Mortgage communication design

A multimethod approach to experts' constraint management

Published by
LOT
Trans 10
3512 JK Utrecht
The Netherlands

phone: +31 30 253 6111

e-mail: lot@uu.nl
http://www.lotschool.nl

Cover illustration: Paris, France. Photograph by Marloes Herijgers

ISBN: 978-94-6093-274-8

NUR 616

Mortgage communication design

A multimethod approach to
experts' constraint management

Het ontwerp van hypotheekcommunicatie

Een multi-methodisch onderzoek naar
hoe experts omgaan met randvoorwaarden

(met een samenvatting in het Nederlands)

Proefschrift
ter verkrijging van de graad van doctor
aan de Universiteit Utrecht
op gezag van de rector magnificus, prof. dr. G.J. van der Zwaan,
ingevolge het besluit van het college voor promoties
in het openbaar te verdedigen
op vrijdag 9 maart 2018
des middags te 12.45 uur

door

Maria Louisa Cornelia Herijgers

geboren op 19 december 1979
te Hengelo, Overijssel

Promotoren:
Prof. dr. L.R. Lentz
Prof. dr. A.J. Koole

Copromotoren:
Dr. T.C. van Charldorp
Dr. H.L.W. Pander Maat

This research was financially supported by The Netherlands Organization for Scientific Research (NWO) and ABN AMRO Bank.

ALPHABETICAL LIST OF ABBREVIATIONS

Abbreviation	*Explanation*
CA	Conversation Analysis
DU	Discourse Unit
FTB	First-time Home Buyer
HHC	Human-Human-Computer
IP	Information Package
MCP	Multichannel Communication Package
MOC	Mortgage Orientation Consultation
MST	Media Synchronicity Theory
QAT	Question-Answer-Typing
SPU	Set of Possible Utterances

CONTENTS

CHAPTER 1

INTRODUCTION

Choosing the right mortgage to finance a home purchase is one of the most difficult financial decisions a household can face in the Netherlands, since mortgages are complex products that have a long-term impact on a household's financial situation. In 2008, when the Dutch housing bubble started to deflate because of the credit crunch, it was painfully illustrated that many homeowners did not know what they had signed up for in the past. At the peak of the crunch, perhaps more appropriately referred to as its rock-bottom, 1.3 million (36%) home-owners were facing a negative equity (BZK, 2016); their mortgage was higher than the value of their home. Since 2014, house prices have been increasing. In addition, homeowners have been making extra repayments on their mortgages. Both of these developments have positively affected the degree of indebtedness. Even nowadays, however, 22% of Dutch homeowners are still experiencing a negative equity problem (BZK, 2016).

The question of who was to be blamed for the housing crisis has been asked many times. Was it the government for supporting the Dutch housing finance system? The financial institutions for insufficiently notifying customers, perhaps even misleading them? Or the customers for irresponsible borrowing?

Since the crunch, the Dutch government has developed policies for financial institutions through the introduction of the 'Wet Financieel Toezicht' in 2007, which obliges financial institutions to make sure to only supply 'reasonable' loans (art. 4.34), and forces institutions to provide clear, non-misleading and transparent information (art. 4.19). This includes a compensation for financial advice that led to the introduction of free-of-charge orientation consultations and follow-up advice consultations at customers' expense. In addition, since January 1st 2013, tax laws require new mortgage customers to repay their mortgage within thirty years. Moreover, the maximum loan-to-value-ratio has been decreased over the last years from 106 to 100 percent.

On their end, mortgage providers haven been displaying an increased interest in providing legible and comprehensible information and reasonable loans, because the credit crunch severely damaged the reputation of financial institutions in general (Hurley *et al*., 2014); globally they have been and still are

the least trusted business industry (Edelman Trust barometer, 2014). The wish to provide more comprehensible information led to a collaboration between one of the largest Dutch mortgage providers, Utrecht University and The Netherlands Organization for Scientific Research (NWO)[1], which resulted in a project on 'Multimodality and Tailoring Complex Financial Information' that aimed to develop strategies for making financial information more comprehensible. The research reported in this dissertation was part of that project. The project also resulted in a dissertation on multichannel pension communication (Nell, 2017) and will result in a dissertation on information concerning debt collection (Sikkema, 2017).

This dissertation includes four studies that explore 'mortgage communication design' in one of the largest Dutch mortgage providers, henceforth referred to as 'the bank', that aimed at helping first-time home buyers (FTBs) choose a suitable personal mortgage. Because of the nature of our data, we mostly focus on spoken consultations. This is unusual, since research concerning comprehensible language traditionally focuses on written communication.

In order to understand the complexity of providing effective and sufficient mortgage information to prospective mortgage customers, we adapt a 'communication design' perspective in which we focus on experts' constraint management practices; that is, the way how financial experts handle functional challenges presented by the context in written and spoken discourse.

We start with an analysis of the entirety of mortgage communication means and processes: the Multichannel Communication Package. This package is available to FTBs and includes digital, paper and oral communication. We apply Functional analysis onto the multichannel mortgage communication package to investigate how institutional experts from different organizational departments compose mortgage communication packages that are meant to support first-time home buyers during their mortgage decision-making process.

In the subsequent three studies, we specifically explore mortgage consultations, mainly because consultations are still the most important source of information for FTBs (Lee, 2002; Verhoef *et al*., 2005; Frambach *et al*., 2007; CFPB, 2015), but also because they constitute the only moment in the communication package at which the customers' wishes receive attention and can be linked to the bank's products (see study 1). Moreover, in the consultation, mortgage advisors have to deal with many issues at the same

[1] The Netherlands Organization for Scientific Research

time. They for instance need to handle organizational constraints, such as time and targets, have to deal with customers' knowledge gaps, and are required to use the computer without letting go of customer-centeredness. These issues are bound to affect the design of the interactions. Finally, we observe experts' interactional routines, because the manners by which experts operate are indications of interactional dilemmas deriving from the chasm between lays and experts. It may therefore be clear that consultations are important and complex, but also very fascinating activities.

The second study in this dissertation focuses on how mortgage advisors navigate their way through the consultation context, handling purpose constraints and aspect system constraints, e.g., efficiency, time, and technology. Using a discourse-analytical approach, we demonstrate how advisors employ so-called discourse design explications –utterances in which they announce how they handle certain parts of the consultation– as proposals to publicly resolve constraint conflicts. Advisors' discourse design explications regularly refer to contextual constraints that must be reconciled in the consultation, and reassure the customer that his interests will be optimally served.

Our third study focuses on advisors' *interaction design* by describing advisors' presentations of explicative tellings, which are delivered to make customers understand the most important mortgage terms and concepts, such as mortgage forms and interest rates. Strikingly, these tellings are provided in each and every consultation. This study also touches upon the issue of how advisors present themselves as competent and helpful experts in order to gain a customer's trust.

The final study in this dissertation investigates advisors' *interaction design* when calculating the maximum mortgage loan amount. By setting up triadic participation frameworks, advisors combine customer attentiveness and computer-use, as a routine manner of managing contextual strains.

Ultimately, all four studies shed light on experts' *communication design* that is the result of solving dilemmas that occur when informing lay persons; dilemmas concerning contextual constraints, dilemmas concerning customers' mortgage domain knowledge and dilemmas concerning computer use during interactions.

The primary goal of this dissertation is to use expert communication design practices as a window on the complex nature of mortgage consultations. On the basis of our findings, we will suggest some improvements to better support first-time home buyers during their mortgage purchase. Although we are aware that prospective mortgage customers gather information from all kinds of

sources in addition than the bank, we have chosen only to focus on the information that is designed and provided by bank employees, since this offers opportunities for improvement. We kindly invite other mortgage providers to scrutinize their own practices and compare them with the bank practices described in this dissertation, because we believe they may show similarities.

In the remainder of this introduction we sketch the first-time home buyers' customer journey within the bank and shed light on the role of consultations in the mortgage purchase process. Subsequently, we provide further details on the data used for the studies in this dissertation. We then describe the research traditions and conceptual frameworks we draw on in our four studies. This discussion will be brief to prevent overlap between this introduction and the other chapters; further details will be discussed within the separate studies. Our introduction concludes with an overview of the five remaining chapters.

1. MORTGAGE INFORMATION

1.1 A first-time buyer's customer journey at the bank

First-time home buyers considering a mortgage at the bank, will likely first visit the bank's website for details on getting in touch with the bank's mortgage advisors. Two sections of the site will initially draw their attention: first, the information on how to establish a meeting with an advisor; secondly, the invitation to "calculate your maximum mortgage loan amount with our tool". As for the rest, the site displays some general information for first-time home buyers, for multiple-time home buyers and for current mortgage customers. To establish contact with an advisor for a free-of-charge orientation consultation, customers need to enter their contact details and their preferred date and time, so that a bank employee can approach them. Their contact details are sent to the bank's customer contact center and the contact center arranges a telephone, webcam or face-to-face appointment with a mortgage advisor, according to the customers' wishes. The appointment is confirmed by the assigned mortgage advisor with an email that includes a service document (*dienstverleningsdocument*): a legally required document that explains what customers can expect from the service and what the expenses will be. A second way to get in touch with a mortgage advisor is by walking into a banking center and requesting an appointment with one of the local mortgage advisors.

During the customer-initiated free-of-charge orientation, the customer gets acquainted with the bank's advisor. The advisor explains the most important mortgage terms and possibilities, e.g., mortgage forms, interest rates, the

Nationale Hypotheek Garantie (a Dutch mortgage trust fund) and calculates the maximum mortgage loan amount (see study 2 for details). At the end of the consultation, customers receive an orientation report with some calculations that have been discussed in the consultation. The report answers their most urgent questions of how much money they can borrow and how much that will cost them on a monthly basis (see study 2 for further details). In addition, customers obtain the personal details of the advisor they spoke to. This enables them to reach the advisor directly, without the interference of a desk clerk or member of the customer contact center.

After the free-of-charge orientation, customers have two options: leave or stay. The most important reasons for customers to stay are their judgement about the overall excellence of the bank and its service quality, which is based on, for instance, previous experience with other products such as checking accounts (Lymperopoulos *et al.,* 2006), the bank's interest rate and the total amount they can borrow from the bank (Devlin, 2002). These latter two reasons may become more important in the future; a recent North-American survey shows that consumers are increasingly considering their relationship with banks as transactional, rather than advice-driven and that the number of people choosing a mortgage provider that differs from their primary bank is increasing (Accenture, 2015), a process likely driven by online rate shopping.

Naturally, there are a number of reasons why customers can decide to leave the bank during the pre-purchase stage, for example because they find another provider that allows a higher mortgage amount or offers a lower interest rate. They can also choose to leave as the result of new insights, for instance because they realize that now is not the right time for them to apply for a mortgage. This sometimes happens when customers' incomes are likely to considerably increase in the near future or when they expect changes in their family situation. Ten percent of the people who stay opt for 'execution only' (ABN-AMRO, 2014), which is applying for a mortgage without advice. This does not mean that the mortgage purchase is free; customers save out on the actual advice costs, but still have to pay a mortgage handling fee. In order to proceed with execution only, customers need to pass a 'knowledge and experience test'.

When customers decide to stay, they sign up for an advice consultation with the assigned advisor, unless their initial advisor is absent and they need a mortgage immediately. When customers enter the advice track, they pay an advice fee and sign an advice quote. Once that is taken care of, the advice consultation will take place. The topics discussed in the advice consultation differ from the topics in the orientation consultation, since there is more emphasis on mortgage safeguards and customers' exact financial details (Appendix A). After the consultation, the mortgage advisor will create an advice

report and sent it to customers by email. In this report, advisors summarize the mortgage that they think is suitable, taking into account the customer's wishes and their own expertise. When customers agree with this proposal, advisors apply for a mortgage quote at another division of the bank. This quote is based on the choices reflected in the advice report. Once advisors receive this quote, customers are invited for a final consultation: the quote consultation. In this consultation the customer and the advisor discuss the –now printed– advice report and the customer is invited to sign this report. Furthermore, the advisor and the customer read the quote together and the customer signs the mortgage quote. Finally, the customers visit a notary to legalize the mortgage purchase. So, a mortgage purchase decision generally happens in three stages: 1. the pre-purchase process, in which customers seek information on available options; 2. The purchase stage, in which they do the actual 'buying'; 3. The post-purchase, in which their decision has been made and they have acquired their mortgage (Frambach *et al*., 2007).

All four studies presented in this dissertation focus on the pre-purchase stage. During the pre-purchase stage, FTBs have acknowledged that they require a mortgage in order to buy a new home. In this stage, they are therefore looking for information and have to evaluate mortgage alternatives (Coughlan *et al.,* 2011). They also have to think about their personal mortgage wishes and requirements. All these processes are intertwined to a certain extent. For instance, in order to choose a mortgage, the buyers need to know the available options and need to combine these options with their personal wishes in order to choose the most suitable alternative.

1.2 First-time buyers' information sources

The bank offers an extensive multichannel mortgage communication package to first-time home buyers, so prospective customers can choose their preferred channel for gathering information. This multichannel communication package includes paper-based information, such as brochures and leaflets, digital-based information, such as websites and apps and finally, three different kinds of consultations: orientation, advice and quote (see study 2 in this dissertation for more details). However, during their pre-mortgage purchase, FTBs rather speak to an advisor than search information through other channels (Frambach *et al*., 2007; Antonides *et al*., 2008). This is one of the reasons that the mortgage consultation is of utmost importance in the mortgage decision-making process. The second reason why the consultation is important is not because of customer preference, but because it offers the chance to match customer wishes to the bank's products. Ideally, advisors are consultative sellers that are serving their customers by identifying products that meet the customers'

demands with the offered product attributes. Prospective home buyers often feel uncertain and they depend on advisors (Greve *at al.,* 1994).

Unfortunately, Greve *et al.* (1994) concluded from observations on 142 Dutch mortgage consultations that advisors are more concerned with presenting their products and discussing the costs than with attending their customers' requirements and needs. This was confirmed by Verhallen *et al*. (1997), who concluded that consultations are product-driven and not customer-driven, even though advisors personally believe that they are paying a lot of attention to customer needs. These conclusions are still valid today, even despite the introduction of the new legislation in 2013 (see chapter 2 for validation). Another shortcoming of mortgage consultations seems to be the abundant use of highly specialized language. Customers often complain about jargon and terminology that is used during the consultations (FSA, 2000a), which is problematic, since there are indications that jargon can hinder laypersons' comprehension of information (Korsch *et al*., 1968; Ong *et al*., 1995; Thomas *et al*., 2014). So although consultations are extremely important during the mortgage pre-purchase stage, it appears, unfortunately, that consultations are complex activities that leave room for improvement.

1.3 First-time buyers' information processing

First-time buyers think of their mortgage purchase as a complex process that concerns a complex product; mortgages are infrequently purchased, they are difficult to understand and they contain many attributes (Vroomen *et al*., 2005). Moreover, these first-time buyers are very aware of the consequences of a mispurchase (Aldlaigan & Buttle, 2001). They are therefore highly involved and motivated when it comes to their mortgage purchase decision. Nevertheless, as we stated before, it is a difficult task for financial institutions to optimally inform FTBs about mortgages.

According to the Media Synchronicity Theory (Dennis, Fuller & Valacich, 2008), there are two information processes involved in mortgage consultations: conveyance and convergence. Conveyance is the process of distributing information, whereas convergence is the process of creating shared understanding. Conveyance can be rather difficult in consultations because of the complexity of mortgages and because of the fact that the information provided in the consultation is extensive, new and diverse, which demands a lot of cognitive effort. The consultation does, however, present the best opportunity for convergence in the pre-purchase process, since it makes it possible to directly compare the customers wishes to the available bank products.

This convergence of customer needs with the available bank products is also a difficult process, since the advisors' cognition needs to be combined with the customers' cognition; they need to exchange information in order to create shared understanding. One further complication is that customer wishes concerning monthly repayments depend on the bank's options, as different mortgage options imply different monthly repayment schedules. For instance, choosing a flexible interest rate reduces the monthly costs but also affects the continuity of the monthly repayment and requires extra attention in the long run, because the interest rates could go up. Another problem has to do with the long-term period of the mortgage. People can always face unforeseen events, such as divorce, job loss or illness, which could lead to repayment problems. There are safeguards available against such problems, but it is difficult for customers to decide how much they want to their insurance to cover, because they don't really know what to expect when such issues occur.

All these processes need to be dealt with collaboratively by the advisor, who is the mortgage expert, and the customers, who know their personal needs best. First time buyers and mortgage advisors are thus facing a challenge.

2. METHODOLOGICAL AND CONCEPTUAL FRAMEWORKS

To conduct the four studies in this dissertation, we combine various research methods and various conceptual models, which we discuss in this section. Subsequently, we explain how these methods and models help us to pursue our communication design perspective and how they complement each other.

2.1 Functional Analysis

In the first study presented in this dissertation, we used the qualitative method of Functional analysis (Lentz & Pander Maat, 2004) to evaluate the design of the bank's multichannel communication package. Functional analysis aims to analyze the quality of documents for a specific target group. By scrutinizing the communicative goals of documents, it can be investigated to what extent these documents aim to achieve intended effects on the targeted reader group. Functional analysis is a specific content-analytical method that allows communication experts to evaluate the document-reader fit with regard to the document's textual formulations, the document's topical content and the document's physical appearance, and in principle may suggest improvements of the existing document based on an ideal model.

From a functional analysis perspective, each document is designed to achieve an organizational goal, such as for instance enabling first-time home buyers to choose a suitable personal mortgage. By decomposing the document's intended functionality into a hierarchical network of sub-purposes,

the document can be evaluated in terms of intended effects on readers. For example, when it comes to mortgage communication, the purpose of a document could be: "First-time home buyers (target group) know (cognitive effect) they can choose between an annuity mortgage and a linear mortgage". At a lower level, we could find a purpose such as for example "first-time home buyers know the characteristics of an annuity mortgage". Besides informative purposes, there can also be persuasive purposes, supporting assessment purposes, instructive purposes, motivational purposes and affective purposes.

Applying Functional analysis in order to evaluate a full communication package instead of applying it on a single document is new. However, since all the documents (oral, digital and paper) in the multichannel communication package are intended to achieve the same overarching goal, to enable first-time home buyers to choose a suitable personal mortgage, we felt the method's applicability could and should be extended. Within the overarching project, the approach has also been used to evaluate an entire multichannel information package concerning pension communication (Nell, 2017). A functional analysis concentrates on elucidating communication design choices. Although it offers plausible hypotheses on effectiveness, it offers no empirical data on actual communicative effects.

For the second study, we were inspired by the perspective of 'talk as a design practice', that is adopted in various research traditions (see chapter 3 for an overview). In line with this perspective, we combined the functional approach from chapter 2 with a discourse analysis of mortgage orientation consultation excerpts. Since consultations are part of the multichannel communication package, they are designed to support the same overarching goal as the multichannel communication package. In addition, advisor's utterances reflect the constraints that advisors have to manage when talking to customers. Functional analysis therefore seems suited to be applied to spoken consultations as well. Applying Functional analysis to our consultations provides insights into how the consultation's context affects the interactional design options available to the mortgage expert, how the expert chooses from these options, and how these choices are communicated to the customer.

2.2 Media Synchronicity Theory

After applying Functional analysis to the multichannel communication package in study 1, we used Media Synchronicity Theory (MST; see Dennis, Fuller & Valacich, 2008) to evaluate the effectivity of channels through which certain communicative purposes are achieved. Many communication designers focus on customer channel preferences when they design information. But we want

to focus on channel's capability to support communicative processes when evaluating the communication package.

Media Synchronicity Theory focuses on the capability of channels to support communicative purposes having to do with processes of either the conveyance of information or the convergence of meaning. MST proffers that both of these processes benefit from different channels, depending on the amount of synchronicity these channels allow. Synchronicity itself is measured in terms of five capabilities, namely: transmission velocity, symbol sets, parallelism, rehearsability and reprocessability. Processes of conveyance benefit from asynchronous channels, which allow interlocutors to communicate at their own pace as well as personally select and re-process specific information. Processes of convergence benefit from synchronicity, because this allows interlocutors to immediately respond to each other. More details on our use of Media Synchronicity Theory are provided in chapter 2 of this dissertation.

2.3 Conversation analysis

In our third and fourth study, we have used Conversation Analysis (CA), a method that has its roots in California, and has been developed within Sociology as a variant of ethnomethodology (see Heritage, 1984). CA can be briefly described as "an approach that aims to describe, analyze and understand talk as a basic and constitutive feature of human social life." (Sidnell, 2010 pp.1). CA is a qualitative method that enables us to explore how the interactions in the mortgage consultations naturally unfold. The advantage of this approach is that we are able to study advisors' daily communication design practices instead of having to draw conclusions from their self-reported practices in, for instance, surveys or interviews, that might be inconsistent with their actual behavior.

Conversation Analysis assumes that because utterances are delivered in response to previous ones, every utterance in an interaction displays an understanding or an interpretation of a previous one. Moreover, CA researchers examine regularities and discover patterns in interaction that the interaction participants generally adhere to. To discover the regularities in our consultations, we gathered instances of potentially interesting phenomena, such as excerpts of advisors explaining mortgage information to customers in study 3 and excerpts in which the advisor and the customer are working on the computer in study 4. We built collections of several instances of both phenomena, because individual cases reveal different features of interaction practices and "by considering the individual cases we can see the range of

actions a given practice can implement" (Sidnell, 2010, pp. 33). These collections enabled us to make a thorough analysis of our phenomena.

CA is a very useful method for investigating how participants use utterances to create intersubjectivity (see also Koole, 2015) concerning the activity in which they are participating, without making interpretations about each other's' cognitions. Observing participants' behavior sheds light on what participants believe they are 'doing' together, without reflecting on the participants' intentions. For instance, in study 3, we use CA to analyze how participants create intersubjectivity with regard to mortgage terms and concepts; more specifically, how advisors present mortgage information to customers. In the fourth study, we use CA to analyze how advisors and customers establish intersubjectivity concerning customer-centeredness in the consultation in order to deal with the constraints raised by having to use a computer to calculate the customers' maximum mortgage loan amount.

2.4 Mixing methodologies and conceptual models

In this dissertation we combine various methods to systematically analyze the design practices of mortgage experts. We provide insights in the constraints affecting communication design and pay attention to how experts manage these constraints on various aggregation levels. We start with the macro level of the entire communication package, after which we zoom in on a crucial package component, namely the mortgage orientation consultation. These consultations are first approached using a functional discourse analysis of certain advisor turns; later we apply conversation analysis to two interactional mechanisms that are central to the consultation conversation. The different methods and conceptual models support our explorative design approach in their own individual way. To start with, we pay attention to the communication design of a multichannel mortgage package for first time home buyers in chapter 2. Our analysis focuses on how contextual constraints, such as purposes and media channel capabilities affect the communication design. Therefore we apply the method of Functional analysis, because Functional analysis allows us to reconstruct intentions of communication designers and constraints that they need to work with. Traditionally, Functional analysis is a useful method to explore intended communicative purposes, but does not suffice to reflect on channels that are used to provide information. Since many components of the multichannel communication package under evaluation are offered via new media channels, we have to evaluate channels' individual capability to support the successful completion of communicative tasks and achieve the intended effect on recipients. That is why our approach in chapter 2 incorporates the renowned conceptual model of Media Synchronicity Theory. This enriched

Functional analysis provides insights in the contextual constraints that are taken into account when individual components of the multichannel communication package are realized by professionals. The evaluation in itself leads to claims about the topics of the information that is provided to customers, claims about the channels that are used to transfer information and claims about whether the communication design fits the communicative task at hand. The analysis also elucidates the crucial role of one particular communication channel in the package: the consultations.

While chapter 2 discusses how the context affects the consultations, chapter 3 analyzes these consultations in more detail and shows how the context is explicitly addressed in certain conversational turns of the advisor. In these turns, the so-called discourse design explications, the advisors discusses consultation design options and design choices. This demonstrates both how consultation designs are conceptualized in reference to contextual strains and how this design is presented to the customer as the optimal one. Methodically, chapter 3 combines Functional analysis with discourse analysis. In essence, both chapter 2 and 3 orient to the institutional context of mortgage communication and orient to how this context shapes the communication design. However, both these chapters do not pay attention to the interactional consequences of the communication design. They do not take recipients' responses into account, they do not consider how recipients orient to the communication design, and they do not show how the designer and the recipient cooperate in interaction. These issues are taken up in the chapters 4 and 5, in which we make use of conversation analysis. These chapters focus on the design of two sequential patterns that are central to the orientation consultation. First we discuss how advisors explain important mortgage concepts to customers by using explicative tellings and then we shed light on how advisors and customers collaborate with the computer to calculate the maximum mortgage loan amount.

Thus our multi-method approach allows us, first, to make claims about communication design and how communication design is affected by the context in which it is developed (chapter 2 and 3), and second, to analyze sequential patterns that characterize the interaction between advisor and customers that evolves against the background of the functional context discussed earlier (chapter 4 and 5).

3. DATA COLLECTION

The data used in the dissertation varies from paper to digital to oral information. To conduct the first study, we used the full communication package that the bank offers to FTBs. An overview of this package is described in our first study on the evaluation of multichannel communication packages (see page 31). Furthermore, from July 2013 until December 2013, we have recorded 39 mortgage orientation consultations, 5 advice consultations and 4 mortgage quote consultations: a total amount of 48 consultations. A large number of customers in these consultations are first-time home buyers (25 out of 48), but not all of them (23 out of 48). However, since the changes in legislation as of 2013, a lot of mortgage terms and concepts are also new for non-first-time home buyers, because the mortgage options they chose in the past are not available anymore. So even though some consultations involve non-first-time home buyers, a lot of results are applicable to the situation of first-time home buyers too and can be generalized. Further details on the data we used in each chapter are given in the respective chapters.

For each of the studies in this paper we used a different number of consultations. The choice to include or exclude certain consultations had to do with the collections of phenomena we had to build. In chapter 3, we screened all 39 orientation consultations to gather our collection of discourse design explications. In chapter 4 on explicative tellings, we collected 57 explicative tellings from 33 consultations. Finally, in chapter 5 we used 39 consultations to collect instances of triadic participation frameworks. Many of these 39 consultations are webcam and telephone consultations; in such consultations the customer, computer and advisor are not facing each other, so they did not match the conditions of triadic participation frameworks. There were also some consultations in which there was no calculating going on at all. In the end we were left with 16 consultations that contained triadic participation frameworks. More details on the number of consultations we used in each chapter is given within the respective chapters.

4. OUTLINE

In chapter 2 to 5 we present four studies. All the chapters in this dissertation are written as journal papers. This has some consequences. Firstly, some overlap between the separate chapters is inevitable, especially when it comes to the method sections, the data sections and parts of the theoretical frameworks of the papers. Secondly, the individual papers are embedded in different research paradigms, which affects the terminology within this dissertation and its separate chapters. Most importantly, the notion of 'design'

that we used in our introduction has different connotations depending on the research paradigm. In the chapters in which we employ Conversation Analysis (CA), chapters 4 and 5, we therefore avoid the use of the word 'design'. 'Design' in CA is reserved for smaller units than the units we investigate and focuses on the local organization of interaction. In addition, it is related to concepts within CA that we do not touch upon, such as 'turn design' and 'action formation' (see Drew, 2013; Levinson, 2013).

In the rest of this dissertation, 'design' is used to refer to design space and recurrent practices by which contextual strains and interactional dilemmas are resolved that occur in our interactions. It should be noted that even though 'design' has the connotation that it is the result of conscious, well-balanced decisions, this is mostly not the case when people talk to each other, because they interact and design on a routine basis, as the result of their long life experience as interlocutors. So while people are not always aware of the design of their utterances when they talk to each other, the utterances are meaningful nevertheless, because they are human actions. Hence, they can be explored as if they are 'designed'.

Chapter 2 of this dissertation starts with an overview of the multichannel information package that the bank offers FTBs to support their decision-making process. This includes an analysis of FTBs information requirements, an analysis of how the information is provided in the purchase process and an analysis of the bank's choice of media channels. Within the complete dissertation, this chapter on the design of multichannel communication packages functions as an introduction to the studies on mortgage consultations. It demonstrates why mortgage consultations are of the utmost importance in the mortgage information process for first-time home buyers. Hence, this chapter functions as a motivation for the research conducted in the subsequent chapters in this dissertation. After this chapter, we present three studies by which we zoom in on the most important component of the communication mix provided to FTBs: the mortgage orientation consultation. In chapter 3, we focus on advisors' design of discourse within the mortgage orientation consultation. By doing so, we focus on the context of mortgage consultations and on how for instance, institutional policies and the goal of the consultation constrain the interactions. Subsequently, in chapter 4, we describe how advisors inform their customers by using explicative tellings. This chapter concerns the 'design' of oral explanations and advisors' recurrent practices of handling the knowledge asymmetries that are present in their interactions because of customers' knowledge gaps. In the final chapter on consultations, we have investigated advisors, customers and the computer's triadic collaboration when performing

the maximum mortgage loan amount calculation. More specifically, this chapter look at the interactional design of collaborative activities in which computers are involved and concerns advisors' interaction design practice when handling the interactional dilemma of displaying customer-centeredness and using the computer. Lastly, chapter 6 provides a summary of our main findings, an overall discussion of the results, suggestions for improving mortgage information and suggestions for future research.

Chapter 2 on the evaluation of multichannel communication packages has been published in the *International Journal of Bank Marketing* and chapter 3 on discourse design explications was published in *Discourse Studies*. Chapter 4 on explicative tellings and chapter 5 on human-human-computer triads have been submitted for publication. Finally, various results have been presented at national and international conferences. An overview of publications and presentations is available on page 167.

CHAPTER 2

EVALUATING MULTICHANNEL COMMUNICATION PACKAGES FOR MORTGAGE CONSUMERS : A CASE STUDY

In this chapter we apply a combination of textual analysis, Functional analysis and Media Synchronicity Theory onto the bank's multichannel mortgage communication package in order to investigate how institutional experts from different organizational departments design information to support first-time home buyers during their mortgage decision-making process. At the same time, this chapter proposes an approach to package evaluation and offers a demonstration of the new approach in a single case analysis. Although only one package is analyzed, the other Dutch mortgage providers offer similar packages. The evaluation reveals significant problems concerning the contents and timing of mortgage information and the channels chosen to convey it. The proposed approach is innovative in that it does not focus on user channel preferences but on channel requirements stemming from the communicative task to be performed. The current chapter enables designers to pinpoint problems in their multichannel communication packages and its individual components, and enables them to modify their designs accordingly, thus improving the support for complex decisions that consumers of financial products are facing. At the same time this chapter provides a motivation for our focus on mortgage consultations the subsequent chapters of this dissertation.

A slightly adapted version of this chapter has been published as:
Herijgers, M.L.C. & Pander Maat, H.L.W. (2015) How to evaluate multichannel communication packages: a case study on mortgage information. International Journal of Bank Marketing, 33 (6), pp. 857-878.

An adapted Dutch version of this chapter has been published as:
Herijgers, M.L.C. & Pander Maat, H.L.W. (2014) Een andere kijk op begrijpelijke taal: het evalueren van een communicatiepakket. Tekstblad, 5/6, pp. 36-40.

1. INTRODUCTION

Some products and services need to be carefully considered by prospective clients or buyers. Hence the organizations and companies offering them need to provide a good deal of information and advice on them. We will use the term 'Multichannel Communication Package'(MCP) to refer to the collection of communication means and activities needed to guide clients and customers through their decision-making process. These packages may contain brochures, websites, consultations and tools. They need to be carefully designed in order to help customers make a motivated purchase decision, with which they will feel comfortable with for the years to come.

One example of such a decision is the choice of a medical treatment, for which procedures of 'informed consent' and 'shared decision-making' are already legally required in many countries (LeClercq *et al*., 2010); at the same time, there are concerns about the actual effectiveness of informed consent practices in terms of patient understanding (Falagas *et al*., 2009; Scheer *et al*., 2012). Another example is acquiring a mortgage on a house. Many people currently face financial problems as a consequence of infelicitous mortgage purchase decisions (RealtyTrac, 2012; Zillow, 2012; The Dutch Home ownership Guarantee Fund, 2013; Netherlands Housing Research, 2012). Payment problems do not only affect the well-being of mortgage customers; the trust in mortgage providers has been severely damaged by the mortgage crisis, which many see as the result of unethical practices of mortgage providers selling unsuitable mortgages to their customers (Edelman, 2013; Stix, 2013). In reaction to these problems, Dutch financial service providers are now legally required to take responsibility for the well-being of their (future) customers. Providers need to comply with newly developed loan-to-value ratio restrictions and need to provide correct, clear and non-misleading information ("Wet op het financieel toezicht", articles 4:19 and 4:20).

The 'informed consent issue' in both medical and financial decision-making underscores the importance of effective communication packages, that realistically manage client and customer expectations and enable them to make well-considered decisions. This chapter provides a method for evaluating such multichannel packages, illustrated by a case study of a mortgage MCP. We use data kindly shared by one of the largest mortgage lenders in the Netherlands, henceforth 'the Bank'.

Our analysis proceeds in several steps. We start by describing our data: the collection of the Bank's mortgage documents and mortgage information

activities that altogether constitute the MCP. Next, we introduce our conceptual tools, namely Functional analysis and Media Synchronicity Theory. We then present the contents and the communicative goals to be served by the MCP and its individual components. These communicative goals are partly identified 'bottom-up' through text analysis of mortgage information documents and partly 'top-down' through interviews with the Bank's employees. Subsequently we focus on the communicative tasks to be performed by MCP users, and on the communicative capabilities of the channels present in the Bank's MCP; both are characterized in terms of Media Synchronicity Theory. Finally, we examine to what extent the MCP design may be expected to work well, given the tasks that need to be supported on the one hand and the channels chosen on the other hand.

By doing so, we provide communication and marketing practitioners with a useful tool to evaluate their MCP's, whether they deal with financial services or with other complex products or services. Furthermore, we hope to contribute to research on mortgage decision-making by providing a communicative process view that may complement the micro-economical perspective taken so far.

2. MORTGAGE DECISION-MAKING ISSUES

Mortgages are complex products. They are infrequently purchased, hard to comprehend and have many attributes that need to be tailored to the customer's situation (Vroomen *et al*., 2005); and the choice for a mortgage has long-term financial consequences. Hence the mortgage purchase decision requires an extensive search for information and a thorough evaluation of alternatives (Guttman *et al*., 1998; Vroomen *et al*., 2005). However, according to Kamleitner *et al*. (2012) people purchasing consumer credits frequently fail to search for information, and if they do search this is no guarantee for good decision-making. Furthermore, only financially literate consumers are able to adequately evaluate various credit options, i.e. consumers who are 'able to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being' (Remund, 2010). However, according to Kamleitner *et al*. (2012) consumers tend to focus on immediate instead of long-term implications when acquiring a credit, so that monthly payments receive more attention than total costs.

Mortgage decision-making has traditionally been studied from a micro-economical perspective in which patterns of consumer choices have been explained in terms of household and consumer characteristics (e.g. Amromin *et*

al., 2011; Chambers *et al*., 2009; Coulibaly & Li, 2009; Ehrmann & Ziegelmeyer, 2014; Fornero *et al*., 2011; Hullgren & Söderberg, 2013), by analyzing the optimality of mortgage choices given the consumer's situation (Campbell, 2006) or by offering a model of mortgage choice defaults (Campbell & Coco, 2011). Only a few studies have addressed mortgage choice in the Netherlands. Cox *et al*. (2014) examined how financial literacy and risk attitude affect household's mortgage choices and Van Ooijen & Van Rooij (2014) studied the effects of financial literacy and mortgage advice on mortgage choices. They find that debt literacy is a better indicator of mortgage choice than financial literacy and also that home-owners associate risky mortgages with high loan-to-value ratios, high loan-to-income ratios and complex attributes such as a life-insurance policy needed to secure mortgage repayments.

Both of these Dutch studies have examined mortgage take-ups before 2013. As of 2013, the mortgage system in the Netherlands has changed substantially. Many of the high risk options discussed by Van Ooijen & Van Rooij (2014) are legally eliminated; nowadays, consumers can only choose mortgage options in which the loan principal is gradually paid off.

Our study differs from earlier work on mortgage decision-making in that our analysis does not focus on the determinants of mortgage choices, but on the arrangements to be made in order for the consumer decision-making process to work well. Adopting a communication process perspective, we discuss the processes and communicative purposes that should be taken into account to effectively support mortgage costumers in making informed decisions.

3. MULTICHANNEL COMMUNICATION

Many studies regarding multichannel communication concentrate on the ultimate customer experience that needs to be created in order to eventually increase customer satisfaction. The first studies on multichannel strategies focused on customer relationship management (CRM) (see Payne & Frow, 2005 for an overview). Subsequently, the interest in multichannel environments moved from organization processes to consumer preferences. A number of marketing studies report on consumers' channel preferences with information concerning less complex products (e.g. leisure travel: Van Dijk *et al*. 2007; household furniture: Lihra & Graf, 2007) or financial services (requesting account balances: Laukkanen, 2007). Other papers discuss models of consumers' channel choice in which determinants of channel choice are related to the various stages of the purchase process (i.e. Balasubramanian *et al*., 2005; Gensler *et al*, 2012; Verhoef *et al*., 2007).

Only a few studies focus on financial services or on mortgages in particular. Frambach *et al*. (2007) studied consumers' channel preferences in the purchase of a home mortgage during various purchase stages. They conducted personal interviews to examine past customer experiences and discuss a channel's functional benefits (i.e. accessibility; ease of use; usefulness; social presence) and psychosocial benefits (positive or negative social benefits). They found that mortgage consumers prefer face-to-face (FTF) communication with a financial advisor over using the internet. These findings are supported by research on consumers' financial information seeking behaviour in the Netherlands (Antonides *et al.,* 2008). However, this reported preference for FTF information may be related to the fact that in the Dutch situation up to 2012, mortgage consultations used to be provision-based services, apparently free to (future) customers. This situation changed in 2013. Given that FTF communication is not for free anymore and that Frambach *et al*. (2007) identified accessibility as a channel choice determinant, they would probably report different results when repeating their interviews right now.
Although following consumers' channel preferences probably does improve satisfaction with the communication process, it does not automatically lead to a better decision-making performance. After all, preferred channels may not be optimal fur the purpose at hand, as intuitions about the effectiveness of channels may be faulty. So far, little attention has been paid to what we know about the actual effectiveness of the multichannel communication packages offered to mortgage customers. We will try to use such knowledge in our analysis and evaluation of MCP design for mortgage consumers, and MCP design for complex products and services more generally. We hope to show what requirements to MCP design follow from the need to educate consumers and clients.

4. THE DATA IN OUR CASE STUDY

We gathered all documents and services regarding mortgage information that the Bank offers to mortgage customers. This led to a collection of twenty-three different components (Table 1), that was checked and approved of (April 1st, 2013) by bank employees who (co-) created the MCP. MCP components may be produced in various Bank departments (especially the communication, legal and compliance departments), sometimes in interdepartmental collaboration. We collected printed, digital as well as oral components. An example of a printed component is the lengthy document with mortgage terms and agreements; a digital component is the tool on internet that enables prospective customers to fill in their monthly loan spending wish in order to

roughly estimate the maximum mortgage loan amount. Printed and digital components were available in the Bank's branches, on the web or in both delivery formats at the same time. Other (not publicly accessible) components, such as e-mail or consultation services were accessible through one of the Bank's call centres and a branch location.

To study oral MCP components, we recorded mortgage consultations (from July until December 2013). The consultation corpus exists of orientation, advice and mortgage quote signing consultations offered face to face, through a webcam or via telephone. Orientation consultations are offered for free and are used to explore mortgage options in a preliminary fashion; advice consultations need to be paid. Both usually occur only once in the mortgage decision-making process.

Table 1 classifies the components according to their delivery formats as assigned to by the Bank (printed, digital, oral). It also shows that four different departments at the Bank are responsible for their production: Marketing, Service, advice and sales, Legal, and Internet. Some printed documents (marked by an asterisk) are offered as PDF files online too. Within oral delivery formats we distinguish between face-to-face and webcam consultations, as these delivery formats have different capabilities and need to be separately evaluated.

Some of the printed components (those in italics) offer information on the processes of buying a mortgage, buying a house and receiving mortgage advice. For instance, they tell you what a notary does, what papers should be brought to a mortgage consultation and how long it takes to draw up a mortgage quote. These components are part of the multichannel communication package but do not substantially contribute to the FTB's mortgage decision making process. Hence they were excluded from further analysis. The same goes for the mandatory risk announcement, which is a legally required document with standardized text which falls outside the Bank's communicative responsibilities.

Table 1. Components of the MCP

PRINTED DELIVERY FORMAT		***DEPARTMENT***
1	Brochure: Your first house at sale *	Marketing
2	Brochure: Choose the best loan for your house	Marketing
3	Mortgage orientation report *	Services, advice and sales (SAS)
4	Mortgage advice report *	SAS
5	Mortgage quote *	Legal
6	Mortgage terms and agreements *	Legal
	*Brochure: From acquaintance to mortgage agreement **	
	*Brochure: From mortgage offer to property purchase **	
	Mortage advice service document	
	*Mandatory risk announcement ('Financiële Bijsluiter'-obliged by The Netherlands Authority for the Financial Markets- (AFM)**	
DIGITAL DELIVERY FORMAT		
7	E-mail (mainly used as helpdesk service)	Internet
8	Social Media (Facebook, Twitter)	Internet
9	House viewer - App	Internet
10	Online web pages on mortgages	Internet
11	Mortgage calculator	Internet
12	Starters to Starters-Tool (an online platform where First time buyers can meet)	Internet
ORAL DELIVERY FORMAT (CHANNEL CHOICE RESTRICTED AND LIMITED AMOUNT ON OFFER)		
13	Webcam orientation consultation (content similar to 18)	SAS
14	FTF orientation consultation (content similar to 17)	SAS
15	Webcam advice consultation (content similar to 20)	SAS
16	FTF advice consultation (content similar to 19)	SAS
17	Webcam mortgage quote consultation (content similar to 22)	SAS
18	FTF mortgage quote consultation (content similar to 21)	SAS
19	Telephone consultations (mainly used as helpdesk service)	SAS

* Also delivered as PDF online

This leaves us with nineteen single components contributing to the overarching purpose of supporting the first-time home buyer in the mortgage decision-making process. We are well aware that in reality, customers gather information from everywhere, not only from the Bank and furthermore that they strongly rely on ideas of their family and acquaintances when it comes to mortgage information gathering (Antonides *et al*., 2008). However, our analysis focuses on how the Bank assumes its responsibility to provide sufficient adequate information.

5. ANALYTICAL APPROACH

Functional analysis: assigning goals to communicative means

Functional analysis (FA) was originally conceived as a conceptual support tool for document designers. It has also been used in analysing and evaluating the design of existing documents (e.g. patient information: Pander Maat & Lentz 1994; public information about laws and regulations: Schellens *et al*. 1997; public brochures: De Jong & Schellens, 2001**;** press releases: Pander Maat, 2008; Newspaper articles: De Wolff, 2012)**.** The mortgage multichannel communication package can be approached likewise, because just like single documents, it has as an overarching purpose: enabling First-time home buyers to make a well-balanced mortgage purchase decision.

Functional analysis (Lentz & Pander Maat, 2004) assumes that the quality of documents requires an optimal match between design choices and their intended functionality, given a particular communicative context. Hence communication design needs to be guided, firstly, by an analysis of the communicative goals to be served by documents and secondly, by an analysis of contextual constraints (e.g. financial, legal, cultural and organizational) on the available design choices.

In a Functional analysis, the communicative goals are described in terms of the intended effects on particular kinds of cognitions on particular topics for particular audiences. Cognitions may involve knowing something (informative goals), having a particular attitude about something (persuasive goals), should know how to do something (instructive goals), or should be willing to do something (motivational goals). Motivational goals may require persuasive and informational goals to be achieved, and instructional goals may also be conditional upon informational goals (Lentz &Pander Maat, 2004). Someone cannot comply with traffic rules if he or she is unfamiliar with them, for instance. That is, communicative goals are often embedded in hierarchical networks.

Goal assignment decisions for communicative means can be based on two kinds of data. First, they can be derived from the questions actually addressed in documents or (recorded) conversations. In documents, this kind of analysis is helped by headings signalling topics, in conversations new topics may be recognized by topic change signals (e.g. Let's talk about X now). Our recordings revealed that advisors discuss a fixed set of topics in their consultations. Second, communicative goals may be derived from secondary information provided by stakeholders actually involved in producing communicative means. By using this information, we adopted a text-in context perspective (Askehave & Swales, 2001). For one of our MCP component

(telephone consultations), invoking stakeholders was the only option we had, because we were unable to record any of these for further analysis.

However, assigning communicative functions presents dilemmas. Askehave (1999, p.19) has noted "the absence of a clear consensus as to what communicative purpose is." For instance, sometimes we need to distinguish between official and nonofficial purposes. A news broadcast has the official purpose to inform people on a certain topic, but it is likely there are hidden purposes such as attracting a large audience. In our case, we faced the question how to deal with occasional promotional sentences such as "our Bank has a (mortgage) solution for every situation". Although such sentences clearly reveal a generic promotional goal of attracting customers to The Bank, they are unrelated to the actual mortgage decision to be made, and hence were ignored.

Another potential communicative goal that has been excluded from the present analysis is increasing the customers' willingness to actually process complex and lengthy papers and digital information, as processing motivations do not affect the mortgage options to be considered. This is not to deny that motivating customers to process may be important in actual practice.

Finally, we need to point out that Functional analysis may involve a normative element. To a large extent, Functional analysis consists of deriving goals or even purposes from actions, or more generally, ends from means. Once the end has been articulated, the means may be considered in terms of its suitability or completeness to achieve this end. Generalizing the goal may extend the set of conceivable means even further. For instance, when bringing an umbrella is seen as an attempt to be protected if it rains, it may be considered adequate. When however it is seen as an attempt to be protected to changing weather in general, an umbrella may not be enough, as it does not protect against rain when there is also a storm. Given this broader goal, other means might be considered, such as taking a coat.

Media Synchronicity Theory: analyzing channel capabilities

Marketing studies generally distinguish between offline (in-branch) and online (internet) channels (Balasubramanian *et al*. 2005; Chen *et al*. 2005; Van Dijk *et al*. 2007; Coughlan *et al*. 2011; Frambach *et al*. 2007; Vroomen *et al*. 2005). In Table 1, we used another classification: printed, digital and oral channels. Neither of these distinctions is fine-grained enough for analysing the MCP in terms of channel effectiveness. A more elaborated framework for channel analysis is offered by Media Synchronicity Theory (MST).

Although MST was only developed quite recently, and is not as well-known as Daft and Lengel's (1986) earlier Media Richness Theory (MRT), MST better fits our purposes than MRT. First, MST expressly addresses new media

capabilities, more than MRT does. Second, MRT only considers media capabilities related to transmitting information, whereas Media Synchronicity Theory also takes media capabilities related to information processing into account. Third, while MRT focuses mainly on media choice, MST concentrates on media effects.-And finally, MRT predications have often not been supported in empirical studies (Dennis & Kinney, 1998). According to Dennis *et al*. (2008), that is because MRT only focuses on broad communicative tasks and does not address the underlying communicative processes that need to be performed in order to accomplish these communicative tasks.

A number of MST-inspired studies have appeared in the last years, in various research domains such as communication (Muhren *et al*., 2009; Fox *et al*., 2010; George *et al*., 2012), information systems (Thomas & Bostrom, 2010; Niinimäke *et al*., 2012), innovation and learning (North-Samardzic *et al*., 2014) and decision-making (Sarker *et al*., 2010; Hassel & Limayen, 2011). Most relevant to our present concerns is the small-scale study by Hassel & Limayen (2011) finding that a mixed portfolio of both high- and low-synchronous media provides better task performance than a single medium approach.

Media Synchronicity Theory (MST) was developed by Dennis & Valacich in 1999 (Dennis *et al*., 2008) and assumes that a channel's success depends on whether it offers a degree of synchronicity that fits the task to be performed by the communication participants. Synchronicity is 'a shared pattern of coordinated behaviour among individuals'; synchronicity involves individuals working together at the same time with a common focus. According to MST, when individuals want to accomplish a communicative task, they encounter processes of conveyance (in which new knowledge is distributed) and processes of convergence (in which they create shared understanding). MST claims that low-synchronous channels (i.e. channels enabling low degrees of synchronicity) are more beneficial to conveyance processes, whereas high-synchronous channels are more beneficial to convergence processes.

According to Dennis *et al*. (2008) the degree of synchronicity a medium or channel allows is determined by five capabilities. The first three are derived from Shannon & Weaver (1949), the last two from Rice (1987):

1. *Transmission Velocity* – A medium high in transmission velocity enables messages to reach the recipient as soon as it is sent, and to be responded to as soon as it is sent. Traditional written communication is much slower than face-to-face communication, for instance. Hence the reader of a mortgage brochure is unable to immediately respond to what he reads, whereas in consultations the customer may respond directly to the advisor. Synchronicity benefits from transmission

velocity, therefore this capability is supportive to processes of *convergence*.

2. *Symbol sets* – Channels allow different ways of expressing information. In a mortgage tool customers are only allowed to enter digits, whereas in a webcam consultation an advisor can verbally explain issues while in the meantime pointing them out in a document shared on their screens. The more symbol sets a channel allows, the more synchronicity it generates. The capability of symbol sets therefore especially facilitates processes of *convergence*.
3. *Parallelism* – When both participants can work simultaneously we speak of high parallelism. E-mail for instance allows a high amount of parallelism, because advisor and FTB can compose an e-mail at exactly the same time without disturbing each other. But parallelism can cause problems when it comes to maintaining a shared focus of attention. If the focus of attention is obstructed, synchronicity gets disturbed and then parallelism is not beneficial to synchronicity. Otherwise, it is, and benefits processes of *convergence*.
4. *Rehearsability* (amount of fine-tuning allowed) – If individuals talk to each other they are more 'pushed forward' by the act of interaction than when they are writing a social media post. Pauses in social media are far more common than in interaction. Rehearsability is the opportunity offered by the channel to work at fine-tuning the message. As rehearsing takes time, it lowers synchronicity and shared focus. But rehearsing is beneficial in communication between individuals who do not share experiences or mental models, and facilitates processes of *conveyance.*
5. *Reprocessability* (amount of re-examination or reprocessing) – The capability of reprocessability allows individuals to re-read information as often as necessary. We add here that media high in reprocessability generally also offers the option of *selective processing,* i.e. to focus only on part of the information. In contrast, sometimes this is not possible, for instance in telephone calls where it is impossible to listen to the same utterance twice or speed up the talk only to get to the point you were aiming for. Reprocessability does not facilitate synchronicity, but supports careful message processing; hence facilitates processes of *conveyance*.

To recapitulate, a functional analysis provides us with a network of communicative goals, embraced by a single overarching purpose. This purpose needs to be achieved in a communicative task to be performed by (one or more components of) the Bank and the first-time buyer. Every such task offers a combination of conveyance and/or convergence processes. This combination poses certain requirements regarding the synchronicity of the communication channel(s) to be used. This synchronicity is determined by the five capabilities of transmission velocity, symbol sets, parallelism, rehearsability and reprocessability.

In the next paragraph we will first present our functional analysis for the Bank's MCP. Then we specify this analysis in terms of the kind of communicative tasks processes involved in achieving the pertinent communicative goals. Next we use Media Synchronicity Theory to assess the capabilities of the MCP components to support these processes. Finally, we combine the results to evaluate to what extent the MCP design matches its purpose.

6. RESULTS

Contents of the multichannel communication package

The identified user questions discussed in the MCP components have been abstracted into overarching topics. For instance, a large number of questions were assigned to a category called 'housing preferences'. These topics are then coupled with intended cognitive effects so as to produce communicative goals. The results of all this are presented in Table 2, in which the component numbers refer to those in Table 1.

Table 2. Content, component and communicative goals

DISCUSSED USER QUESTIONS	COMPONENT	OVERARCHING COMMUNICATIVE GOALS
Should I buy or rent a house? What are the (dis-)advantages of buying? And what are the (dis-) advantages of renting? What will differences will I experience when I have a house of my own versus when I live in a rental house? What kind of home do I prefer: how many rooms, garden, attic, basement, garage etc.? What wishes could I possibly have regarding a home? What is the difference between buying an existing house or a house to be built? What should I expect with regards to maintaining a house? What is the difference between living in an apartment or a (semi-) detached house?	**Paper: 1, 2** **Digital: 13, 16** **Oral: 17, 18**	FTB knows his/her housing preferences
What monthly payments am I able to afford?	*NO PAPER*	FTB knows how much he/she

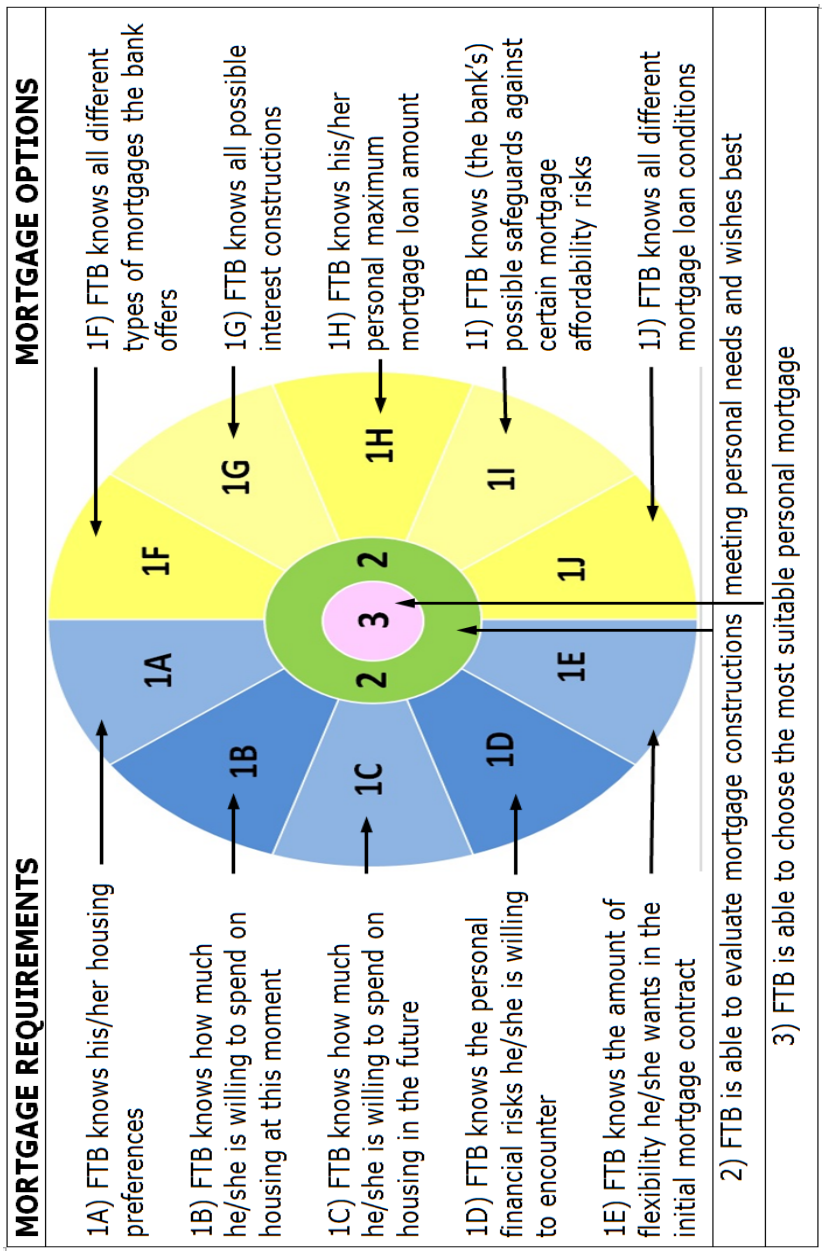
What monthly expenses would I have regarding the amount of money I want to borrow? And what additional costs can I expect besides my monthly mortgage payment obligation? How much do I want to pay on a mortgage in total?	*NO DIGITAL* **Oral: 17, 18, 19, 20**	is willing to spend on housing at the moment
What will my income look like in the future? Do I expect any major changes? What will my personal situation look like in the future? And what will my family situation look like?	*NO PAPER* *NO DIGITAL* **Oral: 17, 18, 19, 20**	FTB knows how much he/she is willing to spend on housing in the future
What buffers do I have to cover unexpected expenses? Am I willing to give up my house when I cannot afford it any longer? What sources are available to me in financially hard times?	**Paper: 6** *NO DIGITAL* **Oral: 19, 20**	FTB knows the personal financial risks he/she is willing to encounter
How much flexibility do I want to have in repaying my mortgage?	**Paper: 7** *NO DIGITAL* *NO ORAL*	FTB knows the amount of flexibility he/she wants in the initial mortgage contract
What is a mortgage? What is an annuity mortgage? What is a linear mortgage?	**Paper: 1,2** **Digital: 14** **Oral: 17, 18**	FTB knows all different types of mortgages the bank offers (as available in the Netherlands April, 2013)
Should I go for adjustable or fixed interest rates? What is the difference for my situation between adjustable interest rate and fixed interest rate? What are the (dis-) advantages of fixed interest rate terms (shorter versus longer terms) in my situation?	**Paper: 1,2** **Digital: 14** **Oral: 17, 18**	FTB knows all possible interest constructions (as available in the Netherlands April, 2013)
What factors are taken into account while estimating my maximum mortgage loan amount? How does the bank calculate my maximum mortgage loan amount?	**Paper: 5, 6** **Digital: 15** **Oral: 17, 18, 19, 20, 21,22**	FTB knows his/her personal maximum mortgage loan amount
What is National Mortgage Guarantee (NHG)? Under what conditions am I allowed to apply for National Mortgage guarantee?	**Paper: 1, 2** *NO DIGITAL* **Oral: 19, 20**	FTB knows about NHG, which is a safeguard against certain mortgage affordability risks
What if I cannot pay for my mortgage anymore? When will my mortgage offer expire? When will my interest rate offer expire? How flexible is the Bank in adjusting my mortgage to changing circumstances? And what are the costs of making changes? What early repayment charges do I need to reckon with? What are the initial costs for getting a mortgage?	**Paper: 7** *NO DIGITAL* *NO ORAL*	FTB knows all different mortgage loan conditions
What mortgage constructions would be most appropriate in my personal financial situation?	**Paper: 6** *NO DIGITAL* **Oral: 19, 20, 21, 22**	FTB evaluates mortgage constructions meeting personal needs and wishes best
What mortgage should I buy?	*NO PAPER* *NO DIGITAL* **Oral: 21,22**	FTB chooses the most appropriate personal mortgage

Table 2 shows what the different MCP components are currently used for. For instance, it shows that the Bank mainly uses paper brochures (1 en 2) to inform FTBs on considerations regarding housing preferences. These brochures are also used to explain different types of mortgages and interest constructions. Digital components play a less prominent role. They are only used to inform on housing preferences and to calculate the maximum mortgage loan amount. Finally, a lot of information is conveyed in the orientation consultation (17, 18) and the advice consultation (19, 20). These components' information distribution overlaps with a lot of other components.

The communicative goals to be achieved: the Decision wheel

The goals in the right-hand column of Table 2 were arrived upon by combining between the information offered in various MCP components on the one hand and more general assumptions concerning the information needs of first-time home buyers on the other. They are a reconstruction of the communicative intentions behind a multichannel mortgage communication package. Figure 1 presents these goals and sub goals in the form of a hierarchical model, the so-called Decision wheel.

Figure 1.Wheel of fortune: decision-making stages and communicative goals



The pink center of the Decision wheel represents the single-overarching communicative purpose: the FTB is able to choose the mortgage construction most suitable for personal situation. In order to arrive at this third stage, the FTB first needs to traverse the outer circle, which represents the mortgage orientation (stage 1). The blue side (numbers 1A – 1E) presents goals regarding the articulation of the FTB's requirements concerning the house and the mortgage, and the yellow side (numbers 1F – 1J) presents information on the Bank's mortgage options (the number of which has been reduced somewhat in The Netherlands as of 2013, as noted earlier). When all communicative goals in yellow and blue are effectively addressed, the FTB is brought to the personal mortgage evaluation (stage 2), which is represented in the Wheel by the green circle. In this stage, wishes (blue) and possibilities (yellow) need to be matched. This matching procedure yields a small number of options to be evaluated in detail. Ultimately, the FTB enters the pink center in which he/she chooses the best mortgage or decides to leave the Bank[2].

These three stages should ideally be MCP-supported and hence imply communicative goals to be fulfilled by MCP components, down to the level of specific user questions such as those in Table 2. It is important to note however that the Wheel itself does not say anything on how these goals and user questions need to be distributed over MCP components. The MCP design requires extra analytical considerations, especially concerning task analysis and channel capabilities, to be discussed shortly.

We consulted Bank stakeholders on the Wheel model, and it was generally accepted as a set of sensible goals for mortgage communication. However, two issues were raised. First, in various MCP components, the bank tries to reduce customer stress by emphasizing how the Bank will do its best to guide customers through the complicated mortgage application process. We did not include this communicative goal in the Wheel, as it is unrelated to the actual mortgage decision (as was the process-related information in some MCP components).

Second, the Wheel does not expressly mention the National Mortgage Guarantee, while this topic is emphatically represented in the MCP components (see Table 1). Ultimately, this guarantee is not the only conceivable safeguard against mortgage affordability problems: for instance, one of the mortgage risks can be a premature decease of the mortgage customer or his/her (financial) partner, and this eventuality may be covered by buying a life insurance. Hence

[2] In the Dutch situation from 2013 on this is less likely to happen as it once was, as mortgage clients now pay for mortgage advice.

the Wheel speaks generally of 'safeguards against mortgage affordability risks' instead of only the National Mortgage Guarantee. This last decision highlights the partly normative nature of Functional analysis that has been mentioned earlier: the communicative goal behind the National Mortgage Guarantee information is generalized and hence suggests other topics to be covered as well.

Communicative tasks and processes

The Decision wheel presents the communicative goals required to support the FTB's decision-making process. We mentioned before that in terms of Media Synchronicity Theory, achieving these goals requires performing tasks that involve processes of conveyance and convergence. In Table 3 we point out where processes of conveyance or convergence occur in the decision-making process. Within the different stages, these processes do not need to follow a particular order.

Table 3. Tasks and processes during mortgage decision-making

	MCP - STAGE 1 *General mortgage orientation*		**MCP - STAGE 2** *Personal mortgage evaluation*		**MCP - STAGE 3** *Purchase decision*
TASK	**1.1**	**1.2**	**2.1**	**2.2**	**3**
	FTB builds mental model on mortgages	FTB & advisor create shared understanding on FTB's mortgage requirements	FTB builds mental model on mortgage constructions meeting personal requirements best	FTB & advisor create shared understanding on suitable mortgage options	FTB & advisor create shared understanding on best fitting mortgage
PROCESS	Conveyance	Convergence	Conveyance	Convergence	Convergence

In the first stage, FTBs need to acquire mortgage knowledge as well as to articulate their mortgage requirements. The knowledge component is to be realized in a conveyance process (1.1). As both the FTB and the advisor need to understand the FTB's requirements, and as the advisor may help the FTB in pointing out the issues that require choices, the articulation of requirements is a process of convergence (1.2). Ideally, this first stage ends once all communicative goals in the outer circle of the Decision wheel are achieved; the FTBs knows their personal mortgage requirements and know all the Bank has to offer.

This leads to the personal mortgage evaluation stage (2). Traversing this stage of the Wheel is complicated because customers' requirements and bank's options are often dependent. Every choice with regards to mortgage possibilities generates a different mortgage construction in the end and these mortgage constructions all have consequences. They influence the monthly

mortgage payment or the certainty over a longer period of time. It's the FTB's and the advisor's task to balance a comfortable situation that matches the mortgage possibilities with FTB's wishes and requirements. For instance, when an FTB wants to buy a house that is affordable but a bit expensive in the FTB's personal situation, it might be a good option to go for lower flexible interest rates to save out some money in the beginning. But it does require some extra attention every year since these rates could go up. And that again involves certain financial risks. Since some people are concerned with loss aversion while others are more concerned with risk aversion, the question is: What construction is most suitable to this FTB, taking all preferences and possibilities into account. Processes of convergence and conveyance will go back and forth in this stage of the mortgage decision–making process. Once the convergence (2.2) has taken place, the mortgage customer (re)builds a mental model on the most eligible mortgage constructions (2.1). In the end, it all comes down to the personal purchase decision. The FTB needs to choose from the options left over and the FTB and the advisor create a shared interpretation about the optimal mortgage construction, as they both need to thoroughly understand and endorse it (3).

Capabilities of the package components

To prepare our evaluation of the fit between MCP components and communicative tasks, Table 4 shows their channel capabilities according to MST. The first five columns represent the channel capabilities. As discussed earlier, rehearsability and reprocessability support conveyance, and transmission velocity and symbol sets support convergence. Parallelism has a special status: if it does not disturb shared attention, it can be supportive for both conveyance and also in convergence processes. Based on the five properties, the last two columns provide overall judgements on a components' fit for convergence or conveyance.

Paper-delivered formats are generally very strong in rehearsability and reprocessability, which makes them fit for extended conveyance processes. Analysis gets more complicated with digital components and oral components, because they offer a set of varied capabilities, such as the ability to re-read something or skip certain information.

Table 4. Complex components' capabilities drawing on Media Synchronicity Theory

		CONVERGENCE SUPPORT		BOTH	CONVEYANCE SUPPORT		OVERALL SUPPORT JUDGMENT	
		Transmission velocity	**Symbol sets**	**Parallelism**	**Rehears-ability**	**Reprocess-ability**	**Fit for Conver-gence**	**Fit for Convey-ance**
PRINTED DELIVERY FORMAT								
	All paper components	-	-	-	+	+	-	++
DIGITAL DELIVERY FORMAT								
7	E-mail	+	o	o	+	+	o/+	+
8	Social Media**	+	o	+	+	+	o/+	+/ ++
9	House viewer- App	+	-	o	+	+	o	+
10	Web pages	+	-	NA	+	+	-	+
11	Mortgage calculator	+	-	NA	+	+	-	+
12	Starters to Starters-Tool	+	-	NA	+	+	-	+
ORAL DELIVERY FORMAT								
13	Webcam orientation consultation*	+	++	o	-	-	++	-
14	Face-to-face orientation consultation	+	++	o	-	-	+	-
15	Webcam advice consultation *	+	++	o	-	-	++	-
16	Face-to-face advice consultation	+	++	o	-	-	+	-
17	Webcam mortgage quote consultation	+	++	o	-	-	++	-
18	FTF mortgage quote consultation	+	++	o	-	-	+	-
19	Telephone consultation	+	o	o	-	-	o	-

(*Systems are working properly all the time; **Taken in the way currently used in the MCP; – = Low; 0=medium; + = High; NA = not available)

Table 4 shows that digital formats offer smaller symbol sets than oral formats. For instance, a webcam consultation also allows people to look at paper files on their screens. And in face-to-face consultation, advisors can use all kinds of aids (images, drawings, brochures). So, oral components allow the use of paper and digital formats, although there is no self-paced reading here. This also holds for email and social media, to some extent, as these allow various kinds of attachments and hyperlinks. Furthermore, social media are stronger on parallelism than other components, because a social media message reaches a group of recipients and therefore not depends on just one person for a response. When clients post messages on social media, there is a complete web care team with multiple bank employees to answer these messages.

Generally, oral formats are less supportive of conveyance than other channels, as they are low on reprocessability and rehearsability. But since they allow the quick presentation of paper and digital documents, they support conveyance processes to some extent. Regarding convergence, different oral delivery formats with identical synchronicity capability scores may still differ somewhat in their fit for convergence. According to MST, an important determinant of the degree of synchronicity is the simultaneous focus of participants during the task. When looking at the recordings, the common focus of interlocutors in webcam conversations seems to be stronger than that in face-to-face conversations. This is in line with the findings of O'Malley *et al*. (1996), who compared face-to-face-interactions with video-mediated interaction. They showed that there is more gaze contact in video-mediated interactions, probable because interlocutors are less confident about the achievement of mutual understanding. To keep track of each other, the interlocutors (need to) look at their screens continuously. Due to this increased mutual focus, webcam consultations may be even more conducive to convergence processes than face-to-face consultations.

Evaluation of the communication package

We have now set the stage for the actual evaluation of the multichannel communication package. We will ask the following questions for each goal.

1. What, if any, MCP components address this goal? (see Table 5)
2. Is the number of MCP components for this goal optimal (nor too many nor too few)?
3. Do the components offer the required information?
4. Are the components presented at the right moment?
5. Are the components' channels optimal for supporting the task at hand, taking into account the processes involved?

Then we combine these elements into an overall assessment on the MCP design's effectiveness.

Table 5. MCP components and associated goals

		GOALS (SEE FIGURE 1 AND TEXT BELOW)												
		STAGE 1										2	3	
		REQUIREMENTS					OPTIONS							
	COMPONENTS	A	B	C	D	E	F	G	H	I	J			
	PRINTED DELIVERY FORMAT													
1	Brochure: Your first house at sale *		A	B	C		F	G	H	I	J			
2	Brochure: Choose the best loan for your house			B	C		F	G	H	I	J			
3	Mortgage orientation report *								H					
4	Mortgage advice report *					D	E		H	I				
5	Mortgage quote *								H		J	2		
6	Mortgage terms and agreements *					E					J	2		
	Brochure: From acquaintance to mortgage agreement *													
	Brochure: From mortgage offer to property purchase *													
	Mortgage advice service document													
	*Mandatory risk announcement ('Financiële Bijsluiter'-obliged by The Netherlands Authority for the Financial Markets- (AFM)**													
	DIGITAL DELIVERY FORMAT													
7	E-mail (mainly used as helpdesk service)					E								
8	Social Media (Facebook, Twitter)										J			
9	House viewer - App		A											
10	Online web pages on mortgages						F	G						
11	Mortgage calculator								H					
12	Starters to Starters-Tool (an online platform where First time buyers can meet)		A											
	ORAL DELIVERY FORMAT (CHANNEL CHOICE RESTRICTED AND LIMITED AMOUNT ON OFFER)													
13	Webcam orientation consultation (content similar to 18)		A	B	C		F	G	H					
14	FTF orientation consultation (content similar to 17)		A	B	C		F	G	H					
15	Webcam advice consultation (content similar to 20)			B	C	D			H	I		2		
16	FTF advice consultation (content similar to 19)			B	C	D			H	I		2		
17	Webcam mortgage quote consultation (content similar to 22)								H			2		
18	FTF mortgage quote consultation (content similar to 21)								H			2	3	
19	Telephone consultations (mainly used as helpdesk service)											2	3	

* Also delivered as PDF online

The Decision wheel's orientation stage comprised two perspectives on mortgages: from a customer's perspective it discusses mortgage requirements (1A-1E) and from the Bank's perspective it discusses mortgage options (1F-1J). The communicative goals from both perspectives are equally important for the mortgage purchase decision, but they do not receive the same amount of attention in the MCP. Some goals from the customer's perspective are addressed extensively. The 'fun' part of buying a house (1A) is exploited in the orientation stage; this goal is addressed in many components: brochures (1, 2), the house viewer App (9), the starters-to-starters-tool (12). All these components adequately support the FTB's reflection on housing preferences (see conveyance process 1.1 in Table 3). However, this is not a particularly pressing concern. One of the main reasons people seek mortgage information is because they set sight on a house, so they have already considered their housing preferences. Secondly, the maximum mortgage loan amount (1H) is overwhelmingly addressed by oral components (13, 14), paper components (1, 2, 3) and digital components (10, 11). Unfortunately, this is not very useful since these 'early' components offer incomplete or unreliable information; incomplete because they only refer to personal preferences versus possibilities in just one sentence (1,2), and unreliable because they do not take into account all necessary client information. The only components offering correct information on the maximum mortgage loan amount are the components (4, 15, 16) that are offered in stage 2: the personal mortgage evaluation stage.

Furthermore, a number of orientation goals are not sufficiently addressed in the current MCP. The FTB does not receive sufficient information on personal financial risks, (1D) nor on insurances that cover possible risks (1I); neither do we find adequate discussion on how much flexibility the FTB wants in a mortgage (1E) and on mortgage conditions (1J). All these issues should be covered before the FTB can safely proceed to the next purchase decision stage.

Some of the components offered for stage 1 goals may be less than optimally effective. For instance, orientation consultations are indispensable to create shared understanding on FTB's mortgage requirements (convergence 1.2 in Table 3). Unfortunately, they are not as successful as they could be, because they are overloaded with information on mortgage options (1F, 1G, 1H) too.

Two paper components offered in the mortgage orientation (1, 2) address the same topics concerning mortgage forms and interest rate forms (1F, 1G). This is unnecessary since one of those components could do the job all by itself. The components are identical except for a paragraph in component 1 on housing preferences (1A).

The primary conclusion from this evaluation of the orientation stage is that the FTB needs more support in building a mental model on mortgages (conveyance 1.1) especially regarding mortgage risks (1D-1I) and mortgage conditions (1E-1J). It is better not to assign these goals to the orientation consultation; such a face-to-face encounter is not suitable for extended conveyance processes (1.1), and should focus on creating a shared understanding on FTB's mortgage requirements (1.2).

Regarding the goal of stage 2, the personal mortgage evaluation, three components are offered (5, 6, 15/16). But only two components of them offer actual support: the advice consultation (15/16) and its follow-up advice report (6). The mortgage quote (5) lacks functionality as it only shows the choices already made and does not offer decision support.

Like the orientation consultation, the advice consultation seems overburdened. This reduces the resources for support during the second stage of the mortgage decision-making process. The advice consultation offers the only opportunity before the purchase decision to repair possible mortgage knowledge gaps or misunderstandings. And it is often needed to cover issues that have been inadequately addressed in earlier components, such as information on possible mortgages risks (1D-1I) and mortgage conditions (1E-1J). Instead of repairing these gaps, the personal mortgage consultation should focus on filling gaps in mental models (conveyance 2.1) as well as creating shared understanding (convergence 2.2). For these tasks, the consultation seems quite suitable, also because it allows sharing written and digital documents.

The third stage of the Wheel is currently supported by the mortgage quote consultation (17, 18). In this consultation, the content of the mortgage quote (6) is discussed, and clients have a final opportunity to ensure correct understanding of the mortgage construction or the mortgage terms and agreements (5). Unfortunately, this is also the only occasion in which mortgage terms and agreements are actually addressed. This may be too late, since they contain terms that should have become clear already in the mortgage orientation stage (1E, 1J).

Finally, a few MCP components may offer support in various stages of the Decision wheel. Examples of these components are e-mail (7), social media (8) and telephone (19). They can be used for all kinds of questions an FTB could possibly have at every stage of the mortgage purchase decision-making

process. The appropriateness of these channels depends on the tasks for which FTB's actually use them. Unscheduled telephone conversations may be fit to achieve convergence on smaller issues (e.g. minor misunderstandings, procedural requests). For sharing financial information, social media and e-mail seem the better choice, with the proviso that for conveying larger bits of information, only e-mail seems suitable.

7. CONCLUSIONS

This chapter offers a method for the evaluation of multichannel communication packages that support customers in making complex decisions on financial products. The case study illustrating our approach uses a multichannel mortgage communication package offered by a large Dutch bank. We demonstrated how Functional analysis can be used as a tool to outline the main communicative purpose of these extensive packages (supporting mortgage customers to choose the most suitable option at hand) and the communicative goals involved. Furthermore, we showed how Media Synchronicity Theory may help analysing the match between communicative tasks and media capabilities for our package.

We evaluated the degree of support for each goal by asking five questions: 1. What, if any, components address this goal? 2. Is the number of components for this goal optimal? 3. Do the components offer the required information? 4. Are the components presented at the right moment? 5. Does the component's channel optimally support the task at hand, taking into account the processes involved?

When applied to our case, this analytical procedure yields a number of interesting conclusions. For instance, the mortgage communication package mainly focuses on goals from the first stage of the decision-making process. Within the goals related to this stage, the bank pays more attention to mortgage possibilities than to first time buyers' requirements. An example of a goal-specific finding is that information on safeguards is underrepresented in the package. Regarding timing, we found that information on mortgage conditions is delivered quite late in the decision-making process, as they are only provided with the mortgage quote. Regarding the adequacy of media choices, an example finding is that the mortgage advice consultation is used for a number of quite different communicative tasks at the same time. It addresses new information on safeguards (although its media capabilities are not optimally fit for that goal), it repairs incorrect ideas of customers and is used to match mortgage requirements with mortgage options. Hence this package component seems to

risk being overloaded, which may result in cognitive overload for the customer during the consultation.

More generally, our study contributes to the field both theoretically and on an applied level. Theoretically, it complements the micro-economical perspective on mortgage decision-making research by showing how communication process characteristics determine whether effective mortgage decision-making will be possible at all; after all, decision-making presupposes that consumers actually process certain information, reflect on it and if needed discuss it with financial experts.

On a more applied note, our study elaborates on the important responsibilities of mortgage providers in facilitating the mortgage decision-making process, which should be taken up by offering an effective communication package. Our method offers a practicable analytic approach to the evaluation such a package. By combining text analysis, functional analysis and media theory, it presents a plausible account of its effectiveness. To be sure, it does not provide empirical findings, but we need to realize testing all package design decisions is impossible. Hence a desk research method that identifies potential problems is a useful addition to the toolkit of communication designers and consultants. Some of these problems may be a topic for subsequent empirical studies on design alternatives.

8. LIMITATIONS AND FUTURE RESEARCH

Choosing a suitable mortgage is a task of daunting complexity. As work in Behavioral Decision Theory has documented, decision makers tend to reduce the complexity of decisions in various ways, such as decomposition (breaking up the decision in presumably independent parts), editing (ignoring relevant aspects of the decision) and biases that simplify information processing (Redlawski and Lau 2013). In the mortgage domain, the consumer preference for the face-to-face channel (cited earlier) may be partly induced by the desire to reduce the amount of information and the number of information sources to be reckoned with. While acknowledging the importance of managing decision complexity, our approach seeks to support package designs in which various channels supplement each other, thus increasing the chance that relevant information is processed at a moment at which it can still be reflected on, and does not need to be taken at face value.

To be fair, we need to note that the research into effective multichannel communication packages for consumers is in its infancy. Given the complexity of certain products and services, we feel that consumer communication research may profit from an educational point of view: sometimes, consumers

not just need to be informed, but need to be educated. And multichannel communication packages are quite common in the learning field. For instance, Kerres & De Witt (2003) developed an influential framework for the design of blended learning arrangements, paying special attention to channel choice. Such frameworks may help our thinking about designing consumer information environments that make it easier to support complex decisions.

CHAPTER 3

NAVIGATING CONTEXTUAL CONSTRAINTS IN DISCOURSE: DESIGN EXPLICATIONS IN INSTITUTIONAL TALK

In this chapter we have adapted a bottom-up approach to gain insight in the context of mortgage consultations and how this context affects the interaction. Although institutional discourse is subject to a vast ensemble of constraints, its design is not fixed beforehand. On the contrary, optimizing the satisfaction of these constraints requires considerable discourse design skills from institutional agents. In this chapter, we analyze advisors routine manners of managing contextual constraints in interactions by focusing on what we call discourse design explications, i.e. stretches of talk in which participants refer to conflicting constraints in the discourse context, at the same time proposing particular discourse designs for dealing with these conflicts. We start by discussing three forms of design explication. Then we will examine the various resolutions they propose for constraint conflicts and show how advisors seek customer consent or cooperation for the proposed designs. Thus our analysis reveals how institutional agents, while providing services, work on demonstrating how the design of these services is optimized and tailored to customers.

A slightly adapted version of this chapter has been published as:
Herijgers, M.L.C. & Pander Maat, H.L.W. (2017) Navigating contextual constraints in discourse: design explications in institutional talk. Discourse Studies, 19 (3), pp. 272-290.

1. INTRODUCTION

We are all discourse designers; talking to each other, we design utterances on a routine and on-the-fly basis, taking into account constraints deriving from the talk's purpose and context. In institutional contexts, managing constraints is even more essential, because most of these contexts imply a vast number of discourse constraints. Discourse constraint management is sometimes done explicitly. Excerpt 1 is taken from a Dutch mortgage consultation:

Excerpt 1.

01 AD: listen. when we talk about a mortgage,
luister. Als we praten over een hypotheek

02 we talk about financing a home.
dan praat je over de financiering van een woning

03 I will probably mention things you already know, **C2:POLITENESS**
ik zeg best dingen die jullie allang weten

04 but that is just to make my story sensible. **C1:EFFICIENCY**
maar eventjes om het verhaal ook een beetje logisch te maken

The ultimate purpose of this consultation is to make the customer understand basic mortgage information. However, there arises a dilemma in how to achieve this purpose. In line 4, the advisor (AD) explains that he wants to deliver a 'sensible story', which we take to mean that he delivers his usual comprehensive mortgage introduction, in order to prevent questions later on and thus to save time; this is an efficiency constraint. Heeding this constraint may however lead to the violation of a politeness constraint, as telling things the customers may already now (line 3) may come across as underestimating their knowledge, and hence as being impolite.

In order to resolve the conflict the advisor produces a design explication, i.e. an utterance referring to a constraint conflict. At the same time, he proposes his solution: prioritizing the coherence of his story over adjusting it to hearer knowledge. Implicitly, he solicits hearer consent for this course of action. So, this discourse design explication showcases how the advisor maneuvers through a discourse context presenting conflicting constraints.

Such discourse design explications occur regularly in mortgage consultations, since mortgage advisors are bound by factors such as internal and external institutional policies, the different interests of various departments (i.e. Legal versus Marketing) and the different interests of agents i.e. mortgage advisors and customers.

More generally, design explications display a distinctive feature of discourse design: Any design is responsive to contextual pressures, but discourse is special in that talk may *represent* context and be explicit about the way it responds to contextual pressures. Hence we are dealing with public displays of discourse design-in-the-making.

In this chapter, we will focus on these explications in the particular context of Dutch mortgage consultations, which we will analyze from three angles. First, they provide us with a window on some of the constraints that are relevant in our particular genre of interaction, and more generally on how the organizational context may affect discourse. Second, they demonstrate how experienced professionals, using design strategies that have been honed over time, deal with discourse options and dilemmas and try to satisfy as many constraints as possible. And third, the explications are interactional moves, showing the advisor's expertise as well as inviting customers to participate in or at least consent to discourse designs. Let us first discuss our core concepts of constraints and discourse design, before moving on to our data set and the actual analysis.

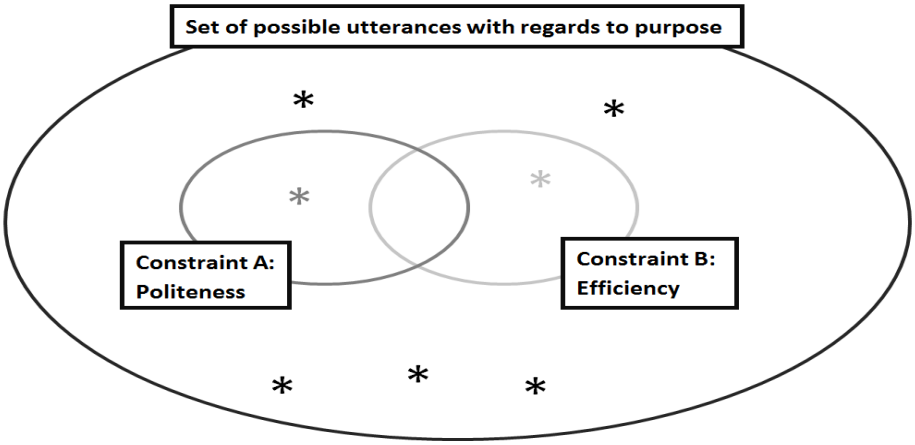
2. DISCOURSE CONSTRAINTS

We define a constraint as a limitation to the options available to an interaction participant. Consider the Venn diagram in Figure 1, in which utterance options are represented by asterisks. The largest ellipse shows the Set of Possible Utterances (SPU) theoretically available to a mortgage advisor to achieve a basic consultation purpose, e.g. explaining basic mortgage concepts in Excerpt 1. This basic purpose constitutes the first constraint impacting the interaction. This SPU is derived solely from purpose-related constraints. However, various further constraints need to be heeded in the interaction; in Excerpt 1, these were politeness (constraint A in Figure 1) and efficiency (constraint B). These further constraints carve out subsets from the primary SPU: the advisor should manage customers pre-existing knowledge, otherwise they may get the feeling that the advisor thinks they are stupid. Furthermore, the advisor needs to make sure his story is delivered as efficiently as possible (constraint B), given that time is money.

We will call these further constraints non-purpose constraints. They derive from different 'aspect systems' (Veeke, Ottjes, & Lodewijks, 2008), a notion to be explained later. Supposing that Figure 1 represents the situation of Excerpt 1 above, there is no utterance that would satisfy all constraints, as the intersection of ellipses A and B contains no asterisk. Hence the advisor can

only prioritize one constraint over the other, which is the option actually chosen Excerpt 1.

Figure 1. Constraints narrowing down the purpose SPU



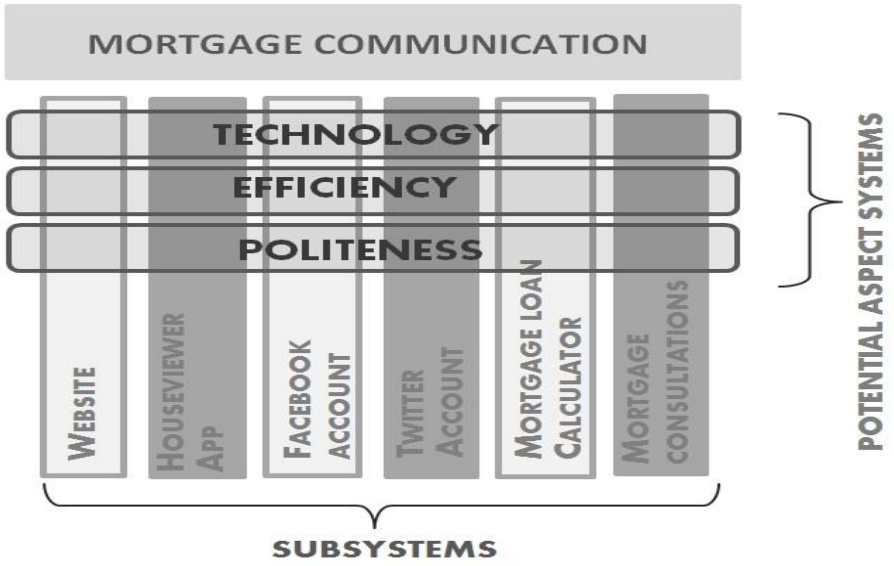
Given that their optimal next move is often not self-evident, advisors regularly need to engage in discourse design. In other words, constraints by themselves do not produce interactions. They merely provide 'structure', in the sense of the structurational analysis of social systems pioneered by Giddens (1984; see Carter & Sealey, 2000 for further discussion): they provide rules and resources that are drawn upon and acted upon by individuals. Social action and social reality only emerge in the interaction between agency and structure, two entities that can never be reduced to one another. More specifically, our analysis of design explications demonstrates how the discourse context not only constrains the advisors' set of interactional options, but requires them to use professional skills and creativity in navigating their design space. This involves what Giddens (1984) has called *reflexive monitoring*: 'In circumstances of interaction – encounters and episodes – the reflexive monitoring of action typically, and routinely, incorporates the monitoring of the setting of such interaction' (Giddens, 1984, p. 3). While much of this monitoring goes on implicitly, this chapter analyzes interactional displays of reflexive monitoring, in which the practical consciousness of institutional actors takes on discursive forms.

We have already distinguished purpose and non-purpose constraints. The non-purpose constraints in Excerpt 1 concern politeness and efficiency, and they derive from different aspect systems impacting the consultation. This notion of

aspect systems stems from the Delft systems approach to organizational analysis (Veeke *et al*., 2008), which postulates that all systems consist of elements (subsystems) linked to each other by different relations (aspect systems). For instance, our mortgage provider: Bank B, has a department (i.e. a subsystem) called 'Mortgage Communication' that develops several communication products, including the mortgage consultation. These products are further subsystems within the communication department (see the vertical pillars in Figure 2), and may even be visible as such in the organizational structure in the sense that specific working units correspond with the different products.

Every working unit needs to consider various aspect systems, e.g. technological, efficiency and politeness aspect systems. These aspects refer to different kinds of conditional relations between activities, providing possibilities and impossibilities. Aspect system issues may concern the technology required to build a website, the time available to talk with customers, or the preferred way of approaching customers. Such aspect system issues generally apply to various subsystems simultaneously, so they can be represented as bars 'crossing' the subsystem columns (Figure 2).

Figure 2. Potential subsystems and aspect systems relevant to mortgage communication.



Our distinction between purpose-based and aspect system-based constraints is a well-known one in design thinking. For instance, software engineers (Glinz, 2007; Chung & Do Prado Leite, 2009) talk about 'functional' and 'non-

functional' requirements of applications. Examples of 'non-functional' requirements in software design are speed, physical requirements, security and interface usability. The label is slightly misleading however, as these constraints are every bit as important as the functional constraints. The same goes for the aspect system constraints in our study, that stem from the entire organizational context. They represent essential conditions for the interaction to take place at all.

3. TALK AS A DESIGN PRACTICE

The perspective of talk as a design practice has been adopted in various traditions; discourse analysts have used it in work on features such as coding the information status of referents, perspective taking in lexical choice, syntactic organization and prosody (see Fox, 2008); conversation analysts have discussed turn design, action formation and preference organization (see Drew, 2013; Levinson, 2013; Pomerantz & Heritage, 2013 for overviews); within linguistics, Optimality Theory focuses on how utterances satisfy constraints (Prince & Smolensky, 2004) and how hearers make inferences based on the assumption of constraint satisfaction (Hendriks & De Hoop, 2001). According to these traditions much of the talking design work takes place unconsciously and is primarily focused on adjusting utterances to their recipients and the immediate context. However, O'Keefe (1988) proposed an elaborated analysis of communicators' assumptions underlying talking design work in order to explain design variations. Her message design logics theory explains differences between language users, which primarily appear when the message context presents complexities, for instance because of bad news.

Aakhus & Jackson (2005) share this interest in researching communicators' assumptions, but include contextual factors such as technology. For them, 'taking a design stance toward such technology includes, at a minimum, seeing what hypothesis about communication is expressed in the design and being able to make reasonable assessments of whether people's use of the technology is adapted to its design features or struggles against its design flaws' (Aakhus & Jackson, 2005, p. 414). They state that message designs are constrained by contextual factors that bring their own designs with them; these factors may be technological in nature, but organizational as well. Face-to-face interaction design is peculiar in that constraints may be articulated and implemented at the same time. This kind of designing-on-the-fly is a less studied phenomenon. One study by Aakhus & Rumsey (2010) reports an interactional discourse design analysis of a disagreement about interactional norms in an online cancer support group forum. The taken-for-granted

interactional norms posed an interactional design dilemma, because they were challenged by some participants, but at the same time used by others to get a derailed complaint situation back on track.

Aakhus & Rumsey (2010) deal with design dilemmas that are largely implicit and need to be reconstructed from the interactional moves of the various participants, while our design dilemmas are referred to more explicitly in the interaction, as our mortgage advisors regularly talk about the various constraints applying to mortgage orientation consultations. Another difference between this study and theirs is that we deal with a more rigidly constrained type of institutional discourse.

In what follows, we will first describe our data, i.e. the collection of mortgage consultations and organizational background documents clarifying the consultation context. Subsequently, we will analyze the consultation context in terms of purpose constraints and aspect system constraints. This context analysis helps us to collect discourse design explications in our data. The analysis of the explications starts with discussing three explication forms. Next, we will analyze the constraint conflict solutions proposed in explications. And finally, we will shed light on the interactional role of the explications in this particular type of institutional discourse, especially on how they solicit customer consent and cooperation, and how they serve to profile expertise and individual agency given institutional constraints.

4. DATA

Bank B, one of the main mortgage providers in the Netherlands, allowed us to record 39 mortgage orientation consultations, with a length varying from 45 minutes to up to two hours. All recordings were orthographically transcribed, thus enabling word searches. Orientation consultations are just one type of consultations in the Dutch mortgage purchase process; other types are advice consultations and mortgage quote signing consultations. They appear in this order in the mortgage purchase process. Due to Dutch legislation launched in January 2013 (BGfo Wft, Art. 86C), the orientation consultation is free-of-charge, and the other ones are not.

In the orientation consultation, advisors explain bank B's basic mortgage options (mortgage forms, interest rates, interest rate periods), run a (maximum) mortgage loan amount calculation and discuss the outcomes of the calculation. So, the main advisor activities in the orientation consultation are data gathering, data entering, and explaining. When customers request advice,

advisors cannot fully comply with their request, as a result of the Dutch legislation mentioned above.

Mortgage consultations are part of a 'multichannel communication package' that supports home buyers (see chapter 2). We asked the multichannel communication package stakeholders to provide us with relevant organizational documents on bank B's organization structure, on Bank B's communicative and organizational purposes and on other constraints impacting the consultations. These stakeholders provided us with documents, some confidential, and research reports on communication topics such as target groups and mortgage customer journeys. Along with the consultation data, these documents enabled us to reconstruct the consultation context.

5. CONSULTATION CONTEXT ANALYSIS

We used the consultation corpus and the fore here mentioned organizational documents to identify the purpose constraints and the aspect system constraints. We opted to combine data sources because it is entirely possible that a constraint is operative but does not surface in the explicit form of a discourse design explication. In fact, it is an empirical question which constraints tend to be invoked in the interaction and which constraints tend to remain tacit knowledge.

We started by listing potential purpose constraints. In the consultation transcripts, customers present four different reasons to visit bank B's mortgage advisor (see Table 1, left column). From these, we derived the consultation's communicative purposes, described in terms of the intended cognitive effect on customers (see Lentz & Pander Maat, 2004). These candidate purposes were validated by checking them with one of bank B's advisors.

First, customers seek generic information on mortgage options and a mortgage purchase in general (see chapter 2). Second, they want to buy a house and want to know how much money they can borrow. Third, they may have set sight on a house and want to know if this particular house is affordable. Fourth, they may have made an actual bid on a house under financing conditions and want to check bank B's purchase support. This applies to returning customers who left to find a house and come back to check if their initial maximum mortgage loan amount is still applicable. Interest rates vary over time, and sometime bank B's financing policies change.

Table 1. Customer purposes and advisor purposes in the orientation consultation

Customer purposes	Advisor purposes
Customers understand the issues that need to be decided upon when purchasing a mortgage. Customers know their maximum mortgage loan amount (including monthly repayment obligation), so they know in what price category to look for a house. Customers know whether a certain house is affordable, so they know how much they can bid. Customers know if bank B is willing to finance the bid they have made on a specific house.	Advisor convinces customer to come back for an advice consultation. ➢ Customer understands basic mortgage options and mortgage concepts ➢ Customers think bank B's advisor is a friendly, competent, polite, reliable mortgage expert, who is willing to help them with patience. Advisor enters customers' personal data into Bank B's computer program.

For advisors, the orientation consultation is very important, as it is the only customer-initiated opportunity to create customer commitment. Normally, when customers choose to take-up advice, they also stick with bank B to purchase their mortgage there. So the main purpose for advisors is to persuade customers to take-up advice. In order to do so, they seek to demonstrate a high level of personal service quality. If advisors succeed in presenting themselves as a helpful and friendly advisor, who is competent, polite, reliable and knowledgeable, and who is patiently willing to help customers (Lymperopoulos *et al*., 2006), the odds are high that customers will choose a mortgage from bank B. Moreover, bank B's advice costs do not differ much from other financial service providers, so advisors have the liberty to focus only on their personal presentation in order to convince customers to take-up advice. Advisor purposes such as these are not explicitly mentioned in the consultations; we derived them from bank B's documents, and checked them with one of bank B's advisors.

Interestingly, Table 1 immediately reveals a conflict between advisor purposes and customer purposes. The advisor will generally restrict his information to *basic* mortgage options available to customers: bank B's policy states that advisors cannot discuss mortgage safeguards other than the National mortgage guarantee (i.e. life insurance, unemployment risk coverage,

disability risk coverage). This information is saved for the advice consultation, so that customers have a reason to come back. On the other hand, customers want to learn about all the decisions they are going to face in the mortgage purchase process, including the safeguards they need to choose.

By investigating the document collection and by analyzing the consultations, we identified the aspect systems and thereupon the aspect system constraints that affect the interaction on the advisors' side. Many of these non-purpose related constraints are made explicit in a document called 'Advice quality and methods' (only available to bank insiders). The introduction of this document tells us that the bank B's advice quality is based on bank B's strategy, mission and core values, and on the legal requirements as dictated by the Act on financial Supervision (WFT). This implies that advisors need to manage and balance various aspect system constraints. Our contextual data led us to distinguish the following six aspect systems that are relevant in the consultations:

1. the technology aspect system, mainly constituted by the computer program that advisors use in the consultations;
2. the efficiency aspect system, which provides rules regarding the amount of time available to fulfill the purposes of the consultation;
3. the legal aspect system, which regulates the design and the amount of information to be provided in consultations, as there is a legal requirement to provide customers with correct, clear and not-misleading information (WFT, Art. 4:19);
4. the bank's customer service aspect system, which provides various regulations varying from the need to provide a 'warm welcome' to customers, to the need to manage the customer's expectations during the talk, to the rule that no advice may be given in orientation consultations;
5. the bank's mortgage acceptance procedure, which sets criteria to be met for mortgage applicants, and determines the customer data that need to be elicited for valid applications;
6. the interactional-pragmatic aspect system of communication, which includes politeness considerations, quality maxims (i.e. providing correct information) and relevance maxims (providing only contributions whose relevance can be reconstructed by the hearer).

Our contextual data suggested two other potentially relevant aspect systems that are not referred to in the consultations:

7. the internal communication aspect system, which, among other things, is responsible for updating the advisor on changes in mortgage acceptance criteria;

8. the mortgage application process aspect system; for instance, the final mortgage quotes are not produced by the advisor but in another business unit.

To the extent that these latter two aspect systems constrain the advisor's actions, these do not enter in reflexive monitoring, because such constraints are typically unknown. For instance, when an advisor has missed a rule update, he is unaware of this.

6. COLLECTING DESIGN EXPLICATIONS

We assembled a collection of 50 design explications, in two ways. First, 10 transcripts were manually screened for references to the constraints suggested by our contextual analysis. Subsequently, a keyword search was done using a list of potentially relevant terms. The keywords included nouns such as *time* and *costs* (efficiency aspect system), *orientation consultation* or *advice* (the bank's customer service aspect system), adjectives such as *slow* or *fast* (technological aspect system), verbs such as e.g. *obliged*, *may* and *allowed* (legal aspect system). We do not claim that our collection exhausts our data; given the explorative nature of our study, we will not present quantitative findings.

Not every constraint reference constitutes a design explication: Sometimes constraint references are 'standalone' ones, such as in excerpt 2, line 4.

Excerpt 2. MHFF20130712HG2: Constraint reference without conflict

01 AD:	ehm and eh ehm if I eh have pictured your situation,	
	uhm en uh ehm als ik eh jouw situatie in beeld heb	
02	then we will pursue a maximum	
	dan gaan we een maximale hypotheekberekening maken	
03	mortgage loan amount calculation,	
	hypotheekberekening maken	
04 CU:	yes.	
	ja.	
05 AD:	**with aid of the computer.**	**C1: TECHNOLOGY**
	met behulp van de computer	

Excerpts like these are not included in the collection, as the technology constraint referred to here ('*with aid of the computer*', line 5) does not conflict with others. So, it does not pose discourse design dilemmas. In contrast, excerpt 3 demonstrates a constraint conflict.

Excerpt 3. MHFF20130712HG1: Conflicting constraints

01 AD:	I'm going to **write down your data**	**C1: CORRECTNESS**
	ik ga straks je gegevens even goed noteren	
02	**correct later,** then I can adjust that too.	
	dan kan ik dat ook even aanpassen.	
03	**I'm just gonna leave it like this,**	
	ik laat 'm even zo staan	**RESOLUTION**
04	**otherwise I first have to enter**	**C2: TECHNOLOGY+**
	want anders moet ik eerst alles	
05	**everything all over again.**	**C3: EFFICIENCY**
	opnieuw gaan inbrengen.	

The current personal data in the computer turn out to be incorrect and require an update (line 1). This need is labelled Constraint 1 (a correctness constraint deriving from the bank's mortgage acceptance procedure i.e. aspect system 5). The advisor explains that the computer program only allows a new address when all the data are re-entered (line 4/5) (technology aspect system). We can also infer that satisfying both constraints would considerably delay the consultation; doing things '*all over again*' (line 5) is clearly undesirable, given the economy aspect system. Her resolution here is to '*leave it like this*' for now (line 3) and suspend the required correction until after the consultation (line 1-2). This decision is made explicit so that the customer understands why she does not correct the data, which would be a natural thing to do after checking them. Finally note that Excerpt 3 shows that more than two constraints may be involved in a constraint conflict.

Considering their sequential environments, it shows that the vast majority of design explications are advisor-initiated. However, there are a few cases, see for instance excerpt 10 further on, in which the explication is prompted by a customer's utterance. Some design explications do not completely list the constraints involved. In those cases, we use our context analysis and the other consultations to reconstruct the conflict; e.g. when the advisor mentions a constraint that regularly conflicts with another elsewhere in the data, we assume that the second constraint is also present.

In principle, we may conceive of entirely implicit conflicts, in which no constraint is made explicit at all. For instance, politeness phenomena may be analyzed as attempts to satisfy partially incompatible constraints. But as this chapter is about explicit discourse design, we will leave those cases aside.

7. DESIGN EXPLICATIONS FORMS

In our data, design explications take three forms: references to the omission of actions or non-preferred actions (A), accounts (B), and explanations (C). The first two forms may be combined.

A. Omission and non-preferredness references

Many conflicts are accompanied by references to omissions of actions or non-preferred actions. The difference between these two is a difference of framing. In omission references, advisors tells the customer they will NOT do X as a next action although X would be desirable; in a non-preferredness reference, the advisors states they WILL do Y as a next action although it violates a constraint. Excerpt 4 and 5 show what these references look like.

Excerpt 4. MHFF20130712HG1: Reference to omission

01	AD:	I always **like to make acquaintance** but eh,	**C1: PURPOSE**
		ik vind het altijd wel leuk om persoonlijk contact te maken	
02		because we have a limited amount of time	**C2: TIME (ACCOUNT)**
		maar eh omdat de tijd heel krap is denk ik dat	
03		I think it is better to ehm yes, **skip that part.**	**RESOLUTION (OMMISSION)**
		het misschien handig is om ehm ja dat stukje even over te slaan	
04		or do you say we actually prefer to know	
		of zeggen jullie van we vinden het juist wel heel fijn	
05		the ins and outs or	
		om even te weten van hoe of wat eh	
06	CU:	hmm, no I eh	
		hmm, nee ik uh	
07	AD:	no, okay	
		nee, okay	
08	CU:	just eh get started right away I would say	
		gewoon beginnen zou ik zeggen	
09	AD:	yes, ok. ehm well,	
		ja, okay, uhm nou	
10		then I'm going to skip my own personal introduction,	
		dan sla ik mijn mezelf even over	
12		but I do want to know who you are	
		maar ik wel weten wie je bent	
13		what you do and what I can do for you.	
		wat je doet en ik wat ik voor je kan betekenen	

In excerpt 4, line 1, the advisor refers to the need for '*making acquaintance'*, a constraint related to the bank's customer service aspect system requiring advisors to make customers feel welcome in the orientation consultation's introduction stage. In the Bank's documents, this is presented as a way to create a bond with customers, which ultimately serves the consultation's purpose of making customers come back for advice. In line 2, the advisor refers to a second constraint: 'time'. This leads her to suggest skipping the introduction: line 3 presents an omission reference which is explicitly accounted for; her customer agrees to this in line 9. In lines 10-11, constraint 1 and the chosen resolution are repeated. In order to maintain the focus on customer bonding, she continues by contrastively emphasizing that she does want to hear the customer introduce herself (line 12/13). Excerpt 5 shows the reference to a non-preferred next action.

Excerpt 5. MHFF20130712HG1: Reference to non-preferredness

01	AD:	let's see. Well, we have to eh **we have**	**C1: CORRECTNESS +**
		eens kijken. Nou, eh we moeten eh we moeten een	
02		**to enter an eh an imaginary address.**	**C2: TECHNOLOGY +**
		fictief adres in eh inbrengen.	***RESOLUTION***
03		naturally, there is not an address yet	**NON-PREFERREDNESS**
		er is nu natuurlijk nog ***geen adres alleen***	
04		but **the system needs to know**	**REPETITION C2(ACCOUNT)**
		het systeem wil wel weten	
05		**what you are going to purchase.**	
		wat ga jij aankopen.	

In line 1/2 the advisor refers to the computer requirement to enter a fake address to continue. This resolution is clearly non-preferred, given that lines 2-3 refer to a common-sense correctness constraint (quality maxim). Lines 4-5 explain why violating this constraint is necessary, by invoking the technology constraint ('*the system needs to know*', line 4).

In both excerpt 4 and 5 the advisor adds an account for her choice of resolution. In both constraint conflicts, the advisor presents certain constraints as if she has no choice other than to follow them: not following the time constraint in 4 and the technology constraint in 5 will obstruct the consultation's progression. Hence other constraints cannot be entirely satisfied. References to non-

preferredness or omission do not necessarily occur with accounts, as we see in excerpt 6.

Excerpt 6. MHFF20130712HG1: Reference to non-preferredness without account

01	AD:	well, do you meet with a real estate agent or not? *nou, heb je al een makelaar in de arm genomen of niet?*	
02	CU:	**not yet.** *nog niet*	**C2:AVAILABLE INFORMATION**
03	AD:	not yet. all right well then **I will** *nog niet. Okay, nou ik laat 'm*	**C1:COMPLETENESS + RESOLUTION**
04		**leave it set to zero.** *even op nul staan*	**NON-PREFERREDNESS**
05		those are obviously costs that will add up *dat zijn wel kosten die erbij komen*	
06		when you start seeing a real estate agent. *als je een makelaar in de arm hebt genomen.*	

The advisor refers to a non-preferred action in line 3-4: leaving open a field in the computer program that asks for the costs for hiring a real estate agent, since the required information is not yet available. The completeness constraint conflicts with the constraint that the advisor can only use information already available.

B. Accounts

A second indication of constraint conflicts is accounting for the chosen discourse option; we already saw accounts in excerpts 4 and 5, which are similar in that they use the second constraint to motivate the chosen action. The same goes for excerpt 3, in which the efficiency constraint is invoked to account for the choice of resolution. Such accounts coupled with omission or non-preferredness references are always provided before or during the advisor action in question.

Accounts may also appear without references to omission or non-preferredness. In our data, stand-alone accounts only occur when advisors reflect on a completed verbal or non-verbal action that helps achieve the consultation's purpose (implicit constraint 1) but may seem to violate customer expectations. Excerpt 7 shows what this looks like.

Excerpt 7. MHFF20130718HG1: 'Completed action' accounts

01	AD:	yes, no, **why do I pull this out**? ***ja, nee, waarom pak ik dit erbij***	**C2: RELEVANCE**
02		**because ehm you can actually** *omdat ehm je kunt namelijk dit*	**ACCOUNT**
03		**adjust this yourself, very nicely,** *heel erg leuk zelf ook aanpassen,*	
04		and then I will fix it just so that if *en dan zal ik het zo maken dat*	
05		you want to change something later, *als u straks eh iets wil veranderen*	
06		for instance the amount of the mortgage *bijvoorbeeld de hoogte van de hypotheek*	
07		or hey then then the program will adjust *of hè dan dan dat het hele programma*	
08		the complete calculation. *dat doorrekent.*	

Just before the start of this excerpt, the advisor opens an Excel sheet without announcing why. This sheet can be used by customers if they want to make a maximum mortgage loan amount calculation at home and adjust the interest rate periods to see how much they can borrow under what interest rate circumstances. So, it is an extra service to customers (implicit constraint 1, purpose-based). However, once the advisor has presented the sheet he realizes his customers may not understand the relevance of his behavior; this constraint of 'clarity of relevance' is referred to in line 1 which prefaces the account.

C. Explanations

A third form for explications is the use of explanations. Explanations are about legal requirements or about the bank's mortgage acceptance procedure. This focus on legislation and rules designed elsewhere distinguishes them from accounts, which are always concerned with verbal and non-verbal advisor behaviors. Explanations signal that advisors assume that such rule constraints may conflict with customer expectations (hence the second constraint in the conflict is that the advisor's actions need to follow customer expectations). In such cases, the advisor explicitly refers to the policy or legal constraint to be explained, while the 'expectation compatibility' constraint is to be inferred. This is shown in excerpt 8.

Excerpt 8. MHFF20130830HG2: Explanation

01 AD: ehm yes what naturally will be what naturally will be
ehm ja wat natuurlijk wel wat natuurlijk wel

02 ehm ehm because this is actually an orientation consultation
gaat ehm ehm want dit is eigenlijk een oriëntatiegesprek

03 CU: hmhm
hmhm

04 AD: so since January 1st there have been quite a few changes
dus sinds één januari is er best wel wat gewijzigd

05 CU: hmhm
hmhm

06 AD: eh and one of the things that has been changed is in the past
eh en een van de dingen die dus gewijzigd is voorheen

07 yes you went shopping at different eh money providers
ja ging je shoppen bij verschillende eh geldverstrekkers

08 CU: hmhm
hmhm

09 AD: eh you were just given a free advice and then you decided
eh kreeg je gewoon een gratis advies en dan besloot je

10 where you wanted to purchase your mortgage
waar je dan je hypotheek ging onderbrengen.

11 CU: yes
ja

12 AD: well, that has indeed changed a bit since January 1st
nou, dat is natuurlijk wel iets gewijzigd sinds een januari

13 so now it's the case if you really want to get advice then
dus nu is het zo dat willen jullie echt een advies hebben dan

14 you are going to pay for that.
ga je daarvoor betalen.

The customer in excerpt 8 just told the advisor he intends to go shopping at different mortgage providers for the best offer. The advisor responds by contrasting the nature of the consultation (*actually*) with the expectation that the customer seems to harbor. Given the new rules as of January 2013 the current consultation is meant for orientation only (line 2 and 4). In the old days, when these customers purchased their first mortgage (line 6-10), mortgage offers could be made directly in the first consultation; nowadays, they are made in a second consultation that will need to be paid for (line 12-14). The upshot is

that it will cost the customer a lot of money to shop around for tailored mortgage offers.

In excerpt 8 the advisor starts explaining the legal changes as of 1st of January in response to the customer's presentation of his reason for coming. In contrast, other explanations (see excerpt 9 below) anticipate customer expectations; this kind of anticipation is desirable given the bank's customer service aspect system.

Reviewing the various explication forms, we may note a difference between explanations and free-standing accounts on the one hand and omission and non-preferredness references on the other. In free-standing accounts and explanations, the customers need to be brought 'on board' with the consultation's design. Once they are, the constraint conflict is eliminated here and now. In contrast, the conflicts underlying omissions and non-preferredness references remain in place once the consultation is over. This leads us to consider the different kinds of conflict resolutions.

8. CONSTRAINT CONFLICT RESOLUTION STRATEGIES

We have seen that discourse design explications present both the design problem and the solution, i.e. some way to resolve the constraint conflict in order to be able to continue their consultation. Three kinds of resolutions can be distinguished:

A. Dropping the losing constraint
B. Suspending the losing constraint
C. Integrating both constraints

Ad A. When advisors drop a constraint, they fully comply with the other constraint in the conflict. If we look back at our examples, excerpt 4 presents a case of dropping, in that the purpose constraint of bonding with the customer (in order to make them return) is not fully satisfied. This compromises the effectiveness of the consultation somewhat.

Ad B. Suspending a constraint is postponing its satisfaction. It will be complied with however further on in the consultation, or once the consultation is finished. Cases in point are found in excerpts 3, 5 and 6. In excerpt 3, the advisor suspends correcting the faulty address. In excerpt 5, she enters a fake address until the actual address will be known. In order not to compromise the advisor's credibility, these 'shortcuts' are presented as technical fixes only, dissociated from the substance of the orientation. Excerpt 6 is also a case of

suspending, in that the advisor postpones the satisfaction of the complete information constraint.

Ad C. The final option is to find a way of satisfying both constraints: constraint integration. This means that neither of the constraints is dropped or suspended. Constraint integration is a possible outcome in the excerpts 7 and 8. In both cases, we see attempts to bring the customer's expectations in line with the advisor's course of action or the bank's policies. To the extent that these attempts succeed, this satisfies both constraints at issue. However, to the extent that the customer remains puzzled or unconvinced, the expectation compatibility constraint will need to be given up.

A more complex case involving a combination of suspension and integration is the design explication in excerpt 9 below. Here, the customers are expecting a baby and want to buy a house before the woman has given birth. They list a lot of questions and (presumably) expect the advisor to answer them (customer expectations). However, the advisor also needs to fill out Bank B's computer program (consultation purpose constraint). Now immediately starting up the computer program seems to violate the constraint of being helpful and friendly. Hence the advisor assures the customers that running the program will allow answering their questions along the way.

Excerpt 9. MHWE20130923HG2: Integrating both constraints

01 AD: let's see. what I will do, I will ehm
even kijken, wat ik ga doen ik ga ehm het

02 **simply** start up the mortgage computer program and then
hypotheekprogramma gewoon even opstarten en dan

03 we will go- go through it and then we will **automatically**
lopen we 'm lopen we 'm door en dan komen we vanzelf

04 encounter lots of things ehm that are important
heel veel dingen tegen eh die belangrijk zijn

05 for a number of decisions that you will have to make
bij een aantal beslissingen die jullie moeten nemen

06 ehm and then along the way I will **simply**
ehm en dan vertel ik gaandeweg gewoon even

07 tell you eh **a few** things about for instance,
wat eh wat dingen over bijvoorbeeld

08 how you can repay your debt

hoe je kunt aflossen

09 eh what is important when buying the house,
eh wat belangrijk is bij de aankoop

10 eh yes what options there are regarding interest rate periods
eh ja welke keuze je hebt in rentevast periodes

11 well, we'll cover it **all**,
nou komt allemaal aan bod,

12 so we'll **just** go through things
dus dan lopen we het even door.

So, in excerpt 9 the advisor suspends answering the customer's questions in order to serve the consultation's purpose of entering the customer data. In presenting this resolution, she emphasizes that actually there is no conflict between running the program and answering questions, as the program will lead the user through all important decisions (line 4-7). She minimizes the effort of running through it all and at the same time discussing important information by using mitigations, such as '*simply*' (line 2/6), '*automatically*' (line3), *'a few'* (line 7), *'just '* (line 12).

To the extent that her account is convincing, she succeeds in actually integrating constraints. Overall, excerpt 9 confirms the impression from excerpts 7 and 8 that constraint integration in our data mainly occurs in the context of managing customer expectations. This suggests that expectation compatibility constraints can be satisfied on the spot, that is by being persuasive, without hurting other constraints; in contrast, other conflicts require a compromise.

9. SEEKING CUSTOMER ACCEPTANCE FOR CONFLICT RESOLUTIONS

We have shown in various shapes of discourse design explications and have explained how they propose to resolve constraint conflicts. Finally, we will review some presentation strategies that invite customers to accept these resolution proposals. Seeking customer acceptance is a regular feature, as three out of every four discourse design explications is accompanied by one of the strategies outlined below.

9.1 Positive framing

Advisors try to 'balance' announcements of not doing something by emphasizing what still will be done. In excerpt 10, the advisor needs to manage

customer expectations potentially conflicting with bank policies regarding advice giving.

Excerpt 10. MHFF20130712HG2: Positive framing

01 AD: eh in this first consultation,
eh in het eerste gesprek

02 which is this conversation
dat is dit gesprek

03 CU: ((nods))
((knikt))

04 AD: it is an orientation consultation
is het een oriëntatiegesprek

05 CU: yes
ja

06 AD: ehm I will not provide advice regarding
ehm ik geef dan geen advies met betrekking tot

07 yes what you have to do in case of dying eh
ja wat moet je doen bij overlijden eh

08 CU: ((nods))
((knikt))

09 AD: of unemployment, of eh risks.
bij arbeidsongeschiktheid bij eh risico's

10 but I do point out what possibilities you have
ik geef je wel aan van welke mogelijkheden je hebt

11 and I will tell you about the eh interest rates
en ik geef je aan welke eh rentepercentages

12 we employ at this moment.
wij op dit moment hanteren.

The advisor tells the customer that their current talks is an orientation (line 1-4) and that she will not provide advice about any mortgage risks (line 6-9). In this excerpt she does not provide an account for that policy, but we know that she has mentioned the legal changes as of January 1st earlier in the consultation. However, after she announces she will not provide advice, which may seem to the customer as if she is unwilling to provide service, she tries to reframe this into something positive by emphasizing all the things she actually is willing to do in the remain of her consultation (line 10-12).

We have seen a similar transition in excerpt 4 above. The advisor tells the customer that she will skip her own personal introduction (line 10/11) but then she sums up everything she is interested in regarding her customer. So, refusals to comply with customer expectations are regularly followed by some good news that makes the refusal a less categorical one. The positive component is emphasized by its final position in the discourse unit.

9.2 Minimizing the problem

The next strategy we identified is downplaying the disadvantages of the conflict resolution, shown in excerpt 11.

Excerpt 11. MHFF20130830HG2: Minimizing problems of choosing a non-preferred option

01 AD: ehm well, then we'll **simply** do it in another way
ehm nou dan gaan we het gewoon even op een andere manier doen

02 I will eh **just** take out our old eh mortgage program
pak ik eh ehm even ons oude eh hypotheekprogramma erbij

03 then I can at least make **a few** calculations.
kan ik in ieder geval wat berekeningen maken.

04 ehm and then I will **just** do eh this eh
ehm en dan ga ik eh deze nog even dit eh ik vind dit heel

Just before the start of the excerpt the advisor has experienced troubles with the new mortgage loan calculation program. He uses an older application to resolve this issue. This is clearly a non-preferred option, but it seems the only way to save the consultation's purpose. Just as we have seen in excerpt 9, the resolution is presented using a range of adverbials and adjectives that minimize the consequences of the make-do solution.

9.3 Requesting customer consent

The last strategy is requesting customer consent, which was already shown in excerpt 4 above. Here, the advisor explains she usually likes to make acquaintances but that time does not allow this right now. She then asks her customer whether he agrees with skipping it or whether he would like to know 'the ins and outs'. Consent requests such as these vary in their openness to customer input. Occasionally, advisors actually ask customers which constraint they feel should be prioritized; but mostly they clearly project their preferred reaction by using Yes/No-interrogatives. Excerpt 12 illustrates how this is done.

Excerpt 12. MHFF20130718HG1: Requesting a confirmation

01 CU: and then what is the difference with annuity?
en wat is dan dat verschil met dat annuïtair?

02 that is also repaying?
dat is ook aflossen

03 AD: yes
ja

04 CU: but then without investments?
maar dan zonder beleggingen?

05 AD: correct, that's correct. that's what I'll show
klopt, dat klopt. dat ga ik

06 you later if
u zo laten zien als

07 CU: yes
ja

08 AD: **if i may just put aside that question for a moment?**
als ik die vraag heel even mag parkeren

09 CU: yes no that's allright
ja nee is goed

In line 8 the advisor suggests to suspend his customer's question, as he will automatically get to answering it later on. In our data, customers never fail to comply with the advisor's suggested conflict resolutions.

10. CONCLUSIONS AND DISCUSSION

In this chapter we have explored discourse design explications: stretches of talk that refer to contextual constraint conflicts and propose resolutions for these. The explications were identified by a combination of top-down and bottom-up strategies. A contextual analysis was used to identify explications, which were then analyzed in terms of form, proposed resolutions and interactional shape. We showed that discourse design explications take the form of references to omitted or non-preferred actions, accounts or explanations. Three strategies are used to resolve constraint conflicts: the advisor drops one of the constraints, suspends one of them or attempts to eliminate the conflict altogether. Finally, we showed how advisors seek customer acceptance of their design proposals, by positive framing of their resolution, minimizing the problem or requesting customer consent.

To our knowledge, explicit design explications have not been analyzed in earlier discourse-analytical work. Nevertheless, their regular occurrence is interesting from various points of view. First, they are an important exception to the tendency for contextual constraints to remain invisible in interactions; hence offer a window on how institutional agents navigate the discourse design space. Far from reducing opportunities for 'agency', complex constraint sets invite displays of discourse design skills, of which design explications are the most visible specimen. Hence they create new perspectives for the analysis of institutional discourse. Moreover, our method of conceptualizing contextual constraints with reference to purposes and aspect systems constitutes a

principled way of linking organizational contexts and interaction analysis, which may of interests for research into organizational communication.

Of more specific relevance to this particular discourse context is the fact that these displays of advisor skills are at the same time displays of customer-centeredness: while providing their consultation services, the advisors are also keen on demonstrating how they optimize these services to suit the customers' needs. While the agent-customer relation is clearly asymmetrical with regard to knowledge and power, projecting a client-centered image is an important interactional concern of the agents; of course, this furthers the consultation purpose of making the customers return to purchase their mortgage at this particular bank.

Our research has practical implications as well. Investigating discourse design explications highlights the moments when the interaction is under 'functional strain', that is it identifies ways in which the context challenges the participants. While these challenges are primarily addressed in the interactions themselves, the organization may also consider interventions to modify the context: some complexities may need to be addressed by the management instead of by institutional agents and clients. For instance, our explications show that the computer program regularly leads to problems, which clearly invites software improvements. Likewise, the new policies of the Dutch government regarding advice-giving on mortgages requires considerable interactional work. Possibly, some of this explanatory work could be moved to other communication media, so that the face-to-face contact is not burdened by it.

Having pointed out potential uses of our analysis, we hasten to add that we have certainly not been exhaustive in identifying constraint conflicts in our consultations, as some conflicts will probably not surface in the interaction. First, most customers lack the expertise to fully pursue the purpose of 'understanding the issues that need to be decided upon when purchasing a mortgage', as the average citizen is not aware of the various kinds of risk that a mortgage consumer needs to reckon with. As long as the advisor does not bring up these risks, customers will generally not ask for them. Second, customers are not very active in voicing information requests or agenda setting. Hence our explications mainly concern design problems that immediately threaten the flow of interaction, and therefore need to be shared with their customers. In other words, our set of explicated problems is a relatively restricted one. Conceivably, other contexts will provide us with more ambitious forms of explicit discourse design.

CHAPTER 4

EXPLICATIVE TELLING IN INSTITUTIONAL CONSULTATIONS: LAUNCHING AND LANDING INFORMATION PACKAGES

ABSTRACT

In this chapter we have used conversation analysis to explore how advisors deliver 'explicative tellings' on mortgage terms and concepts. Drawing on 33 Dutch mortgage orientation consultations, the present study uncovers the sequential organization of 'explicative telling', that is the act by which experts deliver informative discourse units -which we call information packages- to laypersons. Explicative tellings are co-created by advisors and customers, to deliver generic mortgage information. By applying Conversation Analysis, we have argued that both experts and laymen treat information packages as discourse units (Houtkoop & Mazeland, 1985) and that information packages are presented through explicative tellings. Moreover, we have also demonstrated that there are two important phases in explicative tellings: the information package launch and the information package landing. These two phases are essential for the recipient orientation of mortgage information, but also for displaying advisors' accountability for providing eligible information. This is supported by the irreversibility of the IP launch and by the presence of news deliverer upshot formulations during the information package landing.

A slightly adapted version of this chapter has been submitted for publication:
Herijgers, M.L.C. & Van Charldorp, T.C (submitted) Explicative telling in institutional consultations: launching and landing information packages.

1. INTRODUCTION

During Dutch mortgage consultations vast knowledge asymmetries occur, leading to numerous moments of 'information providing' by institutional agents. In order to prepare customers for a well-balanced mortgage purchase decision, mortgage advisors deliver 'extended spans of single speaker talk' (Ford, 2004), containing generic information on mortgage related matters. While the longer turns at talk are delivered "live" during the consultation sessions, they sound as if they are pre-recorded and replayed in each consultation session. It is for this reason that they caught our attention.

In this chapter we will refer to these longer turns as *information packages* (IPs), since they are recognizable as informative discourse units (Houtkoop & Mazeland, 1985) that are jointly created by participants. IPs, similar to discourse units (DUs), show not to fully comply with the original turn-taking model of Sacks *et al*., (1974); the completion points of turn construction units do not always appear to be transition-relevant places (Houtkoop & Mazeland, 1985; Selting, 2000) and internal boundaries in a DU are set apart from next speaker starts (Ford, 2004).

On the one hand, advisors project IPs as extended turns from the beginning. IPs contain elements by which advisors display they want to continue their turn-at-talk so far, and also elements by which they display that their turn has come to a completion point. At the same time, customers do not interrupt advisors until advisors have delivered their entire IP, during IP deliveries customers merely respond with minimal tokens, such as continuers, minimal acknowledgments and surprise tokens. In other words, customers show to be dedicated recipients that allow advisors to retain the conversational floor. Consequently, we wanted to explore the question: *how* do advisors and customers co-create the production of IPs (i.e. informative DUs)?

Exploring the IP deliveries we noticed that participants orient to three phases: a preface, mid-telling and exit phase (also observed by Lammers, 2006). We call the act by which mortgage advisor deliver IPs: *explicative telling*. In line with other telling activities such as the telling of a joke (Sacks 1974), a story (Jefferson, 1978) and telling troubles (Jefferson, 1988) explicative tellings are produced by one person, but co-constructed in interaction with response tokens. This led us to wonder: How are explicative tellings sequentially organized?

Our final research question was triggered by the fact that Dutch mortgage advisors are obliged by law to provide clear and transparent information (WFT, Art. 4:19), while the Dutch national oral examination regulation (CDFD) requires advisors to adjust mortgage information to

customer's level of understanding (Hypothecaire financiering, 2a.2; 2a.3). Hence we are also interested in how information packages are actually adjusted to customers' pre-existing knowledge and how they correspond with customers' level of understanding.

In sum, in our chapter we will answer three research questions: 1) What does the sequential organization of explicative tellings look like?; 2) How do participants co-create the delivery of information packages? and 3) To what extent are information packages recipient-oriented?

In what follows, we will start by introducing the activity of *explicative telling* and relate it to other activities that have been studied within CA to show its similarities and differences. Subsequently, we will present our data and provide more details on the Dutch mortgage purchase process. Then we will demonstrate the sequential organization of an explicative telling; we will argue that the launch and landing of information packages is of great importance to their co-creation and also that the phases of launching and landing are essential for information package recipient orientation. We will show that once an *explicandum i.e.* something that requires explication, is introduced by an advisor, the act of the IP delivery is practically irreversible and also that advisors make use of news deliverer formulations. Finally, all of the answers to our research questions contribute to our argument that explicative tellings are deployed by the advisor to serve their professional accountability.

2. EXPLICATIVE TELLING

In the introduction we stated that mortgage advisors aim at closing knowledge gaps, for instance by explaining mortgage jargon, mortgage concepts and mortgage procedures to customers, through explicative telling. This activity relates to other explanatory activities, of which information-giving (see Heritage & Sefi, 1992; Silverman *et al*. 1992; Kinnell & Maynard, 1996; Silverman, 1997), is the most closely related.

Like explicative telling, information-giving is the business of presenting information in a 'factual or non-normative framework' lacking any normative additions (Heritage & Sefi, 1992). Similar to information-giving the 'message' is nonspecific and non-personalized and when information is delivered recipients align by showing a 'wait and see' attitude; they generally produce minimal response tokens and unmarked acknowledgements and the deliverers get to do all the talking (Silverman *et al.,* 1992). However, the act of information-giving was conceptualized in contexts in which advice-giving, frequently unsolicited, was the institutional agents core business (e.g. health visitors: Heritage & Sefi,

1992; HIV-counselers: Silverman et al., 1992; Kinnell & Maynard, 1996) and in those particular contexts advice-giving is often found to be problematic (Kinnell & Maynard, 1996) due to moral dimensions that are linked to the institutional context in which advice was provided. In these contexts information-giving was established as an alternate activity for advice-giving; sometimes the information delivery format even functioned as a 'cover up' for advice-giving (Silverman, 1997). Now, when it comes to mortgage consultations, customers voluntarily arrange meetings with mortgage advisors, and the act of explicative telling is a wished-for activity. Also, due to the Dutch legislation mentioned earlier, mortgage advisors are prohibited to provide advice during the orientation consultation. The only way they can actually serve their customers is by offering mortgage information with regard to mortgage procedures, mortgage concepts and mortgage options. Explicative telling in mortgage consultations is a desired customer service and not an undesired byproduct when meeting with an expert or specialist, as in the health studies mentioned above.

Information-giving relates to 'explaining' but only to a small extent. We found references to 'explaining' in educational contexts, concerning mathematic teachers' activities (Koole, 2010; Koole & Elbers, 2014). But, these references to 'explaining' are used for examples in which math teachers are actually instructing students on how to proceed with their math assignment. Explaining differs from instructing because an instruction functions to enable a subsequent action, whereas an explicative telling does not. In both of these activities participants have to obtain mutual understanding, but with explicative tellings mutual understanding is a product of linguistic (verbal and non-verbal) response tokens, whereas in the case of instructions, the subsequent immediate non-linguistic action (stirring the pot) demonstrates the recipient's understanding (Pilnick, 1999).

Explaining in conversation analysis has also been linked to other activity types: accounting for behavior or explaining motivations (Antaki, 1988; Antaki, 1994). However, explanations as such, have the power to redefine what is going on (Antaki, 1988), whereas explicative tellings are meant to help customers build a mental modal on mortgages and not to reflect on social behavior in any way.

In short, *explicative telling* is the activity by means of which information packages are presented. This activity shares characteristics with other telling activities, because it contains the distinctive pattern of a preface, mid-telling and closing phase. It also shows similarities with information-giving to the extent that in both activities generic information is exchanged through discourse units. However, unlike with information-giving, explicative telling is a

desired activity, which can very well be found in other institutional settings where knowledge asymmetries occur; think of doctors who explain complex health-related terms, judges who explain to a suspect what 'the right to silence' means in a courtroom or a human resources assistant who explains the terms of employment to a new employee.

3. DATA

The data in this study are drawn from a corpus of 33 mortgage orientation consultations (MOC's) that have been audio- and video recorded at one of the largest banks in the Netherlands, from July until December 2013. The duration of these recordings varies from forty five minutes to over two hours and we were able to record 10 different advisors.
We started off by gathering advisors' explicative tellings in the first 10 consultations that answered the following criteria:

1) The explicative tellings contain an IP that is presented as a DU (Houtkoop & Mazeland, 1985). The IP is produced in a multi-unit turn and recipients show to confine themselves to recipiency by producing minimal receipt tokens.
2) The explicative telling is spontaneously advisor-initiated.

These criteria left us with a sizable selection of excerpts that enabled us to pin down the most important topics in the consultations, demonstrated by the frequency by which they are explained. We chose to include the six most frequent topics in our explicative tellings collection, concerning: 1) mortgage repayment forms (i.e. annuity mortgage and linear mortgage); 2) mortgage interest rate periods; 3) mortgage conditions (budget mortgage versus house mortgage); 4) national mortgage guarantee (a Dutch trust fund); 5) personal resources, such as savings or parental gifts; 6) legal changes as of the 1st January 2013, affecting mortgage policies. We used additional examples from the remaining 23 orientation consultations to refine our analysis. This led to a corpus of 57 explicative tellings concerning the above topics. The data in this chapter were transcribed using Jefferson's notation system (See Jefferson, 2004).

Additional information on orientation consultations

In the free-of-charge MOC advisors deliver customer mortgage information concerning the institution's rules and procedures, the customer's possible mortgage options (e.g. mortgage forms, interest rates, safeguards against certain risks) and the amount of money the institute is willing to offer (See

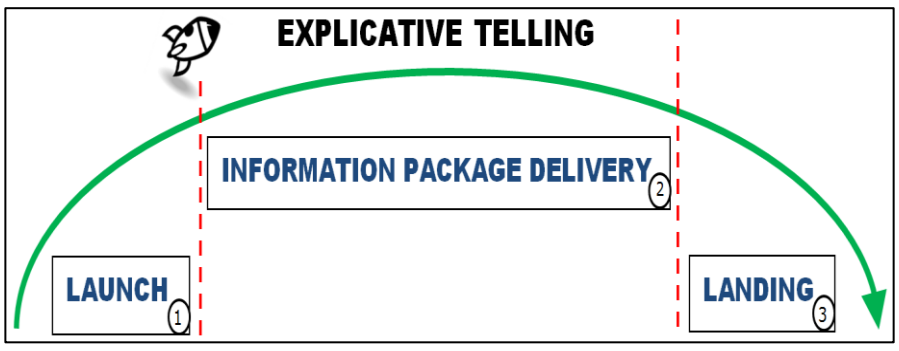
chapter 3). Subsequently, customers decide whether they want to proceed with this institution to purchase a mortgage, but also whether they would like to have advice with their mortgage purchase.

One of two reasons customers require the MOC is to develop a realistic idea of the amount of money they can borrow to buy a new house. Contact with an advisor is the only way to learn this since the internet doesn't provide information as detailed as required to start the bidding process on the housing market. Consequently, the main interactional activities in the MOC are: gathering customer data, providing information and explaining things. The second reason why customers visit an advisor is because they want to know the issues that need to be decided upon when purchasing a mortgage (see chapter 2).

4. SEQUENTIAL ORGANIZATION OF EXPLICATIVE TELLINGS

An explicative telling is characterized by three phases: 1) a preface phase (see figure 1 below), in which the IP is 'launched'; 2) a mid-telling phase, in which the IP is 'delivered'; 3) a closing phase, in which the IP is 'landed'. We deliberately use a rocket metaphor, as it emphasizes that once the advisor has started an explicative telling, the action is more or less irreversible; it is hardly possible for a customer to push back an IP delivery. Besides, the word 'landing' emphasizes the work the advisor and the customer jointly perform in order to close the delivery of IPs; IPs do not just fade away.

Figure 1. Explicative telling



We will follow up on the three phases in the next paragraphs, but first we would like to show an explicative telling prototype[3] that illustrates how explicative tellings are sequentially organized and how they can be

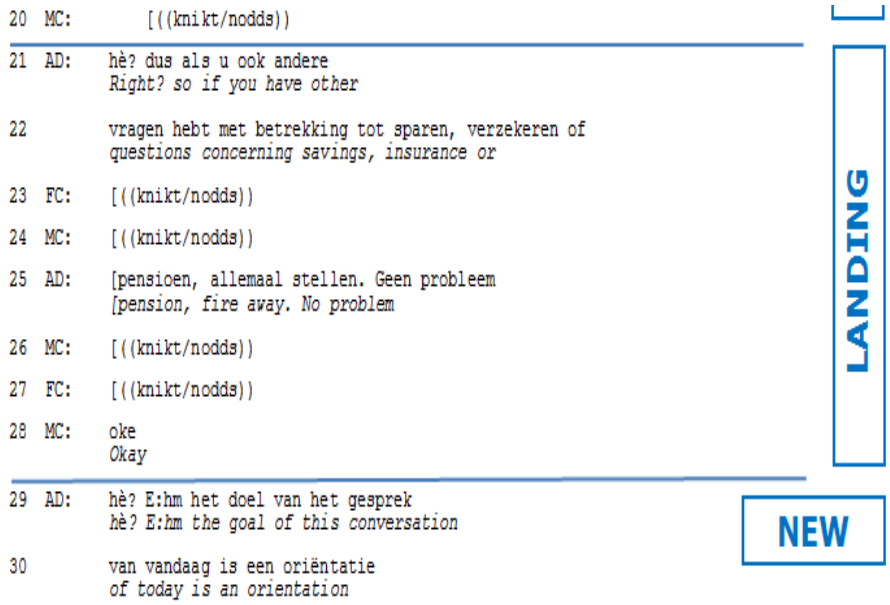
[3] For length reasons we have chosen this example. It is not included in our collection because it does not concern one of the six most frequently explained topics (see section 3).

characterized. Extract 1 comes from the beginning of an orientation consultation. The advisor (AD) has just taken a seat facing his two customers; one female (FC), the other one male (MC)[4].

Excerpt 1. FF20130803HG1 – Explicative telling

01	AD:	.hh ik ben eh (.3) (naam adviseur) (.3) *.hh my name is (.3) (name advisor)*	LAUNCH
02	FC:	((knikt/nodds))	
03	MC:	((knikt/nodds))	
04	AD:	.tch ehm preferred banker want ik begrijp *.tch ehm preferred banker cause I understand*	
05		u bent eh nieuw bij (naam bank) *you are eh new at (name bank)*	
06	MC:	((knikt/nodds)	
07	FC:	((knikt/nodds))	
08	MC:	ja *yes*	
09	AD:	hè dus ik eh k-hè kleine introductie, *hè so I eh g-hè a brief introduction,*	
10	MC:	((knikt/nodds))	
11	FC:	((knikt/nodds))	
12	AD:	Ik ben *preferred banker* en dat betekent *I am preferred banker en that means* *((moves head down to paperwork----------*	INFORMATION
13		nou dat is accountmanager een deftig woord *well that is account manager a fancy word* *((----------))*	
14		voor accountmanager, voor particuliere relaties (.) *for account manager, for private relations (.)* *((----------looks at customers again))*	
15		dat wil zeggen wij kunnen samen over .hh alle that means we can talk together about .hh all	
16		bankzaken praten, bank issues,	
17	FC:	((knikt/nodds))	
18	AD:	en in het bijzonder over hypotheken. *and in particular about mortgages*	
19	FC:	ja [((knikt)) yes [((nodds))	
20	MC:	[((knikt/nodds))	
21	AD:	hè? dus als u ook andere *Right? so if you have other*	

[4] The customers' sex is not of any influence whatsoever, it is noted just for recognition.



In excerpt 1 the advisor launches an IP regarding his job description: 'preferred banker'. Launching always prefaces the IP delivery and has clear recognizable elements that are all visible in this excerpt, although these elements do not always co-occur in explicative tellings. We will elaborate on the elements when we discuss the IP launch in section 5. Firstly, the preface in excerpt 1 contains an account for the IP delivery (line 5/9), in order to make the IP delivery relevant to the customer situation. In this case the customers are 'new' and therefore unfamiliar with the bank's terminology, hence they do not know what a preferred banker is and how his position could be beneficial to them. Secondly, this preface contains an explicit announcement that the advisor is about to provide his customers with an introduction (line 9) to clarify what a preferred banker is. Thirdly, this preface contains a 'package summary': 'korte introductie' (*brief introduction*) (line 9) that selects certain aspects of the IP (*'brief'*) and projects there is more to be told. IP summaries headline the information on the IP that the advisor is about to deliver and the more elaborated these summaries are, the better they project the gist of the upcoming IP.

These characteristics of 'package summaries' resonate the characteristics of *'topicsamenvattingen'* (Mazeland, 2003. p.188) (topic summaries in English) which is Mazeland's Dutch translation of the

phenomenon 'news announcement' (Button & Casey, 1985). However, IP summaries require 'unpacking' and are treated as such by both the deliverer (i.e. the advisor) and the recipient (i.e. the customer), whereas topic summaries/news announcements are not always unpacked. Moreover, both Mazeland (2003) and Button & Casey (1985) illustrate their phenomenon with examples from spontaneous natural interaction and there the topic summaries/news announcements examples always report an activity that happened in the past, whereas 'package summaries' can also report on current state of affairs (for instance: 'we have two different mortgage forms'). Finally, in line with topic summaries/news announcements it is not preferred that recipients contribute substantively to unpacking the headline (Mazeland, 2003, 191).

The customers in excerpt 1 orient to the preface with only minimal receipt tokens (lines 2/3/6/7/8/10/11), by which they display their activity engagement as recipients. Hence the advisor is encouraged to continue the IP launch. After the launch, the advisor starts the IP delivery in line 12. He uses a standard format of first naming the explicandum: 'preferred banker' and then proceeds with 'that means X'. Such a format occurs frequently at the start of IP deliveries. In line 13 the advisor uses a 'well' to project an extended turn (Heritage, 2015) and to mark a new phase in the interaction (Mazeland, 2015), the IP delivery. During the delivery customers do not provide any receipt tokens, and the advisor is not oriented to receiving such tokens as he is looking down at his paper works and does not make any eye contact with his customers. However, once the advisor addresses his customers again he continues to claim the floor by not projecting any turn endings, using mid-rise continuing intonations (line 14 and 16) and breathing in at places that are not turn relevant (line 15) until he has finished his turn in line 18. This is acknowledged with a minimal '*yes*' (line 19) and additional head nods by both of his customers.

The landing of his IP delivery starts with a *'right'* (line 21) that attracts attention for closing the previous utterance and checks customers' understanding even though it is immediately continued with a 'so' prefaced turn in line 21, by which the advisor projects the completion of his complex turn and IP delivery activity (Sacks *et al*., 1974; Raymond, 2004). This so-prefaced turn is also used to transform the gist of the IP delivery into implications for the customers; it provides additional information on future actions that customers can perform: they can ask him all kinds of questions, not only having to do with mortgages (21-25). These so-prefaced upshots (Heritage & Watson, 1979) translating the IP into something that is relevant for the personal customer situation, are a common way of landing IPs. As we see in line

28 the customers show an orientation to closing down the telling activity with an 'okay' that aligns with the advisor's telling closing activity. This practice indicates that only nodding to an explicative telling is insufficient for its closing; this is also supported by other examples in which the advisor requests a token of understanding when customers do not respond to the IP landing. In the following sections we will more elaborately discuss the three phases of the explicative tellings: launching (section 5), delivering (section 6) and landing (section 7) the IPs in mortgage consultations.

5. LAUNCHING INFORMATION PACKAGES

The explicative tellings in our consultations start with a preface by which IPs are launched. This launch is characterized by four elements. The launch is accepted as such by customers; by conveying uncertainty and withholding response in reaction to IP launches customers orient to advisors' expertise regarding mortgage related information, similar to what has been found in healthcare data (Drew, 1991; Silverman, 1987).

5.1 Seeking agreement with IP delivery

The first element that characterizes the IP launch is seeking agreement with the IP delivery. The advisor invites his customer(s) to commit to participation in the co-creation of the pre-packaged discourse unit. Excerpt 2 illustrates this as the advisor (AD) launches her IP delivery about national mortgage guarantee, which is a Dutch trust fund that prevents customers from going bankrupt when they are faultlessly faced with indebtedness as the result of a divorce, unemployment or a deceased partner. MC is a male customer, FC is a female customer.

Excerpt 2. FF20130830HG1 – Seeking agreement with IP delivery

01	AD:	°nou° in deze prijsklasse kom je (.)in aanmerking *°well° in this price range you are eligible*	LAUNCH
02		voor e:hm (0.3) nationale hypotheekgarantie↑ *for e:hm (0.3) national mortgage guarantee↑*	
03	MC:	hmhm *hmhm*	
04	FC:	((knikt/*nodds*))	
05	AD: →	eh weten jullie wat dat is? *eh do you know what that is?*	
06		(1.3)	
07	MC:	een klein beetje, *a little bit,*	
08	FC:	ja *yes*	
09	MC:	[maar ehm *[but uhm*	
10	FC:	[stukjes, maar niet helemaal. *[partly, but not completely*	
09	AD:	niet he[lemaal *not com[pletely*	
10	MC:	[vertel het verhaal maar *[just tell the story*	
11	AD:	ja *yes*	
12	MC:	lijkt mij beter ((glimlach)) *It's for the best ((smile)))*	
13	AD:	((lacht/*laughs*))	
14	FC:	((lacht/*laughs*))	
15	AD:	e:hm nou de ehm de nationale hypotheekgarantie is *Uh:m well the uhm the national mortgage guarantee is*	IP DELIVERY

At the start of the fragment the female advisor introduces the concept of 'nationale hypotheekgarantie' (*national mortgage guarantee*) by announcing that her customers are eligible candidates (lines 1/2). This is the package summary by which the explicative telling starts; a general remark through which she launches the IP. With the hesitation marker 'ehm' (line 2) she seeks special attention for the explicandum, because of its importance, but also as an orientation to the customers' probable non-understanding of the explicandum. In return, her customers allow her to unpack her package summary by producing continuers (lines 3/4) that allow her to go ahead and continue. Then the advisor proceeds in line 5 by requesting agreement with the IP delivery by asking '*do you know what that is*'.

Her customers do not treat this question as a request for demonstrating their knowledge, which is the preferred action when someone asks a 'knowing'-question (Koole, 2010). Instead, MC claims to know *'a little'* (line 7) through a gloss (Jefferson, 1985) that downplays whatever he may know about it. FC provides a '*yes*' (line 8) but resists a knowledge demonstration by displaying that she knows '*parts, not completely*' (line 10) by which she claims knowledge gaps. Subsequently, MC even encourages the advisor to release the IP with '*tell the whole story*' (line 10) including an account that '*it's for the best*' (line 12) as well as a smile that might indicate some kind of shame or fear related to the lack of knowledge he displays. The advisor and FC's laughing demonstrates that they ratify MC's ludic framing of the situation (Glenn 2003, 54) and agree on the joint activity that will take place next: the IP delivery. In line 15 the actual IP delivery starts: the advisor claims the floor (Mazeland, 2003, p.49) and attracts attention for her next action with '*eh:m*' (Schegloff, 2010). Her '*well*' (line 15) projects an extended turn (Schegloff & Lerner, 2009; Heritage, 2015; Pander Maat *et al*., 1986) and a next action and she starts her delivery with a prolepsis of the explicandum: '*national mortgage guarantee'.*

In sum, this excerpt demonstrates that IPs can be launched with a request for agreement combined with a package summary that requires unpacking. This excerpt and others in the data collection shows that advisors and customers have a strong preference for pursuing the IP delivery and a launch is generally irreversible. In the rare case that customers try to block the onset of an IP delivery, their refusal is overruled by the advisor. This is not surprising, since advisors are accountable for providing eligible information and can never be sure if customers truly understood what certain mortgage concepts actually mean prior to an IP delivery.

Excerpt 3 demonstrates what happens when a male customer (MC) tries to withhold an IP delivery. The advisor (AD) seeks permission for her IP delivery on different mortgage forms: the annuity mortgage and the linear mortgage.

Excerpt 3. FF20130712HG1 – Preference for agreeing with IP delivery

01 AD: Dan komen we bij de aflosvormen,
Then we get to the repayment forms,

02 we hebben eigenlijk nog maar twee vormen
we actually have only two forms still

03 over-eh sinds [één januari↑
left-uh since [first of January

04 MC: [((gniffelt/*giggles*.....))

05 AD: [voor eh voor nieuwe hypotheek eh eh eh klante
[for uh for new mortgage uh uh uh customers

06 MC: [((gniffelt/*chuckles*.....))

07 en dat is de annuïteit of de (.) lineaire hypotheek,
and that is the annuity or the (.) linear mortgage

08 → m-eh >volgens mij< w-weet jij wel een b↑eetje (.6)
b-uh >i think< you k-know a little bit

09 AD: hoe [het in elkaar steekt
about [the ins and outs

10 MC: [gewoon i- annuïteit gewoon
[just i-annuity you know

11 AD: okeej.
Okaay.

12 MC: lin-air ga je (.) e:::h steeds minder betale (.8)
lin-ear you (.) u:::h pay less each time

13 dat is voor mij niet zo e:h gunstig
that is for me not so u:h favorable

14 AD: ja- e-zal ik 'm as 'm kort even?
yes-u-shall I it if it a briefly

15 *((voortgaande beweging met arm/continuing motion with arms))*

16 (0.7)nog [uitleggen
(0.7)just [explain

17 MC: [ja als je 't graag wil¿
[yes if you really want to¿

18 *((moves body out for disengagement by leaning back))*

19 AD: ja↑
yes↑

20 MC: *((zucht zacht/sighs softly))*

21 AD: ehm bij een lineaire hypotheek wordt (.)je (.)
uhm with a lineair mortgage you will (.)

LAUNCH

IP DELIVERY

Like in excerpt 2, the advisor starts her explicative telling by seeking attention for the new topic that requires explication (line 1). Subsequently, she provides a package summary concerning a new legislation since January 1st due to which the mortgage repayment forms have changed. Her customer starts to chuckle in response to her general gloss, by which he indicates he has understood the next step the advisor will perform in the course of the interaction, which is the onset of the IP delivery. His chuckling triggers the advisor to respond with a declarative question with a very low epistemic gradient (Heritage & Raymond, 2012), displaying she assumes that he knows the ins and outs of mortgage repayment forms (lines 8/9) and that he believes an explanation is not necessary. However, she continues with another attempt to seek agreement with her IP delivery in line 14, making the act of delivery very small ('*briefly*'). Her customer initially withholds an uptake (line 16) and then when the advisor produces an expansion, he finally responds in slight overlap (line 17), agreeing with the IP delivery to satisfy his advisor ('*if you really want to'*). By doing this, the customer treats the explicative telling as idiomatic, that is, as something that should be done, but at the same time showing he is not very much interested as we can also conclude from his physical behavior (lines 18/19) and his sighing (line 20). The advisor begins her IP delivery in line 21.

5.2 IP delivery account

The second element that is used by advisors to launch the IP is an account for the explicative tellings: a self-explication of why they deliver the IP. This account does not seem to occur as frequent as the other elements we have identified and can be found in combination with announcements of IP deliveries, but also solo as a preface. Excerpt 4 illustrates how the advisor (AD) provides an account for his explicative telling prior to the onset of the IP delivery, in order to make the IP relevant to his customers.

Excerpt 4. FF20130919HG1 – Accounting for IP delivery

01	AD:	E:hm ik zal kort even uitleggen welke	LAUNCH
		U:hm I will briefly explain what	
02		wijzigingen er precies zijn	
		changes have occurred exactly	
03		geweest per één januari	
		since the 1st of January	
04	FC:	ja	
		yes	
05	AD: →	want dat geeft denk ik ook wel een beetje	
		because I believe that will give you an	
06	MC:	mm	
07	AD:	beeld van (.) van (.) wat gaat er voor jullie	
		idea of (.) of (.) what will for you	
08		veranderen of wat is er veranderd,	
		change or what has changed	
09	FC:	ja	
		yes	
10	AD:	ehm en ook wel een beetje een beeld van (.)	
		uhm and also a bit of an idea of	
11		van zitten we nog goed	
		are we still okay	
12		of moeten we echt wat gaan doen¿	
		Or do we have to start taking action¿	
13		eh nou vanaf 1 januari z- eh hebben ze gezegd	IP DELIVERY
		uh well as of 1st of January they have said	

The advisor claims the floor with 'ehm' (Mazeland, 2003, 49) to announce that he will briefly explain the changes that have occurred since January, which is acknowledged and approved by his customer with the Dutch 'ja' (Jefferson 1984) (line 4). Subsequently, the advisor provides an account for his IP, making it relevant to his customer (lines 5-8). The IP will clarify what changes have occurred and will occur in their personal situation. By making the IP relevant the advisor marks the importance of the IP delivery. The customer

acknowledges this with a 'ja' (Jefferson, 1984) (line 9) again leaving the floor open for the advisor to continue.
The IP delivery starts in line 13 with an attention marker 'eh' (Schegloff, 2010) and a '*well*' projecting an extended turn (Schegloff & Lerner, 2009; Heritage, 2015; Pander Maat *et al*. 1986); a combination of elements similar to what we saw in excerpt 2. During the IP delivery the advisor uses the plural lexical reference 'they' (line 13) in order to create distance between his organization and the people making new legislation who belong to a different organization (Lammers, 2001). This type of lexical change occurs often in our consultations when advisors move from the IP launch to the IP delivery.

5.3 IP delivery announcement

The third element that characterizes the IP launch is the announcement of an explicative telling and proceeding with the IP delivery immediately after the announcement. The following excerpt differs from the prior one, because the advisor does not account for his next action. He uses a stand-alone announcement to introduce the IP. In the explicative telling in the next excerpt the advisor (AD) talks to his customer (FC) about the costs that will occur during the mortgage purchase process and then produces an explicative telling about '*national mortgage guarantee'*.

Excerpt 5. FF20130801HG1 – Announcing and immediately proceeding

01	AD:	advieskosten en afhandelingskosten hypotheek, bank *advice costs and handling costs, bank*	LAUNCH
02	FC:	((knikt/nods))	
03	AD:	en kosten nationale hypotheek garantie. *and costs national mortgage guarantee.*	
04	→	nationale hypotheekgarantie laat ik daar *national mortgage guarantee I will*	
05		maar even wat over vertellen *just tell you something about that*	
06	FC:	*hmm*	
07	AD:	ehm nationale hypotheekgarantie is een stichting *ehm national mortgage guarantee is a foundation*	IP DELIVERY
08		die garant kan staan voor jullie hypotheek. *that can underwrite your mortgage.*	

The announcement of the IP delivery in this excerpt is provided in lines 4/5. With this announcement the advisor launches the IP and the customer responds to it with a continuer 'hmm' (line 6), giving space to the advisor to deliver his IP. The delivery is started with an 'ehm' claiming the floor (Mazeland, 2003) and a prolepsis of the explicandum in the first person and continuing talk without any pauses, which is the same format as we saw in excerpt 1: 'Explicandum' is/means X.

5.4 Package summaries

The fourth element that is used to introduce the explicandum and launch the IP is a package summary. This package summary is usually accompanied with a verbal (e.g. 'listen') or physical token (e.g. pointing at it) to draw attention to the new topic. Once the advisor has verbally or physically pointed to the new explicandum, the advisor fires away without any announcement.

Excerpt 6. FF20130718HG1 attracting attention and firing away

```
01  AD:    ja nou   *Wat (.) valt u in eerste instantie op?
           Yes well *wat is the first thing to notice?
                  ((*gazes at screen-----------
02         - we hebben twee vormen van hypotheek -
           - we have two forms of mortgages       -
                ((- points at screen.....................-))
03         we hebben een zogenaamde -*budgethypotheek
           we have a so called      -*budget mortgage
                                  ((-finger on screen-.........
                                   ((*gaze at screen-----------
04         en we hebben -de * *woninghypo[theek-
           and we have  -the* *house mort[gage
                finger on screen-))
                    ----------------* *gaze at customer))
05  FC:                                [o:h ja.
                                       [o:h yes.
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
06  AD: → ja? .h dat zijn allebei hypotheken(.)voor(.) woningen
           yes? .h those are both mortgages for houses
07         .h laten we dat voorop stellen *maar wat zult u zien?
           .h let's put that first,       *but what you will see
                                          *gazes at screen again
08          u zult overal zien dat de budgethypotheek (.)
            you will see overall that the budget mortgage
09          één tiende procent   *goedkoper is* (.)
            One tenth percentage *cheaper is*
                                 *gaze at customer*....*
10          *als een gewone woninghypotheek*
            *than a regular house mortgage *
```

LAUNCH

IP DELIVERY

The advisor attracts attention to the explicandum by producing a package summary and pointing at his computer screen (line 2) to show that there are two different mortgage forms. Subsequently he points at the two different forms individually, while mentioning the budget mortgage (line 3) and the house mortgage (line 4). His introduction of the mortgage forms is acknowledged with a news receipt '*o:h yes*' in line 5. Subsequently, in line 6 the advisor presents his information package. The practice of pointing and firing away is often carried out in our data.

To summarize, we have demonstrated four elements that can occur during the IP launch. As we have seen, these elements can be used on their own, but also stacked on top of each other. By using one or more of these four launch elements, customers are not only prepared for what is to come, but advisors are also "doing being a professional." Advisors are accountable for providing relevant and intelligible information. This is the role they also present during the introduction stage of the orientation consultation; they are there to help customers understand the mortgage process as well as the terms and concepts involved in that process. In the next paragraph we will demonstrate how advisors start off with the IP delivery and how they hold the floor while delivering the IP.

6. DELIVERING INFORMATION PACKAGES[5]

Once the advisor has launched the IP and the customers have agreed with the upcoming IP delivery that both advisors and customers agree on co-constructing the full IP as a discourse unit. On the one hand, excerpt 7 demonstrates how the advisor (AD) makes use of his obtained right to deliver the IP and be the primary speaker for the total IP delivery. On the other hand, it shows how the male customer (MC) commits himself to recipiency in order to support the advisor's activity.

In order to demonstrate how advisor and customer co-create the IP delivery, we will point out several practices advisors use to retain the conversational floor. We will show how the advisor displays that his turn is not final yet, but can also display that his turn has come to an ending, which allows the customer to take a next turn. At the same time we will shed light on the customers' responses, and the practices by which the customer withholds from interrupting the advisor during his IP delivery. All these practices can be found in excerpt 7.

[5] This paragraph is not as elaborated as the ones devoted to launching and landing, since the co-construction of discourse units has been studied thoroughly before (see Houtkoop & Mazeland 1985; Selting 2000; Ford 2004) and we do not mean to provide new insights.

Excerpt 7. FF20130729HG1 Co-constructing the IP

LAUNCH

01 MC: wat moet ik me daarbij eh?
what should I eh

02 AD: dat dat gaat om eh eh eh
that that has to do with eh eh

03 *daar ga ik even wat vertellen
**there I will tell you*
*opens up his hands----------

04 over het advies en de hypotheek op zich*
*about the advice and the mortgage alone**
----------closes his hands*

05 MC: hmhm

IP DELIVERY

06 AD: e:::hm (.6) per 1 janu↑ari is er een verbod op (.3)
u:::hm as of 1st of january there is a prohibition on

07 afsluitkosten complexe financiële producte¿
acquisition costs complex financial products

08 MC: ((knikt/*nodds*))

09 ontst- eh eh in het leven geroepen,
aris- eh eh introduced,

10 MC: ja
yeah

11 AD: zeg maar door de overheid en e:hm (.6) eh daar in (.)
So to say by the government and uhm eh there in

12 e:h eh hebben wij goed gekeken naar van als wij nou
eh eh we have had a carefull look at what those

((8 LINES OMITTED))

22 AD: en wij niet alleen, alle banken
and not just us, all of the banks

23 MC: ((knikt/*nodds*))

24 AD: hebben dat op zo'n manier gedaan¿
have done that in such a way

25 en je betaalt dus (.) voor (.) een stukje advies¿
and so you pay for a piece of advice

26 MC: ((knikt/*nodds*))

27 AD: om jouw persoonlijke situatie in kaart te brengen¿
to map out your personal situation

28 MC: ((knikt/*nodds*))

29 AD: ongeveer zoiets als wat we nu aan het [doen zijn
a bit like what we are [doing right now

30 MC: [((knikt/*nodds*))

31 AD: maar dan (.3)
but then

32 MC: ((knikt/*nodds*))

33 AD: veel uitgebreider,
much more elaborate

34 MC: ((knikt/*nodds*))

35 AD: *met overlijdensrisicodekkingen*
with term life insurance
((*counting one on fingers*))

36 MC: ((knikt/*nodds*))

37 AD: *en arbeidsongeschiktheid*
and labor disability
((*counting two on fingers*))

38 AD: *en noem maar op allemaal*, [.hh
and you name it all
((*counting three on fingers*))

39 MC1: ja
yeah

40 AD: als je wat ouder bent met pensioenregelingen,
When you are a little older with pension arrangements

41 MC: ((knikt/*nodds*))

42 AD: en eh het hele *het hele gebeuren, [.hh
And eh the complete w- a the complete situation
*gazes down>>>>>>>>>>>>>>>>>>>>>>>>

43 MC: [hmhm

44 AD: en e::h eh daarnaast betaal je*
And e::h eh next to that you pay
>>>>>>>>>>>>>>>>>>>>gazes down*

((8 LINES OMITTED))

51 eh eh eh een percentage,
uh uh uh a percentage

52 MC: oke
okay

53 AD: in plaats van een vast *bedrag.
instead of a fixed price
*gazes down>>>>>>>>>>>>>>>>>>>>>

54 MC: oke
okay

((14 LINES OMITTED))

69 AD: ja. Dus dat daar eh daar dat kan wel,
Yes. So that there eh there it is possible

70 dat advieskostenplaatje kan je eruit halen.
Those total advice costs you can delete

71 MC: hmhm

72 AD: eh maar goed,
Uh but well.

73 weet je waar ik 'n beetje naar aan 't kijken ben
you know, what i am looking for now is

IP DELIVERY

LANDING

NEW TOPIC

The explicative telling in excerpt 7 is launched by the advisor with an announcement (line 3) accompanied by a brief summary on what the IP will be about, namely the advice and the mortgage itself (line 4). Firstly, this announcement displays the advisor is about to produce an extended turn. Secondly, the brief summary displays that the advisor is about to launch an information package, since package summaries require unpacking in these consultations, as we have shown in our paragraphs regarding the launch of IPs. Both of these practices invite the customer to commit to recipiency, thus allowing the advisor to deliver his full IP. The customer in return agrees with the IP delivery and his role as passive recipient, displaying a minimal continuer 'hmhm' (line 5).

The advisor starts his IP delivery with an extended 'uhm' (line 6) that claims the conversational floor (Mazeland, 2003, p.49). He produces a turn that is syntactically and pragmatically complete, but prosodically projects there is more to come by not using a turn-final intonation, but instead a rising intonation at the possible transition relevant place (TRP) (Auer, 1992) in line 7. This practice of avoiding turn-final intonation, to prevent signaling a TRP as complete, also occurs in line 9, 24, 25, 29, 31. Another practice to hold the conversational floor is visible in line 11, where the advisor produces an '*and*' to signal there is more to come and an extended e:hm to reclaim the floor (Mazeland, 2003). By using the '*and*' construction before pausing, the advisor makes sure the customer knows that he wants to proceed. This advisor practice reoccurs in line 43. Another advisor practice that shows to be effective to reclaim the floor is by taking inbreaths at possible TRPs (Schegloff, 2007), which we can see in line 38 and 42.

While all these practices above have to do with verbal and audible practices, there are also visible practices, such as gaze behavior and gestures. For example, midway through the IP delivery (lines 40-42), the advisor gazes down at his paper work, by which he avoids eye contact with his customer during two TRPs. Without eye contact it is practically impossible to take over a turn at a TRP since gaze withdrawal is associated with turn continuation and is related to participants understanding of the action they participate in, such as tellings (Rossano, 2012, p.320). What occurs in lines 40-42 reoccurs in lines 56-58: the advisor looks down at his paper works while holding the floor. The advisor only makes eye contact with the customer again once he has delivered a new summary regarding the possibility of acquiring a mortgage without advice, which in return requires an expansion of the advisor turn to clarify the package summary.

At last, sometimes the gestures of the advisor indicate that a turn has not come to a completion yet. For instance in lines 33, 35, 36 the advisor counts

on his fingers to emphasize and project that he is constructing a list that has to do with the topics that will be discussed whenever the customer chooses to enter an advice consultation. That the advisor is successful in holding the floor is shown by the minimal response tokens from MC. Throughout the entire IP delivery, MC only nods (lines 8, 23, 26, 28, 30, 32, 34, 36, 41) or responds with 'yeah' (lines 10, 39), 'hmhm'(line 5, 43, 71) or 'okay' (lines 52, 54).

This illustration of advisor practices to attain and hold the floor during the IP delivery is not exhaustive. Neither is the list with customer practices that show that customers are listening and orienting to the IP delivery as recipients. To conclude, we illustrated that both advisor and customers show to participate in the same activity of delivering an information package and that they show their understanding of this activity to each other by completing the IP in a coordinated way.

7. LANDING INFORMATION PACKAGES

The landing of the information package is the final phase of the explicative telling. Unlike other forms of tellings, such as story-tellings or joke-tellings there are no recognizable punchlines (Sacks, 1974), nor is there a list of completion markers (Jefferson, 1990) that indicate the telling is completed. So, to show their customer(s) that the explicative telling has come to an end the advisors make use of what we call 'landing devices'. More importantly, these landing devices are also used by advisors to transform the generic information from the IP into something that is relevant to the customers' situation.

Excerpt 8 demonstrates the landing of an IP in which the advisor has explained what personal resources a customer can bring when he wants to apply for a mortgage. This excerpt illustrates all the different 'landing devices' that we have identified from our explicative tellings collection. Unlike what this may suggest, these landing devices do not always occur in combination with each other, advisors also use them separately. The landing devices we identified are: 1) upshot formulations (Garfinkel & Sacks, 1970; Heritage & Watson, 1980); 2) formulaic expressions (Drew & Holt, 1988; Drew & Holt, 1998); and 3) references to the IP launch by which the advisors 'return to base'. This extract starts with a preface in which the advisor accounts for the delivery of her IP.

Excerpt 8. FF20130712HG1 – Landing the IP

01	AD:	oke ja wat wat ik altijd belangrijk vind is *okay yes what what I always find important to*	LAUNCH
02		om mee te geven van stop niet al je spaargeld erin *let you know is not to put all your savings into it*	
03		ehm gaat de wasmachine kapot, gaat de auto kapot *uhm if the washing machine breaks down, the car breaks down*	IP DELIVERY
04		dan moet je natuurlijk wel eh *then you need to have eh*	
05	MC:	precies *exactly*	
06	AD:	een buffer hebben om dat op te kunnen vangen *a buffer to take care of that*	
((	5 LINES OMITTED))		
21	AD:	eh maar heb je bijvoorbeeld dertigduizend *higher loan eh but if you have for instance thirty thousand*	
22		euro overwaarde uit je oude woning dan zegt de fiscus *euro extra values from your old house then the taxman says*	
23		als je dat meefinanciert op je nieuwe woning, *if you finance that on your new house*	
24		dan heb je over die dertigduizend euro geen renteaftrek. *you will not get tax deduction over that thirty thousand.*	
25	MC:	*((knikt/nodds))*	
26	AD:	ehm dus je moet er rekening mee houden dat *uh so you have to take into account that*	LANDING
27		alles wat je in de woning stopt dat je dat *everything you put into a house that you will*	
28		eigenlijk nooit meer terugkrijgt. *actually never get it back*	
29		je krijgt het terug in stenen, een dak boven je hoofd *you will get it in bricks, a roof over your head*	
30	MC:	[ja precies *yes exactly*	
31	AD:	[het is niet weg [it is not gone	
32	MC:	nee *no*	
33	AD:	ehm maar het is niet meer vrij opneembaar. uhm but you cannot take it out freely anymore	
34	MC:	nee precies *no exactly*	
35	AD:	dus dat is belangrijk om eh om even mee te geven *so that is important to let you know*	
36	MC:	*((knikt/nodds))*	
37	AD:	ja zal ik 'm gewoon zo laten staan, *yes shall i leave it like this*	NEW TOPIC
38		even kijken wat je maximaal *let's see what you maximally*	

In excerpt 8 the advisor announces her IP delivery accompanied with an account that it is important to not use all your savings when buying a house (lines 1/2). Then she delivers her IP in lines 3 to 24, providing two reasons not to use all your savings. The first reason is given in lines 3 to 6 where the advisor explains that one ought to have some savings in case of unexpected costs. The second reason is given in lines 7 to 24, partly omitted for reasons of length, where she explains that you need to invest any additional value after selling your house, into a new house. In order to explain the legislation to her customer, she uses a reported speech format (Mazeland, 2006) in line 22: '*the taxman says'* and voices the rules as how they are provided by the Dutch tax authorities. Her reported speech ends in a transition relevant place, since her utterance is syntactically, pragmatically and prosodically complete (Ford, 2004). However, she has not projected that her turn is complete yet and her customer allows her to go on only nodding (line 25) in response. Then the advisor starts landing the IP in line 26, by delivering a so-called "so-upshot" self-formulation (to be discussed in the next section), that ends in an idiomatic expression in line 29: '*a roof over your head*'. With this upshot-formulation (Heritage & Watson, 1980) as well as this idiomatic expression (Drew & Holt ,1988) which is in itself also an additional upshot formulation, she displays that the IP has come to an end. The customer in return responds to it with a 'yes, exactly'(line 30) by which he claims understanding, displays he has understood that the IP is completed, and agrees with closing the topic. The advisor additionally offers another formulation that is even shorter and more simplified (lines 31 and 33). This second formulation gets a repeated claim of understanding '*no'(line 32) and* '*no exactly'* (line 34). Finally, the advisor repeats what she already said during the IP launch, that the gist of the IP is important to let him know (line 35), providing a repeated account for her IP delivery. Then in line 37 she moves on to her next topic of entering the data in her computer to find out the customer's maximum mortgage loan amount.

7.1 Upshot formulations

Upshot self-formulations are the most frequently occurring landing devices in explicative tellings. This is no surprise since we already know that upshot formulations, often prefaced by 'so', are known to display the completion of complex turns (Raymond, 2004). Advisors routinely use these upshots to summarize the IP's gist and more importantly translate the generic information to the customer's situation. These upshot self-formulations are used to draw out the implications of the generic IP for the customer's future situation, while referring to customer's actions to take. For instance, in excerpt 8, line 33, the advisor explains to the customer that he will not be able to take his money

freely from his bank account once he has invested it in a house, because it should always be re-invested in a future house. Thus, the advisor explains how the customer's situation is affected by the action to use his personal savings to buy a house, and that he should consider certain consequences. We also observe these references to future situations with regard to actions in excerpt 1 and excerpt 7. In excerpt 1 from line 21 to 25 the advisor explains that customers can ask him all the questions they may have. With this remark he refers to a certain opportunity the customers can take advantage off . It is up to them of course to act on this opportunity. And lastly, in excerpt 7 the advisor delivers an upshot-formulation in lines 69-70, in which he refers to his customer's freedom to take out a mortgage without advice and thus delete the advice costs. With his formulation he reflects upon the customers' mortgage costs with regard to the action to not proceed with an advice consultation.

To summarize, there are numerous institutional settings in which upshot formulations are produced by news recipients (Antaki *et al.,* 2005; Kevoe-Feldman, 2015) who feel responsible for their own understanding of information. This is not the case with explicative tellings. Advisors take responsibility for giving eligible and comprehensible information using news deliverer formulations. By doing this, advisors show they are accountable for making customers understand the implications of the explicandum. They display accountability through this practice.

7.2 Formulaic expressions

Another landing device that also frequently re-occurs, is the use of 'formulaic expressions'. First and most important, in our data these formulaic expressions are also upshot formulations and concluding elements. However, they have a different appearance than the formulations we discussed before and they do not refer to prospective customer actions. Formulaic expressions during the landing can take on different forms. We already know that idiomatic expressions and figurative expressions are used to bring topics to a closure (Drew & Holt, 1988; Drew & Holt, 1998). In our consultations advisors also use fixed expressions such as "*maar dat is koffiedik kijken*", which is a Dutch expression for: "*reading the tea-leaves in the bottom of the cup*" or "*in je achterhoofd houden",* which translates as: "*to keep in mind*". These formulaic fixed expressions occur only during IP landings and are upshots or part of upshot formulations that summarize the preceding talk to initiate topic closing. Excerpt 9 is another illustration of this phenomenon, because it shows explicitly that not only advisors, but also customers treat formulaic expressions as topic closing devices.

Excerpt 9. FF20130803HG1 – Formulaic expression to close topic

01 AD: Aan zekerheid hangt dus een prijskaartje.
You have to pay the price for security.

02 FC: ja
yeah

03 AD: hè?
Right?

04 FC: dus dat betekent dat je op den duur meer gaat betalen.
So this means you have to pay more in the end.

05 AD: nee dat betekent dat je als je nou kiest…
no this means that if you choose now…

The advisor (AD) lands his IP in line 1 with a formulaic expression about the price you have to pay for something, in this case security. The customer (FC) responds to this with a minimal token '*yeah*', which is not sufficient for the advisor to close the topic, given that the advisor continues to mobilize a sufficient response producing a tag question (line 3) (Stivers & Rossano, 2010). The tag question is treated by the customer as a request for agreement with topic closure, since she responds with a so-upshot declarative formulation: '*So this means you have to pay more in the end*' that conveys her understanding of the IP. This upshot formulation displays that she agrees with topic closure in the first place, since formulations are closing implicative (Schegloff, 2007), but it also shows why she didn't provide a closing implicative response to the advisor's idiomatic expression in the first place; she was not sure if she understood the advisor correctly. Line 5 shows that her doubt was legitimate; she did not understand the advisor correctly, he initiates a new explicative telling in order to repair his customer's understanding of the IP: '*no this means that if you choose…'.*

With these excerpts we illustrated that formulaic expressions in itself occur during IP landings and are considered to be explicative telling closing devices by advisors as well as customers. However, unlike upshot formulations, they are not linked to prospective actions, such as 'regular' formulations.

7.3 Return-to-launch device

The final re-occurring landing device to close the explicative telling, is the 'reference to the IP launch', such as we already saw in excerpt 8, line 35. When advisors refer to the IP launch they repeat words, phrases or the gist of an utterance that they also used during the IP launch. This re-addressing of the

opening of a telling is a common practice to close tellings in natural interaction (Schegloff, 2007, p.186). In the specific situation of explicative tellings the mortgage advisors can refer to several launch elements. Sometimes they refer to the account that they already presented during the launch of the action, such as we saw in excerpt 8. In line 1 the advisor tells her customer that there is something she wants to let him know, because it is important: *"what I always find important to let you know".* During the landing she repeats this account in the exact same words (line 35). At other times the advisors refer to the package summary that they displayed during the launch, such as: "*I have two sorts of mortgages"* and refer to the principal idea of this package summary in the landing again "*just know there are two possibilities*". Although the advisor does not use the exact same wording, the gist of the summary is the same.

8. CONCLUSION AND DISCUSSION

The aim of this chapter was to explore the extended turns of talk by which mortgage advisors deliver mortgage information to prospective home buyers. We have shown that in certain extended stretches of talk advisors deliver information packages (IPs) that provide generic information concerning customer possibilities, legislation or institutional policies. The delivery of these IPs shows similarities with people telling stories or jokes. However, we also identified characteristics that are only found when IPs are delivered. Thus, we argued that IP delivery should be considered a new conversational activity type that we propose to call 'explicative telling'.

We have illustrated that explicative tellings are presented in three phases. First, they contain a preface ('the launch'), second, a mid-telling ('the delivery') and finally, a closing phase ('the landing').We showed that launching and landing are important activities when it comes to IPs, because they are used by advisors to translate the generic IP to a customer's situation. However, we have to add that many customers share the same situation, being first-time home buyers. Thus, the information is customer-oriented, but only to a certain extent, also because advisors have a fairly limited amount of pre-information about their customers.

The launch of IPs has two main characteristics. First, launches are almost irreversible. Second, launches can contain four different elements: 1) advisors request a customer to agree with an IP delivery; 2) advisors account for an IP delivery; 3) advisors announce an IP delivery; and 4) advisors present a package summary that needs unpacking.

The IP delivery is recognized by the active incipient advisor and the supportive recipient customer. Together, customer and advisor co-create the IP; the advisor produces units and the customer allows the advisor to continue by not interrupting. The IP delivery co-creation ends once the advisor starts landing the IP through up-shot formulations, including so-upshots, in order to translate the IP's generic information into something that is relevant to the customers' situation. Formulations in which news deliverers summarize their own previous talk have not received any conversation analytical attention before. Ever since the distinction was made between news deliverer formulations and news recipient formulations (Heritage & Watson, 1979) attention went out to news recipient formulations in institutional settings. Prior research concluded that recipient formulations translate laypersons accounts into institutional relevancies (Drew 2003). However, in our data this translation is the other way around; institutional information is translated to customer relevancies. Another device that occurs during IP landings is a reference to the IP launch, which is a common practice when closing other forms of tellings too.

So far we have focused on the sequential organization of explicative tellings and we carefully discussed the term we used for the phenomenon. However, a more prominent question may be: for what problem is this a solution? Why do advisors use explicative tellings? There may be a couple of reasons to provide explicative tellings, but this needs to be further explored in other institutional settings such as the ones we discussed in the introduction. Our best guess would be that the advisor is always the official authority and that he has to act accordingly, which results in a rather monologic consultation. In the rare case of an expert prospective mortgage customer in our data, it seems that the amount of explicative tellings is lower and the conversation is more dialogic than with unexperienced customers. Expert customers are active recipients who ask questions when the advisor provides information. These differences are worth exploring in the future. Additionally, it may be interesting to compare explicative telling with information-providing activities in other institutional settings, since they will probably serve different purposes.

Through the use of explicative tellings advisors aim to explain mortgage related terms and procedures to customers. Advisors never know exactly what preexisting knowledge customers possess and it would cost them a lot of time to find out. Therefore, it is more efficient to estimate the customers' level of knowledge and provide a sensible and comprehensible explicative telling, designed in accordance with the advisor's best practices as the result of long-term information-providing experience. By presenting an explicative telling advisors reduce the risk that customers miss out or fail to understand important information. This point is supported by one of the

advisors who remarks: *'I'll probably tell you some things that you already know, but that is just to make the story more sensible.".* In other words, it is better to be safe than sorry. Furthermore, the data also shows that customers feel that it is better to be safe than sorry; when asked what customers already know about certain mortgage related terms, they often respond with a small demonstration of their knowledge and add up that they would like to hear what the advisor has to say about it. Besides, explicative tellings will generally not be closed without a customer's token of understanding. As the analyses show, advisors put a lot of effort in marking the importance of the IP delivery through the use of launches and landings.

On the basis of the analyses presented here, we would like to suggest that explicative tellings are a practice for "doing being professional". In other words, advisors display accountability for providing eligible and comprehensible information through the launch, delivery and landing of information packages.

CHAPTER 5

HUMAN-HUMAN-COMPUTER TRIADS IN INSTITUTIONAL ENCOUNTERS

ABSTRACT

In this chapter we have used conversation analysis to analyze human-human-computer triads (HHC triads) in institutional settings, more specifically in mortgage orientation consultations (MOCs) when advisor, customer and computer cooperatively generate the maximum mortgage loan amount. HHC triads involve three actors, in a triadic participation framework that collaborate in order to fulfill a specific consultation goal. We argue that the computer, despite its restricted repertoire, is a full participant in these participation frameworks (Goffman, 1981) considering the turn-taking system as proposed by Sacks, Schegloff & Jefferson (1974). In the first section of this chapter we show the interactional dynamics of HHC triads in the MOC. We demonstrate how turn-taking rules apply, how turn-taking is managed by the participants and we illustrate how the participants, including the computer, collaborate to perform a task. Second, we will focus on the global sequence organization of HHC triads, on how these triads emerge in the course of institutional interactions and how they are closed. In the final section we will describe the local sequential structure that occurs in HHC triads and show the actions of the participants, including the computer. The use of HHC triads facilitates transitions between activities of advisors during the performance of a single task, such as shifting between various computer mediation roles or shifting the focus of attention from computer to customer and vice versa. As such, the HHC triad may be considered an interactional device for combining computer use and customer-centeredness.

A slightly adapted version of this chapter has been submitted for publication: Herijgers, M.L.C., Van Charldorp, T.C. & Pander Maat, H.L.W. (under review at Journal of Pragmatics). Human-human-computer triads in institutional encounters.

1. INTRODUCTION

When prospective Dutch home-buyers require a mortgage, they often initiate a mortgage orientation consultation (MOC) at a financial institution, such as a bank, to become familiar with the most important mortgage terms, and more prominently, to learn how much money they can borrow (see chapter 3). In order to generate an amount, the mortgage advisor, customer and computer engage in a joint project of entering software-requested customer data into the advisor-operated computer. Subsequently the computer delivers the maximum mortgage loan amount. This amount depends on so many parameters that computer use is indispensable for achieving this particular consultation goal.

During their interaction the customer is a so-called 'incidental user' of the software, who is not familiar with it, nor operates it (Inbar & Tractinsky, 2010). In such a 'Customer-Agent-Computer interaction' setting (CACI) (Olsson, 2007; Kira *et al.,* 2009), the advisor is the system expert who has to bridge the 'gulf of execution' (Norman, 1988) between the customers' expression of their wishes and requirements and the computer's 'technical language'. In the MOC's human-human-computer interaction, in contrast to CACI, the computer screen is not only visible for the advisor, but is also clearly visible for the customers; still, the advisor is in charge of the computer.

In the MOC the mortgage advisor interacts with customers and operates the computer on behalf of customers; customers talk to the advisor and respond to the computer via the advisor; the computer demands customer input via the advisor and delivers output accessible for customers and advisor. So, during their interaction the advisor, customer and computer are mutually dependent when they want to fulfill the goal of their joint project: calculating the maximum mortgage loan amount.

The aim of this chapter is to argue that the advisor, customer and computer constitute a distinct type of participation framework (Goffman, 1981) that has not been studied by CA-scholars previously: the human-human-computer triad (HHC triad). In the HHC triad (see figure 1), the advisor, customer and computer are actors in a *triadic participation framework* in a *triangular face formation* (Kendon, 1990; Tong *et al.,* 2016) working on a single task: calculating the maximum mortgage loan amount (henceforth 'the task').

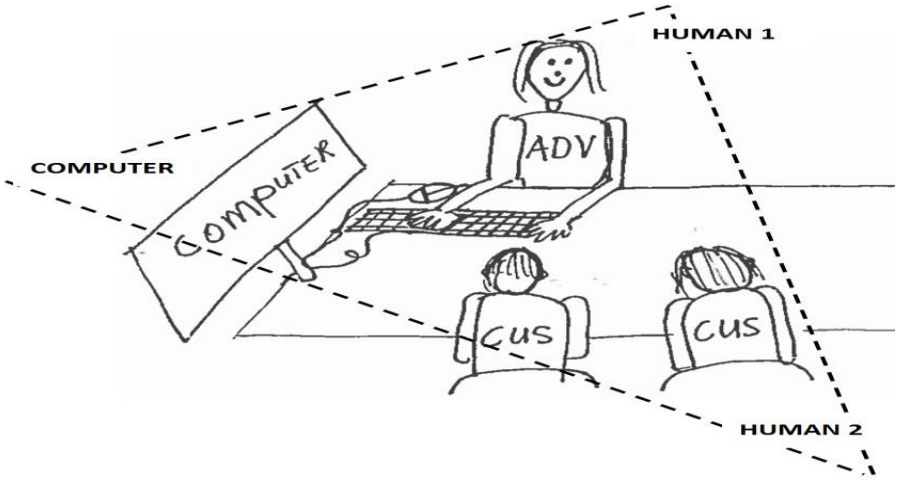


Figure 1. Triangular face-formation of human-human-computer triad

By applying conversation analysis (CA) and using the theory of turn-taking systematics (Sacks *et al.,* 1974) we will show that HHC triads in mortgage consultations are a distinct type of participation framework in institutional interactions. Contrary to what previous studies have shown, in HHC triads computer use is not a side sequence that derails from the main activity (Jefferson, 1972) in a different participation framework. Instead, all the actors in the HHC triad are full participants collaborating in the main interactional activity (Goffman, 1963), despite the restricted repertoire of the computer.

This chapter begins with a brief literature section on triadic interaction and the use of artifacts in institutional encounters. The analysis is presented in three sections through which we will argue that computers are collaborative participants in HHC triads. First, we will focus on turn-taking. We will demonstrate that HHC triads in MOCs practically display the same fourteen general properties of ordinary human-human conversations as once observed by Sacks *et al.* (1974), despite the restricted automatic and non-spontaneous nature of the computer. Moreover, we will show that the computer cannot actually take turns itself, but that it does show 'turn-like' characteristics, because the other participants manage its turns. Second, we will focus on the global sequence organization of HHC triads, on how these triads emerge in the course of institutional interactions and how they are closed. In the final section we will describe the local sequential structure that occurs in HHC triads and show the actions of the participants, including the computer.

Triads in institutional encounters

Since it was first argued that doctor-patient-computer interaction could be considered a triadic interaction (Scott & Purves, 1996), researchers have displayed a growing interest in studying how computers or other 'voices' that are present as third participants, affect doctor-patient interactions. Chan *et al.* (2008) observed family doctors' consulting styles and concluded that doctor's changed their computer behavior when patients presented psychological problems, which affected the course of the interaction and influenced the duration of the consultations. Also, Pearce *et al*. (2009) employed a hermeneutic approach to study how patients handle computer presence in the doctor-patient interaction. They distinguished dyad-oriented versus triad-oriented patients and they demonstrated how triad-oriented patients actually used the computer's presence to exert influence on the consultation. Swinglehurst *et al*. (2011) introduced the electronical medical record as a competing voice in the doctor-patient interaction and Swinglehurst *et al.* (2014) suggested that the incorporation of 'new voices' such as ad hoc interpreters in multilingual consultations leads to triadic consultations, because the conventional two-person communication is 'disturbed' by a third voice.

So far, the collaborative triadic human-human-computer interaction has not been examined from a conversation analytical perspective, although it is clearly useful to examine the interactional construction of the triadic project in some detail. Besides, the use of technology keeps expanding and there are far more settings in which task-driven triadic human-human-computer interactions may become relevant in the future, for instance in educational settings when 'peers' are working together on digital tasks, when teachers are helping students with tasks in which the computer generates a certain output, or when the computer is going to be used for diagnostic purposes in health care settings.

The use of artifacts in institutional encounters

Although CA scholars have not addressed the *triadic* human-human-computer perspective, ever since the introduction of new technology, workplace studies demonstrate how interactions are affected by machines, computers and other artifacts. An entire body of research was developed on institutional interaction in offices, airport operation rooms, emergency dispatch centers and medical settings (Suchman, 1987; Whalen, 1995; Heath & Luff, 2000; Luff, Hindmarsh & Heath, 2000; Whalen *et al.*, 2004), along two different lines. A first aspect studied was how humans interact with computers (Human Computer Interaction); a second aspect concerns how computer presence affects interactions between humans.

Our study continues along that second line of workplace studies on computer presence in interactions, since there are multiple participants in mortgage consultations that are dealing with computer presence. In clinical settings this topic on the presence of artifacts has already received a lot of attention, because the computer was generally considered to be a hazard to patient-centered care, especially in primary care settings, such as the general practitioner's consulting room (Scott & Purves, 1996). Various CA papers supported this idea; they concluded that computer use negatively affected the patient-centeredness of the doctor-patient interaction (Heath, 1986; Greatbatch *et al.*, 1995; Robinson, 1998; Margalit *et al.*, 2006). And it was not only in medical settings that the computer was considered to hinder the interaction's course, also in police interrogations (Komter, 2006) and emergency dispatch calls (Whalen, 1995).

However, in the institutional interactions studied so far, the computer has not been present as a third participant to a joint project. This is where our consultations differ. During 'the task' the consultation's progress depends on the computer's delivery of the maximum mortgage loan amount. The computer is not used to document or retrieve information; it is providing new information that is necessary to fulfill the consultation's goal. Secondly, the computer screen in our data is a participant that can be equally addressed by institutional agents as well as customers, because it is within their joint interactional space. Whether the computer is actually addressed by the customers, will become apparent in the analysis. However, equal computer screen accessibility was clearly *not* the case in earlier CA studies. In studies by, for example, Nielsen (2014); Komter (2006); Robinson (1998); Ruusuvuori (2001), the computer was only available in the institutional agent's interactional space. In the case of doctors their 'home position' was frequently in front of the computer; when addressing the patient, they turned the upper body to engage in interaction with the patient.

We did find one study that shows similarities with the MOCs triads, because the human participants show a sustained orientation to a computer screen, namely the execution of an ultrasound echo examination (Nishizaka, 2014). However, ultrasound echo examinations do not require active participation by pregnant women; their belly is the input for the examiner to fulfill the official consultation's goal of examination. Table 1 presents an overview of institutional human-human-computer interactions that compares the MOC's triadic activity with activities in other settings, based on the papers cited above.

Table 1. The role of the computer in MOCs versus other institutional settings

Computer: / *Setting*	**Is equally accessible to participants**	**Asks for input**	**Provides new output**	**Triggers Explanation by its output**
MOC	+	+	+	+
Medical consultation	-	+	-	-/+
Ultrasound echo examination	+	-	-	+
Police interrogation	-	+	-	-

In all these interactions there is an expert computer user (e.g. the institutional agent) versus an incidental user (e.g. the customer/patient/suspect). Our specific MOC activity is special in that the role of the computer exhibits all four properties indicated in the columns of Table 1: It is equally accessible to both the institutional agent and the lay customer, it asks for input from the customer, it offers new output, and its output requires explanations. Now although this clearly indicates the prominent role of the computer in MOCs, this does not by itself mean that MOCs are triadic activities, because that depends on the participants' behavior and their orientation to the activity they are involved in. Before turning to the three analysis sections, we will describe our data.

2. DATA

For this study we used 16 mortgage orientation consultations that were video-recorded with three camera's at one of the largest Dutch banks in 2013. All recordings were conducted with the written consent of advisors and customers. One camera focused on the customers, another recorded the advisor and the last one focused on the computer screen. First, the recordings were transcribed using the Jefferson principle of notation (2004). Then we added extra lines for multimodal annotations, in accordance with Mondada's multimodal conventions (2013), dedicated to gestures, gaze and body movements for advisors (AD) and customers (CU or C1/ C2 in case of multiple customers) and computer (PC). English translations are our own and follow the Dutch lines in the transcriptions. For this chapter's analysis, we focused on triadic participation frameworks that occur when advisors, customers and a computer cooperatively calculate the maximum mortgage loan amount, i.e. collaborate on

'the task'. Performing 'the task' is the main activity in all these 16 consultations. In our selection there are three different advisors present. [6]

3. ANALYSIS

3.1 TURN-TAKING IN HHC TRIADS

The turn-taking system (Sacks *et al.*, 1974), which we assume is more or less known to our readers, explains how participants regulate the exchange of turns at talk; the system explains how conversational turns are orderly distributed and accounts for a set of fourteen properties that are present in any conversation. The authors note that their turn-taking system is based on natural interaction and that they have chosen not to focus on other settings. However, although turns in institutional interactions are pre-allocated to a large extent –meaning that institutional talk is more predictable than natural interaction due to its context, goal-oriented nature and the asymmetry between expert and lays– (Mazeland, 2003, P.19), participants in HHC triads largely adhere to the rules for turn-construction and turn-allocation as made explicit by Sacks *et al.* (1974).

In the following section it will become clear that HHC triads display almost all of the fourteen properties concerning turn-taking in interaction between humans, as once presented by Sacks *et al.* (1974). This is the first motivation for our claim that all actors in the HHC triad are full participants that collaborate. We will show that computer use in the HCC triads is the main activity in our consultations and that computer interaction is not treated as a side sequence (Jefferson, 1972); the human participants in the MOC display a shared orientation to the computer as a participant. The second reason to argue that the computer is a full participant, has to do with the applicability of the turn-taking systematics as proposed by Sacks *et al.* (1974). The advisor and the customer adhere to the turn-taking system and orient to the computer as a participant that has a right to speak and to whom they can respond. However, we will see that strictly speaking, the computer's turns are allocated by the human participants, because their turns reveal how they understood the

[6] We would like to mention that not all customers who request a maximum mortgage loan amount, actually want to borrow that full amount of money. Sometimes, they only want to know if a certain house that they fancy is affordable. However, the only calculation the computer can deliver, is the calculation of the maximum mortgage loan amount. This calculation can cover all the frequently displayed customer requests, such as informing customers whether a specific house is affordable or informing customers in what price range they can search for a house.

computer turns (Sacks *et al.*, 1974). After all, the computer cannot take turns by itself, because of its restricted nature.

HCC triads show many of the fourteen properties concerning turn-taking as presented by Sacks *et al.* (1974). The following two excerpts will illustrate that: 1. speaker change occurs and recurs; 2. one party talks at a time; 3. occurrences of more than one speaker at a time are common, but brief; 4. there is no significant overlap or gaps; 5. turn order is not fixed; 9. relative distribution of turns is not specified in advance; 10. number of parties can vary; 12. turn-allocation techniques are obviously used; 13. various 'turn-constructional units' are employed. Some of their observations are not applicable in HHC triads: because of the computer's restricted, automatic and non-spontaneous nature we cannot claim that: 6. Turn size is not fixed; 7. Length is not specified; 8. Text is not specified. Besides, institutional interaction is continuous due to its goal-focused orientation; therefore, their 11th observation that talk can be discontinuous, does not apply.

Excerpt 1 shows how advisor and customer collaborate on the computer program in which customer data should be entered in order to proceed with maximum mortgage loan amount calculation.

Excerpt 1.

```
01  PC:  ((visual: empty box called 'year of birth'))

02  AD:   en dan wordt hier gevraagd om uw geboortejaar?
          and then here is requested your year of birth

03  CU:   negentien zevenenvijftig
          nineteen fifty seven

04  AD:  zevenenvijftig
         fifty seven

05       #enters year of birth#

06  PC:  ((visual: empty box called 'alimony'))

07  CU:  geen alimentatie
         no alimony

08  PC:  ((visual: empty box called 'financial obligations'))

09  AD:  nee heeft u financiële verplichtingen?
         no do you have financial obligations?
```

To start with, excerpt 1 shows that speaker change occurs and recurs (observation 1), since the turns of different participants follow each other; the advisor responds to the PC (line 2), the customer responds to the advisor (line

3) and the advisor confirms what the customer just told him by repeating the customer and entering the data into the computer (line 4). Secondly, we can observe from excerpt 1 that one party talks at a time (observation 2) and that there are no occurrences of more than one speaker at a time (observation 3). The excerpt also shows that turn order in the triads is not necessarily fixed (observation 5). The advisor and the customer both take turns if they are allocated by the computer software; the advisor by voicing a question, the customer by responding to the computer's request for information spontaneously or elicited by the 'vocalizing' advisor (observation 12) in two different ways.

When the advisor has entered the customer's year of birth in the computer program, the next field on the screen (line 6) requests information. In line 7 the customer self-selects in response to this turn by providing the requested information '*no alimony*', which is acknowledged by the advisor (line 8) and then the advisor continues by asking if the customer has financial obligations. This time, the customer does not respond to the computer's turn by providing an answer to whether or not he has financial obligations. Instead, the advisor vocalizes the input required by the computer program[7]. Finally, the varying length of the questions that introduce the empty boxes within the computer software, demonstrate that the turn-constructional units can vary (observation 13).

Excerpt 1 also demonstrates in line 1/6/7 that the computer produces turns that are grammatically and pragmatically complete (Ford & Thompson, 1996) ending in transition relevant spaces. In line 2, the advisor responds to the computer as if it selected a next speaker; the advisor mediates the computer turn with a post-first insert expansion. The customer acknowledges this mediation, by providing the computer requested second pair part: his year of birth (line 3). We will elaborate on these mediation practices later on. In line 6 the computer launches a new request for information. This time the computer question is not mediated by the advisor; the customer immediately responds with an answer: '*no alimony*' (line 7).

Excerpt 2 demonstrates that the customer can self-select in a transition relevant space that originates from a lack of response by the computer software, because the computer is slow. The excerpt also illustrates that turn gaps are dispreferred (observation 4) and also that participants avoid overlap

[7] We'd like to remark that the rest of the data shows that this question is always explained by the advisor due to its ambiguous nature; the question can project a yes/no answer, an amount or an open answer. So, the customer could not have spontaneously responded to this question.

(observation 3). Finally, observations 9, 10 and 11 that were not yet illustrated, will be discussed here.

Excerpt 2.

```
53  AD:    of een nieuw#bouw?
           or a newly  #built house
54                     #turns head to gaze at screen-->
55  C2:    geen *nieuwbouw
           no   *newly built house
56               *turns head to gaze at screen-->
57  AD:    #clicks button on screen to move to next field#
58  PC:    @PC is 'thinking'-->
59         (.)
60  C2:    .hh
61         (.3)
62  C2:    e:hm
63         (.3)
64         wat-  *#(.) wat verschilt t voor jullie tussen een
           what- *# what difference is it for you between an
65               *turns head to gaze at advisor-->
66  AD:           #turns body to gaze at customer -->
67  C2:    bestaande en een nieuwbouwwoning?
           existing or a newly built house
```

Excerpt 2 starts with a question-answer sequence (line 53-54) about whether the customer wants to buy an existing house or a house that has just been built, since this has consequences for the costs of a house. As soon as the advisor enters the data she clicks a button on her screen that is supposed to take her to a next screen (line 57). The advisor already mentioned earlier in the consultation that she is experiencing some system delays today, so when the computer starts 'thinking' in line 58, displayed by a symbol on the screen, the customer hesitates and subsequently launches a question in the transition relevant place (line 64). Putting this question out here is an example of how customers display sensitivity to the turn-taking system in handling the computer as a third participant in the triad; this customer avoids overlapping the computer's next turn in accordance with turn-taking observation 3, and he also avoids large gaps (observation 4). Furthermore, this shows that the distribution of turns is not specified in advance, i.e. the advisor could also have

initiated a turn whilst the computer is thinking (observation 9). Finally, the two excerpts both demonstrate that the number of parties can vary in triadic interactions; this is shown by the fact that in excerpt 1 there is only one customer, while excerpt 2 is a triadic interaction with two customers (observation 10).

As shown, the participants in HHC triads adhere to the rules for turn-construction and turn-allocation that Sacks *et al.,* (1974) presented. This is illustrated by the two excerpts above. The computer cannot initiate its own turn, therefore turn-taking in the HHC triads is slightly different from turn-taking in other settings: the turns of the computer are managed by the other participants, mostly through mediation. Moreover, in the HCC triad the computer screen is visible for both agent and customer, but only the advisor has the right to operate the computer. This also requires mediation.

Computer mediation practices

Mediation refers to speaking for another participant to make a third participant understand something. . Within CA mediation practices are not a new phenomenon; for example, Knapp-Pothoff & Knapp (1986) studied interpreters' mediation practices in a multilingual context, with German legal advisors, Turkish guest workers and bi-lingual interpreters. More recent CA studies on mediation in multilingual contexts include Raymond(2014); Davitti & Pasquandrea (2014); Estrada et al (2015). Furthermore, Hynninen (2011) studied mediation practices in an 'english as lingua franca' context where non-native students helped other non-native students. Finally, Houtkoop-Steenstra (2000) observed mediation practices in survey-interviews where interviewers mediated their survey-questions for interviewees. Our study seems the first to discuss mediation in human-human-computer contexts, with the computer being the mediated participant.. In HHC triads, advisors can take up three different mediation roles. Besides, they can shift between these three roles, which was also noticed by Houtkoop-Steenstra (2000), p.45).

The first role we observed is that of 'vocalizer' (excerpt 3), a term borrowed from Clark (1996, p.20).

Excerpt 3.

```
01  CU:  >>*gazes at computer screen-->
02  AD:  >>#gazes at computer screen-->
03  AD:  0ké. dit is jouw eerste woning?
         0kay. this is you first house?
04  CU:  ja
         yes
```

```
05  AD:  e:hh we weten nog niet wat het bouwjaar van de woning is
         e:hh we do not know yet the building year of the house is
```

As a vocalizer the advisor transfers text from customer to computer and vice versa; one-on-one so to say. In excerpt 3 the software requires a confirmation about whether this is the customer's first home to buy, vocalized by the minimal declarative question (line 3) to elicit the required customer information. The customer answers with a '*yes*' (line 4). As we see in line 1-2 both participants are continuously focusing on the computer screen. They talk to each other via the computer screen. Vocalizing is sometimes necessary to draw customer's attention to specific requests for information. Because generally, the advisors skip a lot of fields in the software during the MOC, so customers do not always know to which requests for information they should respond. Therefore, the important ones are vocalized by the advisor.

The second role the advisor can adopt is the role of 'translator' or spokesperson (Houtkoop-Steenstra, 2000, p.47) for the designer of the computer screen and its questions. In this role the advisor translates the screen text to something comprehensible for the customers. In excerpt 4, the advisor explains the 'kosten koper' that is displayed on the computer screen.

Excerpt 4.

```
01  CU:   >>*gazes at PC screen-->

02  AD:   >>#gazes at PC screen-->

03  AD:   kosten koper    #
          buyer's expenses#

04                        #turns head to look at CU-->

05        hè dat betekent dat*
          hè that means that *

06  CU:                      *turns head to look at AD-->

07  AD:   [de bijkomende kosten voor jouw [rekening zijn
           the additional expenses are on your account

08                                        [ja
                                          [yes

09  AD:   [*nou #waar krijg je mee te maken, in eerste instantie
           *well#what you will encounter, in the first instance

10  CU:    *turns head to gaze at screen again-->

11  AD:         #turns head to gaze at screen again-->

12        moet de notaris een akte opmaken #
          the notary has to make a contract#

13                                          #turns head to CU again-->
```

14 AD: dat je *eigenaar van het pand wordt.
*that you *become the owner of the house*

15 CU: *turns head to look at AD-->

16 CU: hmmhmm

17 AD: daar vraagt hij geld voor *
*he will ask money for that**

18 CU: *turns head to PC screen again-->

19 AD: dat hebben wij geschat op ongeveer zevenhonderd euro.
which we have estimated at around seven hundred euro.

20 CU: ja
yes

Firstly, the advisor vocalizes the text projected on the computer screen 'kosten koper'(line 3) and then 'translates' that these are costs that the customer is responsible for himself. Subsequently, the advisor starts elaborating on these specific costs by which he translates the institutional jargon to make it comprehensible in lay terms for customers (line 5-19).

The customer and advisor are both looking at the computer (line 1/2) when the advisor vocalizes 'kosten koper' (line 3) and moves his head towards the customer (line 4) once he starts his explanation. The customer in return looks at the advisor (line 6). In line 8 the customer overlaps the advisors' explanation with a confirmation and moves his head back to the screen again (line 10) to indicate that the explanation that the advisor has provided is sufficient and that they can both return to the computer again. The advisor in response also returns his head (line 11) to the computer, although we can see in the remainder, that the advisor continues elaborating on the contract under discussion (line 14-20).

The third role advisors adopt is the role of 'software expert'. In this role they provide online comments on computer processes when the computer is 'thinking'. Excerpt 5 illustrates how the system assigns a certain interest rate percentage to the chosen interest rate period.

Excerpt 5.

01 CU: >>*gazes at computer screen-->

02 AD: >>#gazes at computer screen-->

03 een tien jaar vaste rente. Nou dit doet het systeem die
and ten years fixed interest. Well this is automatic the

04 #koppelt daar meteen een rente aan
#*system links this to an interest rate*

05 AD: #gazes at customer-->

```
06  CU:  ja
         yes
07  AD:  hè dit is op dit moment onze rente.
         hè this is at this moment our interest rate
```

As we can see in line 1-2, both the advisor and customer are gazing at the screen. The advisor repeats that they have chosen an interest rate of 10 years and he explains where the amount of money comes from that is attached to this interest rate period. Like a mechanic he explains what happens under the hood of the machine. Furthermore, we can conclude from looking at these excerpts that illustrate the different roles, that the shifting of roles within the triadic activity is an unmarked happening; it is never accompanied by explanations or accounts, nor do customers request explanations. This implies that the customers accept that the computer and the advisor are members of the same task-driven participation framework in which they contribute to fulfilling the consultation's goal.

In sum, the observations of Sacks *et al.*(1974) considering turn-taking in human interaction, are also visible in HHC triads, thus, the computer is treated as a participant by the other participants in the triad: the advisor and the customer. Furthermore, the excerpts illustrated that, despite the mediation of the advisor, the computer complies with turn construction and turn allocation, which we can conclude from how the human participants orient to the computer's turns. In the next paragraph we will first describe the global sequence organization of HHC triads. How are HHC triads set-up and how do they come to an ending? After that, we will discuss the local sequential structures that occur within HHC triads and show how the mediation practices of the advisor affect the local organization of the HHC triads.

3.2 GLOBAL SEQUENCE ORGANIZATION OF HHC TRIADS

The introduction of the HHC triad

In the introduction stage of the MOC, the customer and advisor introduce themselves, the customers display their reason for coming and the customer expectations are discussed. Subsequently, the advisor sets up the triadic participation framework of the HHC triad. This is required to fulfill 'the task'.

In the vast majority of our MOCs the HHC triad is introduced by the advisors through announcements of a joint activity in which the computer will be involved. These announcements contain three important features to let customers know what is expected from them. Excerpt 6 below first of all illustrates that advisors announce the collaborative triadic activity by producing a collective 'we' that brings the advisor and the customer together in

the next activity. Furthermore, we will show that the advisor involves the computer program into the next activity and that advisors display an embodied orientation towards the computer screen, that may include gestural behavior. Consecutively, customers respond with an embodied computer orientation.

Excerpt 6 is a prototypical example of how advisors announce the HHC triad in the consultation. The advisor introduces the computer software supporting the consultation's progress and then involves the customers in the activity and assigns the participants' roles.

Excerpt 6.

```
01  AD:  oké. #nou, wat ik wat ik &ga doen- ik ga het
         okay.#well, what I what I will do- I will

02            #shifts towards computer

03  C2:                           &turns head towards computer

04  AD:  hypotheekprogramma opstarten* en dan lopen we
         start up the mortgage program and then we will

05  C1:                               *turns head to computer

06  AD:  eigenlijk gewoon alle velden door
         actually just address all the boxes

07       #komen we heel veel eh dingen tegen ehm ja dat ja
         we will run into many eh things ehm yeah that yeah

08       #shifts gaze to customers again

09       dan zal ik ook gaandeweg even wat dingen uitleggen over
         then I will also along the way just explain some things about

10       wat bijvoorbeeld wat voor hypotheekvormen mogelijk zijn
         for example what kind of mortgage forms there are available

11       en eh ja eh waar waar je bijvoorbeeld op moet letten
         and eh yeah eh what what you for instance have to notice

12       eh dus ja dan komen we heel veel dingen tegen dus dan eh
         eh so yeah then we encounter a lot of things so then eh

13       geef ik vanzelf wel &informatie die eh
         I will provide naturally with all the information that eh

14  C2:                       &turns head towards computer

15  C1:  *ja
         *yes
16       *turns head to computer ((smiles))*

17  AD:  #shifts towards computer ((smiles))#

18       die jullie nodig hebben en als jullie vragen hebben dan
         that you need and if you have questions then

19       eh ja stel ze vooral.
         eh yes do ask them.

20  C2:  ((three nodds))
```

To start with, the advisor (AD) provides an 'okay' that closes the introduction stage of the consultation in which her customers have just provided their reason for coming to the consultation: they are looking for a house. As soon as the advisor closes this introduction, she shifts her body towards the computer and launches the new activity in line 1 with 'nou' (Mazeland, 2012; 2015) and 'wat ik ga doen'. In the middle of her sentence C2 responds to the advisor's computer orientation by shifting her body and gazing at the computer (line 3). The advisor signals that she has the right to operate the computer: *'I will start up the program'* (lines 1/4), which is answered with a bodily shift of C1 towards the computer screen (line 5). Both the customers and the advisor are now gazing at the computer screen. Then, in line 4/6 the advisor shifts from '*I*' to *'we'*, thereby involving her customers in the subsequent activity: '*we will just address all the boxes and run into lots of things*'. She explains one of her own roles to them: that she is going to inform them, for instance, about their possibilities and the things they need to be aware of and she will provide them with the information they need (lines 4-12). C2 projects the end of the advisor's turn by turning towards the computer again (line 13), and as soon as C1 (line 14) also provides an acknowledgement token, the advisor turns physically towards the computer and simultaneously invites the customers to ask questions whenever they want to. That is, she distributes the roles and makes her customers responsible for asking questions about things that are unclear to them and she also makes them responsible for their understanding of the process.

This excerpt demonstrates that advisors announce a variety of activities that are all taking place within the HHC triad. The triad allows to shift freely between activities; for instance, the computer can be abandoned because the advisor has to explain things, also, the customer can be abandoned to gaze at the computer screen again. This is not problematic, however, because they will reach their joint goal nevertheless. In the announcement prior to the HHC triads, the advisor refers to all the different activities that may occur during 'the task' in the HHC triad, but also reassures the customers that all activities are leading to their shared goal: '*along the way'* (line 9), '*just*' (line 6/9), '*encounter a lot of things*' (line 12), and '*naturally*' (line 13). All these words signal activities that may occur within the HHC triad, and make it possible to not account for them when they occur. More examples of these shifting activities are visible in Excerpt 4, where the advisor moves from customer to screen in line 2/3/9/13.

Excerpt 7 demonstrates once more the importance of the distribution of roles within the announcement of the triadic activity. The advisor self-repairs his own utterance in order to invite customers to participate in the following activity.

Excerpt 7.

```
07  AD:  heel goed. eh zometeen in in de
         very good. eh later in in the
08       berekening die ik ga maken
         calculation that I will make
09       eh als we een berekening gaan maken,
         eh if we are making a calculation,
```

In line 7 the advisor announces that he is about to make a calculation, however, he changes from '*the calculation that I will make*' into '*if we will make the calculation*', including his customer in the triadic participation framework.

It is important for advisors that customers display an orientation towards the computer screen during the announcement of phase 2. As we see in excerpt 8, when customers do not display an orientation to the computer after announcing the new face, the advisor solicits a display of computer orientation. In line 41, the advisor launches the new phase with 'Nou'. However, the customers are looking at each other, not displaying any orientation to the computer screen (line 43 and 44). Subsequently in line 45, the advisor checks with them whether the screen is visible, in order to get his customers to turn their gaze towards the computer to make sure they acknowledge the introduction of the computer and thus the triadic activity. He succeeds in doing so as we can conclude from both customers' gaze shift in line 46 and 47, which is accompanied with verbal acknowledgements: '*yes*' in line 48 and 49. Moreover, line 54 displays how committed customers are: the customer shows that she is participating in the HHC triad with the acknowledging 'Jeej' even though she is facing down.

Excerpt 8.

```
41  AD:    #nou
           #well
42         #looks at screen-->
43  C1:    >>*is gazing at C2
44  C2:    >>&is gazing at C1
```

```
45  AD:    kunnen jullie het allebei goed zien?
           can you both see it clearly?
46  C1:    *changes gaze to screen to check and
           then starts looking down at papers-->
47  C2:    &changes gaze to screen-->
48  C2:    ja
           yes
49  C1:    ja
           yes
50         (1.9)
51         oh ja.
           oh yes.
52  AD:    we gaan fictief een bestaande woning aankopen.
           we will imaginary buy an existing home
53         #clicks with mouse on screen#
54  C1:    jeej
           yay
```

To sum up, the computer is brought into the consultation to fulfill 'the task'. The announcement of the triadic activity is always a verbal accomplishment, accompanied by body shifts towards the computer at some point. These shifts display computer orientation. Very often the advisors reach for the keyboard, set their eyes on the computer screen or grab the computer screen to turn it in order to make it visible for the customers. The advisors' embodied orientation behavior frequently accompanies their verbal announcement.

The ending of the HHC triad

The HCC triad ends when the computer has fulfilled 'the task' by displaying the maximum mortgage loan amount. In most cases, the advisor addresses the outcome of the calculation by pointing at the maximum mortgage loan amount and/or vocalizing the amount displayed on the screen. This is illustrated in excerpt 9.

Excerpt 9.

```
01  AD:    hij *geeft hier aan dat wat jullie maximaal kunnen
           he says here that what you can maximally can
               *((points with finger at screen-->
02         lenen aan hypotheek driehonderdzesennegentig*
           borrow as a mortgage is threehundredninetysix
           ---------------------------------------->))*
03         duizend zeven honderd (09:36) euro is
           thousand seven hundred euro
```

```
          (0.8)
04  C1:   het totale hypotheekbedrag?
          the total mortgage amount?
05  AD:   ja
          yes
06  C1:   ja
          yes
```

The advisor physically points at the mortgage loan amount in line 1. She vocalizes the amount as displayed on the screen (line 2-3), which is received with a request for confirmation (line 4). When the advisor confirms the customers' understanding in line 6, the customer acknowledges the amount with a 'yes' (line7). Generally, customers acknowledge the amount that the advisor vocalizes with minimal tokens, such as nodding, 'yes' or 'hmhm'. Such tokens may display that the information that the computer provides was already more or less expected by customers, This is likely because customers often made some rough internet calculations at home, before visiting the mortgage provider. However, sometimes they display surprise when the amount is delivered by the computer, such as: 'can we lend that much?', which we can see in the Excerpt 10, originally English spoken.

Excerpt 10.

```
01  AD:    eh it says here that the ehm your maximum
02         mortgage based on your incomes is
03         threehundredfourtyninethousand euro's. so.
04  C2:    can we lend that much?
05  AD:    that's a bit more than you were expecting
```

In line 1 (excerpt 10) the advisor addresses the outcome of the calculation, again by pointing at the maximum mortgage loan amount and vocalizing the amount that is displayed on the screen.

After the vocalization of the maximum amount, the advisors press a button generating an orientation report that displays the customer details concerning income and savings and all the details on the loan. Loan details include the maximum amount that customers can borrow, consequently the maximum price of a new house and a monthly repayment schedule, which is based on for example the interest rate period and the mortgage form.

3.3 LOCAL SEQUENTIAL STRUCTURES WITHIN HHC TRIADS

The most important sequential structure that occurs within the HHC triad is the Question-Answer-Typing structure (QAT) (Komter, 2006; Van Charldorp,

2011a,2011b). This is a Question-Answer adjacency pair with a post expansion of Typing, a sequence closing third by which the Answer is acknowledged. The Q-A adjacency pairs in HHC triads are often interrupted by the advisor mediation insert expansions, after the first pair part computer questions. This always happens to be a 'vocalization' in our consultations. These advisors' post-first insert vocalization expansions draw customers' attention to a question and at the same time elicit customers' second pair part delivery i.e. the requested information. By delivering information the customer responds to both the advisor and the computer. Then the advisor acknowledges the receipt of information by entering it into the computer. The customer monitors the screen to evaluate the advisors' typing behavior and in case of problems, the customer interrupts the data entry. However, if the advisor's acknowledgement is correct, the sequence continues without interruptions. Excerpt 11 demonstrates how these sequences generally unfold.

Excerpt 11.

01	PC:	((visual:empty box called 'name child'))	**PC:QUESTION**
02	AD:	wat is de naam van jullie oudste dochter? *what is the name of you oldest daughter*	**AD:MEDIATION**
03	C1:	saar, s- a- a- r (36:39)	**C1:ANSWER**
04	AD:	s- a-# a- r? (36:43)	**AD:CHECK**
05		#advisor types name into computer-->	**AD:ACKNOWLEDGEMENT**
06	C1:	hm hm	**C1:CONFIRMATION**
07	C2:	°hij doet het niet hoor° *°it is not working hoor°*	**C2:EVALUATION**
08	AD:	#advisor grabs mouse and clicks on screen#	**AD:ACKNOWLEDGEMENT**
09		#advisor types name into computer again-->	**AD:CORRECTION**
10	AD:	het is een beetje onhandig zo *it is a bit inconvenient like this*	**AD:ACCOUNT/COMMENT**
11		#advisor withdraws hand from keyboard#	**See 1 in figure 1**

12	PC:	((visual:empty box called 'date of birth'))	**PC:QUESTION**
13		en de geboortedatum? *and the date of birth?*	**AD:MEDIATION**
14	C1:	[twaalf *twelve*	**C1:ANSWER**
15	C2:	[twaalf twaalf tweeduizend zes (36:57) *twelve twelve two thousand six*	**C2:ANSWER**
16	AD:	#advisor types date into computer-->	**AD:ACKNOWLEDGEMENT**
			See 2 in figure 1

17	PC:	((visual: empty box called 'name child'))	**PC:QUESTION**
18		en van jullie jongste dochter? *and your youngest daughter's?*	**AD:MEDIATION**
19	C1:	lisa, l- i- s- a (37:07)	**C1:ANSWER**
20	AD:	#advisor types date into computer-->	**AD:ACKNOWLEDGEMENT**

See 2 in figure 1

21	PC:	((visual:empty box called 'date of birth'))	**PC:QUESTION**
22	C1:	zevenentwintig negen tweeduizendelf *twenty seven nine two thousand eleven*	**C1:ANSWER**
23	AD:	#advisor types date into computer#	**AD:ACKNOWLEDGEMENT**
24	AD:	dus die is bijna jarig? *so she's almost having her birthday?*	**AD:FORMULATION**

See 3 in figure 1

In excerpt 11 the advisor vocalizes many of the questions (lines 2/13/18) that are displayed by the computer. These questions are evaluated (line 7) by the customers and the evaluations are displayed whenever they are negative for some reason; in this case because the computer doesn't respond to the advisors' typing (line 8). Once customers understand the questions that need answering in the software, they don't need to wait for the advisors vocalization, as we can see in line 22 where the customer responds to the PC herself. Advisors' vocalizations of questions are very often *and*-prefaced, which signals customers that questions are part of a routine agenda-based series of questions. By adding *and* to the question, advisors maintain the activity at hand in which participants collaborate (Heritage & Sorjonen, 1994).

Excerpt 11 shows several different sequential paths that occur in our data. We have schematized these paths in figure 1; they correspond with the numbers in excerpt 11.

Figure 1. Sequential structure within human-human-computer triads

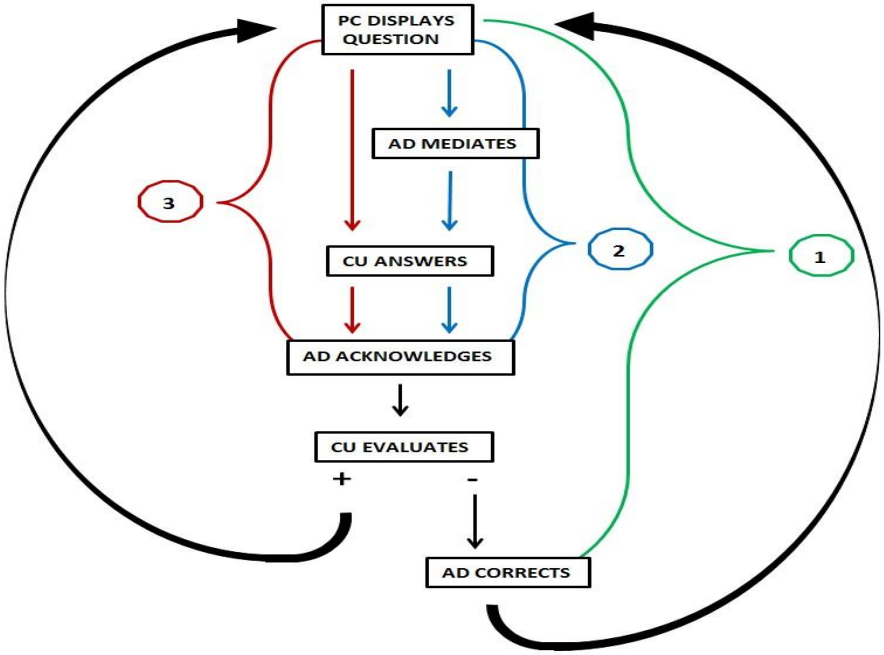


Figure 1 has illustrated how the PC, the advisor and the customer collaborate in filling computer fields. It all starts when the computer screen displays a request for information. It shows that the advisor can (see 2) but does not need to (see 3) mediate the question displayed by the computer screen. Moreover, it shows that negative evaluations of advisors' typing acknowledgments require a correction before turning to the next question on the computer screen (see 1). Finally, the extended QAT sequences end, when the advisor or the customer continue with the next question on the computer screen.

In conclusion, because of the computer's programmed and non-spontaneous nature, the actions the computer can perform within the HHC triad are limited: the computer can ask questions, display waiting behavior and in the end, show the maximum mortgage loan amount. Nonetheless, the computer performs actions during the HHC triad that are necessary in order to fulfill 'the task'. Thus, the computer is indispensable as a participant and, the participants also orientate to it as such. In addition, because the software requests information that is needed to make the calculation, the most frequently occurring adjacency pairs are question-answer pairs, with typing expansions.

4. CONCLUSION AND DISCUSSION

This chapter has identified a triadic participation framework of human-human-computer interaction in institutional settings. In this framework the computer is present as a participant that is essential for fulfilling a specific conversational goal. In our chapter we distinguished computer use in our institutional setting from computer use in other institutional settings. We argued that the computer is a full participant in HHC triads, because human participants orient to the computer as a third participant in terms of the systematics turn-taking (Sacks *et al.*, 1974). After that we presented the global sequence organization of HHC triads, and the local sequential structures within the triads and we reflected on the actions of the computer.

The analysis showed that the computer's conversational status in HHC triads differs from the status of artifacts or computers in other settings, because the computer in the triad demands input and delivers output that is 'new' to the human participants. In HHC triads the participants all collaborate in the same activity, and computer use is not a side activity, as it was in earlier studies. However, even in triads computers are not equal participants, since they cannot spontaneously self-select and they only provide contributions that are fixed in length and specified in advance. Human-human-computer triads are set up by explicit announcements. These announcements contain three features that are present in all of our consultations. In the announcements advisors use a collaborative 'we' that at least includes the customer and the advisor. Moreover, each announcement contains a reference that introduces the computer software or the computer program into the upcoming activity. Finally, announcements are closed by non-verbal behaviors such as gazing at the computer screen or moving the computer screen into the public space. These non-verbal displays show computer-orientation and as such, function as sequence closers and as openers of new sequences too. Through announcements and participants' responses, these human-human-computer triads are talked into being (Heritage & Clayman, 2010).

The triadic participation framework of HHC triads serves an important purpose. When the advisor and customer have entered the triad, there is a lot of flexibility allowed; the advisors shift smoothly between the three different roles they play vis-à-vis the computer. They vocalize what is on the screen, they translate the computer text to comprehensible language for customers and they explain how the computer software works. Creating a triadic participation framework allows the advisor to involve the computer at any time in the conversation at hand, without having to account for transitions. The use of HCC triads may have to do with a certain computer 'wariness' on the part of the

advisor. In one of the consultations the advisor explicitly mentions this: "*Actually I hate using the computer a lot in a conversation, but right now I do not have any other option".* The triadic framework may arise as a response to having to combine computer use and customer-centeredness.

One of the main methodological concerns in this study is the presentation of our multimodal data. When analyzing multimodal interaction there is the choice what to transcribe and how to transcribe it, as Bucholtz (2000) discusses. In our data we find a lot of question-response pairs in which the PC delivers the first pair part; therefore we have chosen to dedicate a separate line to the computer 'voice'. However, this practice could be questioned, because at the end of the day it is the human participants who decide when to focus on what question on the computer screen. We are aware that the PC does not 'respond' or 'initiate' in the way humans do; but it is clearly an actor that human participants orient to as a participant. In CA first pair parts exist because of second pair parts; therefore the PC is transcribed on a separate line as a third participant. That is, our representational choice allowed us to begin to make sense of 'computer participantship'–a phenomenon that will play an increasingly important role in institutional interaction in the years to come.

CHAPTER 6

CONCLUSION AND DISCUSSION

In this dissertation, we have adopted a communication design perspective on mortgage communication. Study 1 analyzed the design of a multichannel mortgage communication package, containing components that are mostly individually designed by experts. Subsequently, study 2, 3 and 4 zoomed in on communication design in mortgage consultations, since consultations are still the main information source for prospective customers. While studying the consultations we focused on experts' recurrent professional routines, because many experts' routine manners are actually resolutions to interactional dilemmas inherent to the consultation's context. In other words: these routines are ways of managing contextual constraints. As such, these advisor routines provide insights in the complex nature of consultations and demonstrate how mortgage advisors handle this complexity. In this chapter, we will summarize our findings. We will then reflect on the management of asymmetries between lays and experts in consultations and provide suggestions to modify the consultation context to reduce the consultation's complexity. Finally, we will present suggestions for future research.

6.1 SUMMARY OF THE MAIN FINDINGS

In study 1, we investigated the multichannel communication package designed to inform first-time home buyers on their prospective mortgage purchase. Our analysis revealed some significant issues concerning the content of information, the choice of the right channels to convey it and the timing of information. We showed that the bank is very concerned with providing information on their mortgage products. However, the customer's wishes and requirements are underrepresented; the advisors' communication is product-oriented rather than customer-oriented. Our analysis also revealed that information on the mortgage conditions is only presented in the very last consultation, even though it contains important details that should be taken into consideration at an earlier stage in the mortgage purchase process. Finally, although understandably the orientation consultation is a crucial component in the communication package, the orientation consultation is used to provide a large amount of complex information, which can result in cognitive overload that

hinders customers' understanding of the information required to make a well-balanced purchase decision. In general, the study showed that, Functional analysis, combined with Media Synchronicity Theory, is a successful tool for evaluating communication packages, for modelling the required purposes of the package and its components and for exploring to what extent these purposes are attended to and whether this happens through an appropriate channel.

In study 2 we presented an overview of the context of mortgage consultations and showed how this context affects the 'design' of consultations. Consultations are affected by a variety of constraints stemming from the consultation purposes and aspectsystems (e.g., technology; efficiency; legal; customer service; mortgage acceptance; interactional-pragmatic). We demonstrated that advisors use discourse design explications to manage constraint conflicts during their consultations and to involve customers in the continuation of the consultation. These constraint conflicts are accompanied by references to omissions of actions or non-preferred next actions, by explanations or by accounts. We also discussed three different solutions to constraint conflicts: dropping one of the constraints, suspending one of the constraints or eliminating the conflict altogether. Moreover, advisors 'sell' their resolutions by positive framing of the conflict resolution, by minimizing or downplaying disadvantages of their proposed resolution or by requesting customers' consent. All of these resolution presentations display some sort of customer-centeredness.

Study 3 focused on advisors' explicative tellings in the consultations, that is, long stretches of talk that contain information on mortgage concepts, processes or institutional policies. These explicative tellings show a systematically recurring standard practice of providing information that is employed by advisors to resolve dilemmas concerning customers preexisting knowledge, as well as to display their professional status. Explicative tellings are delivered in three phases of which the launch and the landing are the most important, since they display a certain degree of customer-orientation. The launch prepares the customers for the delivery of important information and the landing is used to translate generic information to the customer's situation.

Finally, in study 4 we explored the interactional dynamics of triadic participation frameworks of human-human-computer triads. These frameworks, in which the computer is treated as a participant, are set up by advisors to resolve dilemmas that concern computer use and customer-centeredness. In the human-human-computer triad, the advisor and the customers collaborate with and orient to the computer as if it were a participant (as defined in terms of conversation analytical turn-taking

systematics), although the computer has a different participant status. Also, during the human-human-computer triad, advisors exhibit three different computer mediation roles: they vocalize, they translate the computer screens' content and they explain the software procedures. The triadic framework facilitates shifts between these roles; there is no accounting required for shifting, or for when advisors invoke or abandon the computer during the triad, which allows advisor to combine computer use and customer-centeredness.

In conclusion, the four studies presented in this dissertation aim to contribute to an increased understanding of the complex nature of mortgage consultations. We analyzed advisors' routine manners as expert interaction design practices to show how mortgage experts are 'juggling' contextual, interactional or technological constraints. This is important, as the totality of constraints threaten the effectiveness of the mortgage consultation. For instance, customers who are cognitively overloaded are likely to forget important information, customers who don't understand the advisor's 'moves' during the consultation may feel as if the advisor is not concerned with their reason for visit and finally, customers who are not satisfied with advisors because they are too computer-oriented as opposed to customer-centered, may never come back for an advice consultation.

6.2 MANAGING ASSYMETRY

We know from studies on doctor-patient interactions that lay-expert interactions are generally characterized by various asymmetries (see: Ten Have, 1991; Pilnick & Dingwall, 2011). This is the case in mortgage consultations as well. First, there is an asymmetry in initiative. Although the consultations are initiated by customers, they are not the ones who decide when they enter the consultation room. They are invited by advisors to come in, sit down and provide a reason for visit, just like in physician's consultations (Ten Have, 1991). Successively, the expert is expected to take initiative, set the agenda and monitor the continuation of the mortgage consultations. This distribution of initiative is corroborated by the ratio of customer-advisor contribution (the advisors did most of the talking in about 70 percent of the consultations) and the content of the interaction messages, as Verhallen *et al*., (1997) report. In their consultation data, 41.1% of time was reserved for explaining aspects of the product, e.g., loan amount, mortgage type etc., and only little attention was paid to 'specific wishes of the client' (0.9%). We observed a similar pattern in our mortgage consultations, although we didn't quantify our observations. Greve *et al*. (1996) also observed that advisors do not pay much attention to customers' wishes and needs. Our first study, in

which we draw similar conclusions when it comes to the total amount of communication provided to prospective buyers on the basis of our topic analysis of the consultations (appendix A), suggests that the disbalance between bank products and customer needs, has not changed much over the last twenty years. Greve *et al*. (1996) argued that the advisors' behavior implies that advisors, when interacting with customers, are more occupied with selling mortgage products than with counseling customers. Other examples of initiative asymmetries are, as we can see in chapter 4 on explicative tellings, that customers feel insecure and, as Greve *et al.* (1996) conclude. that they largely depend on their mortgage advisors for making a mortgage decision.

Second, we also observed knowledge asymmetries in mortgage consultations. Knowledge asymmetry applies to several domains: advisors are experts regarding mortgages, are familiar with the mortgage purchase process, know the bank policies and the ins-and-outs of legislation and are experts when it comes to the computer and its software. Our studies show that advisors are process, content and technology experts. Chapter 3 reveals knowledge asymmetries, as the advisors' discourse design explications reflect the advisors' expert knowledge concerning, for instance, the bank policies, legislation and the mortgage purchase process. In chapter 4 we reflected on explicative tellings that are delivered in order to bridge customers' knowledge gaps with regard to mortgage-related terms and concepts. Finally, chapter 5 demonstrates advisors' computer software expertise. Advisors' announcements of triadic participation frameworks reflect their knowledge on the status of the computer as a participant during the mortgage loan amount calculation and advisors' translations of the screen and process explanations also reflect their knowledge.

Although these asymmetries are important, they are no more than a starting point for our analysis. Our interest is how they are handled in discourse. Asymmetries between lays and experts will always be present in any institutional setting. There have been many intervention studies that aim at solving asymmetries in order to improve doctor-patient interaction. However, these studies did not lead to much change in clinical consultations over the last thirty years (Pilnick & Dingwall. 2011). Perhaps we should stop considering asymmetries in institutional interaction as inherently problematic.

In our studies, we concentrated on the ways asymmetries affect interactions and how asymmetries are handled by experts. Asymmetries in talk are always an interactional achievement (Ten Have, 1991), and in our consultations, mortgage experts have designed recurrent practices to interactionally manage these asymmetries. Besides, customers don't treat the asymmetries as problematic either. In chapter 3, the advisors dictate the

consultation agenda and customers never object to the agenda-setting of the advisors. Discourse design explications are presented to manage customer involvement during the consultation's progress when functional strains occur.

In chapter 4, the advisors use explicative tellings as a practice of handling knowledge asymmetries. This shows that advisors are accustomed to knowledge gaps and do not consider them problematic. Prior to explicative tellings, advisors rarely ask customers what they already know about the topic on the agenda. However, in excerpt 2 in chapter 4, the customer requests an explicative telling even though he has displayed he already knows 'a little' about the topic at hand. In excerpt 3, the explicative telling *is* preceded by a request for demonstration of the customers' preexisting knowledge, but still, after the customer displays the knowledge he already possesses, the advisor launches an explicative telling. Thus, advisors as well as customers treat the knowledge asymmetry as a fixed fact. Finally, in chapter 5, the advisors build HHC triads in order to invite customers to collaborate in their computer activity when calculations need to be made. Advisors do not exclude customers from their institutional expert activity, but actually invite customers to participate too.

All these routine manners reflect advisors' behavior as professional experts. They show that the advisor is the authority, and the customer is okay with this. At the same time, these routine manners also demonstrate that advisors establish various degrees of interactional cooperation and participation, or, in other words, co-creation. In chapter 4, for example, advisors request customers' formal ratification when they launch explicative tellings. Chapter 5 demonstrates an even higher degree of co-creation, with advisors inviting customers to collaborate in triadic participation frameworks. The best example of interactional cooperation can be found in chapter 3, in which advisors seek customer acceptance on the continuation of the consultation through discourse design explications.

If we take the asymmetries in mortgage consultations as a given, which issues are actually addressable if we want to improve these consultations? In other words, might it be possible to manage these asymmetries more productively?

6.3 IMPROVING MORTGAGE INFORMATION PRACTICES

Based on our observations, we see several opportunities to improve customer support during decision-making in the mortgage purchase process. We concluded in chapter 2 that customer wishes and requirements do not receive as much attention as the bank's options, and that mortgage conditions are

provided far too late to allow customers to consider them thoroughly. Since customers can only choose a suitable mortgage if they understand their own needs and can combine these with the right options, we propose to enhance customer-centeredness, that is, the attention for customer wishes and requirements.

In financial communication research, customer-centeredness is often linked with customer satisfaction or perceived service quality. However, increasing customer satisfaction may ultimately not lead to better mortgage decision-making; we know from doctor-patient interactions that patient satisfaction sometimes even negatively affects health outcomes (Pilnick & Dingwall, 2011). Hence, we should focus on another concept of customer-centeredness. This implies that mortgage advisors need to discuss customer short-term wishes and requirements, but treat customers' long-term wishes and requirements as equally important. Such a new approach of customer-centeredness does not aim at improving customer satisfaction, but aims at better convergence of customer needs with the available bank products. This will lead to more suitable mortgages, even if we take? into account that mortgage providers have a limited selection of mortgage options on offer compared to mortgage brokers.

One intervention that could be particularly useful to improve this customer-centeredness is the introduction of option grids: "brief summaries of options organized in a tabular format, limited to one side of standard size paper" (Elwyn *et al*., 2013). Option grids enable clear comparisons of options and are designed for face-to-face interactions. From the informal evaluative talks with customers after the consultations that we recorded to perform our studies, we learned that a lot of customers consult a mortgage advisor because they are uncertain about the number of choices to be made and the number of options to be considered in each of them. This issue could easily be resolved by providing customers with a list of all the options they should consider during their mortgage purchase.

Option grids were introduced by Elwyn *et al.* (2013) as an intervention within consultations to offer decision support in medical settings. They were shown to be helpful in many ways, even unexpected ones. During the intervention, the grids were offered as a basis for comparison. The grids were used in several ways: 1. to initiate a conversation about options, 2. to elicit questions and encourage discussion, 3. to encourage patients to talk about their options with others after the consultation, 4. as 'aide-mémoire', which can support conveyance processes. Moreover, handing over the option grid itself already impacted the communication process in a positive way, according to clinicians' reports. It signals the clinicians' respect for patients as contributors

to the process of decision-making, as well as a transfer of power and responsibility. Clinicians' response to using the option grids was very positive.

Option grids are a sort of decision aid (also known as decision tool). However, a lot of research on decision aids did not implement the aid within consultations. Instead, the aids were provided to patients to use independently prior to consultations or after consultations. Moreover, the decision aids in most studies were rather extensive and not specifically designed to use within consultations. And in case they were actually used to facilitate dialogues within consultations, they did not attempt to be comprehensive (Elwyn *et al.,*2013). In these ways, decision aids are crucially different from option grids.

The implementation of option grids in mortgage consultations could be beneficial for another reason. Option grids encourage customers to think about their long-term financial planning after the orientation consultation, which constitutes an extra service to customers. As such, they could make customers come back for an advice consultation, because they feel as if the mortgage provider is seriously trying to support them.

Previous option grids interventions were aimed at increasing customer-centeredness by addressing customer needs, rather than focusing on bank products. In chapter 5 on human-human-computer triads, we also reflected on customer-centeredness. This time we related customer-centeredness to computer use. Advisors' design practices seemed to be successful in managing the interactional dilemmas of combining computer use with customer-centeredness. We also observed that that advisors make use of several different strategies to mediate the use of the computer; the advisor bridged the 'gulf of execution' (Norman, 1988), they vocalized the screen text, translated the text so that customers could understand the required information and they explained software processes. All of this would not have been necessary if the computer interface had been designed for customers instead of mortgage experts or bank employees, as is currently the case. If the software had been designed for the customer as an incidental user, then the customer would have been able to directly interact with the computer while sharing the display with advisor, or the customer would even have been in complete control, without any activity of the advisor regarding the computer. Increased customer control can be beneficial in various ways, because this may promote customers' trust in the service provider and improve the effectiveness of the service. Both of these effects would increase customers' satisfaction (Inbar & Tractinsky, 2012). Redesigning the computer interface for customer use would therefore be a valuable intervention to improve mortgage communication.

We will now introduce a third intervention. In chapter 2 we concluded that, in general, mortgage consultations are not the right type of channel to convey information, let alone the amount of information that is presented in orientation consultations (this was also addressed in chapter 4). However, because of customers' feeling of uncertainty, customers still prefer to speak to an advisor to learn about mortgage terms and concepts. Therefore, we suggest an intervention that enhances the support of conveyance processes that occur during the interaction, without taking away customers' opportunity to engage in an orientation consultation. Hence, we propose to record the consultations so that customers can replay them at home. Van Bruinessen *et al.* (2017) reported several benefits in their review of studies on patients recording medical consultations. Recordings lead to better information recall and result in better understanding of choices. The patients' increased understanding, in turn, lead them to be more actively engaged in decision-making. Although we do not exactly know if these results can also be reported when customers receive recordings of the consultation without asking for them, this intervention is consistent with the line of reasoning in our first study on information processing and media synchronicity. The a-synchronous nature of the recordings supports conveyance processes that occur during the consultations, because customers receive a lot of information for the first time. However, there seems to be no harm in trying, since even though some doctors were not very keen on the idea of patients recording their consultations, it is likely that advisors would not have major objections to having their consultations recorded. After all, the topical agenda of mortgage orientation consultations is not burdened with processes of complex decisions with long-term impact, since advisors mostly only convey information on the bank's products and the available choices.

So far, we proffered contextual interventions inspired by the results from our studies on constraint management. However, there is another issue that we would like to address, which we did not conclude from the studies we have conducted, but still seems relevant when we compare different mortgage consultations. Our consultations reveal that there are different types of customers. Excerpt 1 shows a customer who has been searching information prior to the orientation consultation and knows about the knowledge test that is required to purchase a mortgage without mortgage advice. This means that the advisor's explicative telling concerning the options of purchasing a mortgage with or without advice is unnecessary, since the customer displays he has actually already passed the knowledge test that the advisor refers to (line 11).

Excerpt 1. FF20130712HG1

01	AD:	zeg je ik wil geen advies van de bank, *if you say I don't need the bank's advice*
02		dat mag eh maar dan zegt de AFM van eh ja *which is allowed uh but then the AFM says uh yes*
03		je gaat wel een verplichting aan voor dertig *you are facing an obligation for more than*
04		jaar eh en we vinden het belangrijk dat je je *thirty years and we think it is important that you*
05		realiseert wat voor verplichting je aangaat *realize what kind of obligation you commit to*
06		en welke risico's eraan kleven *and what risks are concerned with that*
07	CU:	((knikt)) *((nodds)*
08	AD:	dan moet je eerst een toets doen *than you first have to do a test*
09	CU:	((knikt)) *((nodds)*
10	AD:	eh de toets staat gewoon op de website van de [bank *eh the test is available on the website of the [bank*
11	CU:	[die heb ik al gehaald ((lacht)) *[I already passed it ((laughs))*
12	AD:	die heb je al gedaan? *you already made it?*
13	CU:	ja *yes*
14	AD:	ook al gehaald? *and also passed?*

The excerpt shows that some customers are seriously thinking of purchasing a mortgage without advice, whereas for other customers this is out of the question because they feel far too insecure to decide for themselves. If we look at older models of doctor-patient relations, there are several types of patients when it comes to treatment participation (Benbassat *et al.,* 1998). Some patients want to know all the ins and outs of a treatment and want to make a decision themselves, whereas others want their doctor to decide for them. In addition, understanding all the ins and outs of mortgages requires a certain cognitive ability that not all prospective mortgage customers may possess. Finally, a transfer of decisional responsibility from doctors to patients in

clinical settings may result in anxiety. This is undeniably a less desirable outcome, which may also occur with mortgage consultations.

The issue of decision-making preference or need for shared responsibility is not addressed in our consultations. Based on prior research on doctor-patient interaction, it seems that the only way to find out a patient's preferred level of involvement with treatment decision-making, is by direct inquiry, since doctors themselves are very bad at predicting patient preferences (Benbassat *et al*., 1998). Patient preference for treatment information was also addressed by Kiesler & Auerbach (2006) who reported that patients adjusted better to treatment and experienced less emotional dysphoria when the received information better matched their preference for information. Transferring these observations to the issue of customers having different preferences when it comes to the amount of involvement during their mortgage decision-making or the amount of information they wish to receive, it could be advised that mortgage advisors ask about the customer's existing knowledge and information preferences early in the consultation.

The interventions listed above seem promising for supporting the mortgage customer decision-making process. Three of the interventions, i.e. option grids, recordings and preference for decision-making have received some empirical support in medical communication contexts. The fourth intervention, adapting the computer interface, has been formulated on the basis of an extensive study into the use of the computer during mortgage consultations.

Two interventions that we have suggested aim at facilitating decision-making by providing a 'tool' that enhances customer-centeredness by focusing on supporting customers. A third intervention facilitates the mortgage consultation by improving the support of conveyance processes. The last intervention, to establish attention for customer preferences regarding decision-making involvement, aims at improving customer-centeredness in order to make customers more aware of their decision-making options and to adjust the consultation strategy accordingly.

We have chosen to proffer interventions that aim at reshaping the interactional context to prevent or resolve dilemmas present in the consultations, instead of focusing on the interactional skills of the participants. Our studies provide no indication that advisors' interaction skills are problematic. We believe that the complex nature of our consultations has more to do with contextual constraints, such as knowledge asymmetries, customer decision-making preferences and the limitations of consultations with regard to the support of conveyance processes. Hence, we propose to facilitate the consultation event and unburden it to a certain extent by supplying additional

communicative options. In other words, we propose to focus on reducing the number of constraints that have to be juggled by mortgage advisors, which will facilitate the communication with the customers and ultimately result in better, more effective mortgage consultations.

6.4 DISCUSSION

In this dissertation we have explored a multichannel mortgage information package and its individual components from a communication design perspective. We first explored the functional context using functional analysis enriched with Media Synchronicity Theory. Then we used functional discourse analysis to zoom in on the design of the orientation consultation. Then, in chapter 4 and 5 we were more interested in interactional questions, hence we applied conversation analysis to show how mortgage advisors and customers collaborate in two central sequential patterns.

We should point out an important limitation of our methodologies. Although providing insight in both the contextual constraints and the sequential patterns characterizing current mortgage communication practices, we have not touched on cognitive effects. That is, our four studies do not inform us about the customers' understanding of the most important mortgage terms and concepts. Functional analysis and discourse analysis confine itself to the messages sent by financial experts; and while conversation analysis is all about interactional cooperation and hence about 'interactional understanding', it is not concerned with cognitive representations of the subject matter at hand.

Still, our emphasis on intended effects and interactional cooperation has enabled us to offer suggestions for mortgage communication improvements. Of course, such suggestions need to be investigated taking into account the actual cognitive effects. In this dissertation we have chosen a descriptive and analytical perspective, focusing on mortgage communication as an arena for discourse and interaction design practices. After all, we need to thoroughly understand current practice before we start re-designing it.

REFERENCES

Aakhus, M. & Jackson, S. (2005). Technology, interaction, and design. In K. Fitch & R. Sanders (Eds.), *Handbook of language and social interaction*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.: 411-436.

Aakhus, M. & Rumsey, E. (2010). Crafting supportive communication online: A communication design analysis of conflict in an online support group. *Journal of Applied Communication Research*, *38* (1), pp. 65-84.

ABN-AMRO (2014) https://www.abnamro.com/nl/newsroom/nieuws/2014/abn-amro-ziet-geen-grote-stijging-in-hypotheken-zonder-advies.html (Accessed 18 August 2017).

Accenture (2015) *Mortgage lending shaped by the customer.* North America Consumer Digital Banking Survey for Lenders. Accessed at: https://www.accenture.com/t20150626T121133__w__/us-en/_acnmedia/Accenture/Conversion-Assets/DotCom/Documents/Global/PDF/Dualpub_9/Accenture-Consumer-Mortgage-Lenders.pdf (Accessed 11 September 2017)

Aldlaigan, A.H. & Buttle, F.A. (2001), "Consumer involvement in financial services: an empirical test of two measures", *International Journal of Bank Marketing*, *19* (6), pp. 232-45.

Antaki, C. (ed.) (1988) *Analysing Everyday Explanation.* London: Sage.

Antaki C. (1994). *Explaining and arguing. The social organization of accounts*. London: Sage.

Antaki, C., Barnes, R. & Leudar, I. (2005). Diagnostic formulations in psychotherapy. *Discourse Studies 7* (6), pp. 627-647.

Antonides, G., de Groot, I.M. & Van Raaij, W.F. (2008), "Resultaten Financieel inzicht van Nederlanders", Publieksonderzoek over 4280 consumenten uitgevoerd in opdracht van CentiQ, available at: https://www.wijzeringeldzaken.nl/platform-wijzeringeldzaken/publicaties/onderzoeksrapport-financieel-inzicht-nederlanders.pdf (Accessed 18 July 2017).

Amromin, G., Huang, J., Sialm, C. & Zhong, E. (2011), "*Complex mortgages",* National Bureau of Economic Research, Working paper, No. w17315.

Askehave, I. (1999), "Communicative purpose as genre determinant", *Hermes – Journal of Language and Communication studies in Business, 23*, pp. 13-23.

Askehave, I. & Swales, J. M. (2001), "Genre identification and communicative

purpose: A problem and a possible solution", *Applied linguistics*, *22* (2), pp. 195-212.

Auer, P. (1992). The neverending sentence: Rightward expansion in spoken language. *Studies in spoken languages: English, German, Finno-Ugric*, pp. 41-59.

Balasubramanian, S., Raghunathan, R. & Mahajan, V. (2005), "Consumers in a multichannel environment: Product utility, process utility, and channel choice", *Journal of Interactive Marketing*, *19* (2), pp. 12-30.

Benbassat, J., Pilpel, D. & Tidhar, M. (1998). Patients' preferences for participation in clinical decision making: a review of published surveys. *Behavioral medicine*, *24*(2), pp. 81-88.

BGfo (2013) Besluit Gedragstoezicht financiële ondernemingen Wft (Wet financieel toezicht) Retrieved from Overheid.nl: http://wetten.overheid.nl/BWBR0020421/2016-01-01

Bucholtz, M. (2007) Variation in transcription. *Discourse Studies 9*: 784–808.

Button, G. & Casey, N. (1985). Topic nomination and topic pursuit. *Human studies 8* (1), pp. 3-55.

BZK (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties) (2016), Rapport *staat van de woningmarkt 2016*. Den Haag: Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, Den Haag.

Campbell, J.Y. (2006), "Household Finance", *Journal of Finance, 61* (4), pp. 1553- 1604.

Campbell, J. Y. & Cocco, J. F. (2011), "*A model of mortgage default*", National Bureau of Economic Research, Working paper, No. w17516.

Carter, B. & Sealey, A. (2000). Language, structure and agency: What can realist social theory offer to sociolinguistics? *Journal of Sociolinguistics, 4* (1), pp. 3-20.

CDFD (2016) College Deskundigheid Financiële Dienstverlening. Eindtermen en toetsmodule 2a.2 & 2a.3. http://www.cdfd.nl/examen/toetstermen/hypothecair-krediet (Accessed 07 July 2016)

CFPB (Consumer Financial Protection Bureau) (2015b), "*Consumers' mortgage shopping experience*." Available at: http://files.consumerfinance.gov/f/201501_cfpb_consumers-mortgage-shopping-experience.pdf (Accessed 07 July 2016)

Chambers, M. S., Garriga, C. & Schlagenhauf, D. (2009), "The loan structure and housing tenure decisions in an equilibrium model of mortgage choice", *Review of Economic Dynamics, 12* (3), pp. 444-468.

Chan, W. S., Stevenson, M. & McGlade, K. (2008). Do general practitioners

change how they use the computer during consultations with a significant psychological component?. *International journal of medical informatics*, *77* (8), 534-538.

Chen, Q., Griffith, D. A. & Shen, F. (2005), "The effects of interactivity on cross-channel communication effectiveness", *Journal of Interactive Advertising, 5* (2), pp. 30-44.

Chung, L. & do Prado Leite, J. C. S. (2009). *Conceptual modeling: Foundations and applications: On non-functional requirements in software engineering*. Berlin Heidelberg: Springer: pp. 363-379.

Clark, H. H. (1996). *Using language*. Cambridge: Cambridge University Press

Coughlan, J., Macredie, R. & Patel, N. (2011), "Understanding the consumption process through in-branch and e-mortgage service channels: A first-time buyer perspective", *International Journal of Bank Marketing, 29* (2), pp. 148-167.

Coulibaly, B. & Li, G. (2009), "Choice of mortgage contracts: evidence from the survey of consumer finances", *Real Estate Economics*, 37 (4), pp. 659-673.

Cox, R., Brounen, D. & Neuteboom, P. (2015), "Financial literacy, risk aversion and choice of mortgage type by households", *The Journal of Real Estate Finance and Economics*, pp. 1-39.

Daft, R. L. & Lengel, R. H. (1986), "Organizational Information Requirements, Media Richness and Structural Design", *Management Science*, *32* (5), pp. 554-571.

Davitti, E., & Pasquandrea, S. (2014). Enhancing research-led interpreter education: an exploratory study in Applied Conversation Analysis. *The Interpreter and Translator Trainer*, *8*(3), pp. 374-398.

De Jong, M. & Schellens, P.J. (2001), "Optimizing public information brochures. Formative evaluation in document design processes", in Janssen, D. & Neutelings, R. (Eds.), *Reading and writing public documents*, John Benjamins, Amsterdam, pp. 59–83.

Dennis, A.R. & Kinney, S.T. (1998), "Testing Media Richness Theory in New Media: The Effects of Cues, Feedback, and Task Equivocality", *Information Systems Research, 9* (3), pp. 256–274.

Dennis, A. R., Fuller, R. M. & Valacich, J. S. (2008), "Media, tasks, and communication processes: A theory of media synchronicity", *MIS quarterly*, *32* (3), pp. 575-600.

Devlin, J.(2002)., "An Analysis of Choice Criteria in the Home Loans Market", *International Journal of Bank Marketing*, *20* (5), pp.212-226.

De Wolff, L. J. (2012), "*Newspaper Loyalty: Why subscribers stay or leave*",

doctoral dissertation, Erasmus School of History, Culture and Communication (ESHCC).

Drew, P. (1991) Asymmetries of knowledge in conversational interactions. InL I. Markova & K. Foppa (eds.), *Assymetries in dialogue* (pp. 21-48). Hemel Hempstead, England: Harvest Wheatsheaf.

Drew, P. (2003). Comparative analysis of talk-in-interaction in different institutional settings. In P. Glenn, C. LeBaron, & J. Mandelbaum (Eds.), *Studies in language and social interaction* (pp. 293-308). Mahwah, NJ: Erlb.

Drew, P. (2013). "Turn design." In Jack Sidnell & Tanya Stivers (eds), *Handbook of Conversation Analysis*. Boston: Wiley-Blackwell: 131-149.

Drew, P. & Holt, E. (1988). Complainable matters: The use of idiomatic expressions in making complaints. *Social problems 35* (4), 398-417.

Drew, P. & Holt, E. (1998). Figures of speech: Figurative expressions and the management of topic transition in conversation. *Language in society 27* (4), 495-522.

Edelman, R. (2014),"Edelman Trust Barometer 2014", available at: http://www.edelman.com/ (Accessed 29 January 2014)

Ehrmann, M. & Ziegelmeyer, M. (2014), *"Household risk Management and actual Mortgage choice in the euro area",* European Central Bank, Working paper series, No.1631.

Estrada, R. D., Reynolds, J. F., & Hilfinger Messias, D. K. (2015). A conversation analysis of verbal interactions and social processes in interpreter-mediated primary care encounters. *Research in nursing & health*, *38*(4), pp. 278-288.

Falagas, M.E., Giannopoulou, K.I., Kondilis, K.P. & Peppas, B.K.G. (2009), "Informed consent: how much and what do patients understand?", *The American Journal of Surgery , 198,* pp. 420–435.

Ford, C.E. (2004). Contingency and units in interaction. *Discourse studies 6* (1), 27-52.

Ford, C.E. & Thompson, S.A. (1996)Interactional units in conversation: Syntactic, intonational, and pragmatic resources for the projection of turn completion. InE. Ochs, E. Schegloff & S.A. Thompson(eds.), Interaction and grammar. Cambridge: Cambridge University Press

Fornero, E., Monticone, C. & Trucchi, S. (2009), "*The effect of financial literacy on mortgage choices",* Netspar paper, DP 09/2011-085, available at: http://arno.uvt.nl/show.cgi?fid=120677

Fox, B. (2008). Dynamics of discourse. In G. Antos, E. Ventola & T. Weber (eds.), *Handbook of Interpersonal Communication.* Berlin: De Gruyter Mouton: pp. 225-284.

Fox, S., Leicht, R. & Messner, J. (2010), "Assessing the Relevance of Media Synchronicity Theory to the Use of Communication Media in the AECO Industry", *Journal of Architectural Engineering, 16* (2), pp. 54–62.

Frambach, R.T., Roest, H.C.A. & Krishnan, T.V. (2007), "The Impact of Consumer Internet Experience on Channel Preference and Usage Intentions Across the Different Stages of the Buying Process", *Journal of Interactive Marketing*, *21*(2), pp. 26–41.

FSA (Financial Services Authority) (2002a). Better informed consumers. London.

Garfinkel, H. & Sacks, H. (1970). On formal structures of practical actions. In J.C. McKinney & E.A. Tiryakian (Eds.), *Theoretical sociology* (pp. 337-366). New York: Appleton-Century-Crofts.

George, J. F., Carlson, J. R. & Valacich, J. S. (2013), "Media selection as a strategic component of communication", *MIS Quarterly*, *37* (4), pp. 1233-1251.

Gensler, S., Verhoef, P. C. & Böhm, M. (2012), "Understanding consumers' multichannel choices across the different stages of the buying process", *Marketing Letters*, *23* (4), pp. 987-1003.

Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. University of California Press.

Glenn, P. (2003). *Laughter in interaction* (Vol. 18). Cambridge University Press.

Glinz, M. (2007, October). On non-functional requirements. In *Requirements Engineering Conference, 2007. RE'07. 15th IEEE International*. 21-26. IEEE.

Goffman, E. (1963). *Behavior in public places. Notes on the social organization of gatherings*. London: The free press of Glencoe.

Goffman, E. (1981). *Forms of Talk.* Pennsylvania: University of Pennsylvania Press, pp. 124-159.

Greatbatch, D., Heath, C., Campion, P. & Luff, P. (1995). How do desk-top computers affect the doctor-patient interaction. *Family Practice*, *12*(1), pp. 32-36.

Greve, H. J. M., Frambach, R. T. & Verhallen, T. M. M. (1994). Financial advice: An observation study of client-advisor behavior in the mortgage mediation process. In Quality management in services, part 2 (pp. 1-18). Paris: EIASM.

Greve, H., Frambach, R. & Verhallen, T. (1996). Financial advice: Observing the client-advisor interaction process. *Managing service quality*, *2*, pp. 35-47.

Guttman, R.H., Moukas, A.G. & Maes, P. (1998), "Agent mediated electronic

commerce: A survey", *Knowledge Engineering Review, 13* (2), pp. 143-52.

Hassell, M. & Limayem, M. (2011), "A portfolio of media: Effects of media synchronicity on communication performance", *Proceedings of the 2011 International Conference on Information Systems (ICIS),* Shanghai.

Heath, C. (1986). *Body movement and speech in medical interaction*. Cambridge University Press.

Heath, C. & Luff, P. (2000). *Technology in Action*. Cambridge, Cambridge University Press.

Hendriks, P. & De Hoop, H. (2001). Optimality theoretic semantics. *Linguistics and Philosophy*, *24* (1), pp. 1-32.

Heritage, J. (1984). Garfinkel and Ethnomethodology. Cambridge: Polity Press.

Heritage, J. (1984) "A change-of-state token and aspects of its sequential placement", *In Structures of social action: Studies in Conversation Analysis (J. Maxwell Atkinson & John Heritage, eds.)*, Cambridge, U.K., Cambridge University Press, pp. 299-345

Heritage, J. (2015). Well-prefaced turns in English conversation: A conversation analytic perspective. *Journal of Pragmatics*, *88*, pp. 88-104.

Heritage, J. & Clayman, S. (2010). Talk in action: Interactions. *Identities and Institutions*. Oxford: Wiley-Blackwell.

Heritage, J. & Raymond, G. (2012). Navigating epistemic landscapes: Acquiescence, agency and resistance in responses to polar questions. *Questions: Formal, functional and interactional perspectives*, pp. 179-192.

Heritage, J. & Sefi, S. (1992) 'Dilemmas of Advice: Aspects of the Delivery and Reception of Advice in Interactions between Health Visitors and First Time Mothers', in Paul Drew & John Heritage (eds.), *Talk at Work*, Cambridge: Cambridge University Press, 1992: pp. 359-419.

Heritage, J. & Sorjonen, M. L. (1994). Constituting and maintaining activities across sequences: And-prefacing as a feature of question design. *Language in society*, *23*(1), 1-29.

Heritage, J. & Watson, D. R. (1979). Formulations as conversational objects. *Everyday language: Studies in ethnomethodology*, pp. 123-162.

Heritage, J. & Watson, D.R. (1980) "Aspects of the properties of formulations in natural conversations: Some instances analysed." *Semiotica, 30* (3-4), pp. 245-262.

Hullgren, M. & Söderberg, I. L. (2013), "The relationship between consumer characteristics and mortgage preferences: A case study from Sweden", *International Journal of Housing Markets and Analysis*, *6* (2),

pp. 209-230.

Hurley, R.F., Gong, X. & Wagar, A. (2014), Understanding the loss of trust in large banks", *International Journal of Bank Marketing, 32* (5), pp. 348-366

Home Ownership Guarantee Fund (2012), "*Quarterly report, 4th quarter, 2012"* , Stichting Waarborgfonds Eigen Woningen (WEW)(2013), available at: https://www.nhg.nl/over-nhg/publicaties/kwartaalberichten.html (Accessed 2 April 2013).

Houtkoop-Steenstra, H. (2000) *Interaction and the Standardized Survey Interview. The Living Questionnaire.* Cambridge: Cambridge University Press.

Houtkoop, H. & Mazeland,H. (1985) 'Turns and discourse units in everyday conversation', *Journal of Pragmatics*, *9*, pp. 595-619.

Hynninen, N. (2011). The practice of 'mediation'in English as a lingua franca interaction. *Journal of Pragmatics*, *43*(4), 965-977.

Inbar, O. & Tractinsky, N. (2012) Interface-to-face: sharing information with customers in service encounters. CHI'10 Extended Abstracts on Human Factors in Computing Systems, pp. 3415-3420.

Inbar, O. & Tractinsky, N. (2012). Lowering the line of visibility: incidental users in service encounters. *Behaviour & Information Technology*, *31*(3), pp. 245-260.

Jefferson, G. (1972) Side sequences. In D.N. Sudnow (Ed.) *Studies in social interaction* (pp.294-33). New York, NY: Free Press

Jefferson, G. (1978) Sequential aspects of storytelling in conversation. In J. Schenkein (Ed.) *Studies in the organization of conversational interaction* (pp.219-248). New York, NY: Academic Press.

Jefferson, G. (1984) Notes on a systematic deployment of the acknowledgement tokens 'yeah' and 'mmhm'. *Papers in Linguistics 17* (2), 197-216.

Jefferson, G. (1985). On the interactional unpacking of a `gloss'. *Language in Society 14*, pp. 435-466.

Jefferson, G. (1988). On the sequential organization of troubles-talk in ordinary conversation. *Social problems 35* (4), pp. 418-441.

Jefferson, G. (1990). List construction as a task and resource. *Interaction competence*, pp. 63-92.

Jefferson, G. (2004). Glossary of transcript symbols with an introduction. In G. H. Lerner (Ed). *Conversation Analysis: Studies from the First Generation*. (pp. 13-31). Amsterdam: John Benjamins.

Kamleitner, B., Hoelzl, E. & Kirchler, E. (2012), "Credit use: Psychological perspectives on a multifaceted phenomenon", *International Journal of Psychology*, *47* (1), pp. 1-27.

Karreman, J. & Steehouder, M.F. (2010), "Functionele analyse [Functional Analysis]", in Schellens, P.J. & Steehouder, M.F. (Eds.), *Tekstanalyse: Methoden en toepassingen*, Van Gorcum BV, Assen, pp. 4-37

Kendon, A. (1990). Spatial Organization in Social Encounters: the F-formation System. A. Kendon, Ed. *Conducting interaction: Patterns of behavior in focused encounters*, pp. 209-237.

Kerres, M. & De Witt, C. (2003), "A Didactical Framework for the Design of Blended Learning Arrangements", *Journal of Educational Media, 28* (2-3), pp. 101-113

Kevoe-Feldman, H. (2015). Closing the gap in customer service encounters: Customers' use of upshot formulations to manage service responses. *Pragmatics and Society 6* (1), pp. 67-88.

Kiesler, D. J. & Auerbach, S. M. (2006). Optimal matches of patient preferences for information, decision-making and interpersonal behavior: evidence, models and interventions. *Patient education and counseling*, *61* (3), pp. 319-341.

Kinnell, A. M. K. & Maynard, D. W. (1996). The delivery and receipt of safer sex advice in pretest counseling sessions for HIV and AIDS. *Journal of Contemporary Ethnography 24* (4), pp. 405-437.

Kira, A., Nichols, D. M. & Apperley, M. (2009). Human communication in customer-agent-computer interaction: Face-to-face versus over telephone. *Computers in Human Behavior*, *25*(1), pp. 8-20.

Komter, M.L. (2006) From Talk to Text: The Interactional Construction of a Police Record, *Research on Language and Social Interaction, 39 (*3), pp. 201-228. DOI: 10.1207/s15327973rlsi3903_2

Koole, T. (2010). Displays of epistemic access: Student responses to teacher explanations. *Research on Language and Social Interaction 43* (2), pp. 183-209.

Koole, T. (2015). The interaction Tool. *Dutch journal of applied linguistics 4* (1), pp. 86-100. DOI: 10.1075/dujal.4.1.08koo Rijksuniversiteit Groningen.

Koole, T. & Elbers, E. (2014). Responsiveness in teacher explanations: A conversation analytical perspective on scaffolding. *Linguistics and Education 26*, pp. 57-69.

Korsch, B. M., Gozzi, E. K. & Francis, V. (1968). Gaps in doctor-patient communication I. Doctor-patient interaction and patient satisfaction. *Pediatrics*, *42*(5), pp. 855-871.

Lammers, H. (2001), Het gebruik van *we/wij* in medewerker-cliëntgesprekken bij de sociale dienst, *Tijdschrift voor Taalbeheersing, 23*, pp. 218-235.

Lammers, H. (2006). Explicatie afsluitende 'ja?'-sequenties in gesprekken

tussen medewerkers en cliënten van de sociale dienst. Vijfde sociolinguistische conferentie. In *Papers Vijfde Sociolinguistische conferentie; T. Koole, J. Nortier en B. Tahitu (eds.)* (pp.342 - 353). Eburon.

Laukkanen, T. (2007), "Bank customers' channel preferences for requesting account balances", *System Sciences, HICSS 2007*, 40th Annual Hawaii International Conference on System Sciences, pp. 148a-148a. IEEE.

Leclercq W.K., Keulers B.J., Scheltinga M.R., Spauwen P.H. & Wilt G.J. van der (2010), "A review of surgical informed consent: past, present, and future. A quest to help patients make better decisions", *World Journal of Surgery,* Vol. 34, pp. 1406-1415.

Lee, J. (2002). A key to marketing financial services: the right mix of products, services, channels and customers. *Journal of Services Marketing*, *16*(3), 238-258.

Lee, B. & Lee, W. (2004), "The effect of information overload on consumer choice quality in an on-line environment", *Psychology and Marketing, 21* (3), pp. 159-183.

Lentz, L. & Pander Maat, H.W.L. (2004). Functional Analysis for Document Design. *Technical Communication, 51* (3), 387-398. Retrieved from: http://www.hum.uu.nl/medewerkers/h.l.w.pandermaat/functional_doc/functional%20analysis.pdf

Levinson, S.C. (2013) "Action Formation and Ascription." In Jack Sidnell & Tanya Stivers (eds), *Handbook of Conversation Analysis*. Boston: Wiley-Blackwell: pp. 103-130.

Lihra, T. & Graf, R. (2007), "Multi-channel communication and consumer choice in the household furniture buying process", *Direct Marketing: An International Journal*, *1* (3), pp. 146-160.

Local, J. (1996). Some phonetic aspects of news receipts in everyday conversation. In: Prosody in Conversation: Interactional Studies, E. Couper-Kuhlen & M. Selting (eds.), 177-230. Cambridge: Cambridge University Press

Luff, P., Hindmarsh, J. & Heath, C. Eds. (2000). *Workplace Studies. Recovering Work Practice and Informing System Design*. Cambridge, Cambridge University Press.

Lymperopoulos, C.I., Chaniotakis, E. & Soureli, M. (2006). The importance of service quality in bank selection for mortgage loans. *Managing Service Quality: An International Journal, 16* (4), pp. 365 – 379.

Margalit, R. S., Roter, D., Dunevant, M. A., Larson, S. & Reis, S. (2006). Electronic

medical record use and physician–patient communication: an observational study of Israeli primary care encounters. *Patient education and counseling*, *61*(1), pp. 134-141.

Maynard, D. W. (1991). Interaction and asymmetry in clinical discourse. *American journal of sociology*, *97*(2), pp. 448-495.

Mazeland, H. J. (2003). *Inleiding in de Conversatie Analyse* (Introduction to Conversation Analysis). Bussum: Uitgeverij Coutinho.

Mazeland, H. J. (2006). "Van" as a quotative in Dutch: Marking quotations as a typification. In T. Koole, J. Nortier & B. Tahitu (Eds.), *Artikelen van de Vijfde sociolinguistische conferentie in Lunteren.* (pp. 354 - 365). Delft: Eburon.

Mazeland, H. (2012). NOU als discourse marker in het taalgebruik van kleuters. In: K. de Glopper, M. Gosen & J. van Kruiningen. *Gesprekken in het onderwijs. Bijdragen over onderzoek naar interactie en leren*. Delft: Uitgeverij Eburon, pp. 39-71.

Mazeland, H. (2015). The positionally sensitive workings of the Dutch particle NOU. To appear in: P. Auer & Y. Maschler (Eds). *Nu and its relatives: A discourse marker across the languages of Europe –and beyond*. Berlijn: De Gruyter.

Mondada, L. (2014). Conventions for multimodal transcriptions. Version 3.0.1 . Tutorial available online: https://mainly.sciencesconf.org/conference/mainly/pages/Mondada2013_conv_multimodality_copie.pdf

Muhren, W. J., Van den Eede, G. & Van de Walle, B. (2009), "Making Sense of Media Synchronicity in Humanitarian Crises", *IEEE Transactions on Professional Communication, 52* (4), pp. 377-397.

Nell, M. L. (2017). *Multichannel pension communication: An integrated perspective on policies, practices, and literacy demands* (Doctoral dissertation), Utrecht University Repository.

Neslin, S. A. & Shankar, V. (2009), "Key issues in multichannel customer management: current knowledge and future directions", *Journal of interactive marketing*, *23*(1), pp. 70-81.

Nielsen, S. B. (2016). How Doctors Manage Consulting Computer Records While Interacting With Patients. *Research on Language and Social Interaction*, *49*(1), pp. 58-74.

Niinimäki, T., Piri, A., Lassenius, C. & Paasivaara, M. (2012), "Reflecting the choice and usage of communication tools in global software development projects with Media Synchronicity Theory", *Journal of Software: Evolution and Process*, *24*(6), pp. 677-692.

Nishizaka, A. (2014), "Sustained Orientation to One Activity in Multiactivity

During Prenatal Ultrasound Examinations", *In Multiactivity in Social Interaction: Beyond Multitasking (Pentti Haddington, Tiina Keisanen, Lorenza Mondada, Maurice Nevile, eds.)*, Amsterdam, John Benjamins, pp. 79–108.

North-Samardzic, A., Braccini, A. M., Spagnoletti, P. & Za, S. (2014), "Applying Media Synchronicity Theory to distance learning in virtual worlds: a design science approach", *International Journal of Innovation and Learning*, Vol. 15 No.3, pp. 328-346.

Norman, D. (1988). *The psychology of everyday things*. New York, USA: Basicbooks, Inc.

O'Keefe, B. J. (1988). The logic of message design: Individual differences in reasoning about communication. *Communication Monographs, 55*, pp. 80-103.

Olsson, A.C. (2007). Understanding and Enhancing Customer-Agent-Computer Interaction in Customer Service Settings (Thesis, Doctor of Philosophy (PhD)). The University of Waikato, Hamilton, New Zealand. Retrieved from http://hdl.handle.net/10289/2610

O'Malley, C., Langton, S., Anderson, A., Doherty-Sneddon, G. & Bruce, V. (1996), "Comparison of face-to-face and video-mediated interaction". *Interacting with computers, 8* (2), pp. 177-192.

Ong, L. M., De Haes, J. C., Hoos, A. M. & Lammes, F. B. (1995). Doctor-patient communication: a review of the literature. *Social science & medicine*, *40*(7), pp. 903-918.

Pander Maat, H.L.W., Driessen, C., & Mierlo, H. van (1986). NOU: Functie, contexten, vorm en betekenis. *Interdisciplinair Tijdschrift voor Taal- & Tekstwetenschap 6* (2), pp. 179-194.

Pander Maat, H.LW. & Lentz, L. (1994), "Patient information leaflets: a functional content analysis and an evaluation study", in Van Waes, L., Woudstra, E. & Van den Hoven, P. (Eds.), *Functional communication Quality*, Rodopi, Amsterdam, pp. 137-148.

Pander Maat, H.L.W. (2008), "Editing and genre conflict: how newspaper journalists clarify and neutralize press release copy", *Pragmatics*, *18* (1), pp. 87-115.

Pearce, C., Dwan, K., Arnold, M., Phillips, C., & Trumble, S. (2009). Doctor, patient and computer—a framework for the new consultation. *International journal of medical informatics*, *78*(1), pp. 32-38.

Pilnick, A. (1999). "Patient counseling" by pharmacists: Advice, information or instruction? *The Sociological Quarterly 40* (4), pp. 613-622.

Pilnick, A., & Dingwall, R. (2011). On the remarkable persistence of

asymmetry in doctor/patient interaction: A critical review. *Social Science & Medicine*, *72*(8), pp. 1374-1382.

Pomerantz. A. & Heritage, J. (2013). "Preference." In Jack Sidnell & Tanya Stivers (eds), *Handbook of Conversation Analysis*. Boston: Wiley-Blackwell: pp. 210-228

Prince, A. & Smolensky, P. (2004). *Optimality Theory: Constraint interaction in generative grammar*. Wiley-Blackwell.

Raymond, C. W. (2014). Conveying Information in the Interpreter-Mediated Medical Visit: The Case of Epistemic Brokering. *Patient Education and Counseling* 97(1): 38-46.

Raymond, G. (2004). "Prompting action: The stand-alone" so" in ordinary conversation." *Research on Language and Social Interaction* 37 (2), pp. 185-218.

Redlawski, D. P. & Lau, R. R. (2013), "Behavioral decision-making", in Leonie Huddy, L. Sears, D.O. & Levy, J.S., *Oxford Handbook of Political Psychology* (2nd Edition), University Press, Oxford, pp. 130-164.

Realty Trac Staff (2012), "1.8 Million U.S. Properties With Foreclosure Filings in 2012", Irvine, CA: Realtytrac, 2012, available at: http://www.realtytrac.com/content/foreclosure-market-report/2012-year-end-foreclosure-market-report-7547 (1 november 2013).

Remund, D. L. (2010), "Financial literacy explicated: The case for a clearer definition in an increasingly complex economy", *Journal of Consumer Affairs, 44* (2), pp. 276–295.

Rice, R. E. (1987), "Computer-mediated communication and organizational innovation", *Journal of communication*, *37* (4), pp. 65-94.

Robinson, J. D. (1998). Getting Down to Business Talk, Gaze, and Body Orientation During Openings of Doctor-Patient Consultations. *Human communication research*, *25*(1), pp. 97-123.

Rossano, F. (2012). "Gaze in conversation." In Jack Sidnell & Tanya Stivers (eds), *Handbook of Conversation Analysis*. Boston: Wiley-Blackwell: pp. 308-329.

Ruusuvuori, J. (2001). Looking means listening: coordinating displays of engagement in doctor–patient interaction. *Social science & medicine*, *52*(7), pp. 1093-1108.

Sacks, H. (1974). An analysis of the course of a joke's telling in conversation. *Explorations in the Ethnography of Speaking*, pp. 337-353.

Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation. *Language*, 696-735.

Sarker, S., Sarker, S., Chatterjee, S. & Valacich, J. S. (2010), "Media Effects on

Group Collaboration: An Examination in an Ethical Decision-Making Context", *Decision Sciences, 41* (4), pp. 887-931.

Scheer, A.S., O'Connor, A.M. Chan, B.P.K., Moloo, H., Poulin, E.C., Mamazza,J., Auer, R.C. & Boushey, R.P. (2012), "The Myth of Informed Consent in Rectal Cancer Surgery: What Do Patients Retain?" *Diseases of the Colon & Rectum, 55* (9), pp. 970-975.

Schegloff, E. A. (2007). *Sequence organization in interaction: Volume 1: A primer in conversation analysis* (Vol. 1). Cambridge University Press.

Schegloff, E. A. (2010). Some Other "Uh(m)"s. *Discourse Processes 47* (2), pp. 130-174.

Schegloff, E. A., & Lerner, G. H. (2009). Beginning to respond: Well-prefaced responses to wh-questions. *Research on language and social interaction 42* (2), pp. 91-115.

Schellens, P.J., De Jong, M. & Witteveen, M. (1997), "Functional evaluation of public information about laws and regulations", in Lentz, L & Pander Maat, H. (eds.), *Discourse analysis and evaluation*, Rodopi/Atlanta, Amsterdam, pp. 157-175.

Scott, D., & Purves, I. N. (1996). Triadic relationship between doctor, computer and patient. *Interacting with Computers*, *8*(4), pp. 347-363.

Selting, M. (2000). The construction of units in conversational talk. *Language in society 29* (04), pp. 477-517.

Shannon, C. E. & Weaver, W. (1949), "The Mathematical Theory of Communication", University of Illinois Press, Urbana, IL.

Sidnell, J. (2010) *Conversation Analysis: An Introduction*. Oxford: Wiley-Blackwell.

Sidnell, J., & Stivers, T. (Eds.). (2013). *The handbook of conversation analysis* (Vol. 121). Boston: Wiley-Blackwell.

Sikkema, T. (2017). *De taal van incasso* [The language of debt collection] (preliminary title) (Doctoral dissertation, Utrecht University). Manuscript in preparation.

Silverman, D., Perakyla, A., & Bor, R. (1992). Discussing safer sex in HIV counselling: assessing three communication formats. *AIDS care 4* (1), pp. 69-82.

Silverman, D. (1987). *Communication and medical practice*. London: Sage.

Silverman, D. (1997). *Discourses of counselling: HIV counselling as social interaction*. London: Sage.

Stichting Waarborgfonds Eigen Woningen (WEW)(2013), "Quarterly report" (Home ownership Guarantee Fund, 2012), available at: https://www.nhg.nl/over-nhg/publicaties.html (2 April 2013).

Stivers, T., & Rossano, F. (2010). Mobilizing response. *Research on Language*

and social interaction 43 (1), pp. 3-31.

Stix, H. (2013), "Why do people save in cash? Distrust, memories of banking crises, weak institutions and dollarization", *Journal of Banking & Finance,* Vol. 37 No. 11, pp. 4087-4106.

Suchman, L. A. (1987). *Plans and situated actions: The problem of human-machine communication*. Cambridge university press.

Swinglehurst, D., Roberts, C., & Greenhalgh, T. (2011). Opening up the'black box'of the electronic patient record: A linguistic ethnographic study in general practice. *Communication & medicine*, *8*(1), 3.

Swinglehurst, D., Roberts, C., Li, S., Weber, O., & Singy, P. (2014). Beyond the 'dyad': a qualitative re-evaluation of the changing clinical consultation. *BMJ open*, *4*(9), e006017.

Tang, F., Wang, X. & Norman, C. S. (2013), "An investigation of the impact of media capabilities and extraversion on social presence and user satisfaction", *Behaviour & Information Technology*, *32 (*10), pp. 1060-1073.

Ten Have, P. (1991) 'Talk and institution: a reconsideration of the 'asymmetry' of doctor-patient interaction'. In: D. Boden, D.H. Zimmerman, eds. *Talk and social structure: studies in ethnomethodology and conversation analysis*. Cambridge: Polity Press: pp. 38-63

Thomas, D. M. & Bostrom R. P. (2010), "Vital Signs for Virtual Teams: An Empirically Developed Trigger Model for Technology Adaptation Interventions", *MIS Quarterly*, Vol. 34 No. 1, pp. 115-142.

Thomas, Marlyn., Hariharan, M., Rana, S., Swain, S., & Andrew, A. (2014). Medical Jargons as Hindrance in Doctor–Patient Communication. *Psychological Studies*, *59*(4), pp. 394-400.

Tong, L. , Serna, A., Pageaud, S., George, S. & Tabard, A. 2016. It's not how you stand, it's how you move: F-formations and collaboration dynamics in a mobile learning game. In *Proceedings of the 18th International Conference on Human Computer Interaction with Mobile Devices and Services* (MobileHCI '16). ACM, New York, NY, USA, pp. 318-329. DOI: http://dx.doi.org/10.1145/2935334.2935343.

Van Charldorp, T.C. (2011a). *From Police interrogation to Police Record*. Oisterwijk: Boxpress (PhD thesis).

Van Charldorp, T.C. (2011b). The coordination of talk and typing in police interrogations. *Crossroads for Language, Interaction and Culture 8*, pp. 61–92.

Van Dijk, G., Minocha, S. & Laing, A. (2007), "Consumers, channels and communication: Online and offline communication in service consumption", *Interacting with computers*, Vol. 19 No.1, pp. 7-19.

Van Ooijen, R. & van Rooij, M. (2014), "Mortgage Risks, Debt Literacy and Financial Advice", De Nederlandsche Bank, Working Paper, No. 449, available at: http://ssrn.com/abstract=2530494 or http://dx.doi.org/10.2139/ssrn.2530494.

Veeke, H. P., Ottjes, J. A., & Lodewijks, G. (2008). *The Delft systems approach: Analysis and design of industrial systems*. London: Spinger-Verlag.

Verhoef, P. C., Neslin, S. A. & Vroomen, B. (2007), "Multichannel customer management: Understanding the research-shopper phenomenon", *International Journal of Research in Marketing*, *24* (2), pp. 129-148.

Verhallen, T. M., Greve, H., & Frambach, R. T. (1997). Consultative selling in financial services: an observational study of the mortgage mediation process. *International Journal of Bank Marketing*, *15*(2), pp. 54-59.

Vroomen, B., Donkers, B., Verhoef, P. C. & Franses, P. H. (2005), "Selecting profitable customers for complex services on the internet", *Journal of Service Research*, *8* (1), pp. 37-47.

WFT (2013) Wet financieel toezicht. Artikel 4:19 tweede lid. Retrieved from Maxius: http://maxius.nl/wet-op-het-financieel-toezicht/artikel4:19

Whalen, J. (1995). A technology of order production: computer-aided dispatch in public safety communication. In: P. ten Have, G. Psathas (Eds.), *Situated order: studies in the social organization of talk and embodied activities*. Washington,DC: University Press of America: pp. 187-230.

Whalen, M., Whalen, J., Moore, R., Raymond, G., Szymanski, M., & Vinkhuyzen, E. (2004). Studying workscapes. *Discourse and technology: Multimodal discourse analysis*, pp. 208-229.

Zillow, Inc. (2012, March), "Zillow Negative Equity Report, Quarter 1, 2012", Zillow Real Estate Research, available at: http://www.zillow.com/blog/research/data/ (Accessed 2 April 2013).

APPENDICES

APPENDIX A

Topics in the orientation/advice/quote consultation

Stage	Topic	Orientation	Advice
Introduction	Making acquaintance	O	
	Invited presentation of customer's reason for coming	O	
	Explanation of consultation process and costs	O	
	Signing of the advice quote		A
	Discussion of customer expectations	O	A
	Changes in situation-reason for visit		A
Calculation preparation	Personal data (update)	O	A
	Current employment data (update)	O	A
	Debt history data (current monthly obligations) (update)	O	A
	Current savings (update)	O	A
	Buying alone or together	O	
	Future house financial needs	O	
	Customer mortgage wishes: mortgage form		A
	Customer mortgage wishes: interest rate form		A
	Customer mortgage wishes: interest rate period		A
Running calculation on the computer		O	A
Going over calculation		O	A
Discussing Bank's possibilities	National mortgage Guarantee	O	
	Mortgage forms (annuity or linear)	O	
	Interest rates (variable or fixed)	O	
	Interest rate periods	O	
	Land registry (hypothecaire inschrijving)	O	
	Construction deposit (bouwdepot)	O	
Discussing safeguards	Life insurance		A
	Unemployment risk coverage		A
	Disability risk coverage		A
	Form of domestic partnership		A

Closing conversation	Checking customers expectations	O	
	Unsolved issues/left over questions	O	A
	Describing further mortgage process		A

Topics discussed in the quote consultation

Stage	**Topic**
Discussing the mortgage quote	List of terms
	Mortgage conditions
	Discussion of checklist forms and papers required to complete mortgage application
Signing certificate of acceptance	
Signing direct debit instruction	
Clarifying the mortgage advice	The chosen mortgage
	Customers' wishes and main objectives
	Expenses
	Advice claims regarding mortgage forms
	Substantiation of advice claims
Closing conversation	Describing further mortgage process
	Unsolved issues/left over questions

NEDERLANDSE SAMENVATTING

HET ONTWERP VAN HYPOTHEEKCOMMUNICATIE

Een van de moeilijkste financiële beslissingen waar veel mensen mee te maken krijgen in hun leven, is het afsluiten van een hypotheek; die hypotheek heeft immers langdurige financiële consequenties. Om klanten te ondersteunen bij deze beslissing, bieden hypotheekverstrekkers vaak uitgebreide informatie. Mijn proefschrift richt zich in vier verschillende studies op 'het ontwerp van communicatie over hypotheken'. Ik heb met name aandacht besteed aan informatie die verstrekt wordt aan mensen die voor de eerste keer een hypotheek afsluiten. De data die ik gebruik in mijn proefschrift zijn afkomstig van een van de grootste hypotheekverstrekkers in Nederland.

In mijn proefschrift benader ik hypotheekcommunicatie vanuit een *ontwerpperspectief*. Ik begin met het analyseren van het eenmalige ontwerp van een communicatiepakket, en aansluitend bestudeer ik de communicatieroutines van professionals in hypotheekgesprekken. Deze routines zijn eigenlijk oplossingen voor dilemma's die eigen zijn aan de context, omdat sommige randvoorwaarden uit die context moeilijk verenigbaar zijn. Door de routines te bestuderen krijgen we inzicht in de achterliggende dilemma's.

In het eerste onderzoek van vier heb ik gekeken naar het totale communicatiepakket dat is ontwikkeld om nieuwkomers te informeren over hypotheken. Hoe ziet de context eruit waarin dit pakket is ontworpen en hoe is die context van invloed geweest op het ontwerp van het pakket? Ik heb geanalyseerd welke doelen het pakket moet bereiken en welke middelen hiervoor worden ingezet, denk aan brochures, websites of gesprekken. En ik heb geëvalueerd of de gebruikte middelen geschikt zijn. Daarvoor heb ik eerst *Functionele analyse* toegepast en daarna de *Media Synchronicity Theory* gebruikt om de geschiktheid van de middelen te beoordelen. Daaruit bleek bijvoorbeeld dat er veel meer aandacht uitgaat naar de producten van de bank dan naar de wensen van klanten en ook dat hypotheekvoorwaarden pas rijkelijk laat in het proces aan de orde komen.

Vervolgens heb ik ingezoomd op de hypotheekgesprekken, omdat duidelijk werd dat die nog steeds fungeren als het belangrijkste

informatiemiddel voor nieuwkomers. Ook nu heb ik weer gekeken naar de context. Welke randvoorwaarden of interactionele beperkingen moeten adviseurs in acht nemen als ze in gesprek zijn met klanten? Deze randvoorwaarden hebben we afgeleid uit zogeheten *discourse design explications;* dat zijn toelichtingen op het gespreksontwerp*,* routines van adviseurs die worden ingezet om spanningen op te lossen die ontstaan doordat randvoorwaarden elkaar tegenspreken*.* Met een opmerking als: "Omwille van de tijd, beperk ik mij tot de vragen die u heeft? Is dat goed?" reflecteren adviseurs op randvoorwaarden zoals efficiëntie en klantgerichtheid, en realiseren ze een bepaalde vorm van transparant handelen. Daarnaast nodigen ze ook klanten uit om akkoord te gaan met het verdere verloop van het gesprek.

In het daaropvolgende onderzoek heb ik gekeken hoe adviseurs hypotheektermen en -concepten uitleggen aan klanten door zogeheten *explicative tellings*. Dat zijn routinematige uitlegverhaaltjes met een zeer herkenbare structuur, die worden ingezet om gaten in de kennis van klanten te vullen, zonder rekening te hoeven houden met de voorkennis van klanten. De verhaaltjes bevatten pakketjes met standaardinformatie, die duidelijk worden aangekondigd in een opening en die aan het einde van het verhaal ook nog eens worden vertaald naar de specifieke situatie van de klant. Bovendien worden de verhaaltjes ingezet omdat ze aansluiten bij de institutionele verwachtingen die leven bij klanten. Klanten verwachten dat een adviseur dingen uitlegt en adviseurs kunnen zich door die uitlegverhaaltjes ook profileren als experts, ook al geven klanten aan al een en ander te weten over hypotheken.

In het laatste onderzoek heb ik gekeken naar zogeheten *human-human-computer triads,* ofwel mens-mens-computer driehoeken*.* Deze driehoeken worden gerealiseerd als de adviseur en de klant een maximale hypotheekberekening gaan maken, waarbij de computer onmisbaar is voor het vervolg van het gesprek. Mens-mens-computer driehoeken zijn routinematige oplossingen van het probleem dat de klant centraal staat, maar dat de adviseur even niet onder het gebruik van de computer uit kan. In de driehoeken bemiddelen adviseurs op verschillende manieren tussen de klant en computer: ze vervullen de rol van spreekbuis, inhouds-expert en software-expert en wisselen vrijelijk tussen deze rollen. Daarnaast maken de driehoeken het mogelijk dat adviseurs zonder opgaaf van reden weg kunnen kijken van de klant om aan de computer te werken en vice versa. Ze realiseren een vorm van flexibiliteit in het handelen van adviseurs, zonder de klant het gevoel te geven dat de aandacht verschuift naar iets anders.

Door het bestuderen van de manieren van adviseurs van omgaan met contextuele spanningen in hypotheekgesprekken, kreeg ik inzicht in de

complexe aard van de gesprekken. Adviseurs moeten regelmatig jongleren met contextuele, interactionele en technologische beperkingen. En deze beperkingen vormen een bedreiging voor de effectiviteit van de communicatie. Een klant die het gevoel heeft dat de adviseur alleen maar met de computer bezig is, zal waarschijnlijk niet terugkomen voor een adviesgesprek. Klanten wie het duizelt na het oriëntatiegesprek vanwege de hoeveelheid informatie, zullen allicht belangrijke informatie vergeten die nodig is om een goede hypotheekkeuze te maken. Op basis van mijn bevindingen heb ik tenslotte interventies geformuleerd die inspelen op de dilemma's van adviseurs, die geen extra inspanning van ze vergen, en die toch de communicatie over hypotheken effectiever kunnen maken.

DANKWOORD / ACKNOWLEDGEMENTS

Eén van mijn dagelijks begeleiders vergeleek het schrijven van een proefschrift met hardlopen; het kost veel tijd, het vergt veel oefening, en het vreet energie als je wilt toewerken naar een resultaat. Na een tiental herhalingen van les 1 van de podcast van Evy geheten 'start-to-run', gooide ik de handdoek in de ring. Gelukkig ligt hier wél een proefschrift. Dit dankzij vele baantjes op en neer in het zwembad. Daar was ik in de gelegenheid om met lange slagen, in gedachten verzonken, nieuwe ideeën uit te broeden en dingen op een rijtje te zetten. Zo is dit proefschrift langzaam gegroeid.

De afgelopen vijf jaar zijn er veel mensen betrokken geweest bij mijn promotietraject, zowel professioneel als privé. Allen op hun eigen waardevolle manier. Mijn IVLOS-collega's spoorden mij in 2012 aan te solliciteren. Dankzij Tom Koole, Leo Lentz en Henk Pander Maat kon ik binnen UIL-OTS, met geld van NWO in het programma "Begrijpelijke Taal"- aan mijn promotietraject beginnen. Daar ben ik allen zeer erkentelijk voor. Ik wilde het heel graag en ze hadden vertrouwen in mij. Na de start van het project maakte ik kennis met medewerkers van de Bank, die enthousiast hun verhaal vertelden. Tijdens het maken van Utrechtse opnames, mogelijk gemaakt dankzij mijn favoriete mannen van 'ICT&Media': Hans Schuurman en Jaap Oudesluijs, had ik veel lol met de betrokken adviseurs die altijd even hulpvaardig waren: Wichert Lammers, Marijke Bien en Frank van Rooij en ook de adviseurs uit Nijmegen lieten zich lachend opnemen. Dank voor al jullie medewerking!

Gewapend met een dataset vertrok ik naar Los Angeles aangespoord door Tom Koole. I feel very privileged to be supervised by John Heritage & Steve Clayman. They encouraged me to wonder. With Steve and the UCLA PhD students I spent a lot of free time: Thanks Anne White, Chase Raymond, Clara Bergen and Nan Wang, for showing me around on campus and showing me LA. Thanks also my special LA friend Debbie Malek. And thanks my LA homie: Catherine Woods. I will never forget our fun times. Weer thuiskomen viel zwaar, maar er waren lieve mensen op wie ik kon leunen. René van de Kraats, je was er altijd voor mij, als een kalme haven in een door storm getergde zee. Clara Strijbosch en Gerry Kramer, jullie lapten mij weer op toen dat nodig was.

Henk Pander Maat bedankt dat je met je enthousiasme, mij kan stimuleren, motiveren en aan het lachen maakt. Ik waardeer je zeer, ook al moest ik even wennen aan je directe eerlijkheid. Zonder jou en je gestructureerde aanpak (van alles) had ik het niet gered. Tom Koole, bedankt voor mijn inwijding in CA en je aansporingen om erop uit te trekken. Ik heb heel veel waardevolle mensen ontmoet dankzij jou. Tessa van Charldorp,

bedankt dat je mij weer op de rit wist te krijgen toen de vaart eruit was op een zeker moment. Dat deed je heel vaardig. Je bent slim, sociaal en creatief; fijn dat ik je heb leren kennen. Leo Lentz, bedankt dat je vertrouwen in mij had, terwijl je tot aan het einde toe soms niet goed wist wat ik nou precies aan het doen was. Je nooit aflatende optimisme heb ik als een kracht ervaren in tijden dat het wat moeizamer ging. Verder, door de bank genomen was ik eigenwijs, desondanks zijn jullie allevier altijd zeer respectvol met mij omgegaan. Bedankt dat ik mezelf mag zijn in jullie aanwezigheid.

Bedankt FinCom: Adriaan Kalwij, Sanne Elling, Tialda Sikkema, Milena Dinkova, voor de nuttige, gezellige en leerzame bijeenkomsten. Bedankt collega's van Trans 10: Frank Jansen, Jos van Berkum, Huub van den Bergh, Bregje Holleman, Hans Hoeken, Erwin Mantingh, Rick de Graaff, Jan ten Thije. Ik heb jullie aanwezigheid als steun ervaren. Bedankt ook collega aio's, van wie ik een deel na verloop van tijd als vrienden ging beschouwen: Ellen Schep, Nynke van Schepen, Jet Hoek, Suzanne Kleijn, Björn 't Hart, Renske Bouwer, Monica Koster, Cécile de Morrée. Bedankt in het bijzonder ook Anne van Leeuwen en Carolien van den Hazelkamp. In onze wekelijkse planmeetings beurden jullie mij op als ik dacht dat het nooit meer goed kwam. Het is fijn om dit traject met jullie opgelopen te hebben. Bedankt CA collega's van Arttis (Marca Schasfoort, Joyce Lamerichs, Wyke Stommel *et al.)* en uit Groningen (Lucas Seuren, Agnes Engbersen, Mike Huiskes *et al.).* Met jullie werken voedt de liefde voor dit vak.

Lieve vrienden, bedankt dat jullie mij altijd het gevoel geven dat ik het kan. In het bijzonder: Mariëlle Laan, Dick Maarten Veldman, Louise Nell, Sharon Renjaan, Marlou Tulfer, Elise Schokker, Ria Gompelman, Margreet van Leeuwen, Marlieke Mulder.

Lieve (en áltijd woest aantrekkelijke) Martine Koppenhol, je zorgde voor behoorlijk wat tumult in mijn laatste jaar. Ik kijk uit naar wat je allemaal nog meer teweeg zal brengen in onze toekomst. Het leven is goed met jou.

Lieve papa (Marcel Herijgers) en mama (José Bun), ik ben weer een stap verder gekomen, dankzij jullie onvoorwaardelijke liefde en jullie geloof in mij door de jaren heen. Jullie zijn ouders om trots op te zijn.

Lieve Ellen Herijgers, in gedachten ben je er altijd en overal bij.

♥

CURRICULUM VITAE

Marloes Herijgers was born on the 19th of December in Hengelo, Overijssel in The Netherlands. In 2002 she obtained her Bachelor's degree in Education (Teacher of Dutch, specialized in Arts and Culture) at The University of Applied Sciences in Utrecht (Hogeschool Utrecht). From 2004 to 2012, she worked as a teacher at several schools in the Netherlands (secondary and vocational education) and worked as a program assistant at the Center for Education and Learning at Utrecht University (IVLOS/COLUU) on a project that aimed at introducing research and science in primary schools. In 2012 she obtained a Master's degree in Communication Studies from Utrecht University with a thesis on how Dutch secondary school pupils perceive the reliability of internet sources. Then she started her PhD research at the Utrecht Institute of Linguistics-OTS. As part of her PhD research she studied at University College, Los Angeles (UCLA) on a UU Short stay PhD Fellowship, for six months. This PhD thesis is the result of research that was conducted from 2012 to 2017 in collaboration with one of the largest Dutch banks. Marloes' research interests include financial discourse, educational discourse, multi-channel communication, lay-expert interaction, conversation analysis and discourse analysis.

AUTHOR'S LIST OF PUBLICATIONS

PUBLICATIONS

Herijgers, M.L.C. & Pander Maat, H.L.W. (2017) Navigating contextual constraints in discourse: design explications in institutional talk. *Discourse Studies*, *19*(3), pp. 272-290.

Herijgers, M.L.C. & Pander Maat, H.L.W. (2015) How to evaluate multichannel communication packages: a case study on mortgage information. *International Journal of Bank Marketing*, 33 (6), pp. 857-878.

Herijgers, M.L.C. & Pander Maat, H.L.W. (2014) Een andere kijk op begrijpelijke taal: het evalueren van een communicatiepakket. *Tekstblad*, 5/6, pp. 36-40.

Herijgers, M.L.C. (2012) De begrijpelijkheid van hypotheekcommunicatie. Interviews met medewerkers van ABN AMRO bank N.V. om de multimodale informatieve omgeving (MIE) rondom hypotheken te analyseren. Utrecht University.

TALKS

Herijgers, M.L.C. (27-10-2016). *Explicative tellings in mortgage consultations.* Symposium: Economic Encounters, Maastricht University.

Herijgers, M.L.C. (30-06-2015) Informatie-overdracht tijdens de customer journey. *Workshop multichannel customer management,* ABN AMRO, Amsterdam.

Herijgers, M.L.C. (05-02-2015). *Short presentation: A method for the evaluation of communication packages*. University of Pretoria, South Africa.

Herijgers, M.L.C, Pander Maat, H.L.W. (19-09-2014). *Het ontwerp van een (hypotheek)informatiepakket. Een methode om informatiepakketten te analyseren*. Begrijpelijke Taal-dag NWO, Amsterdam.

Herijgers, M.L.C., Koole, A.J., Nell, M.L. (26-06-2014). *Constructing understanding in (pension) helpdesk consultations*. ICCA 2014, LA, USA.

Herijgers, M.L.C (20-03-2014). *Information gathering in mortgage orientation consultations.* Talk and Social Institutions, UCLA, Los Angeles.

Herijgers, M.L.C. (05-11-2013). *Consultations on pensions and mortgages*. Joint workshop, Conversation Analysis, Götenborg.

Herijgers, M.L.C. (05-10-2012). *Talk and text in financial communication*. AWIA symposium 'applied conversation analysis', Groningen.

OTHER CONTRIBUTIONS

Herijgers, M.L.C. (02-10-2014). *Main organizer 12th AWIA symposium: Embodied interaction, with Lorenza Mondada.* Utrecht University.

Herijgers, M.L.C. (08-03-2013). *Co-organizer 23ste Anéla Viot Juniorendag*. Rijksuniversiteit Groningen.

Herijgers, M.L.C. (2012-2016) Blog-report 'The world of Language and Interaction': http://marloesherijgers.wordpress.com/

Herijgers, M.L.C. (2012-2016) PhD Representative in the PhD council of Graduate School of Humanities.