotherapists' opening questions, I will discuss some general characteristics of these questions, which may influence patients' answers.

#### 4.1.4 General characteristics of opening questions

In order to get an overall impression of the style of the opening questions (OpQ), certain features were examined in each of the OpQs within all four main categories. The detailed examination of the OpQs was driven by the theoretical presumption described in 3.3, namely that questions set topical and action agendas, convey speakers' presuppositions, beliefs, and epistemic stance, and that they posit preferences towards the expected answers (Hayano, 2012; Heritage, 2010). In short, the analysis was motivated by the presumption that the properties of questions influence the answers given to them. Nevertheless, the identification of the exact features to be examined was solely based on the data, as certain recurring patterns were discovered during the repeated study of all OpQs.

The features identified this way are the following: whether there is a reference to I) the patient's person, II) the institute, III) whether a (lexical or copular) verb is used, which has the patient as an

argument,<sup>22</sup> or not, IV) the thematic role of the patient, V) if the PT explicitly expresses in the OpQ that she is interested in current symptoms, and VI) whether the words *panasz* 'complaint' or *fájdalom* 'pain' are used in some form or another (e.g. noun or adjective) to ask about patients' problems. As it was mentioned above, the idea behind examining these characteristics is that the (probably unconscious) linguistic choices in the OpQs may influence the language use of the patient via accommodation or adjustment. However, while the features in I-IV contribute to the style or genre of the questions, the feature in V) is a bit different. Here, asking about current concerns is not a question of style, but still, it may theoretically constrain the scope of the patient's answer, therefore it could influence the response. Similarly, the word used to ask about patients' problems, as examined in feature VI), may also determine and thereby restrict the semantic scope of the answer regarding the kind of problems that are expected in it (see details later in the analysis).

Recall that a co-analyzer also coded these six features independently (4.1). In the case of multiple questions within the OpQ, all were included in the analysis. However, since all the features were coded as binary categories for the sake of the subsequent statistical analysis if a certain feature appeared in at least one of the multiple questions, it was coded as 1, and if it appeared in all of the series of questions, it was still coded as 1. So, regarding coding, the main point of interest was to see if a certain feature was present or not within **one OpQ turn** of the PT, whether that consisted of one or more questions. Similarly, in combined cases, where one feature was realized by more than one item (see for example cases of reference to the patient or the institute later), this was still coded as 1, meaning that the feature appeared in the OpQ, no matter how many times it did.

Below I describe and present the examined features separately.

#### I <u>Reference to the patient</u>

Since the patient is the addressee of the question, it is interesting to examine whether there is a reference to her/him in the OpQ. Three main practices were found to explicitly involve the person of the patient in the OpQ. One is to use the name of the patient, i.e. the use of a proper name (17). In these cases, PTs use the first name of the patient. This implies an informal and friendly relationship and it is common in PT-patient interactions in Hungary that both participants call the other by their first names. This is a major difference compared to doctor-patient interactions, where

<sup>&</sup>lt;sup>22</sup> Following Németh T. (2019:2), I use the term verbal argument to "refer to the lexically realizable elements of the lexical-semantic representation of a verb which make the verb meaning complete".

this habit is inconceivable in Hungary – at least that a patient calls the doctor by their first name. The second choice is to have a personal possessive suffix on the noun – (18) and (20), or the question word (19) about the patient's symptoms since in Hungarian, agreement with the possessor is marked on the possessed noun. Suffixes on verbs were excluded, since in Hungarian finite verbs always agree with their subjects in person and number (Kenesei et al., 1998) while using a marked possessive relationship is optional. The third practice is the use of a personal pronoun referring to the patient: (21) and (22). The combination of the above cases also appears in the data: (23)–(25).

In sum, out of 76 OpQs 50 (66%) included a reference to the patient in one way or another. This means that in one-third of the cases, the patient's person is omitted from the question – (26), which contributes to a more objective way of questioning.

1) Proper name

(17) (1-2: PT 1, 2<sup>nd</sup> recorded patient) *Géza mi most a panasz. hol van fájdalom.*'Géza what is the complaint now. where is pain.'

2) Personal possessive suffix

- a) noun
- (18) (2-2)

Van van-e panasz-**a**.

is is-E complaint-**POSS.3SG**<sup>23</sup>

'Do you have complaint.'

- b) question word
- (19) (8-1)

azt szeretném megkérdezni hogy	mi <b>-je</b>	fáj.
I would like to ask that	what-POSS.3SG	hurt

mivel jött be ide [hozzánk.]

with what did you come in here [to us]

'I would like to ask what hurts for you. with what did you come in here [to us]'

 $<sup>^{23}</sup>$  See part 4.1.1 (Main categories of OpQs) for the role of the *-e* interrogative particle. The formal personal pronoun in Hungarian is in the third person singular.

(20) (10-4) – only the relevant part is presented here. For the full version see Table 6 *a::* gerinc-ével van gond?
the:: spine-POSS.3SG.INS is problem
'Is there problem with your spine?'

3) Pronoun

a)

c)

(21) (7-5)

jó. () meséljen	hogy	mi van	<b>magá-</b> val, ()
good. $()$ tell me the story	that	what is	you.formal-INS

mi a (..) gond mivel (.) (van itt)

what is the problem with what (are you here)

'good. tell me what is up with you, what is the problem with what (are you here)'

**b**)

(22) (17-4)

mi	az ami	fájdalm-as panasz-os	terület	<b>Ön-</b> nek.
wha	t that which	pain-ADJDER complaint-ADJDER	area	you.formal-DAT <sup>24</sup>
'wh	at area is pair	nful with complaints for you.'		

#### 4) Combination

- a) Proper name + possessive suffix
- (23) (9-3)

na akkor Zita azt szeretném kérni? hogy mondja el nekem

So then **Zita** I would like to ask you to tell me

hogy mi-vel van a panasz**-a**, hol van fájdalom,

that what-with is the complaint-POSS.3SG where is pain

'so then **Zita** I would like to ask you to tell me what you have the complaint with where the pain is'

 $<sup>^{24}</sup>$  The formal personal pronoun in Hungarian is in the third person singular. There are two formal personal pronouns used in Hungarian: *maga* (3a) and *Ön* (3b), which express politeness and/or lack of familiarity. The latter one is more formal and/or polite than the former (Kenesei et al., 1998).

- b) Personal pronoun + possessive suffix
- (24) (16-2)

N:o és akkor hallgatom Ön-t hogy mi-vel So and then I listen you.formal-ACC that what-with érkezett most hozzánk? (...) mi-k a fő panasz-a-i, arrived.3SG now to us what-PL the main complaint-POSS.3SG-PL 'so and then I am listening to you with what did you arrive to us now what your main complaints are'

- c) Personal pronoun + proper name
- (25) (17-2)

Jó. (..) szóval mi az ami fájdalm-as panasz-os területgood. so what that which pain-ADJDER complaint-ADJDER areaÖn-nekÉvayou.formal-DAT Eve

'good. so what is the area that is painful with complaint for you Eva'

## 5) No reference to the patient $^{25}$

(26) (5-3)

*és milyen panasz-ok-kal jött* and what.kind complaint-PL-INS came.3SG 'and with what kind of complaints did you come'

#### II Reference to the institute

The relevance of the presence of a reference to the hospital in the OpQ is that it may evoke the formal context of the interaction, thereby affecting patients' answers. The two main practices found in the data were the use of deictic elements – personal pronoun (27) or adverb (28) – on the one hand, and the use of full lexical items, i.e. common nouns (29) or a proper name (30) on the other. Note that when the reference is realized as a deictic element, it is necessary to know the situational

<sup>&</sup>lt;sup>25</sup> Remember that suffixes on verbs does not count as reference to the patient, since in Hungarian finite verbs always agree with their subjects in person and number (Kenesei et al., 1998), while to use a marked possessive relationship is optional. Note that in the Hungarian version there is no personal pronoun, the person is only expressed on the verb.

context of the interaction in order to be able to identify the meaning of the expression. Furthermore, it is interesting to note that in the case of the personal pronoun, the deictic reference is used in a metonymic way. With this feature, we can also find combined cases, where the institute is referred to in more than one way (31)–(32). Overall, 45 OpQs (59%) out of 76 included some kind of reference to the institute.

1) Deixis

- a) Personal pronoun
- (27) (5-1: PT 5, first recorded patient)*milyen panaszokkal jött most hozzánk*

1PL.ALL

'with what complaints did you come to us now'

b) Adverb

(28) (11-5)

milyen (.) panasszal érkezett

(.) Norbert

to.here

ide

'with what complaint did you arrive here Norbert'

- 2) Nouns
  - a) Full lexical item
  - (29) (19-3)

először azt szeretném kérdezni hogy mi a fő panasza mi miatt van most itt

az intézet-ben

#### the institute-INE

'first I would like to ask what your main complaint is because of what are you here now in the institute'

- b) Proper name
- (30) (14-1)

üdvözlöm, .h szeretném megkérdezni hogy milyen panaszokkal érkezett

az (kórház neve)-ba jelen pillanatban.

the (name of the hospital) - ILL

'welcome, I would like to ask with what complaints did you arrive into the (name of the hospital) at the moment'

3) Combination

a) Adverb + personal pronoun – two deictic elements

(31) (22-4)

*Jó mi a jelenlegi panasz-a. most mi* good what the current complaint-POSS.3SG now what *mi-vel érkezett ide be hozzánk.*<sup>26</sup> what-INS arrived.3SG **to.here into 1PL.ALL** 

'good what is your current complaint. now what with what did you arrive in here to us.'

#### b) Adverb + common noun

(32) (19-2)

először is az-t szeret-ném kérdezni hogy mi a panasza. first of all that-ACC like-CON.1SG ask that what the complaint-POSS.3SG

mi miatt kerül-t most ide az intézet-be

what because surface.3SG-PAST now to.here the institute-ILL

'first of all I would like to ask what your complaint is. because of what did you get in here now to the institute'

 $<sup>^{26}</sup>$  In case of institutions, local cases have restricted usage in Hungarian. So 'hospital' can only take the interior cases (Kenesei et al., 1998). Therefore, the interior, 'motion to' local case *be* 'into' also contributes to the reference to the institute. Although, in this example *be* is a preverbal prefix separated from its verb: *be-érkezik* into-arrive.

## III The use of verbs

The relevance of this feature, namely to examine the use of verbs and the kind of verbs used within the OpQs, is to get an impression about how actively/dynamically, statically, or at all the patient is involved in the question. After all, the patient is the targeted audience of the OpQ, the PT's goal is to learn relevant information about the patient with the help of the OpQ.

The goal within this aspect was first to examine whether a verb is used in the OpQ, which has the patient as a manifestation of one of its arguments, or there is no such verb present. The second goal was to examine the kind of verb used within the former case. As a result, two main groups of verbs that take the patient as one of their (explicit or implicit) arguments were identified in the data: lexical verbs (33)-(34) and overt copular verbs. Within the copular verb structure, possessional sentences with copula (35) and copular sentences with an adverbial complement (36) were found (Kenesei et al., 1998). In the case of a nonovert copula with the patient as an argument (38), the OpQ was categorized as 'no verb present', just like in cases where there were truly no verbs with the patient as an argument (39). This decision was made for the following reason. Although grammatically it is a disputable choice, we should keep in mind that the main idea behind the classification and analysis of the OpQs is that the form of the question may affect the patient's answer. So, syntax/grammar and spoken discourse part ways in this aspect.

The results show that out of 76 OpQs, 45 (59%) used a lexical verb, 18 (24%) involved copula and 13 (17%) included no verb connected to the patient. In combined cases, where the OpQ included both a lexical verb and a copular part (33), or when there was both an overt and a covert copular part in the OpQ (37), the "stronger" case was considered – so the OpQ was counted among OpQs with a lexical verb in the former, and OpQs with overt copula in the latter case. Note that in the case of the Embedded OpQ category, not the main verb, but the verb in the embedded question was considered.

- 1) Lexical verb
  - a)
  - (33) (3-2; PT3 second recorded patient)

N:a mesélje el nekem hogy	(miért <b>van</b>	itt velünk)
So tell me the story of	why <b>be.3sG</b>	here 1PL.INS <sup>27</sup>

<sup>&</sup>lt;sup>27</sup> Remember that the official form of the personal pronoun is in the 3sg

milyen panasszaljöttmost hozzánk.with what kind of complaintcome.3SG.PAST<sup>a</sup>now to us'So tell me the story of why you are here with us with what kind of complaint did youcome to us now'

b)

(34) (18-2)

ö: milyen panaszokkal	érkezett	mi-[hozzánk]
uh: with what kind of complaints	arrive.3sg.past	us-1PL.ALL
'uh: with what kind of complaints did		

## 2) Copula

- a) Possessional sentence with copula
- (35) (21-2)

mondje	a Ø	milyen	panasz- <b>a</b> -i	vannak.
tell	me	what kind of	complaint-POSS.3SG-PL	be.3PL
'tell m	e wh	at kind of complaint	s you have'	

## b) Copular sentence with adverbial complement

(36) (7-3)

szóva	l előszö	ir mesél-jen	Ø	Ĭ	egy	, picit	t hogy	mi-vel	van	itt,
So	first	(tell a story)-IMP.3	3sg m	ne	а	bit	that	what-INS	be.3sG	here
mi	Ø	a probléma, ()	mi	Ø		fájd	alm-as	,		
what	is	the problem	what	is		pain	-ADJDI	ER		
'so fii	st tell 1	ne a bit about the st	ory of v	with	what	t you	are her	re, what the	problem	is, what
is pair	nful,'									

- c) Overt and covert copula with the patient as an argument
- (37) (19-1)

azt szeretném kérdezni hogy mi	Ø	a fő	panasz-a. ()
I would like to ask that what	is	the main	complaint-POSS

mi miatt van most itt az intézetben.

what because **be.3sg** now here in the institute

'I would like to ask what your main complaint is. because of what you are here now in the institute'

3) No verb present

- a) Covert copula with the patient as an argument
- (38) (22-3)

MiØa jelenlegipanasz-a.whatisthe currentcomplaint-POSS'what is your current complaint'

- b) No verb with the patient as an argument
- (39) (17-3)

j o (...) mi Ø az ami fájdalm-as panasz-os terület good what is that which pain-ADJDER complaint-ADJDER area 'good. which is the area that is painful with complaints'

Closely connected to the examination of verbs used in the OpQs are the thematic roles assigned to their arguments. Especially, the thematic role assigned to the patient is of interest, since it gives us an idea of how active a role the patient plays according to the OpQ expressed by the PT.

#### IV The thematic role assigned to the patient

The patient is the main character of the healthcare interaction in the sense that it is him/her, who experienced problems and decided to seek help. Therefore, it could be assumed that the patient has an active role in the story. The goal of the examination of the thematic role assigned to the patient was to see, whether this presumption is reflected in PTs' questions.

The topic of thematic roles is controversial (Dowty, 1989; Kiefer, 2007), therefore it was not possible to determine the exact thematic role of the patient in the OpQs. However, there was 100% agreement among the analysts after simplifying the concept to the binary Agent versus Non-Agent categories. According to the results in this way, only 12 (16%) of the 76 OpQs included the patient as an active Agent (19% if only OpQs including verbs with the patient as an argument (N = 63) are considered). Within these OpQs, i.e. where the patient's thematic role is that of the Agent, the

following three verbs were used by PTs: *jön* 'come' (40), *be-fekszik* 'into.PFX-lie' (41) and *fordul* 'turn' (42).

All the copular sentences (35)–(37) within the OpQs were classified as the patient having a Non-Agent thematic role. Furthermore, OpQs with the following lexical verbs also belong to the Non-Agent category: *érkezik* 'arrive' or *be-érkezik* 'into.PFX-arrive' (43) (these two are the most frequent), *kerül* 'surface' or *be-kerül* 'into.PFX-surface' (44).

- 1) Patient as an active Agent
  - a)
  - (40) (5-4)

milyen (.)panasz-szaljöttjelenleghozzánkwhat kind of complaint-INScome.3SG.PASTcurrently1PL.ALL'with what kind of complaint did you currently come to us'

b)

(41) (4-2)

jó. akkor azt szeret-ném kérdezni hogy good. then that-ACC like-CON.1SG ask that hozzánk mivel feküdt he what-INS lie.3SG.PAST into.PFX 1PL.ALL jelen[legi] a leg-fő-bb mi a most a panasz-a panasz-a. what the now the complaint-3SG.POSS current the SPR-main-CMP complaint-3SG.POSS 'good. then I would like to ask with what did you come to us what is now your complaint your current biggest complaint'

c)

(42) (18-1)

milyenpanasz-ok-kalfordul-tmi-hozzánk.what kind of complaint-PL-INSturn.3SG-PAST us-1PL.ALL'with what kind of complaints did you turn to us'

2) Patient as Non-Agent<sup>28</sup>

a)

(43) (8-4)

szeretném meg-kérdezni Ön-től,hogy milyenpanasz-szal,like.COND PFX-askyou.formal-ABL thatwhat kind ofcomplaint-INS(..) érkez-ettbe. (..) [mi-jefáj]arrive-3SG.PASTinto.PFX what-3SG.POSS hurt

'I would like to ask you what kind of complaint did you arrive in with. what hurts for you'

b)

(44) (20-1)

kérdés-em. először is, hogy hol azlenne a van a that.NOM be.COND the question-1SG.POSS first of all that where is the fájdalom hely-e. be-kerül-t hozzánk. ami miatt ide location-3SG.POSS which because into.PFX-surface-3SG.PAST to.here 1PL.ALL pain 'my question would be, first of all, where the location of the pain is. because of which you got into here to us.'

The first four features of OpQs described so far examined the involvement of the patient (reference to the patient, use of verbs, thematic role assigned to the patient) and the formal context (reference to the institute) in the questions. The last two features are rather about the inclusion of certain words in the OpQ that may influence or constrain the semantic scope of the answer. The examined aspects in the OpQs were the presence of words that explicitly express that the PT is interested in the current problems on the one hand, and the kind of word(s) used to ask about patients' problems on the other.

<sup>&</sup>lt;sup>28</sup> As it was mentioned before, there was no agreement between the analyzers about the exact Non-Agent thematic roles given to the patient in the OpQs. In order to demonstrate a possible way of analysis, the author's solution is demonstrated here. Following Kiefer (Kiefer, 2007), the patient, as the subject of the lexical verbs *érkezik* 'arrive' and *kerül* 'surface' was given the thematic role of Patient. In case of possessional sentences with copula (35), the patient was analyzed as Experiencer, while in copular sentences with adverbial complement (36), the patient was seen as Theme. However, since the goal of the investigation of this aspect, i.e. the thematic role of the patient, was to see if s/he was seen as an active participant of his/her own story, the binary distinction between Agent versus Non-Agent suffices. After all, the patient seeks medical care because of certain problems s/he has, so it seems logical to suppose that s/he has an active role in ending up at the physiotherapist.

#### V Current problems

This feature, namely that PTs explicitly express that they are interested in hearing current problems, was examined to see if patients do present their actual concerns in their responses. Since the goal of the problem presentation phase is to learn patients' current symptoms (see 4.2.1), it is interesting to see, if patients really are influenced by and meet this expectation in their answers – especially, if it is explicitly expressed by the therapist.

To inquire about current problems, the most frequently used word by PTs was *most* 'now' (45), Other expressions included *jelenleg* 'currently' (46) or *jelenlegi* 'current' and once *jelen pillanatban* 'present moment/at the moment' (see (30)) was used. In some cases, both *aktuális* 'actually present', i.e. 'current' and *most* 'now' (see (1) in Table 6) or *jelenlegi* 'current'/*jelenleg* 'currently' and *most* 'now' (47) appeared. All in all, out of 76 OpQs, 33 (43%) included an expression referring to the fact that the inquiry was about current problems.

1)

a)

(45) (1-1)

n:o. mi most a panasz. hol van fájdalom
so what now the complaint where is pain
'so what is the complaint now. where is pain'

## b)

(46) (15-1)

*ö* mi-vel érkez-ett jelenleg hozzánk.
uh what-INS arrive-3SG.PAST currently 1PL.ALL
'uh with what did you arrive to us currently.'

#### 2)

(47) (22-1)

*mi a jelenlegi panasz-a. miért kerül-t ide be (.) most.* what the **current** complaint-3SG.POSS why surface-3SG.PAST to.here into.PFX **now** 'what is your current complaint. why did you get in here now.'

## VI Words used to ask about patients' problems

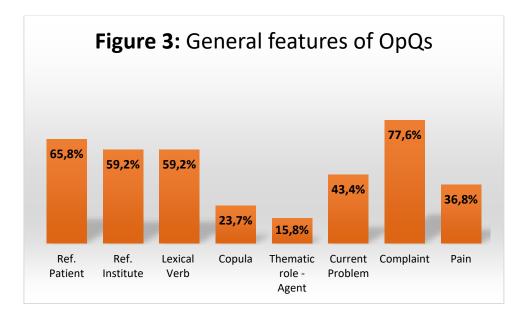
This feature of the OpQs is relevant, since the word, which is used to ask about patients' problems (e.g. problem, pain, complaint) theoretically determines the semantic scope of the answer regarding the domain of concerns – for example, "problem" refers to concerns more generally than "pain".

Based on the demonstrated excerpts so far, it has probably become apparent by now that in the analyzed 76 OpQs, the most frequently used words are *panasz* 'complaint' (78%) and *fájdalom* 'pain' (37%). Furthermore, in the case of both expressions the noun form is used most frequently, although adjectival forms (*fájdalm-as* 'pain-ADJDER', *panasz-os* 'complaint-ADJDER' – (22), (25), (39)) or verbal forms (*fáj* 'hurt' – (43)) are also found in the data. To use the noun forms of these words is in line with the phenomenon of nominalization in medical discourse, by which processes involving the patient (e.g. experiencing pain) are turned into things and encoded as nouns (Jones, 2013).

Regarding meaning, the significance of the use of these words lies in the fact that both 'pain' and 'complaint' can only mean physical/bodily problems. This statement rather seems obvious in the case of 'pain', but 'complaint' needs some explanation. Although the Hungarian word *panasz* 'complaint' has a broader meaning than *fájdalom* 'pain' – which only covers some kind of ache in the body,<sup>29</sup> in a medical context *panasz* 'complaint' is also only used to describe physical symptoms (Juhász et al., 1975), e.g. weakness, numbness or stiffness (in the field of musculoskeletal problems). Hence, by the choice of the words *fájdalom* 'pain' and *panasz* 'complaint' in the OpQs as elicitation of patients' problems, PTs exclude the possibility of presenting any psychosocial concerns in the answers.

Figure 3 summarizes all the general features considered within the OpQs.

<sup>&</sup>lt;sup>29</sup> It is important to note that the interpretation of "pain" as an ache in certain part(s) of the body, i.e. some kind of physical suffering is also constrained by the medical context. Generally, "pain" can also mean some kind of emotional or mental suffering.



As we can see, although physiotherapists' opening questions are clearly directed towards and inquire about the patient and his/her problems, in one-third of the cases, there is no explicit reference to the person, who is the obvious focus of the question. Hence, one-third of the OpQs become impersonal in nature. Furthermore, a big proportion of the OpQs (59%) includes some kind of reference to the hospital, as the given context of the inquiry, thereby strengthening the formal context of the interaction. Considering the use of verbs, which take the patient as one of their arguments, 41% of the OpQs either do not include such a verb at all, or a copular verb is used. In this way, the OpQs become less active, i.e. they express less action. In other words, the process of the patient experiencing some problem, therefore seeking help and looking for a solution to his/her concerns, is neglected in the manner of questioning. The surprisingly low proportion (16%) of OpQs, where the patient takes the active thematic role of an Agent further contributes to this aspect.

In sum, the previously described general characteristics, style, and linguistic properties of the OpQs may evoke a formal-medical frame (Fillmore, 2006; Hale, 2011; Tannen, 1985), which may influence the answers and, within that, the language use of patients. In other words, socio-cultural frames are created by acting or speaking in a certain way, and at the same time, these frames require that a particular language is used within a given situation. Since frames also provide guidance for participants regarding the proper behavior in and interpretation of a certain situation (Kecskes, 2012), it follows that different frames of meaning exist for different speech genres (Bakhtin, 1986; Verschueren, 1999).

The medical, and especially the physical-biomedical frame is also reinforced by the words PTs use to refer to the potential problems. In 88% (67 out of 76) of the OpQs either the word *panasz* 'complaint' or the word *fåjdalom* 'pain' or both appear in some form or another – although the noun form is preferred in both cases. As it was described above, by the choice of the words *fåjdalom* 'pain' and *panasz* 'complaint' as elicitation of patients' problems in the OpQs, PTs exclude the possibility of presenting any psychosocial concerns in the answers. In other words, not only the formal context is evoked by the language use of the OpQs, but the word choices within them may seriously constrain the domain of acceptable responses, emphasizing that physical problems are the first and most welcome.

In this section, I described the characteristics of physiotherapists' Opening Questions. Four main categories of OpQs were identified: Wh-OpQ, Embedded OpQ, Polar/closed OpQ, and OpQ based on medical records. Additionally, certain general features were also examined within all 76 OpQs. These include reference to the patient, to the institute, the use of verbs that take the patient as an argument, the thematic role assigned to the patient, the explicit expression of the fact that PT is interested in current problems, and the use of the words *panasz* 'complaint' and *fájdalom* 'pain' to ask about patients' problems. A general conclusion was drawn, namely that the language use of OpQs evokes a formal-biomedical context, which may affect and limit patients' answers both regarding content and alignment in linguistic choices. As it was discussed in 2.4, the biopsychosocial approach is expected within the physiotherapy practice as well. The OpQ is the first opportunity for the PT to explore not only the biomedical but also the psychosocial agendas of the patient. Although the OpQ and the patient's answer to that constitute only the beginning of a longer interaction, and problems may be raised later in the conversation, the OpQ should not limit the domain of concerns to those, which are biomedical in nature.

The next section will discuss the follow-up of the OpQs, namely the problem presentation phase of the visit generally, which is followed by the analysis of patients' answers to OpQs in the data.

# 4.2 Data Analysis 2. – Patients' answers (T2)

Before we discuss the results of the analysis of patients' answers, it is necessary to provide some background for this topic. Since patients' answers to PTs' OpQs are part of the problem presentation phase of the visit, first I describe the main aspects of this phase.

#### **4.2.1** The problem presentation phase of the visit

The problem presentation phase of the visit is initiated by the healthcare professional's (HCP) opening question and it ends when the HCP attempts to shift into a different activity, most commonly into information gathering, i.e. history-taking (Heritage & Robinson, 2006b). This shift in the activities is important since the first history-taking question gives a medical frame to the patient's problem, which in this way becomes medicalized and validated as something that needs attention (Heritage & Robinson, 2006a).

The goal of the problem presentation phase is to learn about patients' problems, so it is "normatively completed with the presentation of current symptoms" (Robinson & Heritage, 2005:490), both biomedical and psychosocial in nature, that are being experienced in the here-and-now (Robinson & Heritage, 2005). Therefore, the main task of the HCP is to solicit patients' complete agenda, in order to create common ground between the participants. This in turn fosters HCP's ability to make a proper diagnosis and to recommend the appropriate course of treatment.

To gain a complete picture of the patient's concerns, the application of three communication skills is recommended. First, in the case of new consultations, the use of a general open opening question is recommended, as was discussed previously (2.2 and 3.3.2). The second task for the HCP is to listen attentively to patient's talk, which enables the HCP to learn more about the patient's story, perspective, and agenda as well as to pick up cues about the patient's feelings and emotional state. After proper questioning and listening, the third requirement is to screen for possible additional concerns, which then leads to the negotiation and the setting of the agenda for the consultation (Silverman et al., 2013).

The goal of agenda setting or agenda mapping is that all possible topics for discussion are described before committing to a certain agenda that is pursued during the clinical encounter. Agenda setting/mapping is a collaborative action, where both the clinician's and the patient's perspectives are taken into consideration, and the participants are negotiating and prioritizing the

topics. Hence a premature focus on any topic can be avoided and as a result, the interview becomes structured (Gobat et al., 2015).

Although agenda setting/mapping is an important part of a consultation, research shows that in many cases patients are not able to complete their statement of concerns. The highly cited paper of Beckman and Frankel (Beckman & Frankel, 1984) showed that patients completed their statements about their concerns in only 23% of the 74 visits analyzed and that most physicians' interruptions occurred after the first presented problem. However, the first mentioned concern is not necessarily the clinically most important one. As a result, this practice leads to early hypothesis testing and a premature clinical focus based on incomplete data. A later study (Marvel et al., 1999) found a similarly low proportion of visits -28% of 264 visits, where patients could complete their responses after physician's solicitation. Physiotherapists also tend to interrupt patients, while they are outlining their symptoms, i.e. during problem presentation (Chester et al., 2014; Roberts & Burrow, 2018). Nevertheless, it seems that patients do not take much time to present their problems, when uninterrupted. Marvel et al. (1999) found that the average time used by patients, who were able to complete their concerns was 32 seconds, while in Imran and colleagues' (2019) work the median length of problem presentation with no interruption was 89 seconds. The latter research examined the length in seconds of chronic pain patients' opening statements after a standardized question - "tell me the story of your pain and your concerns" - and no interruption. It is important to note here that (as we will see later in 4.2.3) the length of the response is only a part of the complete picture - standing alone, it is not fully informative. Another important point of interest would be the information content of patients' answers, since no matter how long they are allowed to speak, if the provided information is not relevant.

The problem is that physicians often redirect the focus of the interview before learning the patients' full agenda, which leads to fewer patient concerns, late-arising problems, and the missing of potentially important information. In another study (Robinson et al., 2016), examining 407 primary-care visits, the authors found that, although physicians' questions aiming to solicit patients' additional concerns are effective in eliciting new concerns, only 32% of the visits included such questions. These results suggest that clinicians often miss the opportunity to discover the complete picture of patients' concerns. In addition, because of the early focus on a certain problem, agenda setting does not take place in most medical interactions. This practitioner-focused way of communication is also common during physiotherapy sessions (see 2.4), where PTs pursue their

own agenda by focusing on clinical signs and symptoms and generally are oriented toward data collection (Cowell et al., 2019).

The difficulty in discovering a full picture of patients' concerns lies in the fact that patients have several choices regarding the form and content of their problem presentation. One important factor for patients seems to be to show the legitimate doctorability of their problems, i.e. that their concerns are good enough reasons to visit a physician. This can be justified in three main ways: 1) "making diagnostic claims", 2) "invoking third parties as part of the decision-making process", whereby patients reduce their own agency and accountability, and 3) "making troubles-resistant claims", in other words, showing that they've been trying to cope with the problem themselves, before seeking care (Heritage & Robinson, 2006a). Another factor influencing patients' problem presentation is that this is the phase of the visit where patients have control over the conversation. As soon as there is a shift in activity towards information gathering/history taking, the physician takes over this control. Hence, by delaying the presentation of current symptoms, e.g. by telling a narrative, patients may keep the floor longer, thereby the problem presentation slot can be expanded (Robinson & Heritage, 2005). However, there is also another interpretation of those situations, where patients tell the story of their problems. This way they can show, how the predicament makes sense to them, and their illness experience is revealed (Clark & Mishler, 1992). Because of these different practices in the ways patients present their problems, and considering the main goal of this phase, i.e. to learn patients' current problems, clinicians and patients should work together to achieve the goal of the problem presentation phase. In other words, the clinical task becomes a social accomplishment reached by the joint effort of the patient and the clinician (Clark & Mishler, 1992).

In sum, the problem presentation phase is the part of the visit, where the clinician and the patient have their main chance to achieve joint understanding, i.e. to build common ground (see 5.1) regarding the patient's problem(s), and the topic(s) for further discussion. This basic idea should be kept in mind as we go through patients' answers to OpQs in the data.

## 4.2.2 Operationalization of patients' answers (T2)

This section focuses on patients' answers given to physiotherapists' (PT) Opening Questions (OpQ) about current problems. The analysis is limited solely to the first turn uttered by the patient after the OpQ. Since, the main unit of analysis is that of question-answer pairs, i.e. PTs' OpQs and

patients' responses to those, the latter was named as second turn (T2). T2s were defined as patient's unit of speech between the OpQ and PT's next verbal move, whatever that may be. So, even if PT only interjected some kind of backchanneling,<sup>30</sup> like *ühüm* 'uh-huh' or *igen* 'yes', it was considered the third turn (T3), and the subsequent part of patient's talk was omitted from the analysis at this point. The reason behind this decision was to see in a future analysis, if and how PT's verbal action (T3) influences the course of the patient's answer.

Note that although T2 is part of the problem presentation phase – the beginning of it to be exact, the two concepts are not to be treated as synonyms or interchangeable. Whether the whole problem presentation phase consists of T2 only is dependent on the content of T3. If T3 is a shift into the next phase of the visit – most commonly this means that T3 is a history-taking question (see the previous section) – then the patient only had one single turn for presenting his/her problems. This also means that neither screening for further concerns, nor agenda setting took place at the beginning of the visit.

There were two main goals of the analysis of patients' answers (T2s). First, to discover the different ways in which patients respond to PTs' OpQs, and within this aspect, to see if they actually reveal their current problems. Remember that the function of the problem presentation phase – initiated by the OpQ – is to learn about patients' actual concerns. The second goal was to see if there is any relationship between the type of OpQ and the type of T2. In other words, to determine if the language choices of OpQs really influence the answers in the data.

### 4.2.3 Types of T2s

The classification of patients' answers and the formation of the seven main categories (Table 8) were based on the information content of T2s. This process was inductively performed by the author, that is, it was solely based on repeated listening to the beginning of the recorded interactions and reading their transcripts, thereby discovering the emerging patterns. After the seven categories were defined and explained with demonstrative examples to a co-analyst, we worked in tandem to categorize each of the T2s. The complementary expertise of the author (physiotherapist and general

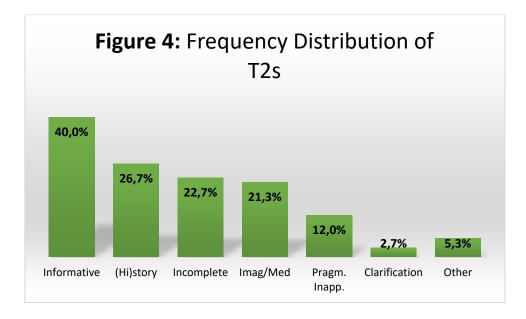
<sup>&</sup>lt;sup>30</sup> There are different terms used for this kind of verbal action. In conversation analysis, it is called continuer (Schegloff, 1982). Clark (1996) calls it continuing contribution, within which umbrella term he distinguishes between acknowledgements, like *I see* and backgrounding like *uh-huh*. In the field of computational pragmatics, it is called a functional segment (Bunt, 2017). Nevertheless, all the different names express the same meaning: these verbal actions provide positive feedback, signal understanding and at the same time give the turn back to the previous speaker, i.e. they allow the speaker to keep or continue talking "by passing an opportunity to produce a full turn at talk" (Schegloff, 1982:81). In my dissertation, I use the terms backchannel and continuer interchangeably.

linguist) and that of the co-analyst (PhD in theoretical linguistics) allowed for a more complex perspective during the simultaneous analysis, whereby both the medical-professional content and the interactional processes were discussed and taken into consideration.

Table 6 Main categories of patients answers – 125		
Name of category	Explanation	
<b>Informative answer</b> (N = 30)	The patient gives relevant information considering the purpose of this phase, which is to learn about the patient's currently experienced problem(s)	
(Hi)story (N = 20)	The patient answers by talking about past events	
Incomplete (N=17)	The location of the problem is named, but the nature of it, i.e. what the patient experiences, is <b>not</b> mentioned	
Imaging results, Medical diagnosis (N = 16)	The patient tells the result of an imaging examination (e.g. MRI), and/or answers with a medical diagnosis or opinion	
<b>Pragmatically</b> inappropriate (N = 9)	The patient gives an answer but its content is not appropriate in the context	
<b>Clarification</b> (N = 2)	The patient asks for clarification	
<b>Other</b> $(N = 4)$	Not possible to classify into any of the above categories	

Table 8 Main categories of patients' answers - T2s

Figure 4 presents the frequency of each group of answers/T2s. In the case of one interaction, the recording was very noisy after PT's OpQ, so the patient's answer was not intelligible. As a result, 75 T2s were classified. Note that the defined categories are not mutually exclusive, which means that one T2 could be classified as belonging to more than one category. The only exception exists between the Informative and the Incomplete groups – following from their definition, these two categories are mutually exclusive. See the Appendix for the classification of all the answers. The following sections demonstrate the seven main categories of T2s in more detail and with examples. First, the main groups will be presented with examples of T2s that belong only to that certain category. Afterward, combined cases – where a T2 is classified into more than one category – will be discussed.



## 4.2.3.1 Informative answers

The name of the category is an evaluative description solely from the medical-professional perspective. It expresses that the information provided in the answer is relevant to the function of the actual phase of the visit, i.e. to the problem presentation phase. In other words, from the answer of the patient, we get to know the patient's current issues. These may be physical symptoms, in which case we need to know the body part and the symptom itself (e.g. pain, numbness, etc.), worries, goals, or expectations of the patient.

The two main requirements of this category are the following. On the one hand that we (start to) get a clear picture of why the patient is there. On the other hand, and this is important to emphasize, only those T2s counted as Informative answers where patients were describing phenomena that they experienced themselves. So, answering with a medical diagnosis or telling the results of an imaging examination (MRI, X-ray, etc.) were not considered Informative answers, and a separate category was created for these kinds of responses.

This decision is supported by three factors. First, answering with a medical diagnosis and/or imaging result can be seen as a form of medical revoicing,<sup>31</sup> i.e. the source of the provided information is not the utterer (the patient) (Verschueren, 1999), but it is the voice of medicine (Mishler, 1984). A medical diagnosis or an examination result makes the labeling of the patient possible, which – although a crucial requirement for clinical reasoning and interprofessional

<sup>&</sup>lt;sup>31</sup> I would like to thank to Professor Heidi E. Hamilton, who introduced this term to me.

communication – is a simplification of the case. This leads us to the second factor, why a separate category was created for medical revoicing: namely, that based on a diagnosis alone, HCP could not know what the exact symptoms of a certain patient are. Every problem or disease may have several specified but only potential symptoms. For example, a "bulging lumbar disc" seen on the MRI may have one or more of the following symptom(s): local low back pain; referred pain in different parts of the lower extremity (thigh and/or lower leg, calf); radicular pain – nerve root involvement (usually in the lower leg/calf); numbness or tingling in one part or other of the lower extremity; muscle weakness. Moreover, it may also happen that – although visible on the MRI – it causes no symptom at all (Brinjikji, Luetmer, et al., 2015).

The last factor motivating the separate categories of Informative answer and Medical diagnosis/Imaging result is that it can also happen that the patient's main concern is not the physical problem itself, but e.g. fear of the consequences. In other words, psychosocial agenda may exceed biomedical symptoms, since there could be several different domains/drivers of a patient's pain experience, e.g. cognitive, emotional, and socioenvironmental (Walton & Elliott, 2018), and disclosing some diagnosis or label will never reveal these.

In sum, an Informative answer is considered as a description of a patient's current problems in his/her own words as s/he experiences them – like on the first occasion when help is sought, i.e. before any medical opinion is formed. The demonstrative examples of this category are the following.

- (48) 1-1: PT1-first recorded patient; 1 stands for PT, 1-1 for patient
  - 001 1: n:o. mi most a panasz. hol van fájdalom<sup>32</sup>
    'so what is the complaint now. where is pain'
  - 002 1-1: .h (..) ö: a derekam, (..) alapvetően a derekam fáj,
    '.h (..) uh: my low back, (..) basically my low back hurts,'
  - 603 és: ö: (.) re ami az-azzal még együtt lehetne úgy ahogy élni de
    'and: uh: (.) re which the-with that one could still live together somehow but
  - 004 nagyon erősen kisugárzik a a: bal: alsó lábszáramba. vádlimba.
    'it refers very strongly to my left: lower leg. to my calf.'

 $<sup>^{32}</sup>$  for the glossed version of the OpQ see (45)

005	tehát van hogy néha nem bírok rálépni.
	'so it is that sometimes I am not able to step on it.'
006	[annyira az] ideg. (.)
	'[so much the] nerve. (.)'
007 1:	[.hh ]
	'[.hh]'
008 1:	ühüm most jelenleg sugárzik ki ez a fáj [dalom?]

'uh-huh now currently is it referring this [pain?]'

In excerpt (48) above the PT initiates the problem presentation with an impersonal Wh-OpQ (Opening Question). The patient gives relevant information in her answer by telling that both her low back (002) and left calf (004) is painful. She even prioritizes her problems, saying that the lower leg pain is more severe – which is clinically important information – causing her functional problems in everyday life (005). This latter fact, i.e. that she sometimes has problems loading her leg when the pain is there, is also relevant information revealing the problem's effect on the patient's life. However, PT is more interested in knowing whether the referring pain is present at the moment (008), so she validates and emphasizes the importance of the physical symptom and does not react to its effect on daily living.

It is interesting to note the mention of some kind of nerve involvement by the patient (006). This knowledge seems to have its origin in a medical opinion and indeed, later in the discussion (omitted from excerpt) the patient tells that she has a disc herniation that is pushing on the nerve. So, even though she has a diagnosis, it seems more important for the patient to answer PT's OpQ by telling the problems she experienced herself.

The next excerpt is another example of what is considered an Informative answer from the patient.

(49) 5-2: PT5-second recorded patient; 5 stands for PT, 5-2 for patient

 001 5: ((papírmunka: tájékoztató, beleegyező kitöltése)) ((filling out papers for research: information, consent))
 002 ((időpont egyeztetés, egyéni-csoportos tornák ismertetése))

((making appointments, information about face to face and group exercises))

003	n:a most pedig ö: szeretném egy picit () megkérdezni
	's:o and now uh: I would like a bit () to ask you
004	hogyha (1.2) ha kényelembe helyezte magát
	'if (1.2) if you made yourself comfortable'
005 5-2:	m:: köszönöm szépen én nagyon jól ülök itt igen,
	'm:: thank you very much I'm sitting here very well yes'
006 5:	(1.8) hogy ö::: (2.5)
	'(1.8) that uh::: (2.5)'
007	hogy mégis milyen panaszokkal érkezett hozzánk
	'that anyway with what kind of complaints did you arrive to us'
008 5-2:	() a legnagyobb problémám az
	'() my biggest problem is'
009	hogy a térdem ö:: nem akar működni,
	'that my knee uh:: does not want to work'
010	(.) ö hasogat amikor lépcsőn járok,
	'(.) uh there is shooting pain when I walk the stairs'
011	időnként járás közben is belenyilall
	'sometimes there is a stabbing pain during walking too'
012	úgyhogy majdnem összecsukódom,
	'so that I almost collapse'
013	() azonkívül a lépcsőn járás
	'() besides walking the stairs'
014	lefelé is, fölfelé is, nagyon rossz.
	'both down and up is very bad.'
015	() egysze [rűen ]()
	'() sim[ply] ()'
016 5:	[egyaránt?]
	[equally?]

In the excerpt (49) above the patient is presenting her problem from a functional point of view – a térdem nem akar működni 'my knee does not want to work' (line 009) – emphasizing difficulties

with walking and walking on stairs. So, from the patient's perspective, not the presence of pain, but its effects on her daily activities are highlighted (lines 010-014).

Two observations are important to make here if we consider PT's reaction (016). First, PT interrupts the patient, who seems to have more to say, introducing her following talk with *egyszerűen* 'simply' (015), which could be an initiation of some kind of summary or other continuation. However, since PT interrupts her, she does not get the chance to finish her thoughts. From this point on (not shown in the excerpt), PT has control over the conversation, and she is immediately going into the details of walking the stairs before asking about pain localization. So, although PT's questions may have clinical importance, PT cuts off the patient's talk and almost immediately goes into discussing a certain part of the information provided by the patient. PT takes control after only 17 seconds of patient's talk.

The second observation is that the patient starts her problem presentation with the expression *a legnagyobb problémám az* 'my biggest problem is' (008), which implies that she has other problems as well. Nonetheless, the PT – instead of continued listening or screening for other concerns (see part 4.2.1 previously) – jumps into the discussion of (part of) the first mentioned problem, thereby missing her chance to get the big picture first. Only much later in the visit does the PT get back to asking about other symptoms as well. It turns out that the patient sometimes also has low back pain and problems with her hand. Furthermore, although it becomes clear that her biggest problem is indeed her knee, the PT spends quite some time discussing the other problems as well. Thus, it can be concluded that prioritizing among problems, agenda setting, and as a result, structuring the interview is also lacking. The scheme of the visit looks like the following: problem 1 - discussion, problem 2 - discussion, problem 3 - discussion, problem 1 - physical examination.

In sum, if we consider the third turn (T3) in both excerpts (48) and (49), we can see that PT's reaction may show a premature focus on a certain part of the patient's talk, which can easily derail the conversation and guide the patient towards discussing what is important for the PT. Alas, these "distractions" are not always clinically important or reasonable (at that point anyway), and they can hinder the efficiency of questioning. Not to mention the fact that these early interruptions or topic changes deprive the patients of their chances to finish their stories.<sup>33</sup>

In the next excerpt (50), we can see a different kind of Informative answer.

<sup>&</sup>lt;sup>33</sup> What we saw in excerpt (48) and (49) are not true topic changes, since the utterances in T3s react on a subtopic mentioned by the patient in the previous turn. Still, they give a new direction as well as a new guide (the PT) to the conversation.

(50) 13-1: PT13, first recorded patient; 13 stands for PT, 13-1 for patient

- 002 13: *van-e fájdalma*. 'do you have pain'<sup>34</sup>
- 003 13-1: (...) *jelenleg nincs (mer) kaptam injekciót* '(...) currently no (cause) I got injection'
- 004 13: *mikor kapott injekciót?* 'when did you get injection?'

The PT in the above example (50) opens the problem presentation phase with a polar OpQ (002). Furthermore, she is only asking about the presence of pain, thereby restricting the patient's scope of answers. Considering these two factors, the patient's answer (003), i.e. that she does not have pain, fulfills both the action and the topical agendas set by the OpQ, even though it is obvious that she has problems, since she is an inpatient in a hospital. Hence, the above example shows that an open and general question about problems and concerns may be more beneficial to start with.

It is also interesting to look at PT's reaction (T3, line 004) to the patient's answer (T2). Since the role of the opening question (OpQ) is to learn about the patient's problems, the timing of the injection may not be the most relevant information at this point, before even knowing what the problem is. However, the PT first asks about when the patient got the injection and by which doctor (omitted from excerpt), before asking about the reason for the injection – and even then, she is sticking to the use of the word "pain".

The last example shows an Informative answer, which is very short and sounds rather formal.

(51) 15-2: PT15, second recorded patient; 15 stands for PT, 15-2 for patient
002 15: *jó, azt szeretném öntől megkérdezni,*'good, I would like to ask you,'
003 *hogy van-e:* (..) *ö jelenleg panasza,*'if you have (..) uh complaints currently,'
004 *mivel milyen panaszokkal érkezett az intézetünkbe.*'with what with what kind of complaints did you arrive to our institute.'

 $<sup>^{34}</sup>$  See part 4.1.1 about the role of the *-e* interrogative particle in Hungarian polar questions. For the glossed version of the OpQ see Table 5.

005 15-2: (..) gerincfájdalmakkal '(..) with spine pains'

006 15: (...) .hh (..) j:ó. (1.2) '(...) .hh (..) g:ood. (1.2)' 007 .h nyugalomban van-e fájdalom. '.h is there pain in rest.'

In this last example, the PT uses an Embedded OpQ to ask about the patient's complaints. In line 005 we see on the one hand that the patient's answer aligns in form with the question: *milyen panaszokkal* 'with what kind of complaints' (004) - gerincfájdalmakkal 'with spine pains'. On the other hand, this answer is rather impersonal, the patient does not use any reference to herself, like she was not a participant in this matter, like it was not her spine that hurts – this answer sounds like a formal report. Imagine for example the following situation among two HCPs: – *What is the complaint of the patient? – Low back pain*; or on a medical report: *The patient arrived with low back pain*.

I call this type of answer as being objective in manner. This means that the patient's person is not involved in the answer like the problem did not have an experiencer. In other words, nothing refers to the patient's person in the utterance. As a result, a kind of distance is created (unconsciously) between the problem and the person, who is experiencing it. This linguistic choice could be the result of language alignment, as in the above example. All in all, ten objective answers were found in the data, in six cases this style is connected to Informative answers, and in four cases to Incomplete answers, as we will see later (4.2.3.3).

If we look back at excerpt (51), there is a final remark to be made: we see that although the patient tells that she has pain, her answer is rather minimal and inaccurate, and sounds like a quote from a medical record. The PT, without even making it clear, which part of the spine is painful, immediately goes into the information gathering stage of the visit.

Now that we have discussed the characteristics of an Informative answer with the help of a few demonstrative examples, the second biggest group of T2s, namely the (Hi)story type answers will be presented next.

## 4.2.3.2 Answers including previous (hi)story

The category of (Hi)story type answer covers different scenarios, but it is common in the answers that the patient is talking in the past tense, evoking past events; i.e. the patient is telling a narrative (Labov, 1972). The topic of the talk may be the cause or onset of symptoms, the story of the evolution of the problems,<sup>35</sup> previous medical visits, and treatments, or the mentioning of problems, about which it is not apparent at this point if they are still present or they are just part of the (hi)story.

The advantage of this type of answer is that the therapist can learn, how patients connect their problems, what (they think) the cause of the problem is, what steps they have already made to get help, or how they themselves were trying to cope with the problem in order to get better. So, we can learn about the patient and his/her attitude toward the problem from these kinds of answers. However, patients' interpretation of the connection between the symptoms, or their cause may not be clinically true or relevant. Therefore, it can be a hard task for the clinician to balance between listening to the patient's story on the one hand and eliciting relevant information on the other. In other words, to use visit time efficiently.

The excerpts below will help to understand this category better. To demonstrate how patients' stories may develop, more than only the first three turns (PT's OpQ - patient's answer/T2 - PT's reaction/T3) will be presented. Keep in mind, however, that the categorization of patients' answers was solely based on the content of T2s (4.2.2 and 4.2.3).

- (52) 6-2: PT6, second recorded patient; 6 stands for PT, 6-2 for patient
  - 002 6: *jóh akkor azt szeretném megkérdezni első körbe* 'goodh then I would like to ask first round'
  - 003 *hogy ö:: (...) hogy ö:* 'that uh:: (...) that uh:
  - 004 ((11 seconds omitted: talk about the information and consent papers for research))

<sup>&</sup>lt;sup>35</sup> Although a story is a subcategory of a narrative, i.e. a story is a narrative that is evaluated (Ainsworth-Vaughn, 1998:128,151), I use the two terms interchangeably.

005	az lenne az [első kér]désem hogy
	'my [first ques]tion would be that'
006 6-2:	[(igen)]
	`[(yes)]'
007 6:	.hh ö:: milyen panaszokkal érkezett hozzánk. <sup>36</sup>
	'.hh uh:: with what kind of complaints did you arrive to us.'
008	(2.8)
009 6-2:	olyan panaszokkal hogy
	'with such complaints that'
010	két éve voltam már én itt a főorvos úrnál, ()
	'two years ago I was already here at the chief physician, ()'
011 6:	ühüm,
	ʻuh-huh'
012 6-2:	és akkor a: () bal () csípőmbe:
	'and then the: () in my left () hip:'
013	(1.3) látta meg a folyadékot, () s mondta hogy ö::
	'(1.3) he saw the fluid, () and said that uh::'
014	(1.3) hát ezt meg kellene m:: () ugye majd műteni,
	'(1.3) well this should be m:: () like operated later,'
015	mer () (nem) (1.0) ez nem fog javulni
	'cause () (not) (1.0) this will not get better'
016	hanem inkább mindig rosszabbodik,
	'but rather it always gets worse,'
017 6:	() <i>ühüm</i> ,
	'() uh-huh,'
018 6-2:	és csak mivelhogy ö
	'and just because uh'
019	jött a férjemnek ez a betegsége és:: (hát) meghalt,
	'came this illness of my husband and:: (well) he died,'

 $<sup>^{36}</sup>$  For the glossed version of the OpQ see (15).

620 és akkor így (..) novemberbe, kezdődött egy a: jobb
'and then like (..) in November, started a in my right'
621 (1.1) csípőmbe egy kegyetlen fájdalom.
'(1.1) hip a terrible pain.'
622 6: ühüm, ühüm,
'uh-huh, uh-huh,'

After PT's Embedded OpQ about complaints (005,7), the patient starts her story two years back in time (010). She tells that the doctor saw some fluid in her left hip and recommended surgery (012-16). Note that we do not learn what problems the patient experienced, only the medical opinion. Furthermore, until this point in the story, we do not know if this problem is still present or not, or if the surgery took place or not. Adding on to this unclear information, the patient discloses that her right hip started to hurt (as well?) in November (020-21) – the interaction was recorded in March. So now we know about two problems – the left and the right hip, respectively, but we cannot be sure if one or the other, both or none of them is still problematic. We also hear about an important and serious life event of the patient, namely that her husband got ill and died. The connection of this information to the physical problems is not clear, there are several possibilities. For example, the illness and the death of the husband delayed the surgery (later it turns out that this is not the case), or the patient thinks that the right hip pain was caused by emotional distress, or she had to take care of her husband and she sees it as the result of physical overload. Or, simply, the patient just felt it important to share this information. Whatever the reason may be for disclosing this intimate information, it is worth noting that the PT does not react to it at all.

It is also worth noting, however, that the PT uses backchannelling/continuers (*ühüm* 'uh-huh' in lines 011, 17, 22), thereby encouraging the patient to continue her story, which she does (not shown). In her evolving narrative, she reports that her right hip pain was so bad that she had difficulties walking. She visited a surgeon, was referred to a neurologist, had imaging, and was prescribed medication, which she was not allowed to take by the cardiologist because of her pacemaker – another important piece of information. We learn that the cardiologist prohibited the left hip surgery before, because of her heart problems. But, since enough time has passed since the pacemaker was implanted, the cardiologist now approves of the surgery, if it is needed. At this

point in the patient's story comes the first time – three minutes after she started her narrative – that she uses the present tense about her problem:

(53) 6-2 continued

090 6-2: mert mert annyira: (..) fáj ugye
'because because it hurts so much right'
091 olyan fájdalmas hogy (1.2)
'it is so painful that (1.2)

However, we still cannot be sure, which hip she is talking about in her utterance above. This confusion is proven in the following conversation:

(54)	6-2 continued	
	092 6:	.hhh [é ez most a jo] ez most
		'.hhh [é this is now the ri] this now
	093 6-2:	[tehát ez () ]
		[so this ( ) ]
	094 6:	a bal [csípő:nek a mű (.) jobb csípőnek]
		'the left [hip's sur (.) right hip's]
	095 6-2:	[ez most a jobba van most a jobb]
		'[this is now in the right now the right]'
	096 6:	[a műtéte (.) amiről beszélgetünk igen mer ]
		[surgery (.) about which we are talking yes cause]'
	097 6-2:	[i:gen most a jobb lenne igen, ]
		'[y:es now the right would be yes ]'
	098 6:	ugye a ballal kezd [te:, de akkor ezek szerint mind]két
		'like you began with the left [but then according to this both] of
	099 6-2:	[igen ballal kezdtem ]
		'[yes I began with the left ]'

- 100 6: cs [ípője panaszos. (..) .h mindkettő]ben van is
  'your [hips are with complaints (..) .h in both ] there is'
- 101 6-2: [mind a kettő(be van) (.) igen igen ] '[(in) both of them (there is) (.) yes yes ]'
- 102 6: folya [dék? azt már megállapították? (.) ühüm ]
  'flu[id? that has been determined? (.) uh-huh ]
- 103 6-2: [van igen (.) igen igen igen i]gen '[there is yes (.) yes yes yes y]es'

As we can see in the excerpt above (54), the PT is also unsure (092, 94), which hip they are talking about and she tries to clarify the situation. So, more than 3 minutes it took for the PT, to learn about the current situation, namely that the patient is (probably) waiting for right hip surgery. After screening for, i.e. inquiring about any other problems, PT gets back to the topic of the hips and asks the patient, which of her hips is worse, and is more painful. The patient tells that currently, it is the right hip. PT once more gets the patient to confirm that the problems began with the left hip, and only after gaining a clear understanding, she turns into history taking – that is she starts the detailed discussion of the right hip pain.

In sum, it took almost 4 minutes for the PT to learn about the patient's current and biggest problem. Nevertheless, from the patient's narrative, she could get a more complex picture of the patient, the history of her problems, her other diseases, the impact of the problem on her life, and also that she was a widow. This last information has further implications apart from personal sorrows – the intensive pain and later the surgery will have a major effect on the patient's life, and the social network, support, and help she could get should be considered by HCPs.

The next example shows a different narrative.

(55) 7-4: PT7, fourth recorded patient; 7 stands for PT, 7-4 for patient
003 7: *jó. (..) szóval meséljen egy picit*'good. (..) so tell me the story a bit'
004 *hogy mivel van itt, mi a probléma,*'about with what you are here, what the problem is,'

005 7-4:	() há:t ö:: elég sok problémám [volt vége]redménybe
	'() we:ll uh:: quite a lot of problems [I had act]tually'
006 7:	[aha ]
	'[aha]'
007 7-4:	(.) .h () a lábam úgy kezdődött hogy ()
	(.) .h () my foot started like that ()'
008	hasmenésem volt majdnem három hétig tartott,
	'I had diarrhea it lasted for almost three weeks,'
009 7:	ühüm,
	ʻuh-huh'
010 7-4:	a: (.) harmadik hét vége felé .hh nem nagyon,
	' at the: (.) end of the third week not really,'
011	és közbe () .h ö sietni kellett ki a vécére.
	'and meanwhile () .h uh had to hurry out to the toilet.'
012	még hasmenés(kor)
	'still with the diarrhea'
013 7:	aha
	ʻaha'
014 7-4:	.hh és a közlekedő (ajtón)
	'.hh and at the (door) through'
015	ott van egy ilyen kis [ö].hh és én abba elestem.
	'there is a small like [uh] .hh and I fell over that.'
016 7:	[aha]
	`[aha]'
017	ó jaj
	'oh dear'
018 7-4:	fölbuktam. de úgy, hogy életembe így még
	' I stumbled. but such, that never in my life so far'
019	
	() .hh és úgy a lábam: () .hh

nem úgy használtam ahogy kellett volna
'I did not use it as I should have'
() aha, volt rön [tgen (ilyen) ] () [ezután ]
() aha, was there X-[ray (like)] () [after this]'

022 7-4: [(soká) ] (..) [hát maj ké]sőbb

'[(long)] (..) [well then la]ter'

In excerpt (55), the PT starts with an Embedded OpQ (003-4). Note that it is a general open question, meaning that the range of patient problems is not constrained (Tsai, 2006) like in those OpQs, where PTs use the words fájdalom 'pain' and/or panasz 'complaint', which are targeted at physical symptoms. In her answer, the patient starts a narrative, which is obvious from her utterance in line 007: a lábam úgy kezdődött hogy 'my foot started like that' – a typical initiation of a story. The PT uses backchannelling (006, 9, 13, 16), she lets the patient tell her story and does not interrupt her and when the patient gets to the point of the story (the fall), she even expresses empathy by the exclamation *ó jaj* 'oh dear' (017). However, we still do not know what the problem is exactly, only that it has to do with the patient's foot and that it was caused by trauma. PT's question about the X-ray is relevant here since serious pathology (e.g. fracture) can be excluded with the help of imaging. The patient is implying that later an X-ray was indeed taken (022), but it is interesting that she does not tell anything about its result, rather she sticks to reporting the story in chronological order (this part is omitted from the excerpt). She tells that first she went to the GP and shortly describes the interaction at the GP in reported speech. Then she gets back to the topic of the X-ray, that she was referred there by some doctor, but nothing was found. Only at this point - one and a half minutes after she started her story – she gets to talk about the nature of her problem:

(56) 7-4 continued

050 7-4:	de a lábam nem javult.
	'but my foot did not improve.'
051	hanem így esik lefelé [a lábam ] feje. <sup>37</sup>
	'instead it is like falling down [my foot]'

<sup>&</sup>lt;sup>37</sup> In Hungarian everyday language *láb* can mean both 'leg' and 'foot', while *lábfej* (in the excerpt it is in the possessive form, literally: 'my foot's head') only means 'foot'. However, based on the context, it seems that the patient means 'foot' in both cases.

Clinically this is very relevant and important information since it implies nerve involvement or damage affecting motoric function. The patient continues to talk for another 40 seconds – about all the doctors she has visited and all the examinations she has had because of the foot and diarrhea, tells that the doctors determined possible nerve injury – before disclosing another symptom she experiences:

(57) 7-4 continued

072 7-4:	de nem érzem a (.) csak ZSIBbadt az egész lábam feje
	'but I don't feel the (.) only it is NUmb my whole foot'
0.50	

073 (..) és innen meg mintha SZÁLlna (vagy) (húzódna)
'(..) and from here it is like it was ASCending (or) (pulling)'

Numbness implies that not only the motoric but also the sensory function of the nerve is affected. Obviously, these physical symptoms, i.e. the drop foot and the paraesthesia (in technical terms) can have a major impact on the patient's quality of life as well. This is proven later in the discussion (4 minutes after the OpQ) when the patient corrects the PT that she does not have pain, but is not able to stand on her foot.

So here we could see another example, of why it is important to gain a complete picture of a patient's problems. That is, not only the biomedical-physical symptoms but also their effects on the patient's life, functional limitations, worries, social network, support, etc. should be addressed if necessary (biopsychosocial approach, see section 2.1). Consider the case presented above ((56) and (57)): the nerve damage may be permanent (4 months since the injury without improvement), which means that there is not much to be done about the physical symptoms. However, HCPs may still be able to improve the patient's quality of life (e.g. recommend the use of orthesis), discuss what social help she could get if needed, and honestly talk about the prognosis – thereby avoiding the raising of false hopes and helping the patient to form realistic goals and expectations.

The next excerpt shows how the patient connects his symptoms, reporting them in chronological order, even though the first-mentioned problem is not the most bothering one at the time.

(58)	11-4: PT11, fourth recorded patient; 11 stands for PT, 11-4 for patient	
	003 11:	j:óhh és akkor (.) Ádám mesélje el hogy
		'g:oodhh and then (.) Adam tell me the story of'
	004	milyen panasszal érkezett (1.5)
		'with what kind of complaint you arrived (1.5)'
	005 11-4:	h:hát igazából szeptemberbe kezdődött,
		'w:ell actually it began in Spetember,'
	006	(.) akkor ö:: () volt ö derék problémám, ()
		(.) then uh::: () I had uh low back problem, ()'
	007 11:	igen,
		'yes,'

After PT's Embedded OpQ about the patient's complaints (003-4), the patient starts a narrative about the beginning of his problems, namely that they started in September and that he had low back pain then (005-6).<sup>38</sup> In what follows, the patient talks about his past treatment at a neurologist, and his MR results, and tells that he was referred to physiotherapy. Furthermore, he shares that he also went swimming every day for 50 days and that he still goes to physiotherapy in private healthcare and to massage every week. He tells that he is improving and, apart from the mornings, he feels that his spine problem is around 90%. Based on the context, this information can be understood as a 90% improvement, but this interpretation is not entirely certain/clear.

Though we will see in the following that the low back problem may not be the patient's main concern at the time of the visit, we can learn about his attitude from this story. It seems that he is quite committed to the therapy, takes an active part in his recovery, and is motivated to do as much as he can to get better. Based on this information, the PT can expect him to be a responsible and cooperating patient.

After having talked about his low back problem's (hi)story for more than one minute, during which time never mentioned the exact symptoms, the patient comes to the next agenda:

<sup>&</sup>lt;sup>38</sup> The visit was recorded in March.

#### (59) 11-4 continued:

035 11-4:	de egy hónapja jött egy .hh ()
	'but one month ago came a $.hh()$ '
036	hát én még még nyomozzuk, () még a::
	'well I still still we are investigating $()$ still the::
037 11:	(2.1) ((typing on computer))
038 11-4:	az ((név)) doktor úr meg a:: (1.1)
	'the ((name)) doctor and the:: (1.1)'
039	((name)) doktornő is még [nyomozzuk]
	'((name)) doctor we are still [investigating]
040 11:	[igen, ]
	'[yes]'

041 11-4: *hogy mi lehet, .hh (.)* 'what it could be, .hh (..)

In excerpt (59) the patient starts to introduce another problem, whose nature and cause are still undetermined. As he continues to describe the problem, it becomes apparent that this is the more pressing matter. He tells that his hands are swollen and numb. His left hand is worse, constantly numb, his forearm is tense, and if he uses his hand, the numbness gets more intense and it hurts. Even bending it causes pain and there is no strength in his hands – he has difficulties unscrewing a cap or pulling up the shutter. So, we not only learn about the physical symptoms but their effect on the patient's life as well, i.e. functional limitations.<sup>39</sup> The patient also tells that he feels like the above-mentioned symptoms were starting to appear in his feet as well, and all these problems interfered with the continuation of physiotherapy for his low back, so the doctor recommended hospitalization to find out what the problem is.

After telling his story for 2,5 minutes, the patient concludes his talk with the following utterance:

<sup>&</sup>lt;sup>39</sup> Later in the discussion PT inquires about the job of the patient and it turns out that he is a firefighter and has a secondary job in the construction industry. Getting to know this, the PT asks how he is able to manage his work, and he discloses that his colleagues help hip when on duty, but he is not able to perform his work in the construction industry. This is a nice example that shows how important the exploration of psychosocial factors could be.

(60) 11-4 continued:

080 11-4: *és (..) most itt vagyok. (..)* 'and (..) now I am here. (..)

This is one of the rare cases in my data, where the patient explicitly signs that s/he has finished talking. Only after this statement does the PT take the floor and start to summarize what she has heard.

Excerpts (52)-(60) demonstrated the (Hi)story type answers with the help of three selected interactions between three different PTs and their patients. There is no doubt about the fact that these kinds of answers are more time-consuming. However, there are also advantages of letting patients freely tell their stories in their own ways and with their own words. In this way, therapists can learn about all the problems and factors bothering the patient, and they can get a more complete picture of the patient as a person (e.g. their attitudes), furthermore, clinicians may also get an insight into the patient's life – compare all these information with the Incomplete answers in the next section. Learning more about the patient helps the therapist to address the most important problems, whatever they may be, it helps clinical reasoning, and it may also give a hint about how easy or hard it would be to get the patient to cooperate during the treatment. The negative aspect of patients' stories – apart from being time-consuming – is that it may be difficult for the therapist to elicit clinically relevant and important information and not get lost in the story. The next section discusses the third major group of T2s, namely the so-called Incomplete answers.

#### 4.2.3.3 Incomplete answers

As it was described in Table 8, those T2s were categorized as Incomplete, where patients name the location of the problem, but the nature of it is **not** mentioned in their answers. This means that there is an unexpanded, or we could say a fragmental answer in the sense that the predicate regarding the nature of the problem is missing. Hence, the therapist can only presume what the exact symptom is that the patient experiences unless she clears it in the following turns. In other words, there is a tie by ellipsis between the question and the answer, meaning that the subject-predicate clause of the question is presupposed in the answer (Mishler, 1984). This observation will become more clear with the help of the examples later. Examples will also show that – as we have seen with Informative answers – there are cases, in which a patient's answer sounds rather formal and

impersonal. This may be the result of language alignment, that is, the patient's language use fits the medical-institutional context or accommodates PT's language.

Let us now consider, how these answers look like in the data.

(61) 9-2: PT9, second recorded patient; 9 stands for PT, 9-2 for patient
003 9: Zsuzsa akkor kérem mondja el nekem hogy
'Susan then please tell me that'
004 mivel van panasz, hol van fájdalom,<sup>40</sup>
'with what is there complaint, where is pain,'
005 9-2: (...) a tér jobb térdem
'(...) the kn my right knee'
006 9: ige:n? (..)
'ye:s? (..)'

In excerpt (61) PT opens the inquiry of problems with an Embedded OpQ, asking about both complaint and pain (003-004). (Remember – see section 4.1.4 – that "complaint" covers a broader and more unspecified scope of physical symptoms than "pain".) Patient's answer only includes the mentioning of her right knee (005), but based solely on this information, we do not know, or rather we cannot be sure about the exact nature of the problem, since the predicate is missing from the answer – e.g. does it hurt? is it stiff? is it not functioning properly (see excerpt (49))? etc. However, since the OpQ included the symptom of pain, we may presume that the patient is talking about pain. Still, it would be important to clear this and hear how the patient would describe her problems, so that we do not miss any important information and do not work based on a hypothesis.

In line 006, PT encourages the patient to continue talking, and therefore we also learn (omitted from excerpt) that she has problems (pain?) with her low back and buttock. After the list of body areas, we encounter the confirmation of our hypothesis, namely that the PT presumed that the patient meant having pain in the mentioned areas. This proof is the following question by PT:

<sup>&</sup>lt;sup>40</sup> For the glossed version of the OpQ see (11)

(62) 9-2 continued

- 018 9: jó. .hh jobb térdén, (.) kívül? a bal az nem fáj.
  'good. .hh apart from your right knee? the left does not hurt.
- 019 9-2: *az nem*.

'that does not.'

It is interesting to note however that the PT did not clarify before this point that they had been talking about pain, and even here (018) she is not asking a question, but rather, she is making a – so far – implicit assumption explicit by making a statement.

The next example also shows that PT presupposes the presence of pain with fragmental answers.

- (63) 17-3: PT17, third recorded patient; 17 stands for PT, 17-3 for patient
  - 002 17: jó. (..) mi az ami fájdalmas panaszos terület<sup>41</sup>
    'good. (..) what is the area that is painful with complaints'
  - 003 17-3: (..) *jajj a derekam meg a csípőm*, '(..) alas my low back and my hip,
  - 004 (...) meg a (.) gerincem. '(...) and my spine.'
  - 005 17: (...) igen? '(...) yes?'
  - 006 17-3: *és a (.) combom lefelé VÉGig* 'and my thigh downwards all along'
  - 007 17: (..) *ühüm*, (..) '(..) uh-huh, (..)'
  - 008 mindkét oldal [on?]

'on both si[des?]

009 17-3: *[mind] a két oldalon.* 

'[both] sides.'

010 17: (2.9) jó. mikor van fájdalma.(2.9) good. when do you have pain.'

<sup>&</sup>lt;sup>41</sup> For the glossed version of the OpQ see (39)

011	inkább amikor pihen,
	'rather when you are resting,'
012	vagy moz [gásra] ter [helés]
	'or with mo[ving] loa[ding]

In this example, after PT's impersonal Wh-OpQ, which asks about complaint and pain (002), the patient starts listing the problematic areas (low back, hip, spine (003-4)), and she is encouraged to continue talking by PT's backchannelling in line 005. Thanks to this, another problem is disclosed, namely the thigh (006). Although no predicate is present in the patient's talk, and she never mentions pain, it becomes clear in line 010 that PT treats the previously mentioned areas like it was obvious that they are being painful.

If we consider excerpt (49), we see that even though pain may be a common and major reason for seeking help, the patient might emphasize a different aspect of the problem, e.g. approaching it from the perspective of functional limitation(s) – "my knee does not want to work" (009). Eliciting and listening to patients' illness experiences, and letting them describe the problem in their own words is not only important because of the biopsychosocial model (see part 2.1). There are other advantages as well. First, this way the therapists can also align their language use to the health literacy of the patient. In other words, the participants have the chance to find their common language and adjust the meaning of the used words. For example, the patient may not call his/her problem pain but rather tension. In this case, the therapist should adjust to this kind of language use, which does not mean that s/he does not try to translate this information into clinical terms, or does not try to understand or clarify what the patient means. Or, as another example, if the patient says numb, it may have a different meaning in everyday language than in a (musculoskeletal) clinical context. In the latter, it is important to differentiate between numbness (lack of sensation) and tingling (pins and needles), since they imply different levels of nerve involvement. However, laypeople tend to use these terms synonymously. In sum, like every community, HCPs and patients also have their own specialized lexicon, where the same word may have different meanings. Therefore, it is essential to find out the cultural community the patient belongs to, so that the HCP knows what kind of vocabulary to use (Clark, 1996).

Second, if the patient talks about the factors that provoke or make the problem worse, or about functional limitations because of the problem, therapists gain much more clinically relevant information without having to ask for it. They also get an early impression of the problem's effect on the patient's life. With these kinds of answers, therapists can also learn about patients' attitudes towards their problems, get an idea of how motivated they are (see (58)), and what their goals might be. In short, clinicians may learn much more about the big picture, and gain clinically important information as well.

Obviously, people are different in the ways they structure their answers, what they think (the clinician thinks) is important to tell, or what they think is expected from them to tell. Still, it may be beneficial to encourage patients to talk more about their problems and not just presume that pain is all there is, although it is definitely a main area of investigation in initial physiotherapy sessions (Hiller & Delany, 2018; Opsommer & Schoeb, 2014).

In excerpts (61) and (63), the T3s by PTs are continuers, which may serve well to show attention, on the one hand, and to encourage the patient to tell more on the other. The next two examples are different.

(64) 4-2: PT4, second recorded patient; 4 stands for PT, 4-2 for patient

001 4:	jó. akkor azt szeretném kérdezni hogy
	'good. then I would like to ask that'
002	mivel feküdt be hozzánk
	'with what did you come to us'
003	mi a most a panasza jelen [legi a leg ]főbb panasza. <sup>42</sup>
	'what is now your complaint your cur[rent big]gest complaint'
004 4-2:	[a:: ]
	[the::]
005	a nyakam a gerincem(nél) a nyakam,
	'my neck at my spine my neck,'
006 4:	(tehát) a nyaki gerince,
	'(so) your cervical spine'

In the excerpt above the PT uses an Embedded OpQ inquiring about the patient's main complaints (001-3) and the patient answers with "my neck" (005). Based on the question, we can reconstruct

<sup>&</sup>lt;sup>42</sup> for the glossed version of the OpQ see (41)

the answer as "I have complaints in my neck". However, the patient does not tell what the exact problem is with her neck before PT repeats the information. It is interesting to note that although PT also uses the word "neck", she turns the patient's layperson's expression of *a gerincem(nél) a nyakam* 'my neck at my spine' into a more medical term of *nyaki gerinc*. This subtle change is what the translation of 'cervical spine' tries to express. I shall call the Hungarian expressions like *nyaki gerinc* 'cervical spine' as semi-technical terms. The reason behind this is that although the words themselves are in Hungarian, the expression is not (often) used in everyday language, but it is rather common in the medical context.

So, PT repeats the patient's words in a more technical fashion, without even knowing what the problem is, or if the patient has completed her response. The danger in this fact is that repetitions early on in the visit may act as interrupters and may redirect focus and disrupt the patient's train of thought. At the beginning of the interview, it seems to be more beneficial to only listen to the patient's problem presentation and use more neutral facilitative phrases, i.e. backchannels or continuers (*yes*, *uh-huh*) that invite the patient to tell more (see excerpts (61) and (63)) (Beckman & Frankel, 1984; Marvel et al., 1999).

The next example shows a similar phenomenon. A longer part of the interaction is presented here so that the interruptive and redirective nature of PT's early verbal interventions becomes obvious.

### (65) 8-1: PT8, first recorded patient; 8 stands for PT, 8-1 for patient

001 8:	n:a akkor egy picit megkérdezem jó?			
	's:o then l	l ask you a	bit good?	,
002	.hh azt sze	eretném me	egkérdezni	hogy mije fáj.
	ʻ.hh I wou	uld like to a	ısk what h	urts for you.
003	mi-vel	jött	be ide	[hozzánk.] <sup>43</sup>
	what-wit	h came.3so	G <b>in</b> to.her	e [to us]
	'with what did you come in here [to us]'			
004 8-1:				[.hh a ]::
				'[.hh the]::'

<sup>&</sup>lt;sup>43</sup> For the glossed version of the OpQ see (19)

005	derék és csípő-vel jöttem be, [és ezáltal a () igen,]		
	low back and hip-with came.1SG in [and thereby the () yes]		
	'I came in with low back and hip, [and thereby the () yes]		
006 8:	[tehát a dereka:::? ]		
	[so your low back:::? ]		
007	.h mind a két csípője?		
	'.h both of your hips?'		
008 8-1:	é é inkább a bal oldalt ()		
	'é é rather the left side ()'		
009	bal oldalt () csípőm, [(.) mivelhogy]		
	'on the left side () my hip [(.) since]'		
010 8:	[(.) igen, ]		
	[(.) yes, ]		
011 8-1:	a bal lábam paralízises (.) volt.		
	'my left leg was paralytic'		
012	.hh és egy centivel rövidebb,		
	'.hh and it is one centimeter shorter,'		
013 8:	.h tehát [bal al ]só végtag?		
	'.h so [left lo] wer extremity?'		
014 8-1:	[és a súly,]		
	[and the weight,]		
015	(.) igen, (1.8)		
	'(.) yes, (1.8)'		
016 8:	[az (parali) ]		
	'[that is (paraly)]'		
017 8-1:	[ez a rész most] fájdalmas ()		
	'[this part is now] painful ()'		
018 8:	jóh tehát a dereka, és mindkét csípője.		
	'goodh so your low back, and both of your hips.'		
019	.hh azt szeretném megkérdezni hogy a DEREKA		
	'.hh I would like to ask that your LOW BACK		

020 .hh hogyha NYUgalomban van csak így ül
<sup>6</sup>.hh if you are in REst you are only sitting like this'
021 (1.0) vagy fekszik, (.) akkor van-e fájdalma.

'(1.0) or you are lying (.) do you have pain then.'

In excerpt (65) PT asks about the patient's pain and the reason for the visit with an Embedded OpQ. The patient answers with fragmental information, meaning that in her utterance she only mentions the hip and the low back as problematic areas, but she does not say what exactly her complaints are with those locations. It is also interesting to note the language alignment in patient's talk, how it takes the form and style of the question: PT - mivel jött be ide hozzánk 'with what did you come in here to us' (003); patient – *derék és csípő-vel jöttem be* 'I came in with low back and hip' (005). So, the answer is not only fragmental, but impersonal and objective as well, since the patient does not express herself, like e.g. 'my hip' or 'my low back', but rather puts some distance between herself and the problems. This style is closer to healthcare professionals' (HCP) language use (e.g. hip patient, low back patient, low back pain).

In line 006, the PT repeats the patient's words, but it is obvious that with this move, she interrupts the patient. The evidence for this observation is twofold. First, the presence of overlap between the utterances makes it clear that an interruption has occurred. Second, the patient uses discourse markers (*és ezáltal* 'and thereby' (005)) to introduce the second part of her utterance which remains unfinished. After the interruption, PT asks a clarifying question as well – if both hips are involved (in whatever problem it may be) – which redirects the patient from telling her story in her way. Unfortunately, she is not able to finish the story of the new topic (the hip) either – her utterance remains unfinished again (014), because of a second interruption by PT (013).

In this interruption, we can see a similar phenomenon as in (64), namely that patient's layperson's term: *bal lábam* 'my left leg' (011), becomes a technical term: *bal alsó végtag* 'left lower extremity' in PT's repetition, or rather her paraphrasing. The patient does not try to finish her utterances, but in the end, she just concludes that *ez a rész most fájdalmas* 'this part is painful now' (017). From this point, the control over the conversation is clearly taken by the PT, who starts to discuss the behavior of the pain (019-21). As a final remark, it is worth noting that although the patient mentioned two problematic areas, no agenda setting (see part 4.2.1) or prioritizing among the problems takes place, the PT decides unilaterally, which problem is to be discussed first.

In this section, I presented the third biggest group of patients' answers (T2s), i.e. the Incomplete category. I showed the characteristics of these answers, namely that patients answer with incomplete sentences, in which relevant information – the exact nature of the problem – is missing. Furthermore, sometimes it also happens that patients use language that sounds more formal and impersonal or objective, thereby creating a distance between the problem and themselves. Considering the reactions of PTs, the excerpts show that they seem to treat incomplete, fragmental answers as sufficient and complete, and they do not tend to pursue the exact nature of the problem, but rather they presume that the patient is talking about pain. As a result, the developing discussion is based on PT's assumptions, without discovering the patient's illness experience and their interpretation of the problem. In sum, common ground (see chapter 5) between the participants may not have been reached in these cases.

The next part discusses the fourth biggest T2 category, the cases, in which patients answer with imaging results and/or medical diagnosis.

### 4.2.3.4 Answers including imaging results and/or medical diagnosis

Answering with a medical diagnosis is not exceptional in physiotherapy encounters (Opsommer & Schoeb, 2014). Nevertheless, as was described in 4.2.3.1, although medical results may be useful and help PT in clinical reasoning, these kinds of answers were not considered Informative answers for three reasons. First, the source of the provided information containing medical opinion, diagnosis, or imaging results is not the utterer (Verschueren, 1999), i.e. the patient, but s/he is revoicing some HCP's words. Second, diagnosis or imaging does not say anything about the exact symptoms present in the case of a certain person. Third, there may be different drivers of a patient's pain experience – physical as well as socioenvironmental, cognitive, and emotional (Walton & Elliott, 2018), and telling only a label for the problem may not reveal all the factors. As a result of considering these factors, a separate category was created for the medical opinion type answers.

The following examples demonstrate this category. The first excerpt presents again a longer part of the interaction than just the first three turns so that we can see what the PT focuses on from the answer. Remember, however, that the categorization of patients' answers (T2s) was based only on the patient's utterance before any kind of verbal action – including continuers or backchannels – from PT (T3).

(66)	3-1: PT3, first recorded patient; 3 stands for PT, 3-1 for patient		
	001 3:	mesélje el hogy (.) mi a problémája	
		'tell me the story of (.) what your problem is'	
	002	amivel most bejött hozzánk. <sup>44</sup>	
		'with which you came into us now.'	
	003 3-1:	() .h () kettő problémám van,	
		'() .h () I have two problems,'	
	004	az elsődleges az a:	
		'the primary is the:'	
	005	nyaki gerincemnél van egy sérv,	
		'at my cervical spine there is a herniation,'	
	006 3:	ühüm,	
		'uh-huh'	
	007 3-1:	() ami: () kicsi,	
		'() which: is () small,'	
	008	() de: társul egy kicsontosodással,	
		'() but: it comes with an ossification,'	
	009 3:	ühüm,	
		'uh-huh,'	
	010 3-1:	és azzal hogy a gerincem ki is egyenesedett.	
		'and with that that my spine is also flattened.'	
	011	nem () nem abba a megfelelő ivben	
		'not () not in that appropriate curve'	
	012 3-1:	[van amiben] kellene. (.) .hh	
		'[it is in which] it should be. (.) .hh'	
	013 3:	[ühüm,]	
		'[uh-huh,]'	
	014	és honnan tudjuk ezt hogy nyaki sérve van?	
		'and where do we know this from that you have a cervical herniation?'	

<sup>&</sup>lt;sup>44</sup> For the glossed version of the OpQ see (9)

After PT's general Embedded OpQ about the patient's problems, she starts by telling that she has two problems (003), and she prioritizes them already at the beginning (004). However, we only hear about structural changes (hernia, ossification – tissues becoming hard and changing into bone, flat spinal curve) that were seen on an MRI. Since these changes do not necessarily cause symptoms (Brinjikji, Diehn, et al., 2015; Brinjikji, Luetmer, et al., 2015), it would be more important and relevant to learn what the patient experiences as a problem for her, to determine the clinical relevance of the imaging results. Alas, PT's question in line 014, does not help in eliciting the experienced problems of the patient, but quite the contrary. First, it focuses on the structuralbiomedical information (cervical disc herniation), thereby justifying its relevance and importance and at the same time ignoring the patient's personal experiences. This attitude may prove to be problematic in case no structural causality can be determined from the MRI, in which scenario the patient may experience a lack of diagnostic closure that in turn influences therapeutic alliance (Myburgh et al., 2022). Second, PT "jumps" into the details of the first mentioned concern, although the patient told at the very beginning that she had two problems. Third, although the rest of the conversation is not shown, this question (how we know that the patient has herniation) derails the conversation, since the patient starts to talk about the story of the MR, which takes almost two minutes, before the PT tries to get the patient back to talking about current symptoms. In the end, and probably because of another redirective question from PT, it takes almost five minutes to elicit patient's present symptoms.

The next example shows a different development of the conversation between PT and patient.

- (67) 22-3: PT22, third recorded patient; 22 stands for PT, 22-3 for patient
  - 001 22: *mi a jelenlegi panasza*.<sup>45</sup> 'what is your current complaint'
  - 002 22-3: (...) (egy) keresztcsont ízületi gyulladásom van, (..) (...) (a) sacral<sup>46</sup> joint inflammation I have, (...)
  - 003 22: *ühüm, [itt a:]* 'uh-huh, [here the:]'

<sup>&</sup>lt;sup>45</sup> For the glossed version of the OpQ see (38).

<sup>&</sup>lt;sup>46</sup> In Hungarian, *keresztcsont* is a layman's term for the sacrum that cannot be reflected in the English translation.

004 22-3:	[(illet]ve)
	'[(an]d)
005 22:	derekánál? fáj [(itt) a ker]esztcsontnál, [igen,]
	'at your low back? hurts [(here) at the] sacrum, [yes,]'
006 22-3:	[igen ]
	'[yes ]'
007	[(igen)]
	'[yes]'
008 22:	() és ö a bal oldalon?
	'() and uh on the left side?'
009	vagy mind a két oldalon.
	'or on both sides.'
010	mer most [a bal (van)]
	'cause now [the left (is)]'
011 22-3:	[hát így hosszan]ti
	'[well like longitudi]nal'
012	irányba [szoktam é]rezni?
	'direction [I usually f]eel it?'
013 22:	[ühüm ]

'[uh-huh]'

In excerpt (67) PT opens the problem presentation phase with a Wh-OpQ, asking about patient's complaints. The patient tells that she has a sacral joint inflammation (sacroiliac joint in technical terms), which is a diagnosis and not the patient's own idea expressed in her own words. Unlike PT3 in the previous example (66), PT22 is not curious about how the patient knows this but rather asks about the pain's location (003, 5). It is interesting to observe, however, that the PT is not asking an open question about the patient's symptoms generally. Rather, she asks a closed question restricted to the presence of pain, on the one hand, and – based on the diagnosis – its expected location on the other. Another interesting point to note is that with this question, PT interrupts the patient, who seems to want to continue her talk, by adding on some more information – this intention is apparent in her use of the discourse marker *illetve* 'and' in line 004. Yet, the PT

continues to pursue the exact site of the pain (008-10), which is no doubt clinically important information. Even so, first, it would be important to hear from the patient herself, what is bothering her, before focusing the interview on PT's agenda. In this excerpt, the observation that PT treats pain as a central issue is similar to the cases presented in the Incomplete category (4.2.3.3, excerpts (61)-(65)), where I argued that in case of missing information about the exact nature of the problem, PTs assume that patients mean pain and the interaction continues based on this presumption.

At the beginning of this section, I described, why a medical diagnosis or imaging result does not provide sufficient information for the clinician. Nevertheless, the demonstrated examples of (66) and (67) imply that PTs treat these answers as being satisfying and do not effectively encourage patients to tell their concerns in their own words. On the contrary, PTs' early focus on some parts of the provided information may derail or redirect the course of the conversation. But why do patients feel the need to give an answer that revoices some medical opinion? Why do they feel it is more important or relevant to rather/first share this information and not their own illness experiences?

The reasons behind this choice of the patient may include the following. First, a medical diagnosis may stand for the justification of the visit, in other words, it can show legitimate doctorability (Heritage & Robinson, 2006a). That is, if a problem was already diagnosed if a name or label was already given to it, then it surely is worth medical attention. Furthermore, and connected to this thought, in the case of people with low back pain (LBP) Lim and colleagues (Lim et al., 2019) found that patients want to know a definitive diagnosis and the exact cause of their problems, which validates their symptoms. Therefore, there is a need for imaging from patients, which is against current evidence-based LBP management recommendations. Patients' answers that disclose imaging results may reflect this kind of attitude. Second, the patient's choice of answer may be influenced by prior experiences in similar situations, where this kind of answer was the expected one (Kecskes, 2008, 2010) – see a more detailed discussion later, in part 5.2. Or, third, it may just be an adaptation of language use to the actual formal-medical context. Whatever the reason(s) may be, an imaging result or medical diagnosis implies the objectification of the patient into a collection of signs and symptoms (Hydén & Mishler, 1999), or in Jones' (2013) words, a kind of virtualization of the body happens. The resulting virtual bodies can be decontextualized, i.e. separated from the patient's person in time and space, and recontextualized into different situations. This is especially true in the case of imaging results, since the picture itself is meaningless to the patient, so the interpretation of the professional is needed, whereby the problem is "talked into existence". It also follows that the attention of the participants (healthcare professional and patient) is oriented toward an external object and not toward each other (Jones, 2013). So, when a patient answers an OpQ about his/her problems by revoicing a medical diagnosis, or by talking about imaging results, s/he aligns with these special characteristics of the medical context, i.e. with the voice of medicine (Mishler, 1984).

The last three categories of T2s to be presented in the following sections are the smallest groups of patients' answers.

### 4.2.3.5 Pragmatically inappropriate answers

The patient's answer was categorized as Pragmatically inappropriate, if – although an answer was provided (action agenda) – either its content did not include topically relevant or useful information regarding the goal of this part of the visit, i.e. presenting concerns (topical agenda) and/or it is not topically connected to the question, in other words, it is not coherent (Fetzer, 2012). In short, the content of the patient's answer is not appropriate in the given context.

The following examples will help to better understand this category.

#### (68) 13-3: PT13, third recorded patient; 13 stands for PT, 13-3 for patient

- 002 13: *van-e fájdalma*. 'do you have pain.'<sup>47</sup>
- 003 13-3: (...) igen
  - '(...) yes'
- 004 13: *hol. hh ((nevet)) (..) sorolja.* 'where. hh ((laughs)) (..) list them.'
- 005 hh ((laughs)) [hhh ((laughs)) ]
- 006 13-3: [hhh ((laughs))]

 $<sup>^{47}</sup>$  See 4.1.1 about the role of the *-e* interrogative particle in Hungarian polar questions. For the glossed version of the OpQ see Table 5.

In excerpt (68) the PT starts with a Polar/Closed OpQ, asking whether the patient has pain. In this sense, the patient's answer (*igen* 'yes') in line 003 is valid. However, the situational context of the interaction – namely that it is being a visit between a HCP and a patient, where the articulation of concerns is inevitable – makes this answer pragmatically inadequate. That is, pragmatically, a hidden constituent or wh-question is connected to the yes-no/polar question and a cooperative answer would include the response to the hidden question as well (Kiefer, 1980, 1983). So, a pragmatically full response should answer both of the following questions: *Do you have pain? If, yes, where?* This becomes apparent in line 004, where the PT makes the hidden wh-question explicit. Although both participants laugh at this course of the conversation, which may sign that they both feel it is awkward, in the beginning, the patient answers in a serious tone (003).

The next example demonstrates a similar, but not quite the same situation.

- (69) 21-3: PT21, third recorded patient; 21 stands for PT, 21-3 for patient
  - 002 21: *milyen panasszal van most (itt nálunk) (...)* 'with what kind of complaint are you now (here at us) (...)'
  - 003 21-3: röviden mindenem fáj

'in short everything hurts'

004 21: *hm igen? (..)* 'hm yes? (..)'

In the above example (69), the patient answers PT's Wh-OpQ about complaints by telling that she has pain everywhere (003). This answer is a bit more informative than the one in (68), but not realistic, that is, it cannot be taken literally. Also, it does not help PT in her clinical reasoning, although it shows how the patient perceives her problem. While in everyday conversation this answer could be adequate and sufficient (in contrast with the patient's answer in (68)), demonstrating the suffering of the speaker, in a clinical situation the elaboration of "everything" is needed. This is shown by PT's continuer in line 004, encouraging the patient to tell more.

Excerpts (68) and (69) demonstrated Pragmatically inappropriate answers, whose information load is inadequate in the clinical situation. The next two examples show incoherent answers or misunderstandings.

- (70) 15-1: PT15, first recorded patient; 15 stands for PT, 15-1 for patient
  - 006 15: (...) ö: (.) mivel érkezett jelenleg hozzánk.<sup>48</sup>
    '(...) uh: (.) with what did you arrive to us currently.'
  - 007 15-1: (..) .h (.) ö a párom hozott gépkocsival. '(..) .h (.) uh my partner brought me by automobile.'
  - 008 15: *igen, és milyen panaszokkal érkezett.*'yes, and with what kind of complaints did you arrive.'

In excerpt (70), the PT opens the problem presentation phase with a general Wh-OpQ, not mentioning anything about pain or complaint, only generally asking "with what did you arrive". Although the patient's answer is semantically appropriate in the sense that it fills in the question word's semantic category: *with what – by car*, it does not consider the situational context, i.e. the interaction being a healthcare visit in a hospital. Hence, the patient's answer is pragmatically inadequate.<sup>49</sup> PT corrects the misunderstanding by making her question more precise in line 008, that is, she makes it explicit that she is inquiring about the patient's complaints.

The next excerpt demonstrates a different kind of incoherent answer.

(71) 10-4: PT10, fourth recorded patient; 10 stands for PT, 10-4 for patient

((gyógytornász ismerteti az anamnézisben található információkat, amelyek között szerepel egy korábbi gerincműtét)) ((PT discusses information in medical record, in which a previous spinal surgery is present))

- 018 10: *jó. MOST ö: milyen fájdalmakra pansz:szosan érkezett.*'good. NOW uh: with what pains complaints did you arrive.'
- 019 *tehát hogy mik a fájdalmas pontok* 'so what are the painful spots'

<sup>&</sup>lt;sup>48</sup> For the glossed version of the OpQ see (46)

<sup>&</sup>lt;sup>49</sup> The ambiguous nature of this kind of general OpQ (006) is utilized by another patient, who makes a joke about it, deliberately giving an answer that is out of context ("*by train*"), i.e. consciously misunderstanding the question.

020	.hh (.) a:: gerincével van gond? <sup>50</sup>
	'.hh (.) the:: there is problem with your spine?'
021 10-4:	voltam () voltam ()
	'I was () I was ()'
022	mer ugye a a:: ide akartam jönni akkor i:s,
	'cause you see the the:: I also wanted to come here back then,'
023	() de aztán a doktor úr
	() but then the doctor'
024	amikor három hétig voltam kórházba
	'when I was in the hospital for three weeks'
025	tovább egy kicsit, [.hh ]
	'longer a bit, [.hh]'
026 10:	[igen,]
	`[yes]'
027 10-4:	() é:s már ő elintézte
	'() a:nd he already arranged'
028	a ((agglomeráció neve))-t [és o]tt is voltam
	'the ((name of agglomeration))-ACC [and the]re I was also'
029 10:	[ühüm,]
	'[uh-huh]'
030 10-4:	több min há[rom hétig (de) () ]
	'for more than th[ree weeks (but) ()]'

031 10: [az ((kórház neve))-ban? (...)] '[in the ((name of hospital))? (...)]

In excerpt (71) the PT opens the discussion of problems with an OpQ that was categorized as OpQ based on medical records (see 4.1.2). She is asking about painful areas, especially if the patient's spine was problematic (018-20). The patient, however, does not answer the question about her complaints, but she starts talking about her previous stays in different hospitals instead. Hence,

 $<sup>^{50}</sup>$  For the detailed explanation of the OpQ see section 4.1.2; for the glossed version of the OpQ see (4) in Table 6 and (20).

considering the question's topic (pain and complaint) and the goal of this phase of the visit, namely to determine the reason for the visit as part of the problem presentation phase, this answer counts as incoherent. This is the reason why it was categorized as Pragmatically inappropriate.

The following talk further proves that the PT has difficulties in eliciting patient's problems. This 85-year-old lady continues to tell her story about her previous history for more than three minutes.<sup>51</sup> Only after this long time, does she first mention having pain in the present tense. Now that the relevant topic came up, PT tries to direct the talk toward the discussion of pain – at this point, more than four minutes have gone by since the OpQ.

#### (72) 10-4 continued

157 10-4:	.h mer mos már utólag egyre jobban fájt.
	'.h cause now lately it hurt more and more.'
158	.hh mer u[gye el szoktam járni ]
	',hh cause [like I used to go]'
159 10:	[ühüm .h beszéljünk erről a] fájdalomról jó?
	'[uh-huh .h let's talk about this] pain ok?'
160	tehát mondta hogy
	'so you said that'

As we can see in excerpt (72), PT struggles to be able to take the floor – she has to interrupt the patient before she again takes the conversation yet to another different direction (158). This struggle becomes explicit when the PT says the following (more than one-minute talk omitted between (72) and (73) – five and a half minutes from the OpQ):

(73) 10-4 continued

208 10-4:	.hh [s akkor adta azt a: akármilyen gyógysz]ert nem tudo(m)
	'.hh [and then he gave me that whatever pill] I don't know
209 10:	[tehát akkor ez a comb elülső részén ]
	[so then this on the front part of the thigh]

<sup>&</sup>lt;sup>51</sup> During this talk, the patient mentions that her daughter died previously. This life event seems to have had a great impact on patient's health and may also explain her talkative nature.

210	hagy én vagy kicsit hagy hagy: m ö kérdezzem meg
	'let me or a bit let let m uh me ask'
211	az én kérdéseimet és u[tána hogy]ha valamit még
	'my questions and [afterward if ] something more'
212 10-4:	[jó ]
	'[ok ]'
213 10:	fontos [nak tar]t azt nyugodtan elmondhatja jó?
	'you feel [important] that you can freely tell ok?'
214 10-4:	[jó ]
	'[ok ]'
215 10:	.hh tehát hogy a bal comb elülső részén azt érzi hogy

'.hh so on the front part of the left thigh you feel that'

In excerpt (73) we can see another overlap between the PT's and the patient's talk (208-9) as the former tries to navigate the conversation back toward the discussion of the thigh pain. At this point however the PT seems to realize that the topic could be easily derailed again and explicitly asks the patient to let her finish the questioning (210-11). The PT also assures the patient that later she will have the chance to tell anything that she still feels is important to say (211 and 213). After the patient's agreement (212 and 214), the PT can finally take the floor and start clarifying the matter of the pain (215).

There could be more reasons why a patient gives a Pragmatically inappropriate answer. First, patients may not know what the relevant information for the PT is, or they may not be aware of what the PT already knows. As it was discussed in the Introduction, PT-patient interactions belong to institutional discourse types. It follows that, on the one hand, PT has an institutional role in the interaction, and on the other hand, that the course of the dialogue follows a formal scenario, which fits into the institutional frame (see also 4.1.4). However, this fact also requires the other party to take the institutional role of the patient, as is expected by the PT. Hence, pragmatically inappropriate answers could be the result of the mismatch between the patient's expected institutional role and the one which s/he is identifying with. Additionally, the different epistemic stances and different expectations of the patients may not know what to answer or how they should answer PTs' questions. It is also interesting to consider that in certain cases (e.g. (68) and (70)) it

seems like the context of the interaction was not given in advance, but rather it is being built up jointly and dynamically by the participants. To put it differently, the patient's answer may potentially change/modify the actual situational healthcare context and both parties' efforts are needed to clarify the situation.

Second, patients may intend to express the degree of their suffering – consider answers like "*everything hurts*" (69). Or simply, patients may just want to tell the story of their problems in their own way, connecting the events in a way that makes sense for them. Whatever the reason, in case of the Pragmatically inappropriate answers, it may take several turns for the PT to elicit the relevant information, i.e. the current problems of the patient, and sometimes this can even prove to be a tough task to achieve ((71)-(73)). The practical implication is that these extra turns may take valuable time from the visit's already limited duration.

Next, I will present the smallest group of T2s, the category of asking for Clarification.

## 4.2.3.6 Asking for clarification

There were only two cases, where patients asked for clarifications in T2s.

(74)	14-3: PT14	4, third recorded patient; 14 stands for PT, 14-3 for patient
	002 14:	üdvözlöm szeretném megkérdezni hogy ö:
		'welcome I would like to ask that uh:'
	003	most hogy felvesszük a: a mozgásszervi státuszát,
		'now that we take your musculoskeletal status,'
	004	.hh ö: ennek az lenne a célja hogy ö
		'.hh uh: the goal of this would be that uh'
	005	() hogy ö felmérjük azt hogy
		'() that uh we assess that'
	006	milyen az állapota most?
		'how is your condition now?'
	007	.h és a végén szintén készítünk egy visszamérést,
		'.h and at the end we also do a reassessment,'
	008	aminek az a célja hogy lássuk hogy .hh
		'the goal of which is that we see that .hh'

009	javult-e valamit az itt léte során.
	'if you improved some during your time here.'
010	szeretném megkérdezni hogy
	'I would like to ask that'
011	mondja el hogy milyen panaszai vannak?
	'tell me what kind of complaints you have?'
012	melyik mozgásszerv(.)vi rendszere érintett, .hh
	'which of your musculoskeletal system is affected, .hh'
013 14-3:	hát (.) most már () a ()
	'well (.) now already () the ()'
014	hol fáj? () [vagy ]
	'where hurts? () [or]
015 14:	[igen]
	[yes]
016	hol fáj, sorolja fel azokat az ízüle [teket,]
	'where hurts, list those [joints,]'
017 14-3:	[fá:j ]
	'[hurt]'

018 a két vállam.

'my two shoulders.' - 'my two shoulders hurt'

In excerpt (74) the PT gives a long introduction (002-9) – explaining the reason why the first assessment is important and why certain information is needed – before she gets to the OpQ (010-12, in boldface). While it is important that the patient understands what and why is going to happen to him during the visit, PT's long stretch of talk may confuse him about the point of the OpQ. In other words, there is a big information load in PT's first turn, which is made even more difficult to process by the use of semi-technical and technical terms like *mozgásszervi státusz* 'musculoskeletal status' (003) and *mozgásszervi rendszer* 'musculoskeletal system' (012).<sup>52</sup>

<sup>&</sup>lt;sup>52</sup> I introduced this term in the explanation of excerpt (64) in connection with the expression *nyaki gerinc* 'cervical spine'. The idea is repeated here for the sake of convenience: those expressions are called semi-technical terms in my work, which are made up by Hungarian words, but in which the special combination of words within the phrases are unique to the medical context.

The patient's uncertainty about the point of PT's question is apparent in his response. He starts to answer but does not finish his utterance (013). Rather, he asks back if the PT means that he should talk about painful areas and he leaves his utterance open by the use of the connective word *vagy* 'or' (014) signing that his guess may not be right or exhaustive. After PT confirms that she is interested in hearing about painful areas (016), the patient starts to give a relevant answer (017-8).

The second case of asking for clarification is the following.

- (75) 21-2: PT21, second recorded patient; 21 stands for PT, 21-2 for patient
  - 001 21: *mondja milyen panaszai vannak*.<sup>53</sup> 'tell me what kind of complaints you have'
  - 002 21-2: (..) .h jelenleg? (..) .h currently?'
  - 003 21: *igen (.) jelenlegi.* 'yes (.) current.'
  - 004 21-2: *jelenleg a derekam fáj nagyon,* 'currently my low back hurts a lot,'

In excerpt (75) PT's OpQ is a Wh-OpQ, asking about patient's complaints (001). In line 002 patient asks PT if she means current problems, and only after receiving a confirmation (003), does she start to tell about her low back pain (004).

Although this category of T2s is negligible in my data, it does show that there are situations, where patients are not exactly sure about the kind of information they should provide. On the other hand, it also shows that – by asking for clarification – patients are trying to be cooperative. In other words, they try to give an answer to the OpQ that is relevant for PT.

The last group of patients' answers is that of the Other category, which is presented in the next section.

<sup>&</sup>lt;sup>53</sup> For the glossed version of the OpQ see (35)

## 4.2.3.7 Answers that fall into the category of Other

Those answers by patients belong to this group, which could not be classified into any of the so far discussed categories, namely into the categories of Informative, (Hi)story, Incomplete, Imaging results and/or medical diagnosis, Pragmatically inappropriate or Clarification answers. Problematic cases, i.e. cases where it was not obvious which turn should be considered as the OpQ and the T2, also belong here. The four cases within this category are presented below.

(76) 10-3: PT10, third recorded patient; 10 stands for PT, 10-3 for patient

((PT clarifies information about the primary disease (multiple sclerosis) based on medical records))

022 10:	ühüm, .h (.) jó: (1.8) igen,
	'uh-huh, .h (.) good: (1.8) yes,'
023	(1.1) .h () ezen kívül bármilyen olyan
	(1.1) .h () apart from this is there some kind of
024	mozgás: ö szervi (.) .h problémája van-e. ()
	'musculo: uh skeletal (.) .h problem that you have ()'
025	tehát volt-e bármilyen kopásos megbetegedés,
	'so was there any wear and tear disease,'
026	.hh törés, .h () esés, ()
	'.hh fracture, .h () fall, ()'
027	[ami] <sup>54</sup>
	'[that]'
028 10-3:	[ö:] törés nem,
	'[uh:] fracture no,'
029 10:	igen,
	'yes,'
030 10-3:	e: esni:
	'to fall:'

<sup>&</sup>lt;sup>54</sup> The OpQ was presented in (3) in Table 6. Remember that the *van-e* form ('is-E' – 'is there'), more specifically the *-e* particle in a positive polar question in Hungarian neutralizes the preference for a positive or a negative answer (Gyuris, 2017); *volt-e* is the past tense of *van-e*. In Hungarian, *kopásos megbetegedés* is a layman's term for degenerative joint disease, which is the deterioration of the joint tissue (cartilage) related to aging.

031 10: (..) picit hangosabban ((suttogva)) '(..) a bit louder ((whispering))' 032 10-3: törés nem volt? (...) 'fracture there was none? (...)' 033 esni elég ö (..) gya [kran] 'to fall quite uh (..) of [ten]' 034 10: [igen,] '[yes]' 035 10-3: el szoktam [es]ni [.hh] I used to [fa]ll [.hh]' 036 10: [ühüm,] [uh-huh] 037 [ühüm,] [uh-huh] 038 10-3: ö: (.) kopásom (..) hát a térdem szokott 'uh: (.) wear and tear (..) well my knee used to' 039 10: ühüm ühüm [tehát] 'uh-huh uh-huh [so]' 040 10-3: [prob]lémá [t okoz]ni '[cau]se pr[obl]em' 041 10: [igen, ] '[yes]' 042 10-3: (.) meg a: (..) derekam. '(.) and my: (..) low back.' 043 10: ühüm, j [:ó ] 'uh-huh, g[:ood]'

044 10-3: [mo]s:taná [ban] '[no]w:ad[ays]'

After discussing the primary disease (multiple sclerosis) of the patient, the PT opens the problem presentation phase in excerpt (76) with an OpQ based on medical records (see part 4.1.2). In this

OpQ, the PT specifically focuses on musculoskeletal problems (024), which is the main profile of the institute. Here we can see again that the PT uses a semi-technical term – *mozgásszervi* 'musculoskeletal', the precise meaning of which may not be completely obvious to the patient. Probably this is the reason, why PT continues the question by giving examples of what she is interested in (025-6), but she also leaves her utterance unfinished (027), open to other possibilities not mentioned in the list. The use of the discourse marker *tehát* 'so' in line 025 signs that the following talk is an elaboration of the previous term, i.e. of musculoskeletal problems.

The reason why the T2, in this case, was classified as Other is that the patient answers point by point to PT's given examples. Also, remember that T2 was operationalized as patient's talk between PT's OpQ and any subsequent verbal action by PT. So, in this case, strictly speaking, only line 028 (*[ö:] törés nem*, '[uh:] fracture no,') was counted as T2, and classified accordingly. However, to show the pattern of the patient's answer, a longer part of the interaction was chosen to be presented.

It is interesting to observe what happens when the patient gets to the "*wear and tear*" of joints in her answer (038). Although *kopás* 'wear and tear' concerning joints is a layman's term, we cannot be sure that the patient understands or knows what this term exactly covers. Her use of the discourse marker *hát* 'well' after some silence and the fact that she changes the "*wear and tear*" into "*cause problem*" (040) may be the signs of expressing this uncertainty.

In excerpt (76) we saw how the form and content of the OpQ determined and constrained the patient's answer. It is conceivable that this effect, i.e. that the patient did not answer freely in her own words, is the reason why the answer could not be classified into any of the previous 6 categories.

In the next excerpt, the same PT is interviewing a different patient.

(77) 10-5: PT10, fifth recorded patient; 10 stands for PT, 10-5 for patient

((PT discusses info on high blood pressure, diabetes, and cardiac problems written in the medical record))

- 060 10: *rendben. .h akkor mozgásszervi panaszként?* 'all right. .h then as musculoskeletal complaint?'
- 061 *azt látom hogy: ö: .h hogy a dereka és a jobb térd.*'I see that: uh: .h that your low back and the right knee.'

062	van itt nekem írv[a? (.) .h]
	'I have it here writte[n? (.) .h]'
063 10-5:	[igen, ]
	'[yes,]'
064 10:	akkor ez (.) ez így helyes:?
	'then this (.) this is correct:?'
065 10-5:	ez így [helyes: ]
	'this is [correct:]'
066 10:	[ez így helye]s
	'[this is correc]t
067	m:ió [mely]ik ami (me)
	'(since whe-) [which] one is that (me)
068 10-5:	[(eh)]
	'[(eh)]'
069 10:	mindennapokban jobban zavarja.
	'disturbs you more in everyday life.'
070	() melyik ami most rosszabb. aktuálisan. <sup>55</sup>
	'() which one is that is worse now. currently.'
071 10-5:	h:át most november közepén a jobb térdem ()
	'w:ell now mid November my right knee ()'
072 10:	ühüm, ()
	'uh-huh, ()'
073 10-5:	kezdte el, [hogy] (1.4)
	'started, [that] (1.4)'
074 10:	[igen,]
	'[yes,]'
075 10-5:	nem tudtam egyszerűen menni.
	'I simply couldn't walk.'
076	(.) olyan erős fájdalmam volt,
	(.) I had such a strong pain,'

 $<sup>^{55}</sup>$  The OpQ was presented in (5) in Table 6.

In excerpt (77) the PT first discusses the primary diseases of the patient (high blood pressure, diabetes, and cardiac problems) before turning the conversation into the discussion of musculoskeletal problems (060) – once again we can see that the PT uses a semi-technical term. The OpQ was classified as OpQ based on medical records. However, this interaction is considered problematic regarding the decision about which turns should be considered as the OpQ and the T2. One option is to consider lines 060-62 or lines 060-62 and 064 as the OpQ, in which case line 063 or lines 063 and 065 constitute T2. The argument supporting this view is that both in lines 062 (*"I have it here written?"*) and 064 (*"then this (.) this is correct:?"*) PT uses rising intonation expecting a reaction from the patient. The patient responds accordingly, by confirming the validity of the provided information – first simply with a "*yes*" (063) and then by giving an explicit answer to PT's question: "*this is correct*" (065).<sup>56</sup>

The second option is to include lines 067-70 in the OpQ, where PT asks the patient to choose between the problems listed in the records – based on their severity. In this case, line 071 constitutes T2. This decision could be supported by the argument that this question is the one that opens up the opportunity for the patient to elaborate on her complaints. On the other hand, it does not leave any chance for the patient to come up with new concerns not mentioned in the records. While the different possibilities do not influence the categorization of the OpQ, they do result in different classifications for the T2. In the first case scenario, the T2 would be definitely categorized as Other. In the second case, however, its category would change to that of (Hi)story – the patient mentions November, and the visit was recorded next April, furthermore, the patient continues her talk in the past tense (073,075-6). This ambiguity is the reason why doubtful cases were decided to be also categorized as Other.

The next example is a somewhat similar case.

(78) 18-3: PT18, third recorded patient; 18 stands for PT, 18-3 for patient
002 18: *jó. (..) .hhh (..) milyen panaszokkal (..) érkezett mihozzánk.*'good. (..) .hhh (..) with what kind of complaints (..) did you arrive to us.'
003 18-3: (1.5) öhm (...)
'(1.5) ahm (...)

<sup>&</sup>lt;sup>56</sup> In section 4.1.2 I already talked about this as I compared the similar questioning strategies in 10-1 and 10-5.

004 18:	itt értem fájdalmas ízületek, () korlátozottság, ()
	'here I mean painful joints, () limitation, ()'

005 18-3: *igen a:: a kisízületek, kéz kisízületek elsősorban*'yes the:: the small joints, small joints of the hand primarily'
006 (annak) igen jelentős a (..) mozgáskorlátozottsága,
'(of that) very significant is their (..) limitation of mobility,'
007 be van szűkülve, (..) .h (..)
'it is constricted/restricted, (..) .h (..)'
008 gyakorlatilag nem tudom ökölbe szorítani a kezem, (..) például, (..)
'practically I am not able to clench my hand into a fist, (..) for example, (..)'
009 18: ez mindkét oldal[on panaszt] okoz?

'this causes complaint on both sides?

In excerpt (78), PT uses a Wh-OpQ to ask about the patient's complaints (002). In line 003, after a long silence, the patient is only able to produce a signal of hesitation "*ahm*", which can be and is understood by PT as a sign that the patient does not understand the question and/or does not know what is expected from her as an answer. The proof that PT treats the patient's (missing) answer as a sign of a lack of understanding comes in line 004, where PT starts her utterance with "*here I mean*", signaling that an elaboration of the question is to follow. Considering this phenomenon, namely the lack of an answer, patient's T2 is classified as Other.

However, we could also argue that, since there is no answer to PT's question, we should include in the OpQ PT's complementary question in line 004 as well. In this case, lines 005-8 would compose patient's answer, i.e. T2, which would then be classified into the group of Informative answers. Note, however, that the first part of her answer (005-7) is expressed in a rather objective manner. First, the patient does not talk about the *"small joints of my hand"* but says *"small joints of the hand"* instead. Second – and this factor may not be appropriately expressed in the English translation, the expressions of *kéz kisízületek* 'small joints of the hand' and *mozgáskorlátozottság* 'limitation of mobility, i.e. movement loss' (which expression is seemed to be primed by PT's use of *korlátozottság* 'limitation' in line 004) are not often used like this in everyday language. On the whole, lines 005-7 could have easily been said by a doctor or a PT reporting about a patient to a colleague. The personal part of the patient's utterance comes in line 008, where she tells her problem as she experiences it in everyday life.

Nevertheless, since the lack of an answer by the patient is the very reason, why PT has to extend and elaborate her OpQ, I support the first option, namely that the missing answer is considered T2 and classified as Other.

The last case in the Other group is different from the previous three.

- (79) 19-3: PT19, third recorded patient; 19 stands for PT, 19-3 for patient
  - 002 19: *először azt szeretném kérdezni hogy* 'first I would like to ask that'
  - mi a fő panasza mi miatt van most itt az intézetben<sup>57</sup>
    'what your main complaint is because of what are you here now in the institute'
  - 004 19-3: *éhn a MahbThera ((mosolyogva)) (..) kezelés miatt*<sup>58</sup> 'Ih because of the MahbThera<sup>a</sup> ((smiling)) treatment'
  - 005 19: (.) ühüm, (2.5) ((jegyzetel)) jó mióta vannak a panaszai.
    '(.) uh-huh, (2.5) ((taking notes)) good since when do you have the complaints.'
  - 006 (..) *amire ezt a kezelést kapja* '(..) for which you receive this treatment'

The PT starts the interaction with an Embedded OpQ, asking about the patient's main complaint (002-3). Considering the part of the OpQ that asks about the reason for the patient's stay in the hospital, the answer is completely appropriate – she is getting treatment for her disease (004). However, from this answer, we do not learn anything about the exact disease, or about the symptoms it causes to the patient at the moment. It is interesting to observe that PT's next question in lines 005-6 seems to ignore this lack of information. She is asking about the duration of the complaints, though she does not know yet either, what those complaints exactly are. If we look at the explanations/definitions of the T2 categories given in Table 8, it becomes clear that this answer does not fit into any of the first 6 categories.

<sup>&</sup>lt;sup>57</sup> For the partially glossed version of the OpQ see (29).

<sup>&</sup>lt;sup>58</sup> MabThera is a biological therapy used for the treatment of rheumatoid arthritis (among others).

In the previous sections (4.2.3.1-4.2.3.7), I demonstrated the seven categories of patients' answers (T2s): Informative; (Hi)story; Incomplete; Imaging results, medical diagnosis; Pragmatically inappropriate; Clarification answers and the group of Other. The presented examples were "clear" cases, meaning that the answers belong to only one category. However, as I mentioned at the beginning of this chapter (4.2.3), the T2 categories are not mutually exclusive, hence one answer may belong to more than one group. A few examples of these cases are presented in the next section.

#### 4.2.3.8 Complex cases of patients' answers

Complex cases of patients' answers (T2s) are those, which are classified into more than one category. (See Appendix for all the complex cases.) Two examples are discussed below.

(80)	1-4: PT1, fourth recorded patient; 1 stands for PT, 1-4 for patient		
	001 1: mi most a panasz hol van fájdalom <sup>59</sup>		
		'what is the complaint now where is pain'	
	002 1-4:	(2.4) ((GYT gépel, egérrel klikkel)) mm () derekam csípőm,	
		'(2.4) ((PT typing, clicking with mouse)) mm () my low back my hip,'	
	003	(1.0) ö:: (jobb ágy) jobb oldalon,	
		'(1.0) uh:: (right lu) on the right side,' <sup>60</sup>	
	004	(1.4) ((GYT gépel)) ö: (3.0) ((GYT gépel)) volt egy régi () ö: (.) sérvem,	
		'(1.4) ((PT typing)) uh: (3.0) ((PT typing)) I had an old () uh: (.) herniation,'	
	005	porckorongsér [vem,]	
		'disc hernia[tion,]'	
	006 1:	[i]gen,	
		'[y]es,'	
	007 1-4:	(.) .h () és ez folyamatosan megmaradt	
		(.) .h () and this remained continuously'	
	008	igazából (1.6) tizenkilenc éve ()	
		'actually (1.6) since nineteen years ()'	

<sup>&</sup>lt;sup>59</sup> Repeated from Table 5.

<sup>&</sup>lt;sup>60</sup> jobb ágy is probably the beginning of jobb ágyéki 'right lumbar', hence the English 'right lu'

009 1: ühüm, .hh (.) ö:: konzervatív kezelés volt
'uh-huh, .hh (.) uh:: was there conservative treatment'
010 vagy ott ott műtét is volt.
'or there there was surgery as well'

The PT starts the problem presentation phase with a Wh-OpQ, asking about complaints and pain (001). Following from the operationalization of T2 (patient's talk between PT's OpQ and PT's next verbal move, whatever that may be), lines 002-5 constitute T2. However, to see how the patient continues her answer after the backchannel from PT (006), a longer part of the interaction is presented.

In lines 002-3, the patient gives fragmental information, since she only mentions body parts (low back and hip) and the affected side without telling what the problem is. We can only presume (see 4.2.3.3) that she means having pain in those areas. (Note: this presumption becomes proven later in the interaction – the patient comes up with it herself, it is not the PT, who clarifies the problem.) After telling that there is some kind of problem with her low back and hip, the patient starts to talk in the past tense (004), saying that she had a disc herniation before. This latter information is a medical diagnosis, probably based on imaging results, and it may serve as an explanation or justification on the patient's part as to why she has the symptoms. In sum, the patient's answer belongs to three T2 categories, namely to the groups of Incomplete, (Hi)story and Imaging results, medical diagnosis.

If we observe what happens after PT's backchanneling (006), we can see that the patient finishes her storyline about the herniation, i.e. that it has been there continuously for nineteen years (007-8). However, this is only the short story of her herniation, and we still have not learned what her current problems are precisely. Keeping this fact in mind, PT's next question in lines 009-10 may not be the most relevant one at this point. Asking the patient about received treatments in the past, especially over a period of 19 years – since PT does not narrow down her question to a specific timeframe – could have the danger of encouraging the patient to continue storytelling. My point is not that this kind of information is not important, but the therapist should first have a clear picture of the patient's problem so that she can decide what information is relevant from patient's talk for the process of clinical reasoning.

The next example shows another combination of categories.

(81) 20-1: PT20, first recorded patient; 20 stands for PT, 20-1 for patient

001 20:	az lenne a kérdésem először is,
	'my question would be first of all,
002	hogy hol van a fájdalom helye.
	'where the location of the pain is.'
003	ami miatt bekerült ide hozzánk. <sup>61</sup>
	'because of which you got in here to us.'
004 20-1:	a::m bizonyos mozdulatokra, a jobb () ee kezem,
	'a::m with certain movements, the right () ee my hand,'
005	tehát a nyakamtól egész az ujjamig zsibbad.
	'so from my neck all the way till my finger it gets numb.
006	() bizonyos mozdulatokra,
	'() with certain movements,'
007	() MR-en voltam, és mondták,
	'() I had an MR, and they said,'
008	hogy a:: () az ötös hatos nyaki: csigolyánál ()
	'that the:: $()$ at the fifth sixth cervical vertebra $()$ '
009	van egy ö:: (1.1) na hogy mondják:? ö::: sérv,
	'there is a uh:: (1.1) now how do they say? uh:: hernia,'
010 20:	ühüm,
	ʻuh-huh'
011 20-1:	igen, .hh és (.) hát,
	'yes, .hh and (.) well,'
012	elég rossz: állapotban vannak a csigolyák.
	'the vertebras are in quite a bad condition.'
013 20:	() tehát ez a fő panasza.
	'() so this is your main complaint.'
014 20-1:	ez a fő panasz így van.
	'this is the main complaint that's right.'

<sup>&</sup>lt;sup>61</sup> For the glossed version of the OpQ see (44).

In excerpt (81) the PT initiates the problem presentation phase with an Embedded OpQ, asking about pain location (001-3). Patient's answer to this question includes more pieces of information. First, he tells that his right arm gets numb with certain movements (004-6), so we learn about the problem, its location, and something about its behavior. Then, he adds that he had an MRI examination and was told that he has a herniation (007-9). This medical information probably serves as an explanation regarding the cause of his symptoms. Considering these factors, the T2 in (81) was classified into the groups of Informative and Imaging results, medical diagnosis answers.

After PT's continuer in line 010, the patient finishes his answer by adding that his vertebras are in a bad shape (011-2), which information also sounds like the revoicing of a medical opinion. It is interesting to observe PT's summarization in line 013: *tehát ez a fő panasza* 'so **this** is your main complaint', which gets confirmed by the patient in the next turn. Since the patient mentioned three pieces of information, namely the numbness, the herniation, and the bad vertebras, we cannot be sure, which one or other the deictic element refers to – or it may even refer to all three topics. We also cannot know if PT and patient think about or mean the same item(s) as the referent(s) of the deixis. It is important though that the therapist knows exactly what the concern of the patient is since this is the only way, the therapist can properly address that certain concern. For example, in this situation, the PT may suppose that the main concern of the patient is the numbness in his right arm, and focuses on resolving that problem. However, it can also be the case that the patient is more bothered by the MRI result, i.e. the herniation, and his main concern may be that he is afraid of its consequences – this would be the psychological part of the problem. If this factor is not discovered by the PT, the main concern of the patient might remain unaddressed.

In this part, I presented the different types of answers patients may give to PT's OpQ in my data. With the help of demonstrative examples, I characterized the seven inductively created categories (Informative, (Hi)story, Incomplete, Imaging results and/or medical diagnosis, Pragmatically inappropriate, Clarification, and Other) as well as the complex cases of patients' answers. In the next section, I discuss the results of the quantitative analysis regarding the relations between the OpQs and the T2s.

## 4.3 Data Analysis 3. – OpQ-T2 relations

To determine whether a relationship exists between the type and characteristics of PTs' opening questions and the category of patients' answers, considering that all the variables are categorical, Pearson's chi-square tests were conducted. The chi-square test compares the observed frequencies in certain categories to the frequencies we might expect to get in those categories by chance (Field, 2009).

Regarding the main category of the OpQ, only the Wh-OpQ and the Embedded OpQ categories were included in the analysis, since the sample sizes of the Closed OpQ and the OpQ based on medical records were too small. Similarly, because of the small sample sizes, it was not possible to involve the five subcategories of the Embedded OpQ in the statistical analysis. For the same reason, only the four biggest groups of T2s were examined: Informative (40%), (Hi)story (27%), Incomplete (23%), and Imaging results, medical diagnosis (21%) type answers. The level of significance was determined as p < 0.05. If the p-value lies between 0.05 and 0.1, it is called a tendency (marked only in the relevant tables). In this case, a bigger sample size would be needed to decide, if the observed effect is by chance or if it truly exists. Effect-size, i.e. the strength of the association between the variables is shown by the phi ( $\varphi$ ) value:  $0.1 \le |\varphi| < 0.3$  is weak,  $0.3 \le |\varphi| < 0.5$  is moderate, and  $0.5 \le |\varphi| < 1$  is strong effect. Table 9-12 below show the percentage of the given type of answer if a certain independent variable occurs versus does not occur in the OpQ.

Table 9 below, summarizes the results of Informative answers. Only the reference to the institute variable is significantly related to Informative answers:  $\chi^2(1) = 6.681$ , p = .010, with a weak effect of  $\varphi$  = .298. Note that the proportion of Informative answers is more than double when there is a reference to the institute in the OpQ (52.27%) as opposed to the absence of this feature (22.58%). This result means that there is a bigger chance to get an informative answer in case the OpQ includes some kind of reference to the institute. It is intuitively a surprising result, since – as was discussed in 4.1.4 – a reference to the institute evokes the formal context of the interaction. Hence, based on the theoretical presumptions, reference to the institute could be hypothesized to rather relate to Imaging results, medical diagnosis type answers. However, as we will see, this is not the case.

	Informat	ive (%)#	
	Yes	No	Results
Wh-Q	47.83	36.54	$\chi^2(1) = .847, p = .358, \varphi = .106$
Emb	40.00	40.00	$\chi^2(1) = .000, p = 1.000, \varphi = 0.000$
Ref. Patient	36.74	46.15	$\chi^2(1) = .628, p = .428, \varphi = -0.092$
Ref. Inst.*	52.27	22.58	$\chi^2(1) = 6.681, p = .010, \varphi = .298$
Verb lexical	45.46	32.26	$\chi^2(1) = 1.320, p = .251, \varphi = .133$
Verb copula	33.33	42.11	$\chi^2(1) = .439, p = .508, \varphi = -0.076$
Thematic role Agent	33.33	42.86	$\chi^2(1) = .370, p = .543, \varphi = -0.074$
Current problem	40.63	39.54	$\chi^2(1) = .009, p = .924, \varphi = .011$
Pain	42.86	38.30	$\chi^2(1) = .152, p = .697, \varphi = .045$
Complaint	37.93	47.06	$\chi^2(1) = .456, p = .499, \varphi = -0.078$

Table 9 Independent variables and the proportion of Informative answers

\* significant

<sup>#</sup> The percentage of Informative answers in case a certain independent variable is present (Yes) versus absent (No)

There is an inverse significant relationship between the variable of reference to the patient and the (Hi)story type answer (Table 10):  $\chi^2(1) = 4.979$ , p = .026, with a weak effect of  $\varphi = -0.258$ . This means that reference to the patient decreases the occurrence of (Hi)story type answers. Yet again a surprising result, as one would think that involving the patient in the OpQ would encourage them to talk (more) about themselves.

	History (%) <sup>#</sup>		
	Yes	No	Results
Wh-Q	17.39	30.77	$\chi^2(1) = 1.459, p = .227, \varphi = -0.139$
$\mathrm{Emb}^+$	35.00	17.14	$\chi^2(1) = 3.044, p = .081, \varphi = .201$
Ref. Patient*	18.37	42.31	$\chi^2(1) = 4.979, p = .026, \varphi = -0.258$
Ref. Inst.	31.82	19.36	$\chi^2(1) = 1.445, p = .229, \varphi = .139$
Verb lexical <sup>+</sup>	34.09	16.13	$\chi^2(1) = 3.000, p = .083, \varphi = 0.200$
Verb copula	22.22	28.07	$\chi^2(1) = .239, p = .625, \varphi = -0.056$
Thematic role Agent	33.33	26.79	$\chi^2(1) = .210, p = .646, \varphi = .056$
Current problem	25.00	27.91	$\chi^2(1) = .079, p = .778, \varphi = -0.033$
Pain <sup>+</sup>	14.29	34.04	$\chi^2(1) = 3.502, p = .061, \varphi = -0.216$
Complaint	25.86	29.41	$\chi^2(1) = .085, p = .771, \varphi = -0.034$

Table 10 Independent variables and the proportion of (Hi)story answers

\* significant + tendency

<sup>#</sup> The percentage of (Hi)story answers in case a certain independent variable is present (Yes) versus absent (No)

In the case of the Incomplete answers (Table 11), two variables were found to be significantly related to the answer. Assigning the thematic role of an agent to the patient ( $\chi^2(1) = 4.791$ , p = .029,

 $\varphi = .265$ ) on the one hand, and using the word *fájdalom* 'pain' to ask about patient's problems on the other ( $\chi^2(1) = 4.339$ , p = .037,  $\varphi = .241$ ) – both with weak effect-sizes however. In other words, the presence of these two variables in the OpQ increases the probability that an Incomplete answer is elicited.

	Incomple	ete (%)#	
	Yes	No	Results
Wh-Q	21.74	23.01	$\chi^2(1) = .016, p = .898, \varphi = -0.015$
Emb	25.00	20.00	$\chi^2(1) = .266, p = .606, \varphi = .060$
Ref. Patient	26.53	15.39	$\chi^2(1) = 1.204, p = .273, \varphi = .127$
Ref. Inst. <sup>+</sup>	15.91	32.26	$\chi^2(1) = 2.773, p = .096, \varphi = -0.192$
Verb lexical	20.46	25.81	$\chi^2(1) = .297, p = .586, \varphi = -0.063$
Verb copula	11.11	26.32	$\chi^2(1) = 1.804, p = .179, \varphi = -0.155$
Thematic role Agent*	41.67	14.29	$\chi^2(1) = 4.791, p = .029, \varphi = .265$
Current problem	28.13	18.61	$\chi^2(1) = .949, p = .330, \varphi = .112$
Pain*	35.71	14.89	$\chi^2(1) = 4.339, p = .037, \varphi = .241$
$Complaint^+$	27.59	5.88	$\chi^2(1) = 3.533, p = .060, \varphi = .217$

Table 11 Independent variables and the proportion of Incomplete answers

\* significant + tendency

<sup>#</sup> The percentage of Incomplete answers in case a certain independent variable is present (Yes) versus absent (No)

Last, in the case of the Imaging results, medical diagnosis answers (Table 12), no significant relationship was found between the features of the OpQ and this kind of answer.

	Imag/Me	ed (%)#	
	Yes	No	Results
Wh-Q	21.74	21.15	$\chi^2(1) = .003, p = .955, \varphi = .007$
Emb	25.00	17.14	$\chi^2(1) = .687, p = .407, \varphi = .096$
Ref. Patient	20.41	23.08	$\chi^2(1) = .072, p = .788, \varphi = -0.031$
Ref. Inst.	18.18	25.81	$\chi^2(1) = .630, p = .427, \varphi = -0.092$
Verb lexical	20.46	22.58	$\chi^2(1) = .049, p = .825, \varphi = -0.026$
Verb copula	11.11	24.56	$\chi^2(1) = 1.475, p = .225, \varphi = -0.140$
Thematic role Agent	16.67	19.64	$\chi^2(1) = .057, p = .812, \varphi = -0.029$
Current problem	25.00	18.61	$\chi^2(1) = .447, p = .504, \varphi = .077$
Pain <sup>+</sup>	32.14	14.89	$\chi^2(1) = 3.111, p = .078, \varphi = .204$
Complaint	20.69	23.53	$\chi^2(1) = .063, p = .802, \varphi = -0.029$

Table 12 Independent variables and the proportion of Imaging results, medical diagnosis answers

<sup>+</sup> tendency

<sup>#</sup> The percentage of Imag/Med answers in case a certain independent variable is present (Yes) versus absent (No)

Although – because of the low sample sizes – the 5 subcategories of the Embedded OpQs could not be involved in the statistical analysis, the subcategories could be grouped along the direct-indirect and explicit-implicit dimensions. Tables 13-16 show the proportion of occurrences of the four biggest answer groups along these dimensions of the Embedded OpQs – as we can see, no significant relationships could be found. In other words, the explicitness and/or the directness of the Embedded OpQ does not influence the type of the given answer.

 Table 13 Proportion of Informative answers along the explicit/implicit and direct/indirect dimensions of the Embedded OpQ

	Informative (%) <sup>#</sup>		
	Yes	No	Results
Explicit	39.13	41.18	$\chi^2(1) = .017, p = .896, \varphi = .021$
Direct	50.00	31.82	$\chi^2(1) = 1.364, p = .243, \varphi = -0.185$

<sup>#</sup> The percentage of Informative answers in case a certain independent variable is present (Yes) versus absent (No)

 Table 14 Proportion of (Hi)story answers along the explicit/implicit and direct/indirect dimensions of the Embedded OpQ

	(Hi)story (%) <sup>#</sup>		
	Yes	No	Results
Explicit	34.78	35.29	$\chi^2(1) = .001, p = .973, \varphi = .005$
Direct	33.33	36.36	$\chi^2(1) = .040, p = .842, \varphi = .032$

<sup>#</sup> The percentage of (Hi)story answers in case a certain independent variable is present (Yes) versus absent (No)

 Table 15 Proportion of Incomplete answers along the explicit/implicit and direct/indirect dimensions of the Embedded OpQ

	Incomplete (%) <sup>#</sup>		
	Yes	No	Results
Explicit	26.09	23.53	$\chi^2(1) = .034, p = .853, \varphi = -0.029$
Direct	22.22	27.27	$\chi^2(1) = .135, p = .714, \varphi = .058$

<sup>#</sup> The percentage of Incomplete answers in case a certain independent variable is present (Yes) versus absent (No)

Table 16 Proportion of Imag/Med answers along the explicit/implicit and direct/indirect dimensions of the Embedded OpQ

	Imag/Med	(%)#	
	Yes	No	Results
Explicit	30.44	17.65	$\chi^2(1) = .853, p = .356, \varphi = -0.146$
Direct	11.11	36.36	$\chi^2(1) = 3.367, p = .067, \varphi = .290$

<sup>#</sup> The percentage of Imag/Med answers in case a certain independent variable is present (Yes) versus absent (No)

In summary, a significant relationship was found between the reference to the institute variable and Informative type answers; between the variables of assigning an agentive role to the patient and the use of the word *fájdalom* 'pain' and Incomplete type answers; and an inverse significant relationship exists between the reference to the patient variable and (Hi)story type answers. No significant relationship was found between any variables and Imaging results, medical diagnosis type answers, or between the explicit-implicit and direct-indirect dimensions of the Embedded OpQs and any type of answer.

Based on these results, we can conclude that the examined features (variables) of the OpQs are not sufficient to explain the variety of patients' answers. In other words, based on the examined characteristics of the OpQs, we cannot safely tell if or how the design of the OpQ influences the answer. Furthermore, the results do not change the fact that Informative answers are provided in only 40% of the cases. It follows from these considerations that some other factor(s) may lie behind the observations that on the one hand, patients answer the OpQs in various ways, and on the other hand, that there is an apparent lack of relationship between the question and the answer types. The next chapter attempts to explain these phenomena.

## 5 AN EXPLANATORY FRAMEWORK FOR THE OPQ-T2 RELATIONS

In this section, I offer an explanatory framework for the observed varieties in patients' answers given to PTs' opening questions (OpQ). The goal of the chapter is to find a possible reason, why in so many cases it seems that patients do not provide an answer, whose content fits with that of the question. To understand this phenomenon, different concepts of common ground and the socio-cognitive approach are considered below. First (5.1), I briefly describe three approaches to common ground (Allan, 2013; Clark & Schaefer, 1989; Stalnaker, 2002) and examine them with the help of examples in order to see, whether they provide a satisfying explanation for the observed phenomena in the data. Since my conclusion regarding this question is negative, second (5.2), I argue that the application of the socio-cognitive approach (Kecskes & Zhang, 2009), which considers both the individual and the social traits of communication, yields a more complex and better way for the analysis of the present data of PT-patient interactions.

## 5.1 Common ground

Shared knowledge, shared belief, or common ground is a necessary basis for mutual understanding in communication. Furthermore, the accumulation of common ground is also a goal of the participants in a conversation. The general view is that that information constitutes common ground 1) which is common and accepted as true by all participants of the discourse at any given point and 2) of which every participant is aware that it is possessed by all the other participants (Bara, 2017; Geurts, 2017). As we will see below, researchers agree on the dynamic nature of common ground, though they have differing views about the exact processes and factors that influence its development during communication.<sup>62</sup> The fact that common ground changes dynamically during a conversation follows from the view that language use is a joint action, whereby participants coordinate both on content and process (Clark, 1996).

In the following, I present theories of common ground, which are relevant for the creation of a framework that helps us in understanding the relations between PTs' OpQs and different types of patients' T2s in my data. It is important to keep in mind that the previously analyzed interactions between PTs and patients belong to the genre of institutional discourse. A key characteristic of this kind of discourse is that certain tasks, e.g. the formulation of a diagnosis and a treatment plan, have

<sup>&</sup>lt;sup>62</sup> For a detailed discussion about different theoretical and empirical approaches to common ground and meaning negotiation, see Horton, 2012.

to be achieved by the participants. To complete these tasks, a certain amount and kind of information are needed. So, PT-patient (or any HCP-patient) meetings are not just about building up common ground generally, but the important thing is to create common ground that is **relevant** for the purpose of the visit, or, more precisely, for the purpose of a certain phase of the visit. In other words, PT-patient interactions are task-oriented dialogues, which is a vital and indispensable fact in the consideration of **relevant** common ground. In the following, I discuss theories of common ground from this perspective, considering their explanatory power regarding my data. Specifically, keep in mind that the goal of the OpQ is to learn about patient's current problems, which means that patient's current problems should become part of the common ground.

Clark and Schaefer (1989) consider a contribution as the unit of conversation. A contribution to the discourse is a collective act of the participants, which requires content specification and the reaching of the grounding criterion: "the contributor and the partners mutually believe that the partners have understood what the contributor meant to a criterion sufficient for current purposes" (ibid.:262). This process helps the accumulation of common ground and it has two phases: the presentation phase and the acceptance phase of a contribution. The latter involves giving evidence of understanding of the previously presented utterance, for example by explicitly acknowledging it or by initiating a **relevant** next contribution. So, in the case of a question-answer adjacency pair (Schegloff & Sacks, 1973), the acceptance of the presented question is shown by the answer, which in turn has to be accepted by the questioner as evidence of correct understanding. This interdependence between questions and answers is also expressed in the notion of conditional relevance, which means that given the occurrence of a first item (a question), the second (an answer) is expectable (Schegloff, 1968). As a result, participants construct contributions in collaboration. "A new contribution is initiated with every cooperative change in turns" (Clark & Schaefer, 1989:280). This idea of the presentation and acceptance of a contribution is similar to that of conversation analysis, which also views a turn of talk as a display of understanding of the previous turn (Maynard & Heritage, 2005; Sacks et al., 1974) - actually, Clark and Schaefer themselves use the terms of conversation analysis.

The idea of acceptance and the dynamism of common ground is also present in Stalnaker's (2002) approach. He identifies common ground with the common belief among participants about what is accepted in a discourse. And since discourse is dynamic, changes in the common ground

occur. This happens through the process of accommodation, whereby something – accepted by participants for the purpose of the conversation – becomes common ground (Stalnaker, 2002).

However, the ideas of contributions (Clark & Schaefer, 1989) and accommodation (Stalnaker, 2002) are not sufficient to explain the relationships between physiotherapists' opening questions and the variety of patients' answers in my data. To support this idea, two important factors are needed to be repeated and emphasized here. First, as was discussed in part 3.3.1, questions set topical agendas (what to talk about) and action agendas (e.g. give information). Second, as it is expressed in both Clark and Schaefer's (1989) and Stalnaker's works (2002), the notion of common ground is inseparable from the purpose of the conversation. In other words, the building of common ground during an interaction has to satisfy the current purpose of that interaction. Hence, since the opening question's goal is to solicit the patient's current problem (current purpose of the conversation), any answer, whose content is other than that, should be treated as evidence of misunderstanding. However, in most of the cases, physiotherapists' next (post-answer) verbal actions show that they treat these answers as unproblematic (a rare exception we will see in excerpt (83)). Whether these reactions help in reaching the goal of this phase is a different matter. Consider the following excerpt.

## (82) 11-1: PT11, first recorded patient; 11 stands for PT, 11-1 for patient

002 11: *és akkor (..) ö Andor* 

'and then (..) uh Andor'

003 *én már olvastam pár [dol]got?* 'I already read some [thin]gs?'

004 11-1: *[ühüm]* 

'[uh-huh]'

005 11: *de azért ö (..)* 

'but still uh (..)'

006 *szeretném először magát meg [kérdez]ni hogy* 'I would first like to [ask] you that'

007 11-1: *[ühüm ]* 

'[uh-huh]'

008 11:	milyen panasszal érkezett.
	'with what complaint did you arrive.'
009 11-1:	(1.2) (há)tö: kettőezertizennyolc áprilisában műtöttek
	'(1.2) (well) uh: in April two thousand eighteen I was operated'
010	egy kiszakadt gerincsérvvel,
	'with a ruptured spinal hernia, ((equals disc hernia))'
011	azt követően volt egy (.)
	'following that there was one (.)'
012	hónapos rehabilitáció, [a: a: ]
	'month rehabilitation, [the: the:]'
013 11:	[ühüm igen,]
	'[uh-huh yes,]'
014 11-1:	Visegrádon, (.) azt követően ugye
	'in Visegrád ((name of city)), (.) following that right'
015	onnantól kezdve én minden nap tornáztam,
	'since then I've been exercising every day,'
016	de (.) a (.) sérv az: ö:
	'but (.) the (.) hernia that: uh:'
017 11:	ez ilyen speciális torna?
	'is this some special exercise?'
018	amit végzett [egyénileg ]
	'that you did [individually]'

The PT in the above excerpt (82) uses an OpQ based on medical records (see 4.1.2) asking about the patient's complaints and at the same time signing that she already read some of the information. Although the PT does not disclose what exactly she knows (002-3, 005-6, 008), by explicitly referring to the fact, she activates and shares this knowledge. The patient starts to talk about his previous history in his answer, mentioning that he had surgery because of a ruptured disc hernia. So, considering the category of T2 in lines 009-12 – remember that the classification was based only on patient's talk before any verbal move from PT – it is a complex case of (Hi)story and Imaging results, medical diagnosis.

Knowing that the interaction was recorded in March 2019, it is obvious that the patient does not answer the question about his current complaints, but rather starts to tell the whole story from the beginning. It is important to note here that this analysis of the patient's (or any other patient's) answer is in no way an evaluation of the patient's person or his/her answer. That is, the analysis does not state that the answer is wrong in any way. It is only meant to demonstrate that the "traditional" view of common ground, as something being dynamically accumulated by the interlocutors in a cooperative way and by attending to the purpose of the conversation, is not necessarily satisfactory for the description and explanation of the phenomena occurring in medicalinstitutional interactions.

Anyway, after the patient started to tell his story, PT only provides some backchannelling (013), which gives the patient the chance to continue his talk. However, the patient still does not get to the point to talk about his current symptoms, instead, he continues his story about how he has been exercising ever since the surgery (015). The next point of interest is PT's subsequent turn in lines 017-18. She is asking about the nature of the exercises. Now, why is this so intriguing?

As I already demonstrated, the patient is not answering PT's OpQ. In other words, the content of the answer does not cover the content of the question. (Obviously, we could imagine a scenario, of how all this talk could lead to the disclosure of current symptoms, but let us just stick to the turnby-turn analysis.) Nonetheless, the PT is first encouraging the continuation of the (hi)story (013), and then asks a question that keeps the patient in the (hi)storyline (017-8). My point is not that the PT should interrupt the patient – probably she is also waiting for the story to evolve till the mention of current problems –, or that the question about the exercises is not important. The question is: is it relevant at this point when we still do not have a clue about the patient's present concerns?

In sum, and as I mentioned above, although the patient does not provide an answer that could add to the **relevant** common ground in this phase of the visit, his answer is not treated as problematic by the PT, furthermore, PT's subsequent question may derail the conversation even more. These kinds of cases are not exceptional in my data. On the contrary, the exception is when PT repairs her question based on the patient's answer, like in the following excerpt.

(83)	5-3: PT5,	third recorded patient; 5 stands for PT, 5-3 for patient
	006 5:	huszonöt éve jár ide (3.6)
		'since twenty-five years you've been coming here (3.6)'
	007	és milyen panaszokkal jött <sup>63</sup>
		'and with what kind of complaints did you come'
	008 5-3:	() hát először ö () dupla nyaki váll () miatt () .hh
		'() well first uh () because of double cervical () shoulder () .hh' <sup>64</sup>
	009 5:	igen, (.) .h most (.) most milyen mi a panasza
		'yes, (.) .h now (.) now what kind what is your complaint'
	010	.hh van valamilyen gyulladásos ()
		'.hh is there some inflammatory ()'
	011	sokízületi gyulladásos betegsége
		'multiple joint inflammatory disease you have'
	012	ami miatt j [ár ide, vagy ]
		'because of which you c[ome here, or]'
	013 5-3:	[hát ez ki ]mondottan eldöntve nincsen.
		'[well this spe]cifically is not decided.'
	014	kimondottan azér járok ide
		'specifically why I come here is'
	015	mer mind a két csípőmbe protézis van,
		'because I have prostheses in both of my hips,'

The PT starts the problem presentation phase of the visit with a Wh-OpQ in the above excerpt (83). Since in the immediately preceding discourse PT and patient discuss that she has been a regular patient in the hospital (at the beginning of the excerpt, in line 006, PT repeats the patient's words), it is conceivable that this is priming the patient to start telling the reasons for her being an inpatient in the past in chronological order (008) – (Hi)story type answer. Nevertheless, the PT almost immediately interferes and specifies her question, expressing that she is interested in the present

<sup>&</sup>lt;sup>63</sup> The OpQ was presented in (26) before.

<sup>&</sup>lt;sup>64</sup> The patient probably means nyaki borda 'cervical rib'.

symptoms (009). She even brings up some examples (010-11) to demonstrate what kind of problems she is interested in.

This exceptional case shows nicely that not any kind of answer satisfies the requirements of the OpQ. In ideal situations, following from Clark and Schaefer's (1989) and Stalnaker's (2002) conceptions, the OpQ-T2 adjacency pairs should be creating common ground that is **relevant** to the current purpose of the conversation, which is to learn about the patient's current problems. However, as we have seen so far (beginning from part 4.2.3, all along up to this point), in many cases this is just not what is happening, and still, the conversations are not deficient. Let us next consider common ground as conceived by Allan (2013).

Allan (2013) also considers common ground as something that is changing during interactions. His definition of common ground, which tries to avoid the infinite recursion present in Clark and Schaefer's (1989) and Stalnaker's (2002) work, goes as follows (Allan, 2013:292):

- "Common ground for any community K of two or more people that include S and H is that:
  - (a) every member, or almost every member, of K knows or believes some fact or set of factsF; and
  - (b) a member is presumed to know or believe F by (almost) every other member of K; and
  - (c) a member of K knows that both (a) and (b) are true.

When a member of K applies knowledge of F in order to interpret P, a state of affairs or something said, s/he can presume that others in the community will also apply (or be able to apply) knowledge of F in order to interpret P. The existence of F, P, and the application of knowledge of F to interpreting P is common ground for members of the community K. Once attended to, P becomes part of F, incrementing the common ground."

Although it is not included in the definition, Allan also mentions the communicative purpose as an important aspect in the accretion of common ground. It follows from the definition that the creation of common ground is a dynamic process during communication, and for it to be working, interlocutors have to be able to put themselves into the shoes of the other interlocutor (Allan, 2013). If this was successful in the analyzed physiotherapist-patient interactions, patients would only give relevant answers to the opening questions. That is, relevant for the purpose of the conversation in this phase of the visit. But, as we have seen so far, regularly enough this is not the case – see (84) as another example.

(84)	16-3: PT16	6, third recorded patient; 16 stands for PT, 16-3 for patient
	002 16:	és akkor hallgatom Önt, hogy
		'and then I am listening to you, that'
	003	mivel érkezett most ide hozzánk.
		'with what did you arrive now here to us.'
	004 16-3:	() hát ö:: tulajdonképpen
		'() well uh:: actually'
	005	én: a <b>hatodik emeleten</b> voltam két hétig?
		'I: was on the sixth floor for two weeks?'
	006 16:	() igen,
		'() yes,'

In (84) the PT asks a general Embedded OpQ, meaning that she does not mention anything like pain, complaint, or problem. She just asks the patient "*with what*" she arrived (003, boldfaced). Maybe the question is too vague or broad in this sense, but still, she definitely uses the question word "*what*". However, the patient answers by telling, that she was on the sixth floor before (005, boldfaced).<sup>65</sup> In other words, she answers like the question word used was "*where*" and not "*what*", i.e. the semantic scopes of the question and the answer do not align. Hence, this T2 was categorized as a (Hi)story and a Pragmatically inappropriate answer. As we can see, in line 006 the PT uses backchannelling, thereby encouraging the patient to continue her story, even though she is answering a question that was never asked (compare this with excerpt (83), where PT does not let the patient go into storytelling but specifies her question instead).

In sum, the patients are not necessarily able to put themselves into the PT's shoes. In order to see that the conversation does not break down because of this apparent discrepancy and to show its interesting development, I present the subsequent interaction below.

<sup>&</sup>lt;sup>65</sup> The different departments of the hospital are on separate floors, so this utterance of the patient means that she was in the same hospital, but at another department before.

# (85) 16-3 continued

007 16-3:	de olyan rossz állapotba vagyok,
	'but I am in such a bad condition,'
008	hogy ö:: () öhhh
	'that uh:: () uhhh'
009 16:	marad [még egy kicsit.]
	'you [stay a bit more.]'
010 16-3:	[ide átvet ]tek
	[here I was taken] over'
011 16:	igen,
	'yes,'
012 16-3:	a ((név)) doktornő [átvett a] () az ötödiken.
	'the ((name)) doctor [took me over] () on the fifth ((floor)).'
013 16:	[igen, ]
	'[yes,]'
014	igen. () [.hh ]
	'yes. () [.hh]'
015 16-3:	[úgyhogy] kezeléseket kapom,
	'[so] I am getting the treatments,'
016 16:	() mivel érkezett be. mikor érkezett?
	'() with what did you arrive. when did you arrive?'
017 16-3:	() a tizenharmadikán. augusztus tizenharmadikán.
	'() on the thirteenth. August thirteen.'
018	ott voltam két hétig,
	'there I was for two weeks,'
019	pénteken () költöztem le.
	'on Friday () I moved down.'
020	(2.2) az [ötödi]kre ()
021 16.	(2.2) to the [fifth] ((floor)) ()'
021 16:	[igen.] '[yes.]'

022	és oda a hatodik emeletre <b>mivel</b> érkezett.
	'and there to the sixth floor with what did you arrive.'
023	() .h mije FÁ:J. ()
	'() .h what HU:RTS for you. ()'
024 16-3:	mindenhh.
	'everythinghh.'
025 16:	mindene?
	'everything?'
026 16-3:	igen.
	'yes.'
027 16:	n:o akkor kezdjük azzal ami a legJOBBan.
	'well then let's start with what ((hurts)) the MOST.'
028 16-3:	(1.4) am: (1.8)
	'(1.4) am: (1.8)'
029	nyolc hónapos terhes voltam
	'I was eight-month pregnant'
030	ötvenhét évvel ezelőtt. [ellök]tek a buszon? ()
	'fifty-seven years ago. [I was push]ed on the bus? ()'
031 16:	[igen, ]
	'[yes,]'
032	ellö [kték a ] buszon.
	'you were [pushed] on the bus.'

As we can see, the patient continues her talk about changing floors/departments within the hospital, which is encouraged by PT's interpretive turn (009) and her use of continuers (011, 013, 014). Only in line 016, probably as she sees that the patient is not getting to the point of disclosing concerns, does the PT try to ask about the patient's problems again. However, on the one hand, she is still quite vague about the point of the question (using the general "*with what*" expression for the second time), and on the other hand, she immediately adds a second question about the time of the arrival. This latter question derails the conversation again. As a consequence, the PT has to repeat her question for the third time in line 022, once again using the same strategy ("*with what*"), but this time she adds a specification to her question, expressing that she is interested in learning what hurts for the patient (023). Unfortunately, she still does not get a very informative (specific) answer from

the patient – at least in this context, it is not the required level of informativeness, since the patient says that everything hurts (024). In order to get closer to the problem, the PT suggests that they start discussing the most painful area (027). And here we get to another interesting point in the conversation, namely that the patient starts storytelling once again, only this time she starts by telling the events that happened fifty-seven years back (030). And once again, PT's repetition of the patient's words (032) probably validates the relevance of the (topic) of the talk and encourages the patient to continue her story – which she does.

In excerpts (84) and (85) one minute of the interaction is transcribed. After one minute, we still do not know what the problems of the patient are (we learn it later, after more than two minutes from the OpQ), even though the PT asked three times about this topic. Two conclusions could be drawn from this conversation. First, it seems like the patient wants to tell her story in her own way (and does not let herself be disturbed by PT's questions), by sharing information that is important or relevant from her point of view, thereby showing how she connects the events in her life that led her to the present situation. Second, if we observe PT's verbal actions, these strategies do not seem to be effective in eliciting the patient's problems. On the contrary, several times PT seems to support and assist the patient in her talk about side topics.

According to Allan (2013), Kecskes and Zhang (2009) (see later in part 5.2) overstate the role of egocentrism in communicative discourse. However, without considering the egocentric component, we cannot explain the variety of patients' answers given to physiotherapists' opening questions. This claim is further supported if we consider the following point. The "traditional" common ground approaches discussed so far are based on the presumption that an ideal information transfer happens during communication in a cooperative manner. So it is presumed that the interlocutors of a conversation behave in accordance with Grice's general Cooperative Principle and his more specific maxims (Grice, 1975). However, since the goal of the opening question is to solicit patients' current problems, a narrative answer telling past events, or an answer with a medical diagnosis would count as being uncooperative. In other words, it would violate Grice's Cooperative Principle – "make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged" and especially the Maxim of Quantity – "make your contribution as informative as is required (for the current purpose of the exchange)" and the Maxim of Relation – "Be relevant" (Grice, 1975:45-46). Furthermore, experimental research shows that speakers may be more

egocentric than what would be expected based on the "traditional" common ground view. In other words, speakers may judge their communication as more effective than it actually is, because they do not accurately assess what is part of their common ground with the other interlocutors (Gibbs, 2017).

Another approach that supports the claim that in many cases patients' answers do not seem to be sufficiently informative or relevant, is that of Farkas and Bruce (2010). They propose the idea that the issue of a conversation is placed on the "Table". If the "Table" is not empty, then the immediate goal of the interaction is to settle the actual issue, that is to empty the "Table". Removing items from the "Table" increases common ground and brings the conversation into a stable state. Thus, if a question is put on the Table, the conversation is directed toward the resolution of it. This can be achieved by providing a complete direct answer to the question, which is in turn confirmed by the participants. As a result of this process, the answer is added to the common ground. If we take this point of view and consider excerpts (82), (84), and (85) again, we may feel that something is off. PT's questions do not receive a direct and complete answer, and still, there seems to be no disturbance in the conversation. So how can we explain this?

Looking at the data about physiotherapist-patient interactions, especially analyzing the OpQs and T2s, and at the same time considering the Maxim of Relation, an important question arises: how can the patient know or decide what counts as relevant, or to put it differently, relevant for who? Obviously, the perspectives of the professional and the layman may differ on this point. Still, there seem to be no difficulties in the conversations, no sign of obstacles or misunderstanding. Yet, if the purpose of the conversation in this phase is to learn the problems of the patients, looking at the data, it is questionable what common ground participants think they have created based on these question-answer pairs. More precisely, if the co-constructed common ground is **relevant** for the current purpose of the problem presentation phase. Though there are conversational situations, where production and comprehension happen smoothly without common ground playing a crucial role, in the achievement of certain tasks, it does play an important role (Colston, 2008). Understanding patients' problems is one of these tasks. Missing (part of) the point may influence the whole activity following this part of the visit: from the topic(s) chosen for discussion, via the process of clinical reasoning and hence the arrival at a proper diagnosis, all the way to the determination of an effective treatment plan.

## 5.2 The socio-cognitive approach

The interesting observation that in many cases patients do not give a direct answer to physiotherapists' opening questions in my data, can be explained within the frameworks of the dynamic model of meaning (DMM) by Kecskes (2008) and the socio-cognitive approach (SCA) by Kecskes and Zhang (2009).

According to the DMM, "linguistic expressions can prompt for meanings because they represent prior encounters and experience", so "lexical units encode the contexts of their prior use" (Kecskes, 2008:386). A very similar idea is present in the earlier works of Bakhtin (1981) and Becker (1994). According to Bakhtin (1981), speakers of a language have to take the words of that language and make them their own. A word becomes the speaker's own, only when, by adapting it to their own semantic and expressive intention, they appropriate it. Prior to this moment, the word exists in other people's context, serving other people's intentions. Even in the case of a certain speaker, whatever they say has a history. So, everything said evokes past language or prior texts, which speakers reshape into the present situation, into new contexts (Becker, 1994).

Every factor, e.g. linguistic and epistemic knowledge (mental world), physical circumstances, and social relations, that influences the interpretation of certain expressions can be considered as context. Moreover, as linguistic choices are always made by the utterer and the interpreter for a specific situation of language use, context is actively generated and constructed by the participants (Verschueren, 1999). Within the DMM, on the one hand, both prior and present experiences are included in the context. On the other hand, private context (created by prior experience) encoded in language helps individuals to make sense of actual situational context, both of which play a role in meaning construction. As a result, language is never context-free. However, an actual situational context as differ. Additionally, the interlocutors may regard different elements of the actual situational context as relevant or salient (Giora, 2003), which fact also influences their meaning construction and interpretation (Kecskes, 2008). So, stability and variability both play a role and interact with each other, resulting in a dynamic meaning generation (Verschueren, 1999).

Another tenet of the DMM is that "both the meaning construction systems and the meaning prompting systems differ in languages because both are culture-specific" (Kecskes, 2008:389-390). This statement can also be adapted into institutional discourse since the physiotherapist and the patient represent two different worlds or cultures: the voice of medicine and the voice of the

lifeworld, respectively (Mishler, 1984). So, in a sense, communication between the clinician and the patient is a form of intercultural communication. Intercultural communication is characterized by interactants who have different first languages (in our case the language of the professional and the language of the laymen), communicate in a common language and represent different cultures (the culture of the medical world and the culture of the common people) (Kecskes, 2004; Kecskés, 2014). In intercultural communication, the core common ground is missing or limited and as a consequence, it has to be co-constructed by the participants in the process of communication. In other words, common ground is situationally emergent in these kinds of interactions (Kecskés, 2014). The idea of analyzing doctor-patient interactions from an intercultural perspective was also raised by Bigi (Bigi, 2016), and it is justified by the fact that HCPs and patients have different knowledge domains, which influences the conversation (Stortenbeker et al., 2020). The factors influencing meaning construction described so far, also affect the construction of common ground.

The socio-cognitive approach (Kecskes, 2010; Kecskés, 2014; Kecskes & Zhang, 2009), like the other theories presented in the previous section (5.1), also considers the construction of common ground as a dynamic process: "it is the convergence of the mental representation of shared knowledge that we activate, shared knowledge that we seek, and rapport as well as knowledge that we create in the communicative process" (Kecskes & Zhang, 2009:333-334). The advantage of the socio-cognitive approach is that it takes into consideration both the egocentric and the cooperative components of communication from the perspectives of both the speaker and the hearer. The former is led by salience and attention, while within the latter a priori and emergent intention and relevance (only related to intention) are the important factors. "Egocentrism means that interlocutors activate the most salient information to their attention in the construction (speaker) and comprehension (hearer) of communication" (Kecskes & Zhang, 2009:343). So egocentric behavior occurs because interlocutors rely more on their own knowledge instead of mutual knowledge (Kecskes, 2017). On the other hand, cooperation is about building up relevance to intentions (which guide the conversation toward its goal) in communication. It is important to realize that there is a constant interplay of intention and attention during communication and that this process contributes to the creation of emergent common ground (Kecskes & Zhang, 2009).

In sum, according to the socio-cognitive approach, individual traits, including prior experience, salience, egocentrism, and attention interact with social traits, such as actual situational experience, relevance, cooperation, and intention, during the communicative process. These factors are equally

important and they affect interlocutors' meaning construction and comprehension and they contribute to the co-construction of emergent common ground (Kecskes, 2010, 2017; Kecskes & Zhang, 2013). Although, we have to keep in mind that common ground is an assumption participants make during the course of communication (Kecskés, 2014). Excerpt (86) is a nice demonstration of this.

(86)	16-2: PT16	6, second recorded patient; 16 stands for PT, 16-2 for patient
	002 16:	No és akkor hallgatom Önt hogy
		'well and then I am listening to you that'
	003	mivel érkezett most hozzánk?
		'with what did you arrive now to us?'
	004	() mik a fő panaszai, (1.2) <sup>66</sup>
		'() what are your main complaints, (1.2)
	005 16-2:	() a: () jobb jobb lábam jobb forgóm, <sup>67</sup>
		'() the: () my right right leg my right hip,'
	006 16:	jobb f igen? (1.3)
		'right h yes? (1.3)'
	007 16-2:	és így végig így egy ilyen (szál) az egész (eddig)
		'and like this all along like this sort of a (thread) the whole (till here)'
	008 16:	kisugár[zik?]
		'radia[ting?]'
	009 16-2:	[kisugár]zik igen
		'[radia]ting yes'
	010	igen igen igen () igen ()
		'yes yes yes () yes ()'
	011 16:	hol sugárzik ki oldalt? [vagy]
		'where is it radiating? on the side? [or]'
	012 16-2:	[nem] (nem) (közep)
		'[no] (no) (midd)'

<sup>&</sup>lt;sup>66</sup> For the glossed version of the OpQ see (24).

 $<sup>^{67}</sup>$  forgó is the expression for the hip in layperson's terms in Hungarian. It refers to the type and property of the hip joint to spin while moving – forgó is the noun form of 'to spin'.

013 16:	elöl in[kább? ]
	'on the front ra[ther?]'
014 16-2:	[i elöl igen ]
	'[y on the front yes]'
015	szinte mintha a csontomat érezném igen
	'almost like I felt my bone yes'
016 16:	(1.2) .hh ez teljesen a lábujjakig?
	'(1.2) .hh this is completely till the toes?'
017	vagy meddig érzi [itt a bokájáig?]
	'or till where do you feel it [here till your ankle?]'
018 16-2:	[hát ö: (van) valamikor]
	'[well uh: (it is) sometimes]'
019	(mer) (hogy) most egy éve vagy valami (ilyen vagy)
	'(cause) (that) now since a year or something (such or)'
020	van amikor még itt is érzem [de inkább] inkább itt
	'sometimes I even feel it here [but rather] rather here'
021 16:	[ühüm, ]
	`[uh-huh,]'
022	inkább a lábszár [aljá(ig)]
	'rather till the lower leg's [bottom]'
023 16-2:	[(inkább a lábszár)] ((halkan motyog))
	'[(rather till the lower leg's)]' ((quietly mutters))
024	(aljáig igen) ((halkan motyog))
	'(bottom yes)' ((quietly mutters))
025 16:	(4.7) mióta tart ez.
	'(4.7) since when does this last.'

In excerpt (86), the PT starts with an Embedded OpQ asking about the patient's main complaints (002-4). Before we look at the answer and the following talk, it is important to emphasize that the PT does not mention pain or any other specific symptom. T2, the unit of analysis is in line 005, where the patient only mentions her right leg and right hip but does not say, what exactly the

problem is in that area. Hence, this T2 was classified as an Incomplete answer. The reason, why the transcription of a longer stretch of talk is presented here, is to show that the conversation between the PT and the patient is based on an assumed common ground. If we have a closer look at the excerpt, we can see that the exact nature of the symptom is never explicitly expressed. In line 007, the patient tells (and probably shows) that this some or other symptom is going down all along her leg. In line 008, PT offers a rather professional term for (partly) describing the phenomenon, namely that (something is) radiating, which term is accepted by the patient (009-10). After agreeing on this fact, they try to localize the symptom together, which proves to be a successful joint action (011-24). Now that they know, where the symptom is, the PT asks the first history-taking question about the duration of the symptom (025). However, she refers to the symptom by using a deictic element ez 'this', although the nature of the symptom was never clarified, elaborated, or explicitly expressed. This, i.e. whether pain, tingling, numbness, or some other symptom (e.g. weakness) is present, is a clinically important point, since it affects clinical reasoning (whether there is nerve involvement) and the subsequent physical examination. These factors could be decisive in whether or not a neurological examination is necessary. Consequently, in task-based institutional discourses, like healthcare encounters, assumed common ground should not be left assumed. It is the responsibility of HCPs to try to clarify and specify the situation as much as possible. In other words, it is their duty to make the assumptions explicit, so that the patient has a chance to negotiate, confirm or reject these assumptions – as we have seen this in the above example (lines 008-9), or as it happens in its continuation below (87).

- (87) 16-2 continued 14.4 seconds is omitted from the transcription between the end of (86) and the beginning of (87)
  - 027 16: valami mozdulat amihez köthető,
    'any movement to which it can be linked,'
    028 egyszerűen csak megfáidult? elkezdett zsib.
  - 028 *egyszerűen csak megfájdult? elkezdett zsibbadni?* 'simply it just started to hurt? started to get numb?'
  - 029 16-2: (.) *ö:: nem zsibbad hanem fáj.* '(.) uh:: it is not numb but hurts.'

In (87) the PT does not exactly clarify the symptom, i.e. she is not asking whether the patient feels pain or numbness. Rather, she makes her own two, (according to her intonation) equally valid and possible, assumptions about the nature of the problem explicit (028). Thanks to this, in line 029 the patient makes it clear that she has pain and not numbness. This, however, does not change our previous observation that the PT started history-taking before she knew exactly what the symptom was, which she inquired about. In excerpts (86)-(87), as well as in the Incomplete answers previously (4.2.3.3), we saw that common ground may be built up and shaped with the help of presuppositions, which can be viewed as proposals for information to become common ground. However, the acceptance of this proposal, i.e. its contribution to common ground, is a joint effort of the interlocutors (Kecskes & Zhang, 2013). After this short detour about assumed common ground, let us get back to the main point of this section, namely the application of the socio-cognitive approach in the present analysis of PT-patient interactions.

As mentioned before, the socio-cognitive perspective can be well adapted to the analyzed physiotherapist-patient interactions. The variety of answers, which patients give to OpQs seems to demonstrate a greater influence of individual traits during communication. We can explain the various T2 strategies by assuming that, in many cases, patients are presenting an egocentric behavior originating from their prior individual experiences and/or from the fact that their attention is focused on information that is salient for them, e.g. how events leading up to the present visit make sense to them. Let us consider the three major NON-Informative groups of answers from this perspective again. Namely,

- the (Hi)story (27%) see part 4.2.3.2 and (88)-(89) below,
- the Incomplete (23%) see part 4.2.3.3 and (90) below and

• the Imaging results and/or medical diagnosis (21%) – see part 4.2.3.4 and (91)-(92) below type answers.

Regarding the (Hi)story type answers, I present two excerpts below in order to show that the story of the patient, although for some reason or another it is important for them to tell, may not always be relevant to the present situation.

(88) 20-2: PT20, second recorded patient; 20 stands for PT, 20-2 for patient

002 20:	az lenne a kérdésem? hogy
	'my question would be? that'
003	mi a fő panasz ami miatt bekerült ide hozzánk.
	'what is the main complaint because of which you got here to us.'
004	(1.3) hol van a fájdalom helye.
	'(1.1) where is the pain's location.'
005 20-2:	() ö::hh () .hh ()
	'() uh:hh () .hh ()'
006	tulajdonképpen nekem egy erős fokú
	'actually I have a severe'
007	.h (.) csontritkulásom va:n?
	'.h (.) osteoporosis?'
008	ö (1.0) ötven éves koromtól
	'uh (1.0) since I was fifty years old'
009	() akkor () nagyon () ö fájt ez a csípőcsontom?
	'() then () very () uh hurt this the my hip bone?'
	'this hip bone of mine hurt very much back then'
010 20:	a jobb ol[dali csak?]
	'the right si[de only?]'

In the above example (88) the PT first asks about the patient's main complaint in an Embedded OpQ (002-3) and – probably because the patient does not take the floor, as it is indicated by the long silence of 1.3 seconds – she specifically asks about the location of the pain in the present tense. Considering the content of the OpQ and looking at patient's answer (005-9), we may get the feeling that the patient does not answer the question, and her answer may be seen as uncooperative at first glance. She begins by telling about her long-lasting osteoporosis, and then about her hip pain when she was 50 years old – the patient was 84 years old at the time of the recording, so we are talking about a pain that was present some 34 years ago. In sum, the patient gives a medical

diagnosis and starts to tell her story,<sup>68</sup> before we learned about her current problems. PT's question in line 010 about the side of the hip pain more than 30 years ago does not help the elicitation of current problems. On the contrary, it keeps the patient in the story, which she does continue by telling how her GP referred her to an X-ray back then. (A similar phenomenon was described in excerpt (82).) Instead of directing the conversation toward present problems, a few turns later the PT encourages the patient to tell her story. From this point on we start to learn about the patient's life: where she was living, where she was referred to for examinations in the eighties, the osteoporosis center she got into, what kind of examinations she had, etc. So, the PT does not guide the conversation towards the elicitation of relevant information, i.e. current problems. But how could we explain the initial storytelling behavior of the patient?

The main tenet of the SCA, namely that individual and social traits are equally important during the communicative process (Kecskes, 2010), provides us with the necessary perspective. Although patient's answer in lines 005-9 seems to be an uncooperative and irrelevant one – that is strictly speaking, if we only take into account the question's content and goal -, it does make sense, if we consider the **individual traits** from the patient's perspective, the **egocentric** drivers of her answer. From this point of view, the answer tells us what information is important or **salient** for the patient, how she links the events in her life, and how she makes connections between the past and the present situation. So, HCPs and patients may have differing pre-existing ideas about the origin of symptoms (Stortenbeker et al., 2020). Still, since the pressing issue of limited time is always present during healthcare visits, the PT should structure and guide the conversation effectively, so that the relevant information needed for clinical reasoning is elicited as soon as possible. This is not to say that PTs or other HCPs should not listen to patients' stories, or that they should deprive the patients of their chance to tell their problems in their own words. There are situations, where actively listening to the patient can help the PT enormously – e.g. this way PTs can learn about psychosocial factors, like fear, that may be more important to address than actual physical symptoms. However, PTs, or HCPs generally, should also be able to distinguish between situations, where patient's talk is leading the conversation into unwanted directions – with a lot of irrelevant details included, which makes seeing the clear picture even more difficult; and those situations

<sup>&</sup>lt;sup>68</sup> Although it may not be known for the patient, it should be obvious for the PT that osteoporosis in itself does not cause pain. It weakens the bones, makes them more vulnerable, so impacts that are normally resisted by healthy bones may result in fractures (most common sites are the hip, the wrist and the vertebras), which in turn cause pain.

where it is crucial to listen and explore relevant information in more detail. The challenge is obvious, and the task is not easy.

The second excerpt (89) shows a different kind of (Hi)story type answer, where the story is clinically relevant.

(89)	14-1: PT14	, first recorded patient; 14 stands for PT, 14-1 for patient
	002 14:	üdvözlöm, .h szeretném megkérdezni hogy
		'welcome, .h I would like to ask that'
	003	milyen panaszokkal érkezett
		'with what complaints did you arrive'
	004	az ((kórház neve))ba jelen pillanatban. <sup>69</sup>
		'into the ((name of the hospital)) at the moment'
	005 14-1:	() há:t tavaly február ö: elején volt
		'() we:ll last year February uh: at the beginning I had'
	006	egy gerincműt- egy gerinc:s:érvműtétem,
		'a spine sur- a spine ((disc)) hernia surgery,'
	007	() [mely: ö] nagyon nehezen gyógy-
		() [which: uh] very difficult heal-
	008 14:	[(igen,)]
		`[(yes,)]'
	009 14-1:	melyből nagyon nehezen gyógyultam fel tavaly,
		'from which I had a very hard time recovering last year,'
	010	tavaly is itt voltam már egyébként, az ((kh neve))ba?
		'last year I was also here by the way, in the ((name of the hospital))?'
	011	.hh () és: ö: ()
		'.hh () and: uh: ()'
	012	az idén is ugyanazzal a problémával jöttem vissza,
		'this year too I came back with the same problem'
	013	hogy ö: lábszárközéptől lefelé ()
		'that uh: from mid lower leg down ()'
	014	lábamujja hegyéig zsibbad. a lábam és fáj.
		'till the tip of my toe is numb. my foot and hurts.'

<sup>&</sup>lt;sup>69</sup> For the glossed version of the OpQ see (30).

In excerpt (89), the PT specially asks about complaints, with which the patient got into the hospital **at the present moment** in an Embedded OpQ (002-4). Considering this factor, the beginning of the patient's response (005-10) about last year's events is not an answer to the question asked, hence it seems uncooperative. Yet again, if we take the egocentric component of the interaction into account, we may conclude that for the patient these past events are salient and important, they are connected to the present situation – they help to understand the present situation. This latter factor may also be justified from the cooperative perspective since the previous history also helps the clinician in putting the problem in the proper context. So past events turn out to be **relevant** for the present situation as well. However, we only learn this in line 012, where the patient tells that she has come back with the same problem.

In sum, (hi)stories may be clinically important and relevant. Yet, it is interesting to observe that while PTs ask about present problems, patients answer by evoking past events – on which their **attention** is focused in the actual situation.

Next, let us consider an Incomplete answer from the socio-cognitive perspective.

#### (90) 3-3: PT3, third recorded patient; 3 stands for PT, 3-3 for patient

001 3:	n:a meséljen arról hogy <sup>70</sup>
	's:o tell me the story about'
002	miért van itt nálunk,
	'why you are here at us,'
003	mi az a fő panasz (ami miatt)
	'what is that main complaint (because of which)'
004	((zaj)) () bejött hozzánk
	'((noise)) () you came in to us'
005 3-3:	(1.1) hát a nyakam
	'(1.1) well my neck'
006 3:	() jó?
	'() good?'

<sup>&</sup>lt;sup>70</sup> The English correlate of the Hungarian verb *mesél* is 'tell a story'.

In excerpt (90), as an answer to PT's Embedded OpQ, asking about the main complaint (001-4), the patient only mentions her neck, without specifying what is wrong with it. Hence, the classification of this T2 is Incomplete. And even after PT's continuer (006), she only tries to give a medical diagnosis (007-8) – that she has some kind of syndrome. If we analyze this OpQ-T2 adjacency pair and the following talk within the frames of the SCA, we may come to the following observations.

As for the social traits of communication, the patient does try to be cooperative, it is her intention to answer PT's question about her main complaint. However, the information provided by her is not informative enough, since she only names the location of the complaint but not the nature of it. Furthermore, after PT's encouragement to continue, the patient first tries to give a medical diagnosis, instead of telling what she is experiencing. The reasons behind this strategy of the patient may be explained by considering the individual traits of the communication. There are at least two possibilities we can think of as probable ways (separately or in interaction) of the different individual traits to influence patient's talk. First, she may have prior experience in similar situations, i.e. in healthcare encounters, that a concise answer is expected from her, and that it is the HCP's role to control the (following) conversation by asking the relevant questions in order to gain the necessary knowledge. Second, her attention may be so focused on her own problem, as the most salient information for her, that she may not be able to step into the PT's vantage point. In other words, her perspective-taking may be hindered by her own problems, and so she may not consciously realize that what she feels or knows is not felt or known by the PT. Furthermore, the patient may simply not know, what information she should provide to the PT, i.e. what is relevant for the professional, or she just cannot express herself properly about what she is feeling.

The patient's attempt to provide the medical diagnosis for her problem (007-8) may also originate from **prior experience**. It is conceivable and common in healthcare that once a diagnosis is made, that label is considered relevant information – many times seemingly more important than the patient's personal experience, or the clinical picture. So, once it is known, it should be told.

This topic leads us to the last two excerpts, which demonstrate the Imaging result, medical diagnosis type of answers – also explained within the SCA framework.

(91) 1-2: PT1, second recorded patient; 1 stands for PT, 1-2 for patient

002 1:	Géza mi most a panasz hol van fájdalom <sup>71</sup>
	'Géza what is the complaint now where is pain.'
003 1-2:	(1.0) hát kettő az egyik a: () nyakam,
	'(1.0) well two one is the: () my neck,'
004	(1.0) ott van egy () korai kopás, () meg aztán egy lerakódás, 72
	'(1.0) there is an () early wear and tear, $()$ and then a deposition,'
005	aztán itt most ö voltak () m::
	'then here now uh: there were () m::'
006	() egy egy hónapja egy () egy ö: (MR) vizsgálat,
	'( ) one one month ago an () an uh: (MR) examination,'
007	ahol hát én nem értek hozzá, ()
	'where well I don't know anything about it, ()'
008	mert ott sok mindent latinul volt írva,
	'cause there was a lot written in Latin,'
009	mindenfajta kiboltosulás, meg nem tudom mi [csodák,]
	'all sorts of bulging, and I don't know what [not]'
010 1:	[ühüm ]
	'[uh-huh]'
011 1-2:	() de a: doktor úr szerint elég rossz a nyakam,
	'() but according to the doctor my neck is quite bad,'
012	na most ebből ez abból áll hogy
	'now from this this consists of'
013	reggeltől estig le van merevedve, () (má) alig bírom mozgatni,
	'from the morning till the evening it is stiff, $()$ (already) I can hardly move it,'

<sup>&</sup>lt;sup>71</sup> The OpQ was presented in (17).

<sup>&</sup>lt;sup>72</sup> In Hungarian, *kopásos megbetegedés* is a layman's term for degenerative joint disease, which is the deterioration of the joint tissue (cartilage) related to aging.

- 614 és hát borzasztóan recseg. (..) meg hát azé fáj is.
  'and well it is terribly creaking. (..) and well it hurts too.'
- 015 1: ühüm, .hh ezt az MR vizsgálati eredményt ezt majd lehozza hozzám
  'uh-huh, .hh this MR examination result could you bring this down to me

The PT starts with a Wh-OpQ (002), asking about pain and complaint in the excerpt above (91). It is important to note that the patient starts by listing the problems. He immediately tells that he has two problems, and first starts to talk about his neck. However, the longer part of his answer (004-9, 011) only includes medical diagnosis (004), opinion (011), and imaging results (009). He even excuses himself for not knowing exactly what was written on the MRI result (007-8). Only after telling all these medical results, does he start to speak about his own experience, by making sense of the professional opinions (012-14). That is, he expresses how the diagnostic findings show themselves in his life: *na most ebből ez abból áll hogy* 'now from this this consists of' (012). Nevertheless, the PT picks the MRI result as the next topic of talk (015), and only afterward does she return to the discussion of neck pain (omitted from the excerpt). And at this point, we should remember, that the patient started by telling that he had two problems. So, the PT starts to discuss the first mentioned problem without discovering or asking about the other one. The other problem (low back pain) only comes up 4,5 minutes after the OpQ, and the patient brings it up, not the PT.

That said, we should return to our main concern, which is to figure out why patients feel that it is more important to (first) talk about their medical results, before mentioning their own experienced problems (if they do that at all). My idea is that this has something to do with patients' **prior experiences** in healthcare settings. It is common in this context that – even though a diagnosis or imaging result is a simplification and reduction of the clinical picture, it may not say much about the exact symptoms present (at least in the musculoskeletal field, as it was discussed in parts 4.2.3.1 and 4.2.3.4) – once a label is given to the problem, it should be used. For example, in the above example (91), the mentioned problems, i.e. wear and tear, deposition, bulging, and "bad neck" according to the doctor (whose opinion is again based on the imaging and not on the examination of the patient), do not necessarily cause symptoms. However, the previously experienced expectations encountered by patients in the healthcare context may have a major effect on the content of their answers. Additionally, it could also be argued in these cases that – in line with the dynamic model of meaning discussed at the beginning of this chapter, the meanings of words, like

panasz "complaint" (as in (91)) or "problem" (as in (66) earlier), is enriched with a new component as a result of their prior use and context: they no longer mean (only) the experience of the patient, but instead they (also) cover the medical labels that were determined by healthcare professionals.

Another aspect to be considered is that patients' Imaging results, medical diagnosis type answers may also be influenced by the fact that these opinions show "legitimate doctorability" (Heritage & Robinson, 2006a). In other words, if a name was given to their problems by HCPs, it surely falls within the competence of healthcare experts. Furthermore, there is one more possible reason, why patients rather talk about medical diagnoses or imaging results than about their own experiences: it is the idea that seeing is equal to curing. However, pictures do not necessarily imply solutions and may have a side effect on patients' conceptualization and representation of their bodies (Dijck, 2005) – think of the patient in (91), who was told that his neck was in a bad condition.

The idea that a picture or a diagnosis implies a solution, i.e. means that the cure is obvious, is accepted even by HCPs, as the following example demonstrates.

(92) 16-1: PT16, first recorded patient; 16 stands for PT, 16-1 for patient

001 16:	és akkor hallgatom Önt hogy
	'and then I am listening to you that'
002	milyen p-panaszokkal érkezett most hozzánk?
	'with what complaints did you arrive to us now?'
003 16-1:	() hát ö: elsősorban a gerinc ö
	'() well uh: primarily the spine uh:'
004	(.) probléma gerincferdülés () kopás,
	'(.) problem scoliosis () wear and tear,'
005	() és ö: () hát térd (.) ízületi gyulladás.
	'() and uh: () well knee (.) joint inflammation.'
006 16:	(1.8) mindkettő térde? ()
	(1.8) both of your knees? $()$
007 16-1:	nem csak a jobb.
	'no only the right.'
008 16:	jobb oldali?

009 16-1: *igen* 'yes'

010 16: (1.8) .h jó. mióta állnak fent ezek a problémák.'(1.8) .h good. since when are these problems last.'

In (92) we see an Embedded OpQ from the PT and a complex answer that was classified into the categories of Incomplete and Imaging results, medical diagnosis. The former is warranted by the fact that although the patient says "spine problem", this may cover a broad area of experienced symptoms. In other words, we do not learn what the problem is with her spine. Also, note the objective style of the patient, namely that the used expressions lack any personal reference – like she was not involved in these problems (003-5). The second category is self-explanatory. In short, the patient talks about imaging results and medical opinion, but we do not gain any insight regarding her experienced problems. Again, scoliosis and wear and tear (degenerative) disease do not necessarily cause any symptoms. Nevertheless, the PT goes into history-taking and asks about the duration of the problems (without specifying which one she is talking about) (010), like it was obvious what symptoms these conditions cause for this individual patient in this certain situation. This kind of behavior of PTs/HCPs only reinforces patients' ideas that disclosing imaging and medical results is more important, relevant, or helpful than talking about their own bodily experiences since it accepts and validates this type of answer by patients. To put it differently, in this way PTs/HCPs implicitly acknowledge and legitimize the medical label, thereby contributing to the medicalization and objectification of the patients. A further and important consequence of this is that common ground will be primarily rooted in the medical context, in the medical world, ignoring the role of the lifeworld.

In summary, this section presented the different categories of patients' answers from a sociocognitive perspective. Its goal was to show that in many cases, at first glance, it seems like patients did not answer PTs' opening questions in a cooperative way. An explanatory framework was provided, utilizing the tenets of Kecskes' (2008, 2010; Kecskés, 2014) and Kecskes and Zhang's (2009, 2013) socio-cognitive approach. The main idea of this section was that sometimes – instead of pursuing and creating common ground that is **relevant** at this phase of the visit, i.e. sharing current problems – patients show more reliance on their own knowledge, and/or on what they previously experienced, and these individual traits influence what they think is important to tell, or what is on their minds. Consequently, the content of their answers may not always seem as cooperative and relevant, or sometimes it may even seem like patients were answering a different question, which was never asked. In these ways, patients can implicitly influence the relevance of the topics discussed, thereby accommodating them to better meet their own agenda (Stortenbeker et al., 2020).

As a complementary idea, it is also interesting to think about these seemingly non-cooperative cases as instances, when the patient does not identify (consciously or unconsciously) with the institutional role that was assigned to him/her by the context, that is, by the formal-medical frame of the interaction (see also 4.1.4). Furthermore, the differing expectations of the PT and the patient – originating from the medical world and the lifeworld, respectively – may also influence the interaction. This idea was raised related to the Pragmatically inappropriate answers (4.2.3.5), but it could well have an effect on other answer types as well.

Facing the above-described difficulties, the task of the PT, or HCP generally, becomes challenging, as they should be the ones guiding the conversation toward issues that are important and relevant for both parties. Nevertheless, as we have seen in this and the previous sections, many times the PTs are the ones, who keep derailing the conversation in my data. Since time is of the essence in healthcare encounters, some recommendations addressing this problem will be formulated later (6.2).

#### **6 SUMMARY**

## 6.1 Conclusion

This work analyzed the opening turns of first meetings between physiotherapists (PT) and patients. The foci of interest were PTs' OpQs, patients' answers (T2), and the qualitative and quantitative relationships between them. So, the unit of analysis was the question-answer adjacency pair, although the process of examination was based on a turn-by-turn analysis, in line with CA recommendations.

Four main categories of OpQs were identified: 1) Wh-OpQ – 30%, 2) Embedded OpQ – 54%, 3) Closed OpQ – 5%, and 4) OpQ based on medical records – 11%. Furthermore, six features of each OpQ were also examined: 1) reference to the patient – 66%, 2) reference to the institute – 59%, 3) the use of verbs – lexical verbs in 59% of OpQs, 4) the thematic role assigned to the patient – 16% agent role, 5) whether PT explicitly expressed that she was interested in current problems – 43% and 6) whether the words *panasz* 'complaint' (78%) and/or *fájdalom* 'pain' (37%) are used in some form or another (e.g. noun or adjective) to ask about patients' problems. The last aspect revealed that in 88% of the OpQs either the word *panasz* 'complaint' or the word *fájdalom* 'pain' or both appear in some form or another, emphasizing the priority of biomedical agendas and at the same time diminishing the chance of the patient to reveal psychosocial problems. A general conclusion was drawn regarding the characteristics of OpQs, namely that they evoke a formal-medical frame, with a biomedical focus. This observation is in line with previous international research, which also found a discrepancy between the theory and practice of patient-centered care (see 2.4).

The rationale behind analyzing the described variables of the OpQs was the theoretical conception that question design has an effect on the subsequent answer. More specifically, questions set topical and action agendas, thereby claiming power and control over the emerging discourse. However, the analysis of patients' answers revealed that this is not necessarily the case in PT-patient interactions. In the present data, patients showed a variety of strategies in their answers to PTs' OpQs. The patterns in the answers yielded seven categories: 1) Informative – 40%, 2) (Hi)story – 27%, 3) Incomplete – 23%, 4) Imaging results, medical diagnosis – 21%, 5) Pragmatically inappropriate – 12%, 6) Clarification – 3%, and 7) Other – 5% type of responses. A surprising result is that in only 40% of the cases does the PT get a relevant answer from the patient. Relevant in the sense that we learn about patients' problems experienced in the here-and-now.

Furthermore, statistical analysis showed that only the reference to the institute variable is significantly related to the Informative answer, although the effect is weak ( $\chi^2(1) = 6.681 \text{ p} = .010 \varphi = .298$ ). Other significant findings were the relationship between the patient's agentive thematic role and Incomplete answers ( $\chi^2(1) = 4.791 \text{ p} = .029 \varphi = .265$ ) on the one hand, and between the use of some form of the word *fájdalom* 'pain' and Incomplete answers ( $\chi^2(1) = 4.339 \text{ p} = .037 \varphi = .241$ ) on the other. Both associations are weak, however.

Following from the operationalization of T2s, the classification of patients' answers was strictly based on the talk between PT's OpQ and PT's next verbal reaction, even if that was a facilitative one, i.e. backchannelling. Hence, an argument could be made that the possible number of Informative answers was by default reduced in this way. However, checking patients' subsequent talk in cases, where PT interjected only a continuer (and T2 was a Non-Informative answer), revealed only six additional instances of Informative answers. This still only results in 48% of Informative answers in the data, thus, in less than half of the cases do patients give relevant information in their response, or put it differently, in only 48% of the cases do they directly and completely answer the opening question. Consequently, it seems that the theoretical effect attributed to questions, namely that they constrain and influence answers, may not be entirely true for every and any context. This conclusion is in line with previous research in the field, which yielded different results and interpretations about questions and questioning in medicine (see 3.3). To quote Robinson and Heritage (2005:491) "the normative organization of problem presentation (revolving around current symptoms) exists independently of the design of physicians' opening questions". Furthermore, in the field of physiotherapy, Cowell et al. (2019) also found examples in their analysis, where the features of PTs' concern-seeking questions are not necessarily consequential for the length and content of patients' answers. So how can we explain our findings?

The socio-cognitive approach (Kecskes & Zhang, 2009), which emphasizes the importance of individual traits in the communicative process, was proposed as an explanatory framework for the results of the present research. The variety of patients' answers makes sense if we consider the role that egocentrism plays in human interactions. This means that as a result of prior experience, the most salient information is activated and brought up to the needed attentional level, and this influences the production and comprehension of interlocutors in a certain actual situational context (Kecskes, 2010; Kecskés, 2014). In the medical context, this means the following. First, patients' answers are influenced by their previous experiences in healthcare encounters. As a result, they

have an idea of what is expected from them, regarding both the content and the style of the answer, and behave accordingly. Second, their attention may be focused on information that is the most salient and important for themselves, and may not be able to consider the other party's, namely the PT's knowledge domain. Accordingly, patients' answers will include aspects of their predicament that make sense to them, which may not be in alignment with the clinical requirements, i.e. with the clinically relevant information. Hence, it may seem like PTs and patients were struggling over what matters in the given situation within the medical context (Heritage, 2010).

Nevertheless, the goal of the problem presentation phase, which is initiated by PT's OpQ, is to build common ground regarding the patient's problem(s), and the topic(s) for further discussion. So, no matter what kind of answer the patient provides, PT should be able to guide the conversation toward the elicitation of clinically relevant information. We could see in the presented excerpts, however, that in many cases PTs are the ones, who derail or redirect the conversation. This PTfocused attitude of controlling communication is again not an exceptional result in the field (see 2.4). Nevertheless, as a consequence of the practitioner-centered communication, it is doubtful, whether the relevant common ground has been co-constructed among the interlocutors, or what common ground the participants think they have built. Is it rooted in the medical context or the patient's lifeworld? Is there a passage or interaction between the two? Is there a discussion about it in order to reveal the common denominator? Based on the data, it rather seems that both participants, i.e. the PT and the patient, are pursuing their own agendas. Even considering the facts that "common ground [...] is almost never really common" and that communicative success "is always extremely relative and can never be taken for granted" (Verschueren, 1999:77,61), we should keep in mind that medical encounters are institutional, task-based interactions. This factor has a crucial effect on the course of the communication as well as on the researcher, who analyses them. So, looking at OpQ-T2 sequences in physiotherapist-patient interactions, two kinds of successes are to be differentiated. One is literally the success of communication, i.e. that there is a continuous flow of conversation between the participants without major disturbances. The other one is a task-based communicative success, which means that the information-seeking question about patients' current concerns receives a relevant answer, one that actually contains patients' current problem(s). In the latter sense, most of the OpQ-T2 sequences in my data fail to achieve this task.

## 6.2 **Recommendations and practical implications**

One of the main observations is that, as we have seen, in more than half of the cases, PTs' OpQs did not get a direct answer from the patients. Thus, based on the results of the present research, clear recommendations cannot be formulated about the design of a good or effective OpQ. Although much can be learned about patients as they tell their stories, being time efficient is also an important and pressing matter for all healthcare professionals (HCP). The recommendations of the Calgary-Cambridge Guides (2.2, Figure 1), in this case especially the one about providing structure, may help HCPs in becoming more effective during their consultations. Providing structure means that HCPs make the organization of the visit overt and use signposting when transitioning from one section to another. In the case of the OpQs, PTs could describe the overall structure of the visit in advance, furthermore, they could tell the patient what information they need, before the actual OpQ is asked. It is also important to emphasize that, although certain information is absolutely necessary to be known, the patient will have the chance to add anything that s/he feels important to tell or to ask questions. This structuring of the interview and agreeing on the "rules" in advance may help the elicitation of information to become more effective.

A second observation is that in the analyzed excerpts (and in the data generally) it was found that many times it is PT's reaction to the patient's answer that redirects the course of the conversation. These moves by PTs, without the intention of being exhaustive, include the following practices. First, prematurely focusing on the details of a certain (sub)topic mentioned by the patient, thereby unilaterally choosing the topic for discussion – this is what we may call "cherry-picking". Second, reacting to physical symptoms, when their effects on life were also disclosed, or third, asking about/accepting imaging results rather than pursuing the patient's problems. Fourth, and in line with previous research, regular interruptions, and fifth, (clinically) irrelevant questions – at least at that point of the conversation.

As a solution to these problems, and in accordance with the patient-centered communication model, it would be beneficial, if PTs resisted the temptation to immediately go into the clinical details of a symptom or to otherwise redirect the conversation. Instead, first, they should try to actively listen to patients freely telling their stories. This attitude has two advantages. On the one hand, a more patient-centered attitude could be implemented in clinical practice, in line with international recommendations. On the other hand, a more complete picture could be gained about the patient, which has important implications for the diagnosis, treatment plan, and shared decision

making as well. Furthermore, soliciting patients' additional problems by screening and "concernseeking questions" early in the visit can help PTs in gaining a full picture of patients' agenda (Robinson et al., 2016), which in turn contributes to the co-construction of common ground.

Obviously, human communication, especially if laypeople are concerned, does not necessarily follow the ideal structure of institutional interaction. However, being perfectly aware of the structure of the visit, HCPs would be able to guide the conversation efficiently and flexibly and may avoid derailing it even more from the winding paths that it takes alone.

Beyond the research findings of the dissertation, the data can be implemented in practice as well. The transcripts analyzed in the present work could be utilized in the education of physiotherapists since previous studies show that the transcripts and results of medical discourse research can be valuable sources in improving the education of professional communication (Tsai, 2015; Tsai et al., 2014). Furthermore, research shows that (even a short) health communication intervention can significantly improve clinicians' problem presentation solicit as well as patients' opportunities to present their problems – without this having a significant effect on the length of this phase (Jenkins et al., 2015). It is also an important finding that interpersonal interventions positively influence health outcomes (e.g. physical function, adherence) and patient experience (e.g. satisfaction, involvement, comprehension) without significantly increasing visit time (Haverfield et al., 2020).

Hence, as a final remark, the results of this work may enrich both the linguistic-pragmatic understanding of naturally occurring healthcare interactions and the education of physiotherapistpatient communication. The analysis of physiotherapists' opening questions, the patterns of patients' answers, and the relationship between these adjacency pairs revealed that the creation of common ground in task-based institutional interactions may not be as ideal as the traditional concepts of common ground suggest. Rather, patients' answers reflect their egocentric attitude, showing what matters to them, and what information they think is important to share. However, the transcripts of the analyzed interactions could be utilized as valuable sources in the teaching of healthcare communication skills, especially regarding the structuring of the problem presentation phase of the visit.

## 6.3 Future considerations

There are three research topics recommended in this section that could complement and further the results of the present work. First, it would be interesting to analyze the OpQs, especially the OpQ-Informative versus OpQ-Non-informative answer relations utilizing a completely inductive method. In this way, the approach to the analysis would be turned around. This means that we would be looking for analogies or similarities between OpQs that precede the Informative versus Non-Informative answers, respectively. This method may explore features of the OpQs that were not thought of or that were not examined in the present work and which may influence the elicitation of an Informative answer.<sup>73</sup>

Another research topic to be considered is to analyze the whole problem presentation phase of the visit and examine when and how patients' current problems surface during the interaction – that is if the patient's answer (T2) was considered to be Non-Informative.

The third topic is related to the creation of common ground as well, but it could examine the later phases of the visit, focusing on physiotherapists' information provision strategies.

Overall, linguistic research could enhance the understanding of physiotherapist-patient interactions, furthermore, the findings could be implemented in healthcare communication education.

<sup>&</sup>lt;sup>73</sup> I would like to thank to the anonymous reviewer of my paper (Udvardi, in press) for this idea.

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# APPENDIX

Code	Informative	(Hi)story	Incomplete	Imag/Med	Pragmatically inappropriate	Clarification	Other
1-1	1	0	0	0	0	0	0
1-2	0	0	1	1	0	0	0
1-3	1	0	0	1	0	0	0
1-4	0	1	1	1	0	0	0
2-1	1	1	0	0	0	0	0
2-2	0	0	0	0	1	0	0
2-3	1	0	0	0	0	0	0
3-1	0	0	0	1	0	0	0
3-2	1	1	0	0	0	0	0
3-3	0	0	1	0	0	0	0
4-1	0	0	1	1	0	0	0
4-2	0	0	1	0	0	0	0
5-1	0	1	1	0	0	0	0
5-2	1	0	0	0	0	0	0
5-3	0	1	0	0	0	0	0
5-4	1	0	0	0	0	0	0
6-1	1	0	0	1	0	0	0
6-2	0	1	0	0	0	0	0
6-3	1	1	0	0	0	0	0
7-1	1	0	0	0	0	0	0
7-2	na	na	na	na	na	na	na
7-3	1	0	0	1	0	0	0
7-4	0	1	0	0	0	0	0
7-5	0	1	0	0	0	0 0	0
8-1 8-2	0	0	1	0	0		0
8-2 8-3	na	na	na	na	na	na	na
8-3 8-4	na 0	na 0	na 0	na 1	na 0	na 0	na 0
8-4 8-5	0	0	0	1	0	0	0
8-5 9-1	1	0	0	0	0	0	0
9-2	0	0	1	0	0	0	0
9-3	0	0	1	0	0	0	0
9-4	0	1	1	0	0	0	0
9-5	1	0	0	0	0	0	0
10-1	0	1	1	0	0	0	0
10-2	1	0	0	0	0	0	0
10-3	0	0	0	0	0	0	1
10-4	0	0	0	0	1	0	0
10-5	0	0	0	0	0	0	1
11-1	0	1	0	1	0	0	0

Appendix: Classification of patients' answers

Code	Informative	(Hi)story	Incomplete	Imag/Med	Pragmatically inappropriate	Clarification	Other
11-2	1	0	0	0	0	0	0
11-3	0	0	1	0	0	0	0
11-4	0	1	0	0	0	0	0
11-5	1	0	0	0	0	0	0
12-1	1	0	0	0	0	0	0
12-2	0	0	1	0	0	0	0
12-3	1	0	0	0	0	0	0
13-1	1	0	0	0	0	0	0
13-2	0	0	0	0	1	0	0
13-3	0	0	0	0	1	0	0
14-1	0	1	0	0	0	0	0
14-2	0	1	0	1	0	0	0
14-3	0	0	0	0	0	1	0
15-1	0	0	0	0	1	0	0
15-2	1	0	0	0	0	0	0
15-3	1	0	0	0	0	0	0
16-1	0	0	1	1	0	0	0
16-2	0	0	1	0	0	0	0
16-3	0	1	0	0	1	0	0
17-1	0	0	1	0	0	0	0
17-2	0	0	0	1	1	0	0
17-3	0	0	1	0	0	0	0
17-4	1	0	0	0	0	0	0
18-1	0	1	0	0	1	0	0
18-2	1	0	0	0	0	0	0
18-3	0	0	0	0	0	0	1
19-1	1	1	0	1	0	0	0
19-2	0	1	0	0	0	0	0
19-3	0	0	0	0	0	0	1
20-1	1	0	0	1	0	0	0
20-2	0	1	0	1	0	0	0
20-3	1	0	0	0	0	0	0
21-1	1	0	0	0	0	0	0
21-2	0	0	0	0	0	1	0
21-3	0	0	0	0	1	0	0
22-1	1	0	0	0	0	0	0
22-2		na n			na		na
22-3	0	0	0	1	0	0	0
22-4	1	0	0	0	0	0	0

Appendix: Classification of patients' answers continued