

Towards an integrated model of service encounters

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1. Introduction

Service encounters are everyday social contacts, in which certain goods and/or services are provided. Despite booming Internet and shopping channels most of these encounters are still carried out face-to-face as they have always been, e.g. at department stores, travel agencies and restaurants. These institutionalised interactions are relatively clearly structured, and they generally have a fixed role allocation, involving (at least) a customer and a server. Service encounters are usually realised in a complex interplay of cognitive processes, dyadic verbal components, non-verbal elements and physical actions; and it has been stressed that these aspects should be considered in discourse analysis (cf. Ehlich 1993: 124).

Looking at various existing models of service interactions one gains the impression that most of them have certain deficiencies. For example, the diverse phase models, which are particularly popular in practical sales guides, but also suggested in some linguistic publications, mostly represent a rather unrealistic picture. Besides postulating fixed sequences of phases, they often focus on the server's perspective, neglecting the interactive character of the event. Another disadvantage of most of the approaches examined is that they do not capture the actual realisation of the interaction. This is why this study strives for an integrated model, which allows for a comprehensive representation of service encounters (cf. Bös forth.).

It is obvious that such a model cannot be developed without authentic data. Therefore, a corpus of 100 service encounters recorded in London bookstores was established as an essential prerequisite. As it is one of the main concerns to go beyond the standard focus on the verbal elements, the scope of this study was extended to include selected facial expressions, gestures and physical actions documented during the recordings at the actual point of sale as well.

Based on a close analysis of this material and the existing representations, an explanatory model was created, which is shown (in extracts) and described in section 2. In section 3, the proposed form of representation is applied to a sample interaction from the corpus, illustrating that the model cannot only cope with idealised service encounters, but is also capable of reflecting the characteristics of specific service interactions.

2. The integrated model

An integrated model of service encounters has to meet various requirements. One of the key objectives is to develop a general pattern which can serve as the basis for the representation of individual service encounters. This general form of the integrated model should provide all possible components of service encounters in bookstores as well as different alternatives of their realisation. It should be flexible enough to be adapted to specific service encounters. The model should include both the customer's and the server's perspectives, whose contributions are considered as equally important for the progress of the interaction. Besides, it should capture communicative as well as physical and cognitive aspects and illustrate their interplay. For the diverse activities involved in service encounters, a unified representation appears necessary to allow for a better comparability of the interactions.

Global structure of service encounters

One of the first steps in the development of the integrated model was the investigation of the global structure of service encounters in bookstores. The corpus analysis has produced a set of 10 possible structural elements, which, in the individual interactions, occur in various combinations. A full list of these components is given in Fig. 1.

- RUN UP (RU)
- ESTABLISHING CONTACT (EC)
- GREETING (GR)
- SERVICE BID (SB)
- NEED PRESENTATION (NP)
- SERVICE (SE)
- PURCHASE DECISION (PD)
- PURCHASE REALISATION (PR)
- FAREWELL (FA)
- BREAKING UP CONTACT (BC)

Fig. 1 Global structural elements of service encounters

Although the RUN UP precedes the actual service encounter and is, in this respect, not part of the interaction proper, it is included in the model, because it essentially influences the progress of the interaction. In shops with self-service like bookstores, customers may browse, select products, and even make their purchase decision in the RUN UP, before they turn to the salesperson for help, for further information or simply to pay for the goods chosen.

The remaining global structural elements differ in their degrees of obligation. The only obligatory elements observed in the corpus are ESTABLISHING CONTACT, BREAKING UP CONTACT and the NEED PRESENTATION. More specifically, ESTABLISHING and BREAKING UP CONTACT are physical elements which are necessary to create the face-to-face situation of the interaction. In the investigated data it is usually the customer who approaches or leaves the counter, where the server is placed. The most central obligatory element is the NEED PRESENTATION. Since it is the primary goal of every service encounter to satisfy certain customers' needs, inevitably, these needs have to be expressed at some point in the interaction either verbally or non-verbally.

SERVICE, PURCHASE DECISION and PURCHASE REALISATION are considered to be obligatory alternatives in the course of the service interaction. As the corpus analysis has proved, a considerable number of service encounters does not involve the transfer of goods but the supply of information or other services, which are provided in the SERVICE element. This means, a service encounter does not necessarily include a (positive or negative) PURCHASE DECISION of the customer. This cognitive process is only realised when certain products are involved. If there is a PURCHASE DECISION, and it is positive, the actual exchange of money and goods takes place in the PURCHASE REALISATION, which usually consists of a routine sequence of typical physical actions and may be supplemented by certain communicative acts.

Components like GREETING, SERVICE BID and FAREWELL are communicative elements which are truly optional, i.e. all of them can be omitted, and the data show that often they are indeed not realised. The element GREETING occurs in only 56% and the SERVICE BID even less often, namely in 14% of the service encounters in the corpus; the FAREWELL is documented more frequently in 85% of the cases.

Local structure of service encounters – primitive acts

Another aim of the integrated model is to provide a detailed, but comparable description of the various activities performed during service encounters. Searching for a way to represent the communicative, physical and mental components of the interactions, the concept of primitive acts, first suggested by Schank (1972), proves helpful. As their application in the cognitive script model by Schank/Abelson (1977) has shown, primitive acts allow for a unified representation of actions. Therefore, they can help to clarify certain regularities of service encounters independently from their individual realisation. For its use in the integrated model, the set of primitive actions was adjusted and now comprises the acts summarised in Fig. 2. Apart from modifying the meaning of acts such as MTRANS (which, in Schank's classification, includes the transfer of information between persons), and placing more emphasis on the communicative function of SPEAK, the new act GEST was introduced to account for the non-verbal aspects of communication. Additionally, the primitive act ATTEND is used to document the non-verbal aspect gaze ('ATTEND eyes'). Another new act is OPERATE, which allows for the description of certain activities such as writing, using the telephone, computer etc.

PHYSICAL	PTRANS	Change of the local position of a person or object; or transfer of an abstract relationship, e.g. possession
	GRASP	Gripping of an object by a person
	INGEST	Taking in of an object by a person
	EXPEL	Expulsion of an object from the body of a person into the physical world
	OPERATE	Performing of an action involving the use of a certain instrument, e.g. 'OPERATE computer', 'OPERATE pen'
MENTAL	MTRANS	Transfer of information within a person
	MBUILD	Construction of new information based on old information
	ATTEND	Focussing of a sense organ to a certain stimulus
COMMUNICATIVE	SPEAK	Transfer of information between persons by producing sounds
	GEST	Transfer of information between persons by moving parts of the body or the face, e.g. 'GEST lips ↑' (smile)

Fig. 2 Modified set of primitive acts (based on Schank/Abelson 1977: 12ff)

This limited set of primitive acts presupposes a basic level of description. It does not include the instrumental acts which are necessary to perform the suggested acts. For example, GRASP could be split up into various subordinate acts, e.g. moving the arm, bending the finger etc. On the other hand, the act GRASP itself can operate as an instrumental act, e.g. in the realisation of a PTRANS of an object. However, in this function it is, like all other instrumental acts, neglected in the model proposed. In this way, the modified set tries to avoid 'endless conceptualisations' which have been criticised as one of the major problems of Schank's concept (cf. Drescher/Hornstein 1976: 368).

Graphic representation of service encounters

Fig. 3 shows an extract from the general form of the integrated model illustrating the graphic arrangement which is used to capture the structure of service encounters. It demonstrates how the two perspectives of the major participants and various alternatives in the realisation of a service interaction are integrated in one form of representation. As mentioned before, both interactants are considered to have an equal share in the interaction, therefore they are assigned an equal space in the model, the left half of the diagram being reserved for the customer's, the right for the server's contributions.

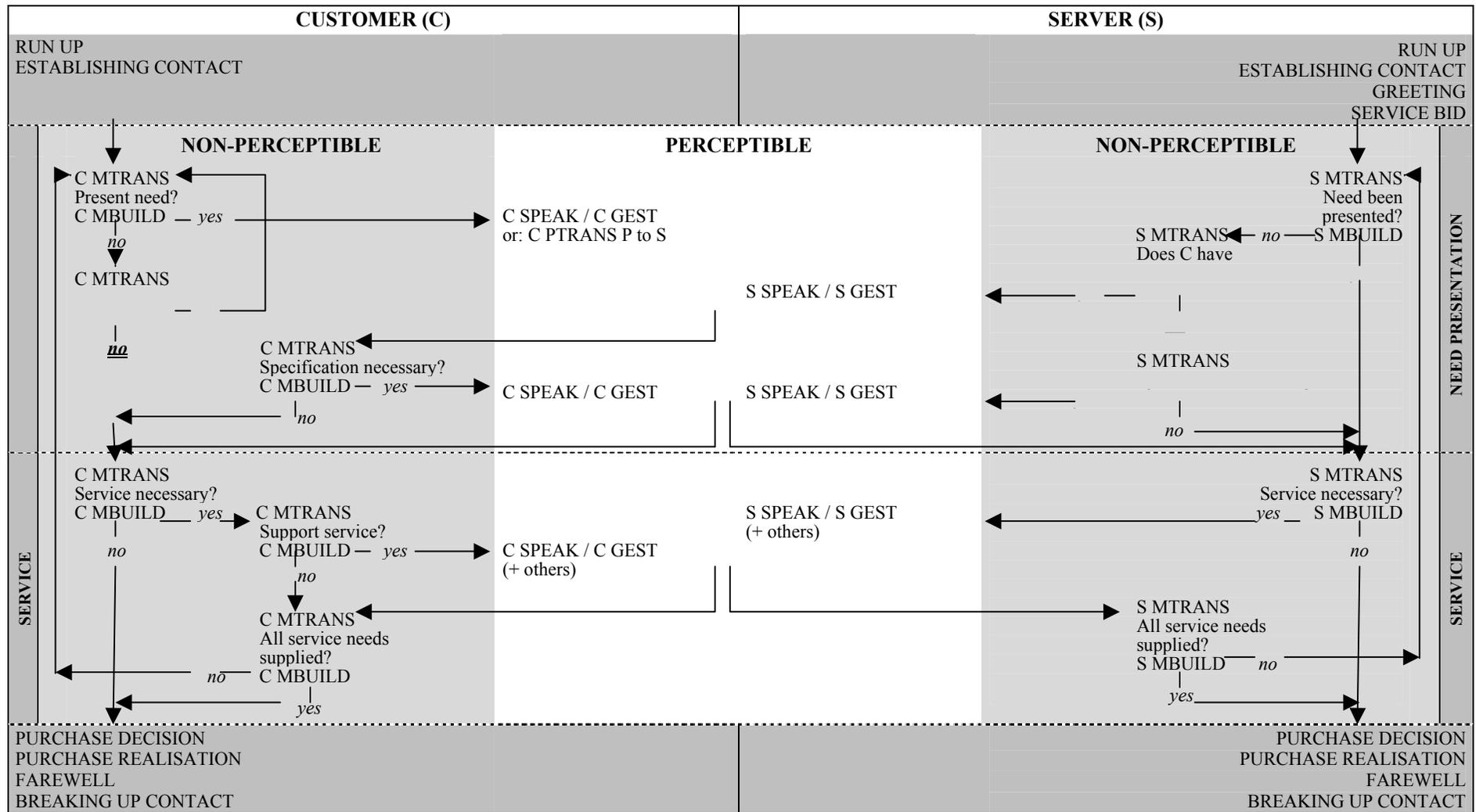


Fig. 3 General integrated model for the representation of service interactions (extract)

P = product

The extract contains the SERVICE BID, NEED PRESENTATION and SERVICE, i.e. three out of the 10 components of a service interaction, which the analysis of the corpus has yielded (cf. Fig. 1). These global structural elements are given in the left and the right margin of the figure. They are indicated separately for customer and salesperson, because the data show that asymmetries can occur (cf. section 3). In the general model, the structural elements are arranged in the idealised sequence presented in Fig. 1. However, this order is not fixed, but can be rearranged to represent specific service encounters.

The various activities in the realisation of service encounters are described with the help of the primitive acts assembled in Fig. 2, and can be classified as perceptible or non-perceptible. This distinction is shown in Fig. 3 by their graphic separation. The perceptible segment contains the actual observable interaction. These communicative (i.e. verbal and non-verbal) and physical activities of the participants are arranged in the middle of the diagram (where they are again differentiated into customer's and server's part). The general form of the model can only include the primitive acts which are typically used in the realisation of the various global structural elements. However, as Fig. 4 will illustrate, this segment extends immensely in detail when the model is applied to a specific interaction.

What should always be taken into account is that the observable interaction is determined by the underlying mental processes of the interactants. An explanatory model aiming at a comprehensive picture of a service encounter should therefore also include cognitive aspects. These non-perceptible elements are taken down separately for the customer and the server on the left and right of the figure respectively (shaded grey). As the interactants are not just "passive vehicles in the unfolding of generic structure", as George (1988: 316) puts it, but "knowledgeable participants", their decisions presuppose a background knowledge of continually changing experiences and expectations.

Generally, assumptions about cognitive processes are, of course, of a hypothetical nature and involve interpretative problems. Their representation in the model has to remain restricted to standardised points of decision. The principle of incorporating yes/no choices is also used, for example, in flowchart models (e.g. Ventola 1987), and makes it possible to include alternatives for the progress of the interaction which are indicated in Fig. 3 by the arrows.

3. Application of the model

The general integrated model introduced in section 2 can flexibly be adapted to represent specific service interactions by adjusting the number and sequence of global structural elements and adding the relevant primitive acts as well as the actual wording of the interaction.

The analysis of the corpus has revealed that the complete, idealised sequence of structural elements presented in Fig. 1 does, in fact, never occur. Instead, there are certain typical combinations depending on whether the interaction is focussed on the provision of goods and/or different kinds of services. As this determines the choice and realisation of the obligatory alternatives (SERVICE, PURCHASE DECISION, PURCHASE REALISATION, s.a.), eight subtypes of service encounters in bookstores can be distinguished according to their global structure. It does not come as a surprise that in a self-service environment like the bookstore the most frequent type of interaction is the simple payment, which does not include a special SERVICE element. However, there are, for example, also many cases in which the customer seeks only the advice of the salesperson and, thus, no PURCHASE DECISION and REALISATION are required. As the global structure of the integrated model is not considered to be fixed, the model can cope with the different subtypes.

The flexible form of representation also allows for a visualisation of the three major structural peculiarities which could be observed in the corpus: loops, embedded elements, and asymmetries. As 41% of the service encounters display one of these divergences or a combination of them, approaches which postulate linear sequences of phases are disproved. Loops are caused by the repetition of structural elements. For example, customers often present more than one need in the course of the

service encounter. As a result, NEED PRESENTATIONS and, of course, also other elements, e.g. the ones in which the needs are dealt with, can occur repeatedly. Embedded elements are performed while another element is in progress. A customer might, for instance, ask for further information while s/he is paying for some goods. In such cases, the (second) NEED PRESENTATION is embedded in the PURCHASE REALISATION. Loops and embedded elements cannot only occur separately or in combination with each other, they can also be linked with asymmetries, i.e. asynchronous sequences, in which the interactants are engaged in different structural elements. A sample of these phenomena is given in Fig. 4.

For the description of the local structures of a particular service interaction, the activities displayed in the non-perceptible and the perceptible segments of the diagram have to be specified. The non-perceptible, cognitive processes, which involve a variety of alternatives in the general form of the model, can now be geared to the actual service interaction. Consequently, the representation will be restricted to those points of decision and their resolutions which can be derived from the progression of the specific interaction. The perceptible segment of the model, on the other hand, which contains only a few typical primitive acts in the general form, can be enlarged with the details of the concrete verbal, non-verbal and physical realisation of the encounter. For the inclusion of the actual verbal utterances, a new feature is added to the figure. The dialogue is shown in a column in the middle of the diagram, thus symbolising the centrality of this part in the interactive process.

Fig. 4 illustrates the way the necessary adaptations are accomplished and the potential such a form of representation offers. The extract shown is taken from a service encounter of the corpus which does not involve any goods, but only the advice of the salesperson. The customer, in her first NEED PRESENTATION, has asked the server for books on a certain subject (*'erm I'm looking for something on – marriage as opposed to weddings – the state of marriage'*). In the subsequent SERVICE section (SE1), the server starts checking on the computer, but due to the fact, that the search word is rather vague, she has difficulties in finding suitable publications (cf. Fig. 4, *'...I'm not coming across anything in general'*).

The global structure of the example demonstrates the peculiarities discussed above. It contains a loop, as well as cases of embedded elements and asymmetries. For example, the customer accepts the negative reply of the server (*'okay'*) and then comes up with a new NEED PRESENTATION (NP2) (*'alright I'll just have a look on my own do you have a philosophy section?'*). It appears that for the customer the SERVICE (SE1) for her first need is finished (though unsuccessfully), and, as the next issue is brought up (NP2), a loop occurs in the structure of the encounter. However, the server still tries to deal with the first problem, even after the customer has signalled that her needs have changed. While the salesperson provides the information asked for (SE 2), she still continues her search for the first request. Consequently, from her perspective, NP2 and SE2 are embedded elements, performed while SE1 is in progress. As this is not the case for the customer, an asymmetry arises, which continues up to the end of the interaction. At that point, the server is still busy operating the computer, searching for suitable books, while the customer impatiently tries to signal that the interaction is finished by applying the discourse marker *'okay'* and an expression of thanks (FA). Even as she leaves the counter, the server is still involved in SE1.

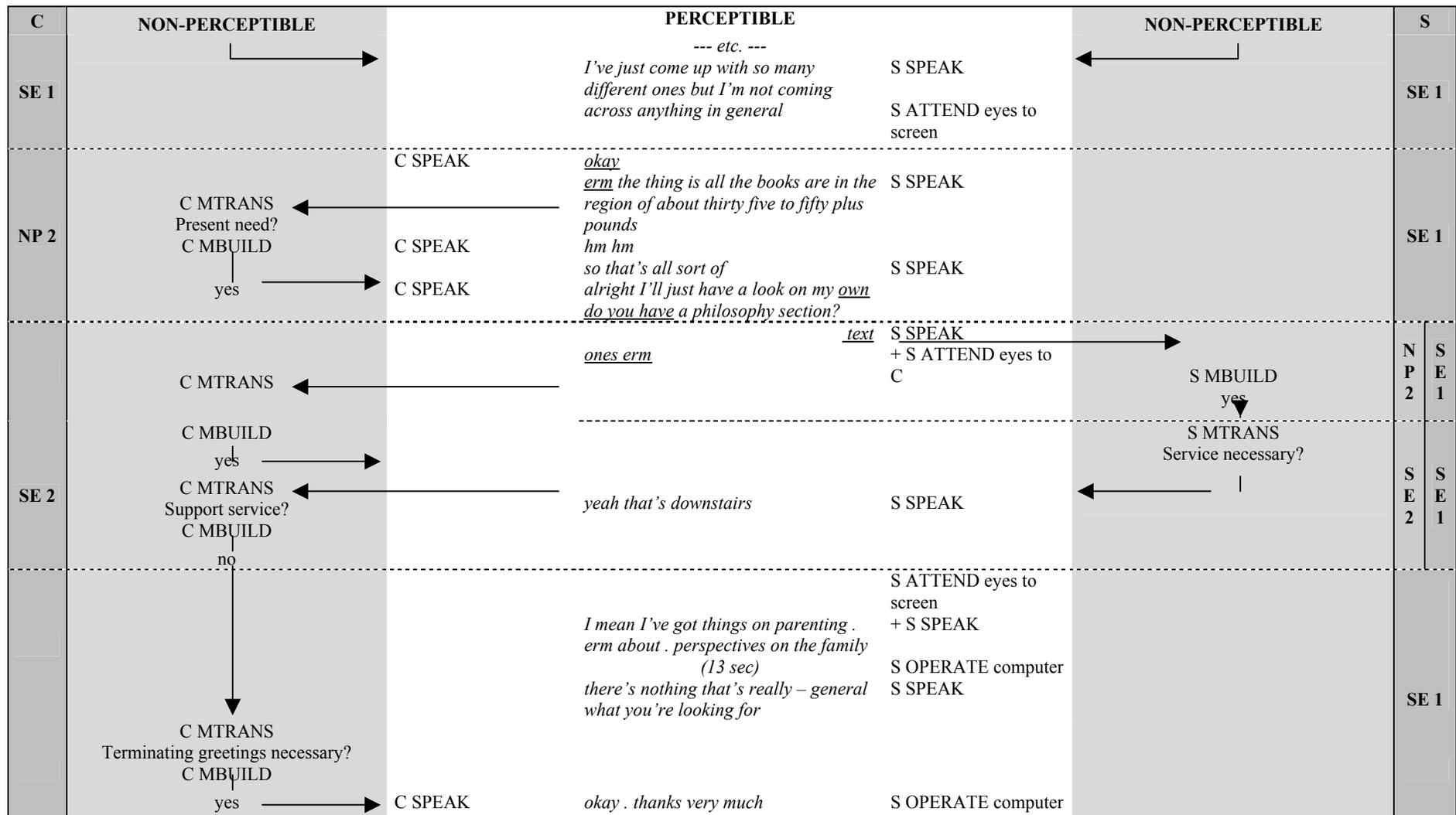


Fig. 4 Representation of a sample (extract)

As emphasised before, the cognitive, verbal, non-verbal and physical elements of the interaction are “not discrete activities but aspects of an ongoing stream of behavior” (Arndt/Janney 1987: 4). Fig. 4 exemplifies how this interplay can be illustrated in the integrated model. The perceptible part of the extract contains mainly verbal activities of the participants, represented by the primitive act SPEAK. Additionally, we find instances of non-verbal behaviour, e.g. visual contact (‘S ATTEND eyes to C’), and physical actions like the salesperson’s use of the computer (‘S OPERATE computer’). As pointed out above, the underlying cognitive processes are restricted to selected points of decision. The chronological order of the activities is represented by their position in the diagram, their causal relations by the arrows connecting the entries. Simultaneous actions are placed on one horizontal line, as, for instance, demonstrated in the last line of the extract, where the customer is speaking and the server is still involved the computer search at the same time. Needless to say, the non-perceptible activities (which are frequently realised in a split second) are usually running in parallel with the perceptible ones. The sequences of events can be derived from their vertical arrangement.

Often, it is this interplay of features which clarifies apparently abnormal phenomena in the plain text versions. For example, the inclusion of physical activities can explain the occurrence of pauses in the verbal part. In the corpus, long pauses (of 5 seconds up to several minutes) are usually observed when physical tasks are performed. Our sample interaction contains five instances of long pauses caused by the server operating the computer and waiting for the search results. They vary in length from 13 seconds (as shown in the extract) to up to 25 seconds. The neglect of physical and non-verbal aspects in the analysis of service encounters might lead to the impression that certain global structural elements are missing. The obligatory NEED PRESENTATION, for instance, is realised non-verbally in almost 30 % of the cases, usually by handing over a product for payment (‘C PTRANS P to S’). These instances would, of course, escape the analyst of the plain text versions.

Thus, for a comprehensive analysis of service encounters the concentration on the verbal parts of the interaction proves insufficient. With the integrated model discussed in this paper, however, a detailed picture of service interactions in bookstores can be achieved. As this model offers the chance to represent complex processes in a relatively clear graphic form, it could also be applied (with the necessary adjustments) to other types of service encounters. Besides, it might be interesting to test the potential of the graphic arrangement for the representation of other types of dialogues.

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