Treating dialogues with customers as sources of knowledge

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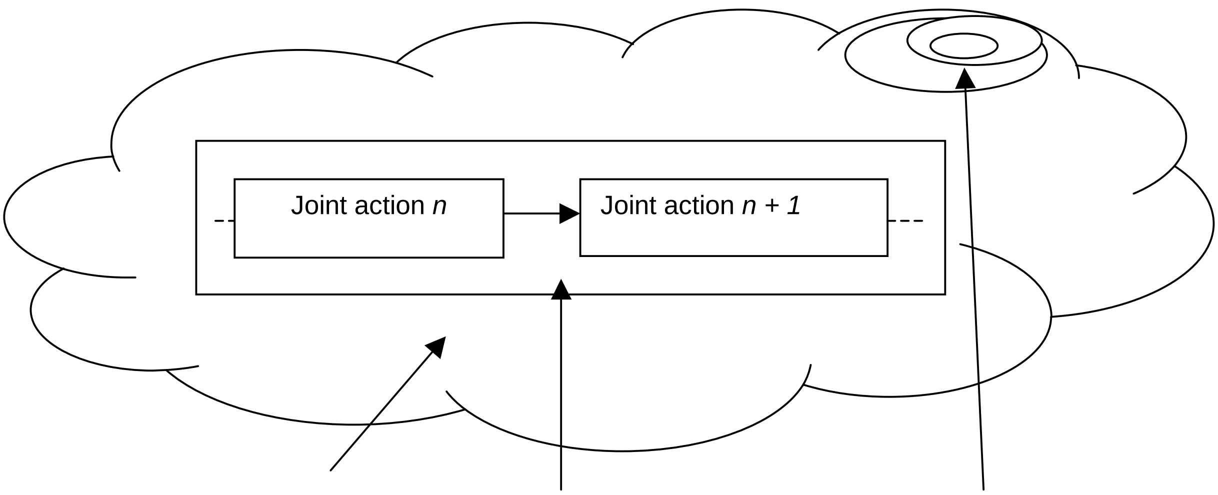
Introduction

One of the goals of Customer Relationship Management (CRM) is to understand the incentives of a customer in order to get to know the customer better. Dialogues with customers might prove to be a powerful source in obtaining this goal. The result of this larger body of knowledge can be products or services that are more tailored to the needs of that particular customer. This can result in a longer lasting relationship with the customer where both parties are more satisfied.

Dialogues can be defined as a form of interaction where both speaker and audience together –in their alternating roles as speaker and as audience– construct the course of the dialogue as it goes along (cf. Clark, 1996). It is the *joint action* of both parties that determines what utterance will come next. When a customer is contacting an organisation he or she is initiating a *joint project*. Clark (ibid.) defines a joint project as: “One participant projects a joint action for all the participants to complete, and the others take it up and complete it.” (p. 219). For example, the customer wants some information about a new product and the representative of the organisation takes that up with the promise to send the customer a brochure about the product. When the representative has sent the brochure the joint project is completed.

In this research we are particularly interested in the *larger purpose* (Clark, ibid.) of a speaker with a (series of) dialogue(s). Organisations would like to know why the customer chose to contact the organisation. This knowledge gives them the opportunity to be more able to address the (latent) needs of that specific customer. The larger purpose might help in determining what this (latent) need consists of. As Clark (Ibid.) states: “Speakers intend their larger purpose to be inferred from their utterances as construed in the current situation.” (Clark, ibid., p. 302). This larger purpose is therefore part of the *common ground* (Clark, ibid.) of the speaker and the audience. Common ground is defined as the “great mass of knowledge, beliefs, and suppositions [participants in a dialogue] believe they share.” (Clark, ibid., p. 12). When the organisation and the customer are having a dialogue they are adding to their common ground. If this dialogue occurs for the first time the participants can still have a common ground. It will then consist of unconfirmed expectations, stereotypes, prejudices, and suppositions. Dialogues that follow at a later time give both participants the opportunity to add to their common ground. We expect that the larger purpose will be more easily detectable for the participants in a dialogue with the accumulation of common ground. That is, a sequence of dialogue will present us with more possibilities to infer the larger purpose since the participants in the dialogue have had more opportunity to accumulate their common ground. A picture might illustrate the introduced terms.



Common ground   Larger purpose

Joint Project

Figure 1. Introduced terms

The straight lines in the picture indicate that a joint action and joint project can be more directly inferred from the records of human dialogues than the larger purpose or common ground.
In the following sections we will elaborate on the introduced terms.

Joint actions

What exactly is meant by a joint action? Joint actions are activities that need input, e.g., acts or words, from two or more participants to achieve completion. In a sense a joint action is therefore created from the individual actions of the participants in a certain social setting. A joint action, however, is not the same as the addition of the two (or more) individual actions. The whole is greater than the sum of its parts. Moreover, the actions of the participants are tailor-made to each other at the time of acting to respond to changes that come up during the process of joint action. A joint action is comprised of cognitive *and* social aspects. For example, the utterance itself comes from the cognitive domain. However, the specific wording of the utterance is co-determined by the social setting in which it takes place.

To accomplish joint action the participants have to coordinate these actions to come to a result that they can both agree with. When studying coordination processes, the originator of the coordination process, the participant(s) of the coordination process, as well as the coordination process as a whole need to be studied. Only then we can gain insight into the coordination process in order to be able to describe or explain it. It is therefore important to include the social dimension into the analysis of language use since the utterance during a joint action is the result of the interaction of influences from the cognitive *and* the social domain.

An example of a joint action might elucidate the terms. A asks B: “Do you want to help me with this heavy bag?” B recognises the request, looks at A and at the bag A is pointing to and nods and smiles in the affirmative. With that B has communicated that he or she has recognised the request and accepts it and is assessing the weight of the bag as a preparation to lift it. With the smile B has communicated that he or she wants to reassure A that carrying the bag is not a problem for him or her and to confirm the status of the relationship of A and B. To complete this joint action B had to respond in this fashion, otherwise the aim of the joint action would not have been fulfilled and A would have to look for someone else to help him or her out.

Joint projects

Joint actions in sequence are what are termed *joint projects*. What exactly is meant by a joint project? Clark (Ibid.) defines it as: “One participant projects a joint action for all the participants to complete, and the others take it up and complete it.” (p. 219). This definition is directly applicable to the phenomenon that is the subject of this study: the dialogue between a customer and a representative from an organisation. The reason for this direct applicability lies herein that the customer contacts the organisation intending to change a certain parameter or aspect in the relationship with the organisation or to inquire about certain extensions, additions or subtractions to the product portfolio. Alternatively, when the representative from the organisation contacts the customer his or her goal is to change a certain parameter in the relationship with the customer or to add or subtract something from the product portfolio of the customer.

Rephrasing the definition of Clark, one could say that the customer or the representative of the organisation is projecting a joint action –the request for a change in a parameter of the relationship or product portfolio– for all the participants (i.e., customer or representative) to complete. The others, in this case the representative or the customer, take it up and complete it. For example, a customer is informing the organisation a change of address via an e-mail message. The organisation takes it up by the promise to change the address and, ideally, informing the customer that the change in the address has been made in their administration. As such, for this specific case the joint action is completed. If they do not take up and complete the joint project, then the joint project has failed or is not complete. This might lead to a repeat of the proposed joint project or to a change in the relationship between the organisation and the customer, e.g., a discontinuation of the relationship.

Common ground

So, a specific dialogue or number of dialogues can be defined as a joint project. While conversing, the speaker and the audience build on their *common ground*. The common ground of the two (or more) parties in a dialogue is the "great mass of knowledge, beliefs, and suppositions they believe they share." (Ibid., p. 12). When you get to know a customer better as an organisation you build on the common ground that is established in previous occasions or in previous utterances in the current dialogue. The customer or the representative from the organisation might give some indications during the current dialogue that hint at what he or she thinks is shared.

This common ground of the customer can consist of

- information that the customer got from other customers of the same organisation,
- from adverts or other commercial communications,
- from previous encounters with representatives from the organisation,
- et cetera.

The common ground of the representative of the organisation can consist of

- geographic data about the area where the customer lives,
- from previous encounters with the customer,
- from the payment behaviour of the customer,
- et cetera.

It is in the interest of the organisation, and in a way of the customer as well, to ensure that this believed common ground matches that of the other party as much as possible. Stakes are higher that they might come to an agreement more easily then. Over time, the accuracy of (the contents of) the common ground might get better. The participants have more opportunity to compare and adapt (the contents of) the common ground in order to come to an agreement more easily and complete the joint project satisfactorily. Or as Clark puts it: "…contributors and respondents work together to reach the mutual belief that the [utterances] have been understood well enough for current purposes." (Ibid., p. 252).

Larger purpose

One of the indications that a participant might give during a dialogue that we are especially interested in, in the current research is the *larger purpose* the participant has with this specific dialogue or sequence of dialogues. As Clark puts it: "Speakers intend their larger purpose to be inferred from their utterances as construed in the current situation." (Ibid., p. 302). This larger purpose hints then at the need that underlies the reason why the customer contacted the specific organisation. Many organisations are very interested in this larger latent need of (potential) customers. It is believed to be relatively stable and provides therefore a good basis to form a relationship. Products and services can be more easily adapted to the "real" need of a customer if one knows this larger latent need. Many initiatives are taken in organisations to find out what this larger need consists of. For example, an internal research report from 1998 from a Dutch financial services company compares the image (i.e., stable personality traits over time) of certain customer groups with the image what a brand of the organisation is designed for and categorises their product portfolio according to these customer groups. The image that they refer to her as being stable personality traits over time might contain information that hint at the specific larger purpose a particular customer has. For another example of a larger purpose see the next section.

Hierarchy of purposes
Clark reports a study (Ibid., p. 302) in which the participants infer the larger purpose of a dialogue through a hierarchy of purposes. The higher in the hierarchy (i.e. the more general) a purpose is, the more informative it is about the actual need of the speaker that has led to the larger purpose, hinted at during the dialogue, of the entire dialogue. An example of such a general level larger purpose is mentioned by Clark (Ibid., p. 302) where some participants in a dialogue in the aforementioned study seem to infer that if a customer phones a restaurant asking whether the restaurant accepts credit cards that the speaker might would like to have dinner in that very restaurant. “Armed with these inferences, [one of the participants] should try to short-circuit for some of [the other participant’s] questions, and they did.” (Ibid., p. 302). In the majority of cases in the study the audience succeeded in determining what the larger purpose was behind the utterance in the dialogue. This study illustrates that inferring the larger purpose is possible and matches to a large extent the customer’s need or larger purpose. We will elaborate on this in the sections below.

Larger purpose is part of common ground
The larger purpose hints then at the need that lies behind the reason why the customer contacted the organisation. The larger purpose is also part of the common ground of the customer and the representative. This is because the speaker intends their larger purpose to be inferred from the utterance. Therefore, the speaker believes that the larger purpose is shared with the audience. And, the audience believes that their understanding of the larger purpose is shared with the speaker. Organisations need to make sure that this discrepancy is as minute as possible, otherwise they might end up disappointing the (potential) customer.

Intentions expressed via language
The focus of attention in a lot of language research is on the intentions or purposes of the speaker at the moment of the utterance (cf. Di Eugenio, Thomason, Jordan, & Moore, 2000). In the context of this research we are more interested in the larger purpose, or longer term intentions, of the customer with a dialogue since we assume that this larger purpose of a customer –in a number of dialogue(s)– provides a good indication of the reason behind the fact that he or she chose to contact the organisation.

Towards a research approach
We are interested here in how people use language to accomplish their intentions to fulfil their larger purpose with this (series of) dialogues with the audience. The intentions are here the intentions expressed via the formulated utterance. The larger purpose of the entire (series of) dialogues is a type of higher-order or longer term intention. It follows from Clark’s theory (Ibid.) that we can derive the larger purpose of speakers from indications during utterances in a (series of) dialogue(s).

In our particular case the participants in the dialogue are a customer and a representative of the organisation. When studying a sequence of dialogues this representative is not necessarily always the same person. Therefore we need to be quite explicit in what this larger purpose is to make sure that the dialogue does not have to be restarted from scratch to explain the state of affairs thus far when another representative of the organisation *takes up* the (ongoing) dialogue with the customer. The larger purpose might help in being up to date about the current state of the dialogue with a specific participant. Furthermore, it might assist in determining why the customer chose to contact the organisation (again). This is an important “need to know” of organisations for both reasons mentioned.

The, hopefully repeated, contacts of the customer with the organisation leads to an accumulation of the common ground of the customer and the organisation. The organisation is not a passive respondent in the dialogue with its customers (e.g., answering queries about products or registering changes of address), but should see the conversation in light of its own larger purpose of better serving the customer. Since we look at dialogues between customers and organisations some elements of a common ground may be presupposed that are not always common in other conversations. For instance, the organisation might have succeeded in developing and providing one or more products that match certain (perceived) needs of customers. Therefore, the question becomes how we can find or come to a common intention of the organisation and the customer that serves the larger purposes of both parties.

We need therefore to develop a way to check whether the larger purpose the organisation believes is shared with the audience matches the larger purpose of that audience. Or, alternatively, we need to check that the larger purpose the organisation believes the customer has matches the “actual” larger purpose of the customer. Armed with this knowledge we can e.g. adapt a product to the customer’s changing needs, which fulfils the intention of the customer to get the product that best matches his or her wishes and fulfils the intention of the organisation to retain the customer (or sell more products).

In sum, we want to look for indications in the utterances of customers and representatives of the organisation during (series of) dialogues that hint at larger purposes that they believe are common ground. Moreover, since we need to be as explicit as possible about this larger purpose in view of sharing this information with other representatives of the organisation, we also want to find out whether it is possible to guide the conversation in such a way that as much of these larger purposes becomes known without being obtrusive during the conversation. The answering of this last question also assists in determining the reliability of the model that follows from the first question.

Research approach

In order to achieve the aforementioned goals we will analyse records of the dialogues between customers and representatives of the organisation. These records are in the form of e-mail messages, transcripts of telephone calls and mutations in databases as a result of requests from customers or from marketing campaign organisers from the organisation.

Since these records come in textual form and we are looking for indications of larger purposes of dialogue participants we chose to use a qualitative research method[1] to analyse the material. The research method of choice for us is protocol analysis (Ericsson & Simon, 1993) because of the rigorous theoretical support and the large body of research where this method has been successfully applied.

In protocol analysis a number of phases can be defined.

- In the first phase the researcher creates an initial model based on task analysis. Task analysis consists in this case of spelling out all the supposed reasons why a customer might contact the organisation. This initial model is then tested against a random sample of dialogues from the body of dialogues that we have collected. This test is done by more than one judge. A reliability measure of inter-judge agreement will be computed between the judges to check the reliability of the model as an instrument of analysis and an adequate model of the intentions expressed via the dialogue at hand.

- This tested model will then be used as the basis for the next phase of research where we will use instances of dialogues between the same customer-representative of the organisation pair. This is the phase where we will look at the sequence of dialogues to check for the accumulation of common ground and indications in the utterances expressed during the dialogue that hint at the larger purposes of both the customer and the representative of the organisation. It follows from the theory of Clark (Ibid.) that by looking at more than one instance of a dialogue that the accumulation of common ground can be determined (cf. Clark, ibid., p. 39) *and*, secondly, that the indications of larger purposes can be more easily inferred (cf. Clark, ibid., p. 39, also discourse transitions aid in this determination, ibid., p. 344).

- When we succeed in finding an adequate analysis of the larger purposes of participants in one or more dialogue(s), we can compare dialogues to determine if and how we might be able to guide conversations in order to reveal as much of the larger purpose of dialogue participants as possible without becoming too obtrusive. To do this we might compare dialogues where we succeed in

[1] There are more reasons for this choice, but they fall outside the scope of this extended abstract

determining the larger purpose with dialogues with the ones where we did not succeed in this. The difference might give us some indication how we can approach this issue. Next, this will also assist in testing the reliability of the model that resulted from the previous phases. That is, when the model proves to be successful in assisting with guiding the dialogue and thus increasing the chance that we will be able to successfully infer the larger purpose from indications during a dialogue then we have an additional test of the reliability of the model. Lastly, the body of knowledge that stems from this analysis can then also be shared more easily between individuals in the organisation.

- A fourth phase of this research will consist of implementing the explicated analysis models into computational models to serve as an additional check for the adequacy and reliability of the models.

This last phase is also in the interest of larger organisations since the amount of dialogues that are performed there at a daily rate are so high that they need computational means to look for indications of larger purposes expressed during dialogues since it is not achievable to do this at a per dialogue basis. If time permits this will result in the development of a computer program that supports representatives from the organisation while they are in (a number of) dialogue(s) with a customer.

References

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