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CAN I SAY "BUBUBU"?
DISCOURSE CONTEXT AND MEANING CONSTRUCTION[*]

A b s t r a c t. This paper investigates how discourse context and dialogue goals within a discourse influence interpretation. Discourse context can be seen as a maze of lexical meanings surrounded by multitude of contextual information (infons) (cf. Wittgenstein 1958/1986, 8). This analysis tries to unweave these infons as it is a practical application of the dynamic semantic model of ℜeALIS (Alberti and Kleiber 2014). Making an interview with a patient who had surgery before, we were interested in her information management during her dialogues with her doctors. The starting point of our analysis was that when a problem occurs, we set goals to solve it. A discourse starts when the goal is set, and stops when it is fulfilled. A discourse usually has segments. Discourse coherence depends on whether these segments are relevant or not. In our interview the segments were (consecutive) dialogues forming one coherent discourse for the interviewee. Our results indicate that ℜeALIS is capable of capturing the pieces of information concerning the interlocutors' mental states (beliefs, desires, intentions) along which coherence is created in a discourse process. We found that in a discourse, a new discourse step would follow only when — as closing one dialogue — the discourse agent's mental state has changed. This mental state is also influenced by infons that are present in the discourse context, but are not parts of the dialogues. With this type of analysis we aim to show a line through which pragmatics can be accessible from a ℜeALIStic point of view.

Key words: discourse context; mental states; ℜeALIS; pragmatics; dynamic semantics.

Can I say "bububu"? and mean "If it doesn't rain I shall go for a walk"? (Wittgenstein 1958/1986, 38). In this question — beside the philosophical problem which arises when language goes on holiday (and we have to figure

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out what "to mean" means)—we can recognize the scope of pragmatics. Our hypothesis was that discourse context can be seen as "outskirts of the regular" meaning construction, where the interpreter has a partly bound, but particular way to vituperate the lexical and contextual information.

The paper is organized as follows. Firstly, as a background, we discuss the narrative as a mental structure along with its role in the cognitive system, and briefly describe doctor–patient communication. Then we introduce the object of our inquiry: the dialogues of a special discourse. This is followed by the pragma semantic analysis of the dialogues in the representational dynamic interpretation system $\Re$eALIS: we illustrate how the narrative can be handled in a formal manner focusing on the process of decision making. And finally, we draw some conclusions.

THE BACKGROUND

As we see, when a problem occurs in our life, we set goals to solve it. A discourse starts when the goal is set, and ends when it is fulfilled. A discourse can have—and usually do have—segments. Discourse coherence depends on whether discourse segments are relevant or not. In our interview (D_0) the segments were (consecutive) dialogues (D_{1-4}) forming one coherent discourse (D) for the interviewee.

"[…] 'thought' and 'problem solving' are […] everything that perception is not: slow, deep, global rather than local […] characterized by computations in which information flows every which way." (Fodor 1985, 4). In this sense thinking is itself discussing, a discourse: forming a question is recognizing a problem, while answering them is solving them. This is how our knowledge broadens.

But there are situations when it is not that simple. The contextual complexity of the doctor–patient communication is comprised of physical, institutional, social and cultural rules, norms and roles. Even the participants are parts of and at the same time parties to these contexture of structural and substantive bounds (Kárpáti 2015). In the process of a discourse (organization) social relations and (intellectual) world fragments can occur together (Pléh 1999): in spite of the socio-cultural determination we all consider ourselves as individuals insisting on our interpretational freedom. Even in doctor–patient encounters we follow a rather bumpy road supposing a common dialogue goal (Kecskes 2013) in accordance with the supposed degree

of cooperation (Macagno and Bigi 2017). At the end of the road we *re*interpret the dialogue itself in the light the discourse goal shreds on it: we evaluate the physical and even the more general context, the other participant (participants), our own role; the possible consequences (inferences), the decisions may occur, the steps may follow, etc.

And we do it in our own way. No matter how vicious the circle is, we only see the world and ourselves in it in the mirror of narratives. Szilas (2015) narrative hypothesis states that we should add a supplement to Bruner's (1991) words "we organize our experience and our memory of human happenings mainly in the form of narrative," saying that "narrative is a logic for structuring the experience in general, not just story-like inputs" (Szilas 2015, 134). What follows from that is that only those information, events exist for us that become narrative objects, and so they are linked as memory units by narrative relations (i.e., time, causality, location, agency and objects, composition, abstraction) (Leon 2016, 23–24).

In our case the interpretation of the whole discourse is done by producing a narrative by the patient. Following the thoughts above, we can see that the narrative fulfills a double cognitive role in parallel: for one the patient interprets the dialogues in the light of her own articulated (or not even articulated) discourse goal, but as second, the narrative links together the fulfilled or not fulfilled dialogue goals. And so it changes the mental states, capacities, dispositions of the agent of the narrative (Herman 2013). Although the functions of these mental states also change dynamically: they just as serve as a basis for narrative experience as are based on these narrative experiences themselves.

Doctor–patient communication is a special situation: it is asymmetrical and mostly defined by the doctor (Bigi 2016). In a discourse though, it is equally, indeed, in many cases much more important what a patient understands, what kind of believes, desires, intentions she has. This is why we chose to outline the patient's mental discourse representation model based on a given narrative. Stating, or at least hypothesizing that the narrative unfolds the levels of its own architecture "both from the point of view of structure (discourse, content) and the cognitive effect (focus, salience, inference)" (Leon 2016, 20).

We had two questions in our inquiries. First we wanted to know whether it is possible to describe and if it is, by what means what a patient understands from a medical encounter: what kind of contribution she thinks the doctor has to the discourse goal of recovery (cf. Kárpáti and Kleiber 2017).

During the interview (D_0) as the interviewee formed her narrative, the dialogues of her recovery (D_{1-4}) produced a discourse (D), showing that the process is a coherent unit for her. Our hypothesis was that on the dialogue level coherence is an important but not essential feature. We found that a discourse is organized into a coherent unit along the discourse goal, i.e., it is produced by the relevance of its segments, the dialogues.

Secondly, we tried to describe the dynamism of adjustment in the patient's mental state: how it is influenced and by what means during the dialogues and in the broader context of the discourse. We took as a starting point that we all strive for the most effective information processing, and for maximizing the relevance of that processed information (Sperber and Wilson, 1995/1986, p. 49). From this aspect two lines occurred in the discourse examined. The first one, which was the patient's most intensive goal (life theme), was health preservation or restoration (recovery). It means that she was trying to reach this goal at the lowest "investment cost" (minimizing the acts that have to be done, minimal physical impact, minimal financial expenses, minimal intellectual expenses) and so she was looking for the most effective intervention. The second line was that of the doctors involved in the dialogues. The same goals can be articulated for the patient and the doctors, although the sequence and emphasis (strategy and relevance) can only be hypothesized (since we know about them only from the patient's narrative). The phases of deliberation between the two lines — the one that the patient's planned, whished, and the other that the doctor advised — turn up in the dialogue goals and in their completion during the discourse. They occur in accordance with the changes of the mental states by which they cause the next step in the process.

Based on these above, we assumed that the changes in the patient's mental state are important factors in discourse organization: utterances and other components of the communicational situation (e.g. narrative seduction or narrative banalization; Bruner 1991, 9) result — based on their cognitive contribution — in contextual implications which have cognitive effects (Wilson and Carston 2007). We consider as change when the prevailing believes are confirmed or modified. But it is also a change when the participants' dialogue goals collide: the patient learns (hears, experiences, implies, etc.) a new information incompatible with her present BDI-state. As we see, pattern matching (adjustment) can happen within a dialogue (convince, confirm, refute). If the collision is still unsolved after the dialogue was closed, then it can trigger an "outside" adjustment. Mental state changes are continuously

running; that is why background states (intentions) can (re)occur at any time. These changes serve as basis for (and start) the next discourse step whenever the adjustment was finished in the patient's cognitive structure. The discourse ends when the discourse goal is fulfilled. Although this "end" means that the narrative became incorporated into the cognitive structure.

For the analysis, we applied the ℜeALIS framework which is a formal discourse representation theory using dynamic semantic means and cognitive notions for capturing pragmatic phenomena (Alberti, Kleiber, and Kárpáti 2017). So far, the analyses produced in ℜeALIS have been utterance based; this research is the first attempt to describe a nearly 1 hour long interview. Our goal was to show — using the ℜeALIS formalism — how the information within and outside the dialogues influence the patient's mental states. And vice versa, what kind of role the mental state change plays in the discourse organization. As a result we outlined a formal analysis of the mental changes occurred in this special discourse.

The interview was recorded and typed. Later we asked the patient to summarize the dialogues — this is the macrostructure we used below.

THE DIALOGUES IN THE DISCOURSE

The analysis was aimed at a special narrative: the (ex)patient was asked to remember the medical communicational situations she was participated during her illness. We consider the sequence of events as one discourse from GE's perspective (D): a problem solving from recognizing the problem (illness) through finding the proper method (minimal invasive treatment) till the solution (recovery). GE was an active part of this process, controlling, sometimes even defining the situations. She tried to find the most information and interpreting them, and then her decision was made deliberately — she was not willing to accept her partner's paternalistic behavior (Bigi 2016). During the process the dialogues had different characteristics. She was in contact with four different doctors. First she visited the clinic, where the doctor was appointed accidentally. He delivered the bad news: he said that she has to be operated, she needs a hip prosthesis. Then she turned to her friend (2nd doctor), and they discussed the situation, and she recommended a specialist. The specialist (3rd doctor) confirmed the 1st doctor's diagnosis, although the process has been diverted: he got personal instead of being professional (the patient's job, her specialization in literature; how would she return the favor

for consulting her in his spare time, etc.). In the last part of this encounter his professional remarks were correct, but he did not have the urge to convince her about his preferred procedure (invasive treatment), instead he became personal again, making remarks on women (why are they so vain?). He scheduled her operation without any deliberation (or question at all).

After a careful and prudent research — by even taking a nurse's advice — the patient turned to the 4th doctor. Their discussion can be divided into three parts: a preliminary consultation, an encounter in the hospital (following the operation), and a follow-up conversation (the latter two are not relevant for the present investigation). The preliminary consultation was professionally satisfying. The patient was confirmed both about the person and the technique — she felt safe about her recovery. And so, the discourse closed for her.

We were not able to record the dialogues themselves. The patient summed them up for us during an interview where our starting question was: "What happened to you?" In her talk she highlighted the events that had special importance for her (narrative focus) and commented them according to her interpretation (narrative inference). And so she gave a report about the discourse process, i.e., the turning points of her decisions in her dialogues, where the dialogues (the discourse steps) should be evaluated in accordance with the discourse goal.

As we see, the discourse is defined by her narrative: the relevant elements are conceived by it and become narrative objects, e.g., narrowly mentioned dialogues (with passers-by, friends, a secretary). Mental states are on one hand, the results of the previous steps, and on the other hand, serve as starting points to the following one. We found that these changes in the mental structure are important on her way to solve her problems. But they can be buried by another change. When the present mental state meets with an information that cannot fit into the patient's cognitive structure, we call it a collision. Collision does not cause an immediate change. Adjustment can take some time: the patient gathers new information, she meets new people in new surroundings, rethinks and deliberates what she knew. For example, GE was scared of the operation, but then she accepted that she needs a treatment. Which is not a new knowledge in the cognitive structure, but the wind of admittance has blown away the ash of fear from a former information.

THE MACRO STATEMENTS AND THEIR EVALUATION

1. DIALOGUE

The patient's summary of the doctor's contribution:

> *You have advanced hip abrasion, it is only a question of time, when it should be operated. You can try alternative therapy, like physiotherapy, but according to our experiences, it will not help; the complaints can alleviate only for those patients, who lose a lot of weight.*

The patient's summary of her own emotional reaction:

> *I've been shocked. It was a bolt from the blue. The diagnosis was exact.*

Evaluation:
  i. mental change: shocked, does not believe it;
 ii. the dialogue: coherent, relevant;
iii. the behavior of the participants: informational and interpretative dialogue;
iv. the situation: it is not a decision-making situation; only providing information.

2. DIALOGUE

The patient's summary of the doctor's contribution:

> *You probably need a hip prosthesis. Go to Doctor 3, he is the best. Although he applies the conservative technique, I would go to him, because it is the safest way. The background of that hospital is the best, I would not go to a smaller clinic (hygiene, etc.). My husband and I will get you an (privileged) appointment.*

The patient's summary of her own emotional reaction:

> *I had become uncertain, but I did not believe her and did some further research.*

Evaluation:
  i. mental change: becomes uncertain;
 ii. the dialogue: coherent, relevant;

    iii. the behavior of the participants: informational, with interpretative and deliberative segments;
    iv. the situation: preparation of the decision-making.

3. DIALOGUE

The patient's summary of the doctor's contribution:

> *Well, I didn't like literature classes.*

The patient's summary of her own emotional reaction:
I embarrassingly do not answer, knowing that it would enhance further pointless reactions.
    Evaluation:
     i. mental change: stupefaction
     ii. the dialogue: coherent, not relevant
    iii. the behavior of the participants: uninterpretable in the discourse frame
    iv. the situation: killing time (in the last ten minutes):

The patient's summary of the doctor's contribution:

> *So, show me the x-ray! You need an operation, that is for sure, but you have other problems, too: your spine. And it will not get better, the operation will not help on that. Well, forget the minimal invasive, that is only a matter of esthetics and fashion.*

The patient's summary of her own emotional reaction:

> *Stupefaction, I understood that he equivocates, and manipulates me.*

    Evaluation:
     i. mental change: did not convince her;
     ii. the dialogue: coherent, relevant and not relevant;
    iii. the behavior of the participants: informational, partly paternalistic;
    iv. the situation: preparation of the decision-making (there is a conflict: the doctor made a decision)

4.1. DIALOGUE

The patient's summary of the doctor's contribution:

> *You need an operation, the operation means this and that, I usually get x amount of money for the minimal invasive procedure.*

The patient's summary of her own emotional reaction

> *I was convinced, I can go to him, because he is competent, only his communication is monotonous.*

Evaluation:
  i. mental change: convinced;
 ii. the dialogue: coherent, relevant;
iii. the behavior of the participants: informational, with interpretative and
 iv. deliberative segments;
  v. the situation: decision-making.

THE NARRATIVE IN ℜeALIS

For the pragmasemantic analysis, we applied the ℜeALIS framework (Alberti 2011) which combines dynamic semantic means and cognitive notions for capturing pragmatic phenomena. We start this section by briefly introducing the system, then we move on to the analysis.

ℜeALIS IN A NUTSHELL

ℜeALIS, 'Reciprocal And Lifelong Interpretation System,' can be characterized as a discourse-representation-based (Kamp, Genabith, and Reyle 2011; Asher and Lascarides 2003) formal pragmasemantic theory. *Reciprocal* means that the interlocutors model each other reciprocally: the speaker, for instance, when utters a sentence, takes the listener's assumed knowledge into consideration, including their assumed knowledge on the speaker's knowledge. *Lifelong* means that a huge DRS (discourse representation structure) is built from birth, containing the interpreter's information states from moment to moment. Nothing is deleted, a piece of information can only

"fade away". In order to account for pragmatic phenomena, we need to represent not only the outside world but also the interlocutors' internal worlds (mental states): their beliefs (B), desires (D) and intentions (I).

The innovative feature of $\Re$eALIS is that representations are regarded as mental states (the interpreters represent discourses in their minds), and these mind-representations are taken to be part of the world model (Alberti and Kleiber 2014). In this way, a homogeneous structure is used for representing the discourse, the world, and the human mind. With this approach, the same pattern-matching mechanism can be applied for extensional and intensional evaluation which makes it possible to check the sincerity of a promise, for instance, the same way as the truth value of a sentence.

We will not go into details about the formalism of $\Re$eALIS, we only discuss the relevant fragments necessary to understand the analysis. The interlocutors' mental states are represented in labelled DRS-like structures called *wordlets* (we will also refer to them simply as "boxes"). Each worldlet encodes one meaning component, such as a desire (D) for something (eventuality e), or — because of their recursive feature which enables embedding — a belief (B) about the intentions (I) of someone toward something (e).The label also includes the intensity of the modality (Max, great, etc.), the host of the worldlet (mostly Addresser: AR, or Addressee: ae), its time parameter (τ), and polarity value (+, –, 0). Every parameter can have multiple values which allows underspecification in the representations. For instance, the polarity value may be"+–," representing 'non-neutral'. (Note that these "boxes" are only visual aids for mathematically defined structures.

DISCOURSE D

In the present research, our aim was to model — based on the interview — the relevant part of the patient's mind, namely the segment about her recovery. It can be regarded as a coherent discourse (D) which starts when she notices the problem (illness) and ends when the problem is solved (she is cured) (Figure 1). The discourse is presented from her point of view, therefore the patient (GE) is the Addresser (AR) throughout D, and the doctors she consults with will be the addressees (ae) of the particular dialogues.
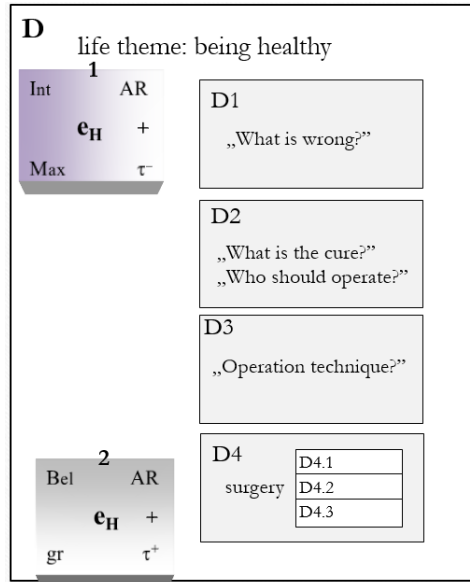
Figure 1: Discourse D: goal (recovery) and structure (dialogues)

After noticing the problem, the relevant life theme, 'being healthy,' becomes salient in the patient's mind, and the intention is formed to become healthy again which is the main goal throughout the discourse. The first box (1) represents this segment: at the beginning of D (τ^-), the Addresser's (AR=GE) maximal ('Max') intention ('Int') is to reach the state of e_H: 'healthy(τ, GE)'. The second box (2) represents the patient's belief ('Bel' with 'great' intensity) at time τ^+ that she has reached her goal (e_H) — putting an end to the discourse.

As for its structure, D can be divided into four parts corresponding to the dialogues with the four doctors she consulted (with 3 meetings in the case of the 4th doctor): D_1, D_2, D_3, D_4: ($D_{4.1}$, $D_{4.2}$, $D_{4.3}$).During a previous analysis (Kárpáti and Kleiber 2017), we have constructed the representations of these six dialogues in a way the patient (presumably) represented them in her mind. In the present study, we aim at finding out how the patient's mental state changes effect the decisions she makes during her recovery. Since there is no decision to make after $D_{4.1}$, the last two dialogues ($D_{4.2}$, $D_{4.3}$) are not relevant for our present investigation.

THE DIALOGUES

As our main aim here is to uncover the motivation behind the patient's decisions regarding her recovery process, we will concentrate on her actual goals in the key moments, i.e., after the four dialogues. Therefore, we will provide the (assumed) representation of discourse D at times τ^{D1+}, τ^{D2+}, τ^{D3+}, and τ^{D4+}. After a dialogue, some kind of mental state change — collision or confirmation — takes place which moves the discourse forward: in case of a collision, the actual goal remains unchanged, while in case of a confirmation, the patient can move on to the next step of the recovery process. Firstly, let us discuss the goals concerning the first dialogue (D_1). Figure 2. shows GE's mental state at time τ^{D1+}, that is, after D_1.
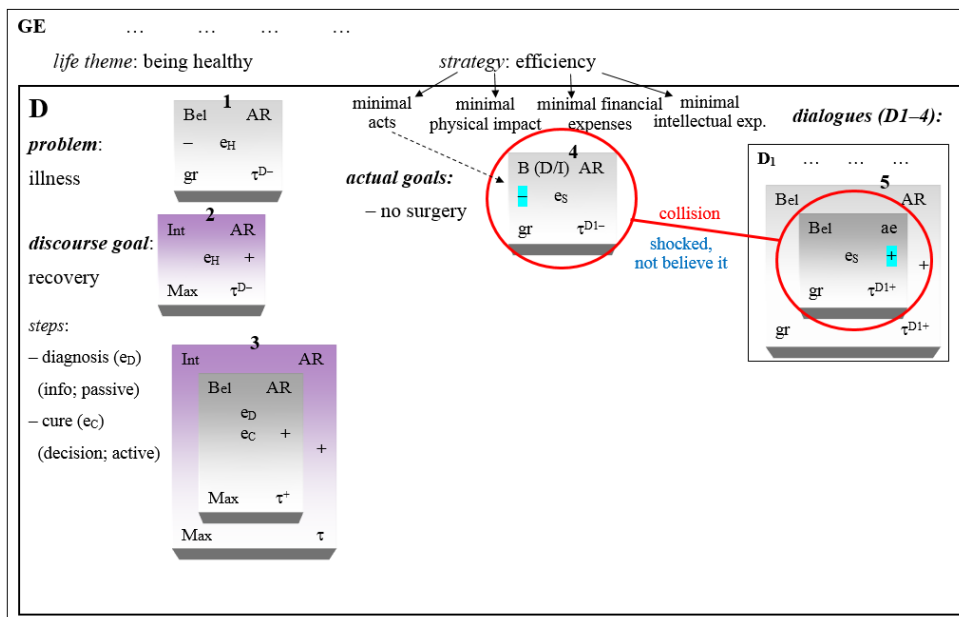

Figure 2: Actual goals by reference to the strategy (efficiency),
in connection with the first dialogue (D_1).

The outer box represents the part of GE's mind which is outside of D. Only the two relevant segments are displayed, the ones which are actualized in D: the life theme 'being healthy', and the strategy 'efficiency'.

On the left side of D's representation, you can see the problem, detecting illness (1): at the beginning of D (τ^{D-}), the Addresser (AR=GE) believes (Bel) with great (gr) intensity that she is not healthy: e_H does not hold

(polarity parameter: −). Therefore, she sets a goal to get well again (2): forms an intention (Int) to be healthy (e_H+). The necessary steps to recover are also activated beginning with information gathering (3): what is the diagnosis (e_D), and what can be the cure (e_C). GE's intention (Int) at this time (τ) is to know (Max Bel) these pieces of information at a later time τ^+.

In the middle, we can see which segments of the strategy ('efficiency') are activated: minimal acts, minimal physical impact, minimal financial expenses, and minimal intellectual expenses which means (in this scenario) that following the doctors' recommendations (no confrontation, no speculation, no search for the optimal solution). Below that, GE's actual goals can be seen.

Finally, on the right side of the box, you can see the relevant parts of the representations of the dialogues (for detailed description see Kárpáti and Kleiber 2017). The patient's actual goals follow from the strategy and her mental state changes after a particular dialogue.

Before the first consultation (at time τ^{D1-}), GE's actual goal — in harmony with her belief (4) — is to get well without much intervention (no surgery: e_S-). The addressee (ae) of the first dialogue (D_1) is an unknown (random) doctor who recommends surgery. Box (5) shows the key segment of D_1: AR's assumption (at τ^{D1+}) that ae believes that surgery is necessary (e_S+). Hence, a collision occurs after D_1, which can be captured by the mismatch in polarity parameters: in the case of eventuality e_S ('GE needs surgery') the patient's (AR) previous belief is negative, while the doctor's (ae) supposed belief is positive. The patient's mental change can be characterized as 'shocked, does not believe it' (cf. the subsection of the macro statements). And as a result, she does not follow the doctor's advice, she does not act on her illness.

However, as time passes, her pain increases, and she eventually realizes that the doctor was probably right. So she decides on another medical consultation: D_2 (Figure 3).

So, before the second dialogue (at τ^{D2-}) GE reconsiders her previous belief/ intention: she accepts that surgery is needed (6: e_S+). As she moves on to a new actual goal, her previous (τ^{D1-}) belief/desire/intention (4) fades away. It is crucial that past mental states do not vanish entirely (in $\mathfrak{Re}$ALIS nothing is deleted from the representation), the addresser could come back to them any time. Anti-representationalist theories (possible world semantics) have difficulties with this phenomenon. (For detailed comparison of the two approaches see Alberti and Kleiber (2012).) So the actual goal now (at τ^{D2-}) is surgery; however, as another component of the strategy ('efficiency') is
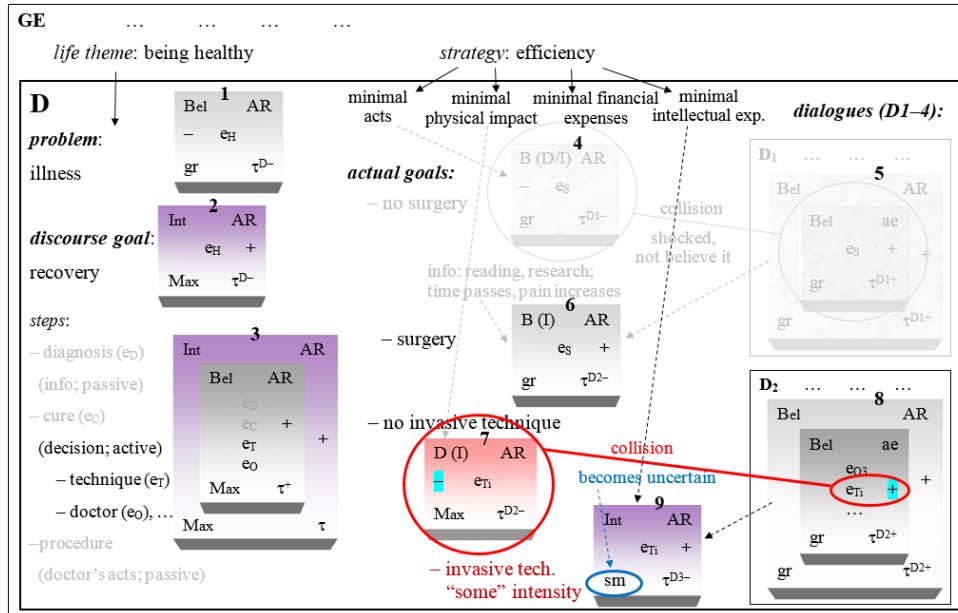
Figure 3: Actual goals by reference to the strategy,
in connection with the second dialogue (D_2).

activated, 'minimal physical impact', a negative desire/intention is formed for the invasive technique (e_{Ti}) (7).The question is which doctor should carry out the procedure (e_O in box 3). In order to find out, she visits the second doctor (O_2), her friend, whose words she trusts (second dialogue, D_2).

After the dialogue, another collision occurs, since the addressee recommends O_3, a surgeon who performs invasive procedures (8). The collision can be formally captured by the mismatch of polarity parameters regarding the surgical technique: e_{Ti} is '−' in the worldlet of AR's desire/intention, but '+' in the world let of ae's (supposed) beliefs. As for GE's mental change, she 'becomes uncertain'. Nevertheless, she follows the doctor's advice, on the one hand because she trusts her, and on the other hand because this is the cheapest solution ('minimal intellectual expenses'). Thus, her actual goal after D_2 is to see O_3 and submit to the invasive technique (9). However, the intensity of her intention is rather low ('some'), since her desire remains negative for this method. The representation of the third dialogue (D_3) can be seen in Figure 4.
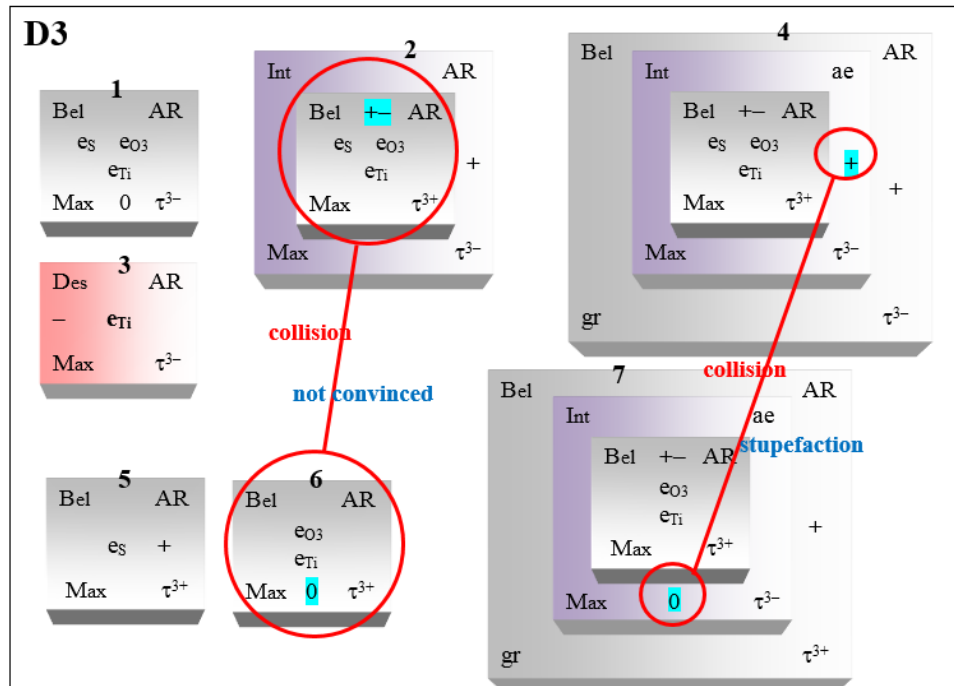
Figure 4: The representation of the third dialogue (D₃):
goals, expectations, mental state changes.

The patient was given a priority appointment with the third doctor (O₃) (with her friend's help, O₂') — which had substantial impact on the nature of the consultation. In the dialogue the goal is twofold (box 2): on the one hand, she needs confirmation that surgery is needed (e_S) and O₃ should perform the procedure (e_O3); on the other hand, she requires some convincing facts about the invasive technique (e_Ti), considering her strong desire against it (3). She expects that the doctor's goal is (more or less) the same (4).

At the end of D₃, however, she realizes that O₃ did not feel the need to convince her about anything, he just wanted to pass the time, and figure out how she could repay him for the extra time — his goal was not the same as hers (7). In this way, AR's expectations are not met; a collision occurs, since intentions do not match (polarities: +/0). GE's mental state change is 'stupefaction'. In the last ten minutes of D₃, the patient openly asks for the doctor's professional opinion, during which he confirms that surgery is needed (5), but still does not advocate the invasive technique, he does not convince the patient (6). So the dialogue goal is not fulfilled, another col-

lision occurs (belief: +–/0). As a result, GE rejects O_2's suggestion after all, and returns to her own way which is the minimal invasive technique (Figure 5).
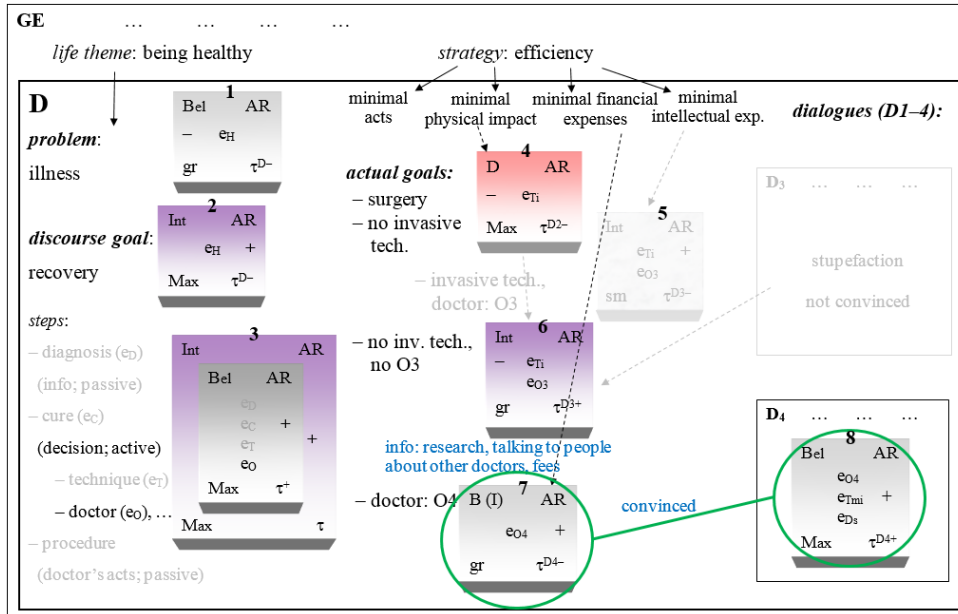

Figure 5: Actual goals by reference to the strategy,
in connection with the fourth dialogue (D4).

So after D_3, the previous (τ^{D3-}) small-intensity intention fades away (5), GE is now (τ^{D3+}) considerably sure that she does not want O_3 and the invasive technique (6). The left side of Figure 5. shows that the active step in the discourse is (still) finding a suitable doctor to carry out the surgery (e_O). She begins information gathering by herself in order to find a surgeon who performs minimal invasive operation. She discovers two options. The decision she makes is again based on the strategy ('efficiency'): she chooses the doctor who requires less financial expenses, O_4. Her actual goal at time τ^{D4-} is to have a consultation with him (D_4) and confirm her great-intensity belief that O_4 is the right doctor (7).

After the appointment (τ^{D4+}) she knows for sure (Bel Max) that O_4 will be her surgeon (e_{O4}) for the minimal invasive operation (e_{Tmi}), and she also learns some details about the procedure (e_{Ds}) (8). The dialogue goal is fulfilled, the mental change is 'convinced.' She can move on to the next step in the recovery process which is the surgery itself. Since the patient plays

a passive role in what follows, this is the end of the decision-making (deliberative) phase.

WHAT THE ANALYSIS DEMONSTRATED

As a summary of this section, we highlight the key points which the analysis demonstrated. (1) In order to fulfill the discourse goal (recovery), certain (partially predefined) steps are to be followed (diagnosis, cure, etc.) — through dialogues with doctors. (2) If there is a collision between the previous BDI and the currently acquired information segment — which appears in the mismatch of polarity parameters in $\Re$eALIS (e.g. +/0) —, then the actual goal remains unchanged (same step, e.g. finding the right doctor), hence the patient cannot move on. (3) If a confirming, reassuring information segment arrives (from a dialogue (D_4) or elsewhere) — which appears in the match of polarity parameters in $\Re$eALIS (usually with different intensity) —, then the patient can move on to the next step, task, problem. (4) So with deliberative behavior a constant speculation can be observed between her own way (beliefs, desires, intentions) and the doctors' suggestions.

CONCLUSIONS

We have discussed a special discourse representational method within the framework of $\Re$eALIS. Our starting point was that in real life, when a problem occurs, we wish to solve it and so designate a goal. In our mental representation (narrative) a discourse starts when a goal is set and ends when it is fulfilled. Dialogues are — in structural sense — components of the discourse. More importantly, dialogues are — in cognitive sense — special space-time-participants constellations in the deliberation process, although they are just as information segments as anything else that becoming a narrative object can enter the cognitive system.

Mental state changes are continuously running in the cognitive system; that is why background states (intentions) can (re)occur — become salient — in the narrative at any time. The collision of goals, believes, desires, intentions causes mental state change. Pattern matching (adjustment) can happen within a dialogue (convince, confirm, refute). Our knowledge (presupposition, etc.) about our partner's mental states are also bound by contextual features. If the collision is still unsolved after the dialogue was closed, then

it can trigger an "outside" adjustment. The next step in problem solving takes place whenever the adjustment was finished in the patient's cognitive structure.

The discourse process ends when the discourse goal is fulfilled, i.e., the problem is solved. Although this "end" means that the narrative became incorporated into the cognitive structure: it can be a script for a new discourse.

It seems that on one hand, ℜeALIS is able to capture the infons of mental states that become incorporated into the cognitive system during a discourse. On the other hand — emphasizing the dynamic aspect — it is able to show that a discourse is not only represented in our minds, but it is represented by (in the frame) of a narrative. Which means that it can build on, it can be reorganized, deleted, re-structured — just as a narrative can be.

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CZY MOGĘ POWIEDZIEĆ "BUBUBU"?
KONTEKST DYSKURSU A KONSTRUKCJA ZNACZENIA

S t r e s z c z e n i e

Artykuł analizuje sposób, w jaki kontekst dyskursu oraz cele dialogu wpływają na interpretację. Kontekst dyskursu można określić jako labirynt znaczeń leksykalnych otoczonych splotem informacji kontekstowych (infonów) (cf. Wittgenstein 1958/1986, 8). Niniejsze studium ma na celu „rozplecenie" tych infonów, czemu w praktyce służy dynamiczny model semantyczny ℜeALIS (Alberti and Kleiber 2014). Przeprowadzając wywiad z osobą po operacji chirurgicznej, byłyśmy zainteresowane sposobem, w jaki pacjentka operuje informacjami w rozmowach z lekarzami. Punktem wyjścia dla naszej analizy jest założenie, że wystąpienie problemu pociąga za sobą wyznaczenie celów nakierowanych na jego rozwiązanie. Dyskurs rozpoczyna się wraz z wyznaczeniem celu, a kończy się, gdy cel jest osiągnięty. Dyskurs zazwyczaj składa się z segmentów. Spójność dyskursu zależy od wagi owych segmentów. W przypadku naszego wywiadu segmentami były (kolejne) dialogi składające się na jeden dyskurs, który pacjentka postrzegała jako koherentny. Według wyników naszych badań ℜeALIS pozwala na wyszczególnienie informacji odnoszących się do stanów umysłowych (przekonania, pragnienia, intencje) odpowiedzialnych za spójność dyskursu. Odkryłyśmy, że dyskurs wejdzie w nowy etap dopiero w momencie, gdy —

po zakończeniu jednego dialogu — nastąpi zmiana w stanie umysłowym agenta. Ów stan umysłowy jest również zależny od infonów obecnych w kontekście dyskursu, ale niestanowiących części dialogu. Nasza analiza ma na celu pokazanie sposobu, w jaki $\Re$eALIS udostępnia zasoby pragmatyczne uczestnikom dyskursu.

Przekład abstraktu Kamil Rusiłowicz

Słowa kluczowe: kontekst dyskursu; stany umysłowe; $\Re$eALIS; pragmatyka; semantyka dynamiczna.