From zero to 'you' and back: A mixed methods study comparing the use of two open personal constructions in Finnish

Mikael Varjo & Karita Suomalainen

This article focuses on two Finnish personal constructions which can be used to create indexically open reference, i.e. they can be used to refer to generalized or shared human experiences. These two constructions are the zero-person construction and the open 2nd person singular construction. Using Finnish everyday conversational data, we (i) statistically analyze the distributional semantico-grammatical differences in the use of the zero-person and open 2nd person singular constructions, and (ii) examine these differences on a clausal and sequential level in interactional contexts. In our analysis, we integrate quantitative and qualitative methods. Our aim is to show that by mixing methods it is possible to both reveal the recurring semantico-grammatical patterns of the constructions across a large corpus and analyze how these patterns are shaped by the ongoing interaction.

Keywords: corpus linguistics, everyday conversation, interactional linguistics, open 2nd person singular, person reference, zero-person

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1. INTRODUCTION

The generic use of personal forms has attracted considerable attention within pragmatically- and interactionally-oriented linguistic research in the last few years. Recent studies have focused both on personal constructions that are specialized in expressing generic reference (e.g. Ragmarsdóttir & Strömqvist 2005, Laitinen 2006) and on the generic use of such personal forms which, from a canonical point of view, are thought to convey deictically specific reference (e.g. Bredel 2002, Helasvuo 2008, Stirling & Manderson 2011, de Hoop & Tarenskeen 2015, Kluge 2016, Zobel 2016; for an overview, see De Cock & Kluge 2016). These studies have shown that in many languages, different ways of creating generic or generalized reference co-exist, and pointed out typical patterns of usage for such personal forms. However, much less attention has been paid to the contextual variation and distribution of different generic

constructions within monolingual corpora (but see Nielsen, Fosgerau & Jensen 2009 for Danish).

   This article[1] deals with two Finnish personal constructions that can be used to create generic, or, as it is referred to in this article, indexically open reference. These two constructions are (i) the zero-person construction and (ii) the open 2nd person singular construction. The zero-person and the open 2nd person singular construction can be used to refer to shared human experiences. They thus have the potential to invite the conversational participants to recognize and relate to the presented content. In the zero-person construction, the predicate is in the 3rd person singular form and there is no overt subject, but the implied agent or experiencer in the construction is interpreted as human (Laitinen 2006:10), as is seen in example (1). The key for transcription symbols can be found in the Appendix.

(1) Mari: ei   se   kyllä oo   mitää   elämästä nauttimista
          NEG.3SG DEM PTC be.3SG anything life.ELA enjoying.ELA
          Jos **käyttäytyy** typerästi   koulussa,
          If   act.3SG   stupid.ADV school.INE
          'It's not called enjoying life if one acts stupid in school.'

                                                                    (SG441)

The open 2nd person singular construction is morphosyntactically identical to the deictically specific 2nd person singular forms in Finnish, but its use is different in that the 2nd person forms do not refer (exclusively) to the addressee (Suomalainen 2018), as is shown in example (2).

(2) Erkki: kui   mul   ois   semnem miälikuva et
           how   1SG.ADE   be.3SG.COND   such   idea   COMP
           jos **sää** **omistat** kunnasta   kiinteistön,
           If   2SG   own.2SG   municipality.ELA   real.estate.ACC
           ni   **sää** **olet** sen   kunnan   jäsen.
           PTC   2SG   be.2SG   DEM.GEN   municipality.GEN   Member
           'How come I have such an idea that if you own real
           estate in a municipality then you are a member of that
           municipality.'

                                                                    (Sapu115)

A number of studies have noted that the co-occurrence of the zero-person and the open 2nd person singular constructions in Finnish data is rather common. Furthermore, these studies have presented some observations on the grammatical as well as on the pragmatic similarities and differences between the two constructions (Laitinen 1995, 2006; Lappalainen 2015; Suomalainen 2015; see also Uusitupa 2017 for Border Karelian dialects). However, there has been no systematic research investigating the relation between the zero-person and the open 2nd person singular constructions

based on a larg naturally occurring data set. The present article attempts to fill that gap by providing a systematic study of the distribution and use of the zero-person and open 2nd person singular constructions in Finnish.

Drawing on a large conversational database and using both quantitative and qualitative methods, we will (i) analyze the distributional semantico-grammatical differences in the use of the zero-person and open 2nd person singular in a subject position in everyday conversational data, and (ii) examine these differences on a clausal and sequential level in interactional contexts. By combining statistical methods with a qualitative approach, our aim is to show the systematics in the interplay between the grammatical and interactional contexts of our focus constructions. With corpus-based findings regarding the two open personal constructions of Finnish, this article contributes to the discussion on the use of referentially open or generic personal forms in different languages. By providing information on Finnish regarding these two personal constructions, the present study also further develops the possibilities for crosslinguistic research on the variation in the use of generic personal constructions in everyday talk-in-interaction.

The article is structured as follows: Section 2 outlines the theoretical dimensions of this study. In this section, we will briefly discuss the construal of the open reference in Finnish and other languages and give some insights into the grammar, semantics, and pragmatics of our target constructions, the zero-person and open 2nd person singular. The data and methods used in this study are presented in Section 3. In Section 4, we introduce the statistical model used in the analysis of the semantico-grammatical tendencies of the zero-person and open 2nd person singular clauses and present the results of this analysis. Section 5 provides a qualitative analysis of the results that were proven to be statistically significant in Section 4. Finally, in Section 6, we discuss the findings of the quantitative and qualitative analysis as a whole and provide the conclusions of the study.

2. CONSTRUING OPEN REFERENCE IN FINNISH

2.1 What is open reference?

According to Siewierska (2004:1–2), person as a grammatical category covers the expression of the distinction between the speech act participants (that is, the speaker of an utterance and the addressee), and the party talked about that is neither the speaker nor the addressee. The category of person from a pragmatic and grammatical point of view thus prototypically involves the three-way distinction of speaker, hearer and third party (ibid.). However, languages typically have more than just three person markers, and in addition, these person markers can be used to refer not only to a specific individual or a group of individuals but to people in general or to a loosely specified collective (Siewierska 2004:210).

It has been recognized in a wide variety of languages that person markers may also be used with no clear reference to a specific individual or group of individuals. The non-specific use of person markers can be found among the singular as well as non-singular personal forms. Within European languages, it is well known that the 2nd person singular forms are often used to create non-specific reference; this phenomenon has been studied in the Border Karelian dialects of Finnish (Uusitupa 2017), Danish (Jensen 2009, Nielsen et al. 2009), Dutch (de Hoop & Tarenskeen 2015), English (see e.g. Kitagawa & Lehrer 1990, O'Connor 1994, Kamio 2001, Stirling & Manderson 2011), French (Williams & van Compernolle 2009), German (Bredel 2002, Malamud 2012, Kluge 2016), Spanish (Posio 2016), and [Finnish] Swedish (Fremer 2000). Furthermore, Siewierska (2004:212) mentions that the non-specific – or impersonal, as she calls it – use of the 2nd person singular is documented in Slavic languages, in Hungarian, Estonian, Komi, Turkish, and Abkhaz. In addition to European languages, the non-specific use of the 2nd person singular occurs in, for example, Godie, Gulf Arabic, Hindi, Kashmiri, Koromfe, Koyra Chiini, Kurdish, Mandarin (see also Biq 1991), Marathi, Mauwake, Maybrat, Macushi, Modern Hebrew, Mundani, Nkore-Kiga and Tuvaluan. The non-specific use of the 1st person singular, on the other hand, has so far been much less studied (see, however, Helasvuo 2008 for Finnish, and Zobel 2016 for German).

From a typological point of view, the non-specific use of the 3rd person singular is considerably less frequent than that of the 2nd person singular (Siewierska 2004:212). There are nevertheless non-specific 3rd person singular forms as well, such as the reflexive impersonals in, for instance, Romance and Slavic languages: the referents of these forms are necessarily human and they are often used in contexts in which the speaker is included or could be included (see e.g. Siewierska 2008: 18–21).

Among non-singular forms, the non-specific use of the 3rd person non-singular is rather common across languages. Such use is found in many Indo-European language families, such as Germanic, Romance and Slavonic languages and, in addition, some other Indo-European languages such as Greek, Kashmiri and Persian, as well as in some Uralic languages both in the Finno-Ugric language family (in the Ugric, Permic and Mordvinic languages and in Mari language) and also among the Samoyedic languages in Nenets. Furthermore, the non-specific use of the 3rd person singular is documented in the Turkic languages, in the Dravidian languages, in some Niger-Congo languages, in some Trans-New Guinea languages and in some Austronesian languages (Siewierska 2004:211; see also Siewierska 2008). Interestingly, 2nd person non-singular forms tend not to be used for non-specific reference at all (Siewierska 2004:211). Within European languages, the 1st person non-singular forms are used for creating non-specific reference, but they do not appear to be as common outside Europe (ibid.).

In addition to the non-specific use of person markers, many languages also have certain personal constructions that are specialized in expressing deictically non-specific reference, such as the English *one*, French *on*, Spanish *uno*, or Germanic *man* constructions (see e.g. Altenberg 2005 Ragnarsdottír & Strömqvist 2005, Siewierska 2008, Posio 2016). Kibort (2008) has specified different constructions in Polish that lack a canonical subject, and Leinonen (1985) in Finnish and Russian. In relation to modal verbs and necessity, Zinken & Ogiermann (2011) have studied the Polish impersonal modal declarative *trzeba* 'need to' construction that cannot be combined with a grammatical subject at all.

In previous studies, there has been variation in terminology when describing the phenomenon in question. Some studies speak about a 'generalized' (e.g. Stirling & Manderson 2011 on English conversations) or 'generic' reference (e.g. Fremer 2000 on Finland's Swedish, Kamio 2001 on English, Jensen & Gregersen 2016 on Danish), while some have chosen to use the term 'impersonal reference' in their description of the phenomenon (e.g. Kitagawa & Lehrer 1990 on English, Siewierska 2008,[2] Malamud 2012 on German; for a discussion, see also Gast et al. 2015:149; De Cock & Kluge 2016:352).

In this study, we use the term 'open reference' instead of generic, generalized, or impersonal reference. By using the term 'open' we would like to draw attention to the fact that even the so-called generic or impersonal expressions might find their referent(s) in the immediate speech context they appear in (see Laitinen 2006, Helasvuo 2008). The use of open reference thus leaves space for the fact that expressions can be simultaneously non-specific and specific in their contexts of use, as Laitinen (2006:216) notes. Expressions that convey an open reference are non-specific in the sense that they are commonly used to present a generic or a generalized situation that anybody, at least in principle, can relate to. However, open expressions can also be rather specific in the way that they often identify a very particular experience that has happened to somebody, for example to the current speaker or to a certain third party who is not present in the speech situation, and in these cases, the context of use might allow a rather specific interpretation (see e.g. Laitinen 2006:218–219, 224). With regard to referentially open expressions, it is thus the speech situation, the ongoing sequential action, and the responses that the participants' produce in the situation that in the end define whose territory of experience is being addressed (see Heritage 2011 on the territories of experience).

2.2 The zero-person and open 2nd person singular in the Finnish person marking system

The category of person in Finnish can be expressed in three coding systems: personal pronouns, verbal person markings, and possessive suffixes (Helasvuo & Laitinen

2006:173).[3] The person marking system is flexible in such way that it partially allows the so-called pro-drop: on the syntagmatic level, it is possible to leave out the 1st and 2nd person subject pronouns, and in such cases the marking of the verb – or that of the possessive suffix – conveys the personal reference (ibid.:174, 179), whereas the 3rd person pronouns can only be left out in specific contexts (ibid.:182–183). However, as Helasvuo & Laitinen (ibid.:179) note, in the spoken language the subject pronoun is most often present (see also Helasvuo & Kyröläinen 2016, Väänänen 2016).

When placed in the paradigm of the Finnish person marking system (presented by Helasvuo & Laitinen 2006), the open 2nd person singular, from a grammatical point of view, falls into the same category as the deictically specific 2nd person singular, while the zero-person can be understood as a personal category of its own. This is due to the fact that the zero-person has a specific grammatical marking, as was mentioned in the introduction: in the zero-person construction, the predicate is in the 3rd person singular form and there is no overt grammatical subject (Laitinen 2006:10). The modern examples of the use of the open 2nd person singular, on the other hand, seem to favor the presence of both the pronoun and the verbal person marking (Seppänen 2000; Helasvuo & Laitinen 2006:201; Leino & Östman 2008:39–40).

The zero-person has traditionally been considered a non-specific member of the Finnish personal system (see Hakulinen 1987, Helasvuo & Laitinen 2006), whereas the status of the open 2nd person singular is not yet as conventionalized, at least in standard Finnish. However, as Uusitupa (2017:37) notes, on the basis of the grammatical descriptions of Finnish written during the 19th and 20th century, the open use of the 2nd person singular seems to be rather common in the Eastern dialects of Finnish, especially in the southeastern region of Finland (see also Surakka 2011, Uusitupa 2011). The recent studies focusing on contemporary colloquial Finnish suggest that the open use of 2nd person singular is also becoming more common in spoken Finnish outside the eastern varieties of Finnish (see e.g. Laitinen 2006, Suomalainen 2015, Suomalainen 2018).

As mentioned, the grammatical manifestation of the zero-person and open 2nd person singular is different, but the two constructions have similar semantical potential: they can both be used in a generic way, describing common or non-specific human experiences, and more specifically in their immediate context, so that they refer to the action, thoughts or experiences of a certain people or of the speech act participants (Helasvuo & Laitinen 2006:202; Laitinen 2006:218–219, 229; Suomalainen 2018). It is, however, worth noticing that they take their referents distributively unlike, for instance, the unipersonal passive in Finnish whose implied referent is typically collective (Laitinen 2006:218).[4] Example (3) illustrates the use of the zero-person (line 1) and the open 2nd person singular constructions (line 2).

(3) 1 Tuija: **eikä   tommosia ihmisiä   voi   vastustaa**
              NEG.3SG.CLIT such   people.PART can.CNG fight.against.INF
              'And one cannot really fight against people like that'

    2   niinku   huumeessaki **jos Sä   annat**   [huumetta] niin=
              like   drug.INE   if   2SG   give.2SG drug.PART   then
              'like when it comes to drug(s) if you give (somebody) drugs then'

    3 Niina: [nii hh   ]
              PTC
              'Yeah'

    4 Tuija: =sehän   tulee   vaan   villimmäksi. .hhh
              DEM.CLIT   become.3SG   just   wilder
              'she just gets wilder.'

                                                                    (SG108)

Since the 2nd person singular can be indicated with a pronoun that can be case-inflected, the open 2nd person singular can, unlike the zero-person, be used more explicitly to indicate object and possessive forms in addition to the subject position. According to Laitinen (2006:213), the status of the zero-person as an argument in oblique cases is somewhat questionable, even though such cases have, in some studies, been analyzed as potential zero-persons (e.g. Vilkuna 1989:48–49, 194–195).[5]

Because there cannot be a subject NP in the clauses with zero-person subject, the preverbal elements in zero-person clauses are more varied than in open 2nd person singular clauses, where the preverbal position is usually filled by the pronominal subject. Furthermore, it has been argued that Finnish could be considered as a topic-prominent language in the sense that, in an active sentence, the argument functioning as the topic need not to be the subject NP, but can also be for instance an adverbial or an object (Holmberg & Nikanne 2002:78; for Balto-Finnic passives and impersonals and their relation to verb types and preverbal elements, see Hiietam & Manninen 2005). Hakulinen & Karttunen (1973) have outlined the types of preverbal elements, such as adverbials and object NPs in zero-person clauses (or 'missing person sentences', as Hakulinen & Karttunen call them); the preverbal element can be, for instance, an expression of time, place, instrument, manner or a goal, and it forms the necessary or sufficient conditions for the process described in the clause (Vilkuna 1992:171–175; Laitinen 2006), that is to say the referent of the preverbal element affects anyone that is in the particular situation.[6] In this respect, open 2nd person singular clauses differ from the zero-person clauses since the 2nd person singular pronoun (*sinä* or its variants), whenever present, tends to hold the theme position and thus function as a preverbal element (Suomalainen 2015:68–69). However, if the open 2nd person singular clause does not have a 2nd person pronoun subject, the preverbal element might be missing or be something other than a pronoun, for instance an adverbial or an object NP.

From the point of view of their contexts of use, the zero-person and the open 2nd person singular in a subject position have affinities: both are typical

in hypothetical contexts as well as with modal verbs of necessity and possibility (Laitinen 2006:212; Suomalainen 2015:66–67). Semantically, the person implied in zero-person constructions has a tendency to have the role of the beneficiary, the experiencer or the patient as the construction is often used to express changes of state (*paleltua* 'to freeze'), emotions (*iloita* 'to be happy'), perceptions (*nähdä* 'to see'), experiences (*viihtyä* 'to enjoy'), losses (*menettää* 'to lose'), receptions (*saada* 'to get') and dynamic modality (*päästä* 'get'). Agentive and stative verbs are possible mainly with a modal verb (as the infinitive complement of the modal verb), in a conditional frame such as *if–then* clausal compounds or in a generic complex sentence. (Laitinen 2006:212–213). The open 2nd person singular, on the other hand, can be used more freely with agentive and stative verbs (Laitinen 2006:219).

In conclusion, despite the similar potential for open reference, it has been argued that the use of the zero-person has certain semantico-grammatical restrictions that the open 2nd person singular lacks (Laitinen 2006:219). Later in this article in Sections 4 and 5, we will reflect on these observations in light of our data and examine them more closely.

3. DATA AND METHODOLOGY

Our data consist of 26 hours of everyday face-to-face conversations from the Arkisyn corpus that is a morphosyntactically coded database of conversational Finnish (see see details of the corpus just before the list of References below). The data we used were recorded between the years 1996 and 2015, and include 21 different face-to-face conversations with altogether 66 speakers. Both dyadic and multi-party conversations are present in our corpus.

For this study, we collected all the occurrences of the zero-person (henceforth ØSG3) clauses and open 2nd person singular (henceforth OSG2) clauses in our data. We have chosen to focus on instances of the two constructions in subject positions. In the Arkisyn database, the clauses with zero-person subject have a special coding in their predicate verb, and they can thus be easily extracted. Since there is no overt morphosyntactic marking in the open 2nd person singular clauses compared to those with a deictically specific 2nd person singular reference, the clauses with open 2nd person singular have been collected manually out of all those with the predicate verb in the 2nd person singular form. As a result, we have 1498 ØSG3 clauses and 192 OSG2 clauses.[7]

In our analysis, we combined quantitative, statistical methods with a qualitative, interactional linguistic approach and conversation analysis. Since the phenomena we focus on in this research have not been analyzed from a quantitative perspective before, we had to conduct a thorough morpho-syntactic analysis of the data before

the actual statistical analysis, in order to define the significant variables (presented later in Table 1, in Section 4).

In the statistical analysis, we carried out a mixed-effects binary logistic regression model (Generalized Linear Mixed Model) in IBM SPSS Statistics. Our aim was to trace the semantico-grammatical tendencies of OSG2 clauses and ØSG3 clauses. In other words, our analysis will give insight into how the studied constructions diverge from or are similar to each other with regard to their typical use as defined by the independent variables. Binary logistic regression was chosen with regard to its suitability in a context where the dependent variable has a binary response like the two personal constructions in this study. Logistic regression has become very common among corpus-linguistic research when testing the effect of multiple independent variable(s) on the dependent variable, especially because of its flexibility and the relatively easy interpretation of the results (see e.g. Bresnan et al. 2007, De Cuypere, Baten & Rawoens 2014). In the case of multiple independent variables, the model also takes their interactions into consideration (Gries 2015:727).

A Generalized Linear Mixed Model (GLMM) was chosen because it makes it possible to perform a binary logistic regression with both fixed and random effects. The difference between these two effect types is that the fixed effects are constant across individuals and therefore not dependent on the data set of the study, whereas the random effects may vary in different data sets (see e.g. Baayen, Davidson & Bates 2008). The fixed effects identified in this study are introduced in Table 1 in Section 4. The only random effect used is the speaker (see Bresnan et al. 2007, Helasvuo & Kyröläinen 2016). This is due to the fact that the majority of the speakers in our data have produced more than one unit of observation. Therefore, if we considered the speaker as a fixed effect, the conclusions would only hold true among the sampled data and thus could not be generalized to any other population (see Tagliamonte & Baayen 2012:143).

In the model, the fixed effects were used as a function to predict whether the unit of observation in our data is an OSG2 clause or an ØSG3 clause. The results of the model in Section 4.2 show whether the fixed-effect predictors have a positive or negative association to the odds for the construction being an ØSG3 clause: the greater the negative association, the greater the probability for the clause being an OSG2 clause and vice versa. The intercept is adjusted separately for each speaker and thus the random effect is not visible in the results (see Tagliamonte & Baayen 2012:157).

In the qualitative analysis, our main approach was that of interactional linguistics (IL), which is an interdisciplinary approach to grammar and interaction that draws from the fields of functional linguistics, conversation analysis, and anthropology (Schegloff, Ochs & Thompson 1996:3). The goal of IL is to provide a better understanding of how language, and its structures and patterns of use, are shaped by

Variable		ØSG3		OSG2		All
						Verb type
Concrete (A)	n	479		94		573
	%	32.3		52.8		34.5
Action	%	14.2		26.4		15.5
Event/change	%	7.6		2.8		7.0
Motion	%	5.2		11.8		5.9
Location	%	5.7		11.8		6.3
Mental (B)	n	458		43		501
	%	30.9		24.2		30.2
Speech act	%	2.2		4.5		2.5
Perception	%	6.1		3.9		5.8
Psychological	%	22.6		15.7		21.9
Modal	n	546		41		587
	%	36.8		23.0		35.3

		A	B	Modal	A	B	Modal	A	B	Modal
Conditional frame										
jos 'if'	n	91	42	12	24	6	1	115	48	13
	%	19.0	9.2	2.2	25.5	14.0	2.4	20.1	9.6	2.2
kun 'when'	n	90	78	26	16	5	2	106	83	28
	%	18.8	17.0	4.8	17.0	11.6	4.9	18.5	16.6	4.8
Initial field										
Object NP	n	62	93	141	2	6	1	64	99	142
	%	12.9	20.3	25.8	2.1	14.0	2.4	11.2	19.8	24.2
Adverbial	n	153	136	189	7	5	5	160	141	194
	%	31.9	29.7	34.6	7.4	11.6	12.2	27.9	28.1	33.0
Other syntactic constituents										
Object NP	n	216	182	276	37	24	19	253	206	295
(anywhere)	%	45.1	39.7	50.5	39.4	55.8	46.3	44.2	41.1	50.3
Infinitive	n	-	63	334	-	4	28	-	67	362
object (anywhere)	%	-	13.8	61.2	-	9.3	68.3	-	13.4	61.7
Polarity										
Affirmative	n	447	341	400	90	40	27	537	381	427
	%	93.3	74.5	73.3	95.7	93.0	65.9	93.7	76.0	72.7
Tense										
Present	n	437	423	517	90	41	40	527	464	557
	%	91.2	92.4	94.7	95.7	95.3	97.6	92.0	92.6	94.9
Mood										
Conditional	n	79	66	91	3	1	-	82	67	91
	%	16.5	14.4	16.7	3.2	2.3	-	14.3	13.4	15.5

Table 1.   Summary of the variables used in the statistical analysis. In order to provide more detailed information, all the dummy variables are presented with regard to the verb types.

the ongoing interaction and how they themselves shape it. In this approach, language is understood first and foremost as a tool for interaction, and linguistic structures are seen as dynamic resources that the conversation participants can employ while engaging in different interactional practices. For scholars in the field of IL, language is always context-sensitive, and language forms and structures are conceived as emerging in use, as a result of joint interactional achievements of the participants (Couper-Kuhlen & Selting 2001:3–5).

Employing statistical methods in the study of spoken interaction is not a simple matter. Through statistical analysis, it is possible to obtain an overview of the phenomenon, but there is always a risk that the sequential organization of a conversation and the subtle elements inherent to spoken interaction are ignored. Using statistical methods in the study of conversational data should thus not be taken for granted. However, statistical methods can provide an interesting approach to data analysis, since IL easily fails to reveal the typical patterns across a large corpus (see e.g. Walsh 2013:37). Therefore, combining IL with statistical methods allows us both to find the recurring semantico-grammatical regularities of ØSG3 and OSG2 clauses and to examine them more closely in their conversational context. As high-quality mixed methods research requires considerable effort in integrating quantitative and qualitative components (see e.g. Hashemi 2012:206), it is crucial to bear in mind that the design of this study is by no means a unilateral interaction, but instead a continual interplay between the quantitative and qualitative observations. As our aim is to weave all the previous observations and our quantitative and qualitative findings into a whole, we also adopt the view of usage-based grammar that the usage patterns and the frequency of occurrence are in a key position when constructing a theory of language (Bybee & Beckner 2010:827).

4. VARIABLES AND STATISTICAL ANALYSIS

This section deals with the statistical analysis of the data. We focus on the distributional semantico-grammatical differences in the ØSG3 and OSG2 clauses in our data. The variables as well as the statistical model used in this study are introduced in Section 4.1. The results of the analysis are then reported in Section 4.2. All our variables are categorical, and they have been chosen on the basis of previous studies regarding zero-person clauses and open 2nd person singular clauses in Finnish. A detailed summary of the variables is provided in Table 1.

4.1 Grammatical factors

We analyzed the main predicate verbs of ØSG3 and OSG2 clauses in our data, mainly with reference to their semantics and argument structure. We followed the verb type classification of Pajunen (2001) but, in addition, we used transitivity

and semantic proto-roles of proto-patient and proto-agent (see Dowty 1991) as classification criteria[8] in order to better reflect the observations concerning the semantics of the verbs used in zero-person clauses (see e.g. Laitinen 1995, 2006). In our data, we consider three main groups of verbs: 1) concrete, 2) mental and 3) modal. Concrete verbs are further classified into verbs of (i) location, (ii) action, (iii) motion and (iv) event and change. Mental verbs consist of (i) psychological verbs, (ii) verbs of perception and (iii) speech act verbs. In Pajunen's (2001) classification, concrete and mental verbs represent primary verbs, whereas the secondary verbs contain the modal verbs and the aspectual verbs. In our study, only the modal verbs represent the secondary verbs. In the case of an aspectual verb, such as *alkaa* 'to begin', in the finite form, we have analyzed its infinitive complement as the main verb.

Marking the context as hypothetical or nonfactual is crucial when construing open reference, especially in zero-person clauses. In addition to the preverbal theme discussed in Section 2.2 above, other ways of creating a hypothetical or nonfactual context are, for instance, the conditional *if–then* frame (see Laitinen 2006:212, 215; Helasvuo & Vilkuna 2008:232) or the conditional mood. Examining the conditions which make the open reference of the subject possible, we took three factors into consideration: (i) the elements in the initial field, (ii) conditional conjunctions *jos* 'if' and *kun* 'when', and (iii) the conditional mood. The elements in the initial field are in this study divided into adverbials and object NPs.

As mentioned, the verb type classification partially depicts the semantic proto-roles of agent and patient, but in order to further investigate these roles we wanted to pay attention to the transitivity of the clause. The concept of transitivity in grammar and discourse is a complex one and its definitions vary (see e.g. Hopper & Thompson 1980:251–252). In this study, we have adopted the view of Helasvuo & Kyröläinen (2016) and encoded transitivity as the realization of the object complement (nominal or infinitival, not clausal) in our list of variables.

Some observations on tense and its effect on the interpretation of a zero-person clause have been made in earlier studies. It has been noted that with a past-tense form the zero-person clause is more often understood to be referentially specific (see e.g. Laitinen 2006:212–213). In order to discover whether there is a difference in the distribution of tenses between our two personal constructions, we compared the present tense to the tenses that locate an action or an event prior to the moment of utterance.

Finally, we examined polarity in our data. Recent studies on conversational Finnish show how the 1st person singular subjects favor verbs of cognition (Helasvuo 2014:64), but there are also observations on how the most common cognitive verbs in Finnish conversational data are skewed with respect to person, number, and polarity (Laury & Helasvuo 2016:82). As Laury & Helasvuo (2016:83) show, even the 2nd person singular negative forms seem to be used significantly less than those of the

1st person singular among cognitive verbs. We endeavored to discover if there are any such differences between the ØSG3 and OSG2 clauses in our data. All variables are summed in Table 1.

4.2 Results

In this section, we present the results of the mixed-effects logistic regression model. We focus on the statistically significant differences between OSG2 and ØSG3 clauses, but provide also some additional remarks on other interesting findings. The results of the statistical model are introduced in Table 2. In the model, one of the categories from each predictor is marked as the reference group. In other words, the model portrays how the other categories of the predictor affect the realization of the construction compared to the reference group. The reference groups in our model usually represent neutral categories. In the case of a dummy variable this means the absence of the feature. For the verb types, we chose modal verbs as the reference group, as they are the most common verb category among both constructions. The unit of observation used as the baseline is an affirmative clause that is in another tense than present tense and in another mood than the conditional mood. Furthermore, the main predicate is a modal verb, the initial field is empty, and there is no conditional frame, object NP, or infinitive object. The results then indicate how much the findings differ from this baseline.

The coefficients in Table 2 represent the effect the predictors have on the independent variable, that is, the OSG2 clause versus the ØSG3 clause. Positive coefficients here indicate a higher probability for the unit of observation being an ØSG3 clause, whereas negative coefficients indicate that of an OSG2 clause. The *t*-value is the coefficient divided by the standard error, and it is used to find the critical *p*-value based on the degrees of freedom in the model. In this study, the predictors are considered to be statistically significant at the five percent level, in other words if the *p*-value (Sig.) is smaller than .05. The exponentiation of the coefficient shows the odds ratio for the predicted outcome.

Including the random effect into the statistical model increased the accuracy of the model. Without the random effect the binary logistic regression could only predict 89.3% of the data correctly (which would also be the accuracy of the model if it were to predict all the clauses as being ØSG3 clauses), whereas the accuracy of the mixed model with both the random effects and fixed effects is 91.0%; the model correctly predicts 98.7% of the ØSG3 clauses and 26.4% of the OSG2 clauses.

According to the model, only the perception verbs and verbs of event and change seem to favor the ØSG3 clauses, although there is no statistical significance. The verb types with statistical significance are the verbs of action ($p = .004$), the verbs of motion ($p = .006$), the verbs of location ($p = .001$) and the speech act verbs

Variable	Coefficient	Std. Error	t	Sig.	Exp (Coefficient)
Intercept	3.508	1.1682	3.003	.003	33.369
Verb type = psychological	−0.309	0.3284	−0.942	.346	0.734
Verb type = perception	0.154	0.5255	0.292	.770	1.166
Verb type = speech act	−1.942	0.5607	−3.464	.001	0.143
Verb type = location	−1.453	0.4267	−3.405	.001	0.234
Verb type = motion	−1.212	0.4361	−2.779	.006	0.298
Verb type = event/change	0.574	0.5675	1.012	.312	1.776
Verb type = action	−1.032	0.3550	−2.907	.004	0.356
Verb type = modal	0[a]	.	.	.	.
Adverbial in the initial field = yes	1.540	0.2846	5.414	.000	4.667
Adverbial in the initial field = no	0[a]	.	.	.	.
Object NP in the initial field = yes	2.079	0.3922	5.303	.000	8.000
Object NP in the initial field = no	0[a]	.	.	.	.
jos 'if' = yes	−0.356	0.2819	−1.262	.207	0.701
jos 'if' = no	0[a]	.	.	.	.
kun 'when' = yes	0.353	0.2864	1.234	.217	1.424
kun 'when' = no	0[a]	.	.	.	.
Conditional mood = yes	2.208	0.5307	4.162	.000	9.102
Conditional mood = no	0[a]	.	.	.	.
Object NP = yes	−0.790	0.2276	−3.437	.001	0.454
Object NP = no	0[a]	.	.	.	.
Infinitive object = yes	−0.397	0.3185	−1.248	.212	0.672
Infinitive object = no	0[a]	.	.	.	.
Present tense = yes	−0.750	0.4582	−1.636	.102	0.473
Present tense = no	0[a]	.	.	.	.
Negative polarity = yes	0.147	0.2862	0.513	.608	1.158
Negative polarity = no	0[a]	.	.	.	.

[a]This coefficient is set to zero because it is redundant.

Table 2. The coefficients of the Generalized Linear Mixed Model.

($p < .001$), all of which favor the OSG2 clauses. However, as shown in Table 1, there are notable differences in the distribution of the modal verbs between the OSG2 and the ØSG3 clauses and therefore the coefficients of the verb types are strongly dependent on the reference category.[9]

Elements in the initial field strongly favor the ØSG3 clauses as both the presence of object NPs and the presence of adverbials in the initial field are statistically significant ($p < .001$). This is not surprising as clauses with a zero-person subject in

Finnish cannot have an overt subject NP and, therefore, the initial field is always left open for other elements.

As suggested in Section 2.2 above, the object NPs in the initial field are also rare among the OSG2 clauses (N = 9, of which six are relative pronouns that are obligatorily clause-initial). The reason behind this is the fact that the theme position in OSG2 clauses is often occupied by the 2nd person pronominal subject *sinä* 'you'. Indeed, 71.9 % of all the instances of OSG2 subjects in our data have both the pronoun and verbal person marking, even though the 2nd person pronoun is not obligatory and the person could also be expressed through verbal marking only (see Dryer 2013), thus leaving the initial field open.

The conditional frames *jos* 'if' and *kun* 'when' did not prove to be statistically significant. The former conjunction has a negative coefficient, that is to say it is slightly more common among the OSG2 clauses in our data, whereas the latter shows the opposite tendency.

The conditional mood is the most significant variable in our model. It has been suggested that there is a connection between conditional mood and zero-person clauses (see e.g. Hakulinen et al. 2004:§1348–1351) and in our analysis in Section 5.2 below we show that certain correlation between these two do exist.

The realization of the object NP proved to be statistically significant ($p = .001$). The coefficient is negative which means that in the case of an object NP the clause is more likely to be an OSG2 clause. The realization of an infinitive object was not statistically significant.

The tense distribution does not differ statistically significantly between OSG2 clauses and ØSG. The coefficient of the present tense is negative which means that the present tense, to some extent, favors OSG2 clauses, while the past-tense forms are more frequent among ØSG3 clauses.

There seems to be no statistically significant difference between ØSG3 and OSG2 clauses regarding polarity and, as Table 1 above indicates, the differences in the amount of affirmative clauses between concrete and modal verbs are indeed rather small (93.3% vs. 95.7% in concrete and 73.3% vs. 65.9% in modals, respectively). However, negative clauses with a mental verb as their main predicate show a strong preference for ØSG3 clauses, as there is a difference of 18.5 percentage points (74.5% vs. 93.0%). This difference may indicate, for instance, that (i) there are more crystallized patterns among negative ØSG3 clauses with mental verbs (see Helasvuo 2014) compared to those of OSG2 clauses, (ii) these clauses more often refer to the speaker her/himself (i.e. be deictically specific), or (iii) these clauses are less commonly used with OSG2 in order to avoid misunderstandings in sensitive contexts (see also Laury & Helasvuo 2016:82–83, on the differences in the frequencies of Finnish verbs of cognition with respect to person, number, and polarity).

5. TRACING THE SEMANTICO-GRAMMATICAL TENDENCIES IN USE: THE SYNTACTIC AND SEQUENTIAL CONTEXTS

The quantitative analysis presented in Section 4 provided an overview of the semantico-grammatical tendencies of the two focus constructions in this study. In this section, we make use of these results to direct our focus on the qualitative analysis. We will examine how the semantico-grammatical differences that proved to be statistically significant, or at least remarkable, are demonstrated on a clausal and sequential level in our data. In doing so, our main approach will be that of interactional linguistics.

In what follows, we will compare ØSG3 and OSG2 clauses from three different perspectives. In Section 5.1, the focus is on the realization of adverbials and object NPs, in Section 5.2 on the occurrences of conditional mood, and in Section 5.3 on the distribution of verb types.

5.1 Adverbials and object NPs in ØSG3 and OSG2 clauses

In the statistical analysis, adverbials and object NPs in the initial field as well as the realization of the object NP on the whole proved to be statistically significant. The adverbials and object NPs in the initial field strongly favor the ØSG3 clauses, while the object NPs in general are more common among OSG2 clauses. This means that the ØSG3 clauses more often have an object NP, as in (4a) below, an adverbial, as in (4b), or both in the initial field.[10] This is not particularly surprising, as clauses with a zero-person subject in Finnish cannot have a subject NP, and therefore the initial field is left open for other elements (Laitinen 2006:214–215).

(4) a. Mikko: **pelivuaroja**   ei   saa   va<u>r</u>attua
                  time.slot.PLU.PAR   *NEG.3SG*   *may.CNG*   *reserve.INF*
                  muuta   ku   luattokortinumerolla,
                  Other   than   credit.card.number.ADE
                  'One can only book the time slot (for playing) with a
                  credit card number.'

                                                                    (SG355)

     b. Katja: sit   **siel**   saa   £friteerattua   juustoa£.
                 then   *there*   *get.3SG*   *fried.PAR*   *cheese.PAR*
                 'Then one can have deep fried cheese there.'

                                                                    (SG377)

In our data, object NPs in the initial field are rare among the OSG2 clauses (N = 9, of which six are relative pronouns that are obligatorily clause-initial). As mentioned in Section 4.2, in OSG2 clauses, the theme position is often occupied by the 2nd person pronoun *sinä* 'you', as in (5a) below. Open 2nd person singular subjects can

also be expressed through the verbal marking only, and it would thus be possible in OSG2 clauses to have a preverbal object NP or an adverbial, or to leave the initial field open. However, if there is an object NP or an adverbial in the initial field, it can either be in the pre-field if there is also a subject pronoun, as in (5b), or in the theme position if there is no subject pronoun, see (5c).

(5) a. Kaisa: tai siis jos **sä** meet vaik johonki tuo- #öö#
or I.mean if 2SG go.2SG for.example somewhere.ILL St.Tho- PTC
no johonkit tuomasmessuun ni, (0.4) **sähäv** saat
PTC somewhere.ILL St.Thomas.Mass.ILL PTC 2SG.CLIT get.2SG
istuus
sit.INF
Siel penkis.
there bench.INE
'Or, I mean, if you go for example somewhere like St. Tho- uhm well to St. Thomas Mass for example, (0.4) you just get to sit there on the bench.'

(SG440)

b. Heikki: **Kolmen päiväl Lipulla** Sä saat Ramppaa
three.GEN day.GEN ticket.ADE 2SG be.allowed.2SG traipse.INF
edestakas
back.and.forth
Sisää ja ulos ↑ihan niin paljo ku lystää Tuskassa?
in and out quite so much as like.3SG Tuska.INE
'With a three-day ticket you can go in and out (the festival area) as much as (you) like, in the Tuska festival.'

(SG444)

c. Erja: milläs **tän** saat kokoo ku ↑tämmönen o.
what.INE.CLIT DEM.ACC get.SG2 Together when such be.3SG
'How do you get this together when (it) is like this'

(D131)

As stated in Section 4, there are more object NPs among OSG2 clauses than among ØSG3 clauses, but these object NPs are typically placed in a post-verbal position, as is seen in (6).

(6) Tuula: et jos sä vuoden jaksat hoitaa **kahta vau#vaa#**,
COMP if SG2 year.GEN manage take.care two.PAR baby.PAR
'That if you for a year manage to take care of two babies.'

(SG438)

It is noteworthy that the object NP distribution is largely in line with the differences among the mental verbs: 55.8% of OSG2 clauses with a mental verb have an object NP, while only 39.7% of ØSG3 clauses have an object NP.[11] According

to our interpretation, the reason for this might be that the open 2nd person singular construction, to a greater extent, is used in rather concrete discourse contexts; even when it is used with mental verbs, the processes described with these verbs need to be as concrete as possible. We will go deeper into this in Section 5.3, where we deal with the distribution of verb types among the ØSG3 and OSG2 clauses from a sequential point of view.

Generally speaking, the positioning of the clausal constituents in the ØSG3 and OSG2 clauses has to do with the information structure of the clause. As Vilkuna (1992:9) notes, the word order, that is to say the constituent order at the clause level, is grammatically relatively free in Finnish, but discourse-conditioned. In other words, despite the existence of a grammatically unmarked default order, choosing a different order indicates something about the information structure and discourse functions of the clause (ibid.; Hakulinen et al. 2004:§1366–1367). The information structure correlates with the structure of the object NP in the ØSG3 clauses of our data: in the initial field, up to 64% of object NPs are demonstrative pronouns, while in positions other than the initial field, approximately 62% are lexical nouns. On the conversational and pragmatic level this may reflect the use of the ØSG3 clauses when referring to something already introduced into the discourse, as in (7a), or spatially connecting the utterance to the speech situation, is shown in (7b).

(7) a. 1 Sanna: mä rupesin mie̲ttii et me̲ijän äiti on ainaki
1SG start.1SG think.INF COMP 1PL.GEN mother be.3SG at.least
kyl
PTC
'I started to think that our mom at least has'

2 pitäny niinku aina <ru̲okarukouksen>, (.) et>
keep.PTCP like always grace.ACC COMP
'always said grace.'

3 Kerttu: [mm (0.5)
PTC

4 Sanna: sa- **sitäkä** ei varmaan saa e[nää tehä
ge- DEM.PAR.CLIT NEG.3SG I.suppose get.CNG anymore do.INF
'One probably isn't allowed to do that either anymore'

(SG346)

b. Eija: joo. (0.6) tuota (.) **ton** voi laittaa se̲inälle #ja **tän**
PTC PTC DEM.ACC can.3SG put.INF wall.ALL and DEM.ACC
voi laittaa niinku# to̲llei.
can.3SG put.INF like so
'Yeah (0.6) well, one can put that one in the wall and one can put this one like that.' (SG435)

5.2 *Conditional mood in ØSG3 and OSG2 clauses*

In this section, we provide a qualitative observation of the occurrences of the conditional mood in regard to ØSG3 and OSG2 clauses, as well as the interactional contexts in which the clauses with conditional mood occur. Although in the scope of this study it is not possible to exhaustively categorize the conditional clauses of our data (N = 240), some remarks can be made on why this particular mood is so common among ØSG3 clauses and not as widely used in OSG2 clauses. We argue that the typical uses of the conditional mood in the Ø3SG clauses in our data have to do with (joint) planning and proposal making, seen in examples (8)–(9) below, and indicating wishes, seen in (10). Moreover, with the conditional mood the speaker may express her stance on the topic under discussion, as in (11)–(12). All these uses are discussed later in in this subsection.

The conditional mood in Finnish differs from that of many other languages (Kauppinen 1998:156). In Finnish, the conditional mood has been seen to indicate nonfactuality (see e.g. Kangasniemi 1992:242–243; Kauppinen 1998:156–160). The conditional mood also has more pragmatic, secondary functions, for example in conveying politeness, doubt or mitigation (Yli-Vakkuri 1986:191–201). In some subordinate clause positions the conditional mood has been said to correspond the subjunctive mood (see Kauppinen 1998:164).

Diachronically, non-actual planning – that is nonfactual per se – has been considered as one of the prime functions of the conditional mood. This is due to the alleged combination of frequentative derivational suffix and the past-tense suffix in the conditional marker *-isi-* (Lehtinen 1983:485–501). According to Hakulinen (1987:149), the conditional mood in zero-person clauses conventionally implicates the speaker her/himself as the implied agent/experiencer in clauses which express either the speaker's plans or intentions, or enable an optative-like interpretation in which the speaker indicates a wish of some sort. Optative-like conditional clauses are typically verb-initial but may also include a conjunction (e.g. *jos* 'if') in the beginning of the clause. In such turns, the speaker often seeks for an approving response from other participants – even if the speaker refers to her/himself (Kauppinen 1998:187–190).

Example (8) demonstrates how the zero-person forms of verbs of action and movement in the conditional mood are used in joint planning as Mikko proposes a trip to a sauna to a group that consists of his wife and another married couple (see also Couper-Kuhlen & Etelämäki 2015:12).

(8) Mikko: e:i   e:i   mut se jos **kävis**   auton kans
          NEG.3SG NEG.3SG but DEM if go.COND.3SG car.GEN with
          et **kävis**   saunomassa ja **tulis**   takasi,
          PTC go.COND.3SG bathe.INF.INE and come.COND.3SG back
          'No no but if one would go by car so that one could go to sauna and
           one would come back.'

                                            (SG355)

Besides the concrete verbs, also the modal verbs, especially the verb *voida* 'can', occur typically in contexts of planning along with a zero-person form. Consider example (9), in which Iina is planning a trip to Turku with her husband, who is not present in the conversation.

(9)   Iina: Sit   **vois**   **käydä**   jossain   niinku
              then   *can.COND.3SG*   *visit.INF*   *somewhere.INE*   *like*
              ehkä   Turussa   ja   sit   **mennä**   sinne
              maybe *Turku.INE*   *and*   *then*   *go.INF*   *there*
              yöks   tai˚   jottai ˚(-)˚
              night.TRANSL *or*   *something.PAR*
              'Then one could visit somewhere like maybe in Turku and
              then go there for a night or something.'

                                                                        (SG446)

Whereas the concrete verbs and the modal verbs were used in (joint) planning in examples (8) and (9), it seems that the conditional mood marks the speaker as the implied agent/experiencer particularly in connection with the mental verbs, in example (10).

(10)   Salla: joo, (0.2)   ja   Sit   sillee   et (.)
                PTC   *and*   *then*   *like*   *COMP*
                haluais   Soittaa   kaikkee   muuta
                want.COND.3SG   *play.INF*   *all.PAR* *else.PAR*
                Mut   mä   en   niinku   osaa? (0.3)   tai
                but   *1SG*   *NEG.1SG*   *Like*   *can.CNG*   *or*
                niinku   suurin   haave   olis
                like   *big.SUP*   *dream*   *be.COND.3SG*
                Se   et   **pystys**   sillee (0.5)
                DEM   *COMP*   *can.COND.3SG*   *like*
                jammailemaan   mukana
                jam.INF.ILL   *along*
                jossain   kappaleessa;
                some.INE   *song.INE*
                'Yeah, and then, like, that one would want to play everything else
                but I cannot (0.3) or like the biggest dream would be that one would
                be able to, like, (0.5) jam along in some song.'

                                                                        (SG123)

In contexts like this, the speaker typically indicates her wishes or intentions. In example (10) the zero-person also alternates with the singular 1st person.

Both personal and impersonal pronouns provide a way to express stance: personal pronouns often express a personal or otherwise involved stance whereas impersonal pronouns fit better with less personal stance (van Hell et al. 2005). Expressing stance, and especially potentially intersubjectively shared stance, seems to be rather common

among ØSG3 and OSG2 clauses as well. Consider example (11), where the speaker provides an evaluation of a TV program about off-road motorcycle racing.

(11)   Tero: >joo   ei   todellakaa,< (0.5)
             PTC   *NEG.3SG*   *certainly*

             eihä -   **tos (.)**   **n-**   **tavallisel**
             NEG.3SG.CLIT   *there*   *n-*   *ordinary.ADE*

             krossipyöräl
             motocross.motorcycle.ADE

             pääsis   **mihikää**   **ku**   **toi**   **on**
             get.COND.CNG   *anywhere*   *when*   *DEM*   *be.3SG*

             nii   **pehmee**   toi   maa, (0.2)
             so   *soft*   *DEM*   *soil*

             vielä-
             still-

             'Yeah, certainly not (0.5) with an ordinary motocross motorcycle one wouldn't be able to get anywhere because the soil is so soft (0.2) still-'

                                                          (SG121)

The nonfactuality indicated by the conditional mood is thus used to convey the speaker's stance as he argues that one needs a custom-built motorcycle in the ongoing race instead of an ordinary motocross motorcycle.

It is noteworthy that in all of the OSG2 clauses that have a predicate verb in the conditional mood the nonfactual interpretation is supported by contextual cues such as a conditional frame or a rather crystallized 2nd person singular imperative form of the verb *ajatella* 'to think', as seen in (12). In (12), the speaker again expresses her stance on the topic under discussion.

(12)   Jaana: =eihän   se   ois   jumankaut
             NEG.3SG.CLIT   *DEM*   *be.COND.CNG*   *goddammit*

             pärjänny   ↑ollenkaa
             manage.PTCP   *at.all*

             tommoses   noin   ni,   .hhhhhm   >semmone<
             that.kind.INE   *PTC*   *PTC*   *such*

             ↑aattele   **semmost**   **et**   **e- (.)**   **sä**   **olisit**
             think.IMP.2SG   *such.ELA*   *COMP*   *t-*   *2SG*   *be.COND.2SG*

             niinku   **↑pikkukengillä**   **liikkeellä**
             like   *formal.shoe.PL.ADE*   *on.the.move*

             semmoses   **pakkases? .hhhh**
             such.INE   *frost.INE*

             'She wouldn't have managed at all, goddammit, in that kind of a, such – think if you had, like, formal shoes on in such a cold weather.'

                                                          (SG438)

We believe that the key to the differences in the frequency of the conditional mood of ØSG3 and OSG2 clauses lies in the very essence of the conditional mood: If we consider it as a marker for nonfactuality, it does not alone provide sufficient conditions to avoid a misunderstanding of the referent in OSG2 clauses. Instead, the speaker has to mark the nonfactuality in some other grammatical or contextual way, and therefore the conditional mood would in many cases be redundant.

5.3 Verb types in ØSG3 and OSG2 clauses

As stated in Section 4, the perception verbs and verbs of event and change slightly favor the ØSG3 clauses, whereas the speech act verbs as well as the verbs expressing action, motion and location occur more often in the OSG2 clauses. Our qualitative analysis shows that this kind of distribution of verb types can be explained by two factors: Firstly, the semantico-grammatical restrictions zero-person has (described in Section 2.2 above) make certain interactional contexts more suitable and some impossible for the use of this construction. Secondly, the interactional tasks the ØSG3 and OSG2 clauses have in their conversational contexts are of importance, and the type of action of the ongoing sequence has an impact on which of the construction types is being used.

The tendency that perception verbs and verbs of event and change are slightly more common in ØSG3 clauses can be approached through the observations presented in earlier studies; it has been stated that the zero-person often has the proto-patient role of implication of affectedness, so that the person implied in the ØSG3 clause is often in the role of the beneficiary, experiencer or patient (Laitinen 2006:213). This also seems to hold true for the ØSG3 clauses in our data, in which the implicit subject in ØSG3 clauses observes, feels and is affected by the circumstances.

The use of the open 2nd person does not have similar semantico-grammatical restrictions to the zero-person. Nevertheless, it seems that the OSG2 clauses have a tendency to have a certain role in the sequence in which they occur. In our data, the 2nd person singular with an open reference is typical in contexts where the speaker demonstrates something with a concrete example. The extract in (13) is from a conversation between three young adults, who are talking about what a curriculum vitae is and what information it is supposed to include. Just before the extract, Kaisa has told the others that she is not quite sure what a CV is since she has never written one. However, in lines 1–2, Kaisa tries to define the contents of a CV, and Masa, who has just written his first CV, joins in.

(13)   1   Kaisa: se, (0.4)   eikum   mikäs   se   °siis°
              DEM   *PTC*   *what.CLIT*   *DEM*   *I.mean*
              'It, (0.4), wait what (is) it, I mean'
        2   [siis   **siihehä**   **kirjotat**   **että**   **mitä**   **sä**.
              I.mean   *DEM.ILL.CLIT*   *write.SG2*   *COMP*   *what*   *SG2*
              'you write in it what you...'

3   Masa: [se   on   seevee   joho   on
               DEM   *be.3SG*   *CV*   *which.ILL* *is.3SG*

               se:, (.)   koulutus   ja
               DEM   *education*   *and*
               'It is CV into which (you put your) education and'

4   mitkä   työt   sull   o   olluj
               which.PL *job.PL* *2SG.ADE* *be.3SG* *have.PTCP*

               ja   blaa   blaa   blaa.
               and   *PTC*   *PTC*   *PTC*
               'what jobs you've had and blah blah blah.'

                                                     (SG440)

In (13), the OSG2 clause with an action verb *kirjoittaa* 'to write' occurs in Kaisa's turn in line 2 when she starts to explain what she thinks one – or more precisely 'you' – can write in the CV. In lines 3–4, Masa, in overlapping talk, completes Kaisa's definition and explains what information a CV is supposed to include. In his turn, Masa also uses the open 2nd person singular, but as an adverbial expressing the possessor in a possessive clause (line 4). In terms of interaction, the OSG2s in (13) occur in a context in which both participants are engaged in trying to give a definition on the topic of the talk, in this case the content requirements of a CV.

Furthermore, in our data, the ØSG3 and OSG2 clauses co-occur relatively often. This means that the speakers seem to use the open 2nd person singular in the same sequences where they also use the zero-person. In sequences where ØSG3 and OSG2 clauses co-occur, the distribution of tasks is the following: the ØSG3 clauses are used to give a general characterization or to introduce a topic or a change of perspective, while the OSG2 clauses are used to illustrate (the previously described) state of affairs or to exemplify a claim (see Nielsen et al. 2009:126–129 on the distribution of tasks of the two Danish generic pronouns). This distribution of tasks is also visible in the statistical analysis; verbs of event and change are more frequent in the ØSG3 clauses, whereas verbs describing dynamic action or being in a location favor OSG2 clauses.

Example (14) below demonstrates how the distribution of tasks of the OSG2 and ØSG3 is reflected in the types of verbs used with each construction type. The extract comes from a conversation between four young men who are having a game night. The topic in (14) is music festivals, and the participants are discussing whether people are allowed to bring their own drinks to the Tuska festival. Before the following extract, Heikki has told the others how, due to changes in the law, people are not allowed to bring their own drinks into the festival area anymore. As a response, Tuomas, starting from line 1, seeks more clarification about this claim.

(14) 1   Tuomas: <ok<u>e</u>i>.   (0.2) no   siis,   (0.4) eli   nyt   sit, (.)
                              PTC   *PTC*   *PTC*   *so*   *now*   *then*

                    jos   ost-
                    if   buy-
                    'Okay, (0.2) well you mean (0.4) so now then (.) if bu- '

      2   (0.2)   **ostaa   [sen   kahen   päivä   lipun,]**
                              buy.3SG   DEM.ACC   two.GEN   day.GEN   ticket.ACC
                    '(0.2) one buys the two-day ticket . . .'

      3   Heikki: [s<u>e</u>n takii   se   k<u>o</u>lmen   päivän   lippu
                    because.of.that   DEM   three.GEN   day.GEN   ticket
                    'That's why the three-day ticket'

      4   o   aika   ehdoton   **et**   **sä**
                    be.3SG   quite   essential   COMP   SG2

                    voit   jättää   narikkaa,
                    can.SG2   leave.INF   cloak.room.ILL
                    'is quite essential so that you can leave in the cloak room'

      5   (0.2) **repullisen   kylmää   bissee**
                    backpack.ACC   cold.PAR   beer.PAR

                    mitä   sä   käyt,
                    what.PAR   SG2   go.SG2
                    'a bag of cold beer that you go,'

      6   **.hh   haet   sen   Siit ↑   narikasta**
                              get.SG2   DEM.ACC   DEM.ELA   cloak.room.ELA

                    ja   meet
                    and   go.SG2
                    'you pick it up at the cloak room and (you) go'

      7   **siihe   ulkopuolelle   juomaa**   ku
                    DEM.ILL   outside.ALL   drink.INF   when

                    o   paskoi   [bändei.
                    be.3SG   shitty.PL.PAR   band.PL.PAR
                    'drink (it) outside when there are shitty bands on.'

      8   Tuomas: [**siis   ka-]**
                    PTC   I.guess
                    'You mean I g-'

      9   (.) **mut   kai   sinne   nyt   v<u>e</u>ttä**
                              but   I.guess   DEM.ILL   now   water.PART

                    sai   vet#tä
                    be.allowed.PST.3SG   water.PART
                    'but I guess one could (bring) water in there'

     10   [(**mukana**)#,]
                     with
                     'with (her/him).'

     11   Heikki: [↑joo↑**vettä]   saa   viedä   >siis**
                    PTC   water.PART   be.allowed.3SG   bring.INF   PTC
                    'Yeah one can bring water I mean'

     12   <**juomapullon   saa   viedä.**
                    drinking.bottle.ACC   be.allowed.3SG   bring.INF
                    'one can bring a drinking bottle.'

                                                                              (SG444)

In (14), the ØSG3 clauses occur in lines 1–2, 8–10 and 11–12, in both Heikki's and Tuomas' turns. All these turns describe the general states of affairs. The first ØSG3 clause in Tuomas' turn in lines 1–2 deals with the way the implied person(s) act in the outlined circumstances. It is a question of hypothetical situation (note the *jos* 'if' frame), and the context makes the intentional interpretation, in which Tuomas might be planning his future actions, possible with regard to the use of the zero-person. In the example above, we can also see how the zero-person is typical with modal verbs: in both Tuomas' turn in lines 8–10 and Heikki's response in lines 11–12, the generic agent implied with ØSG3 is under the modal condition of permission, which is expressed with the modal verb *saada* 'to be permitted/allowed to'.

Consequently, in (14), the ØSG3 clauses are used to frame the topic situation. The OSG2 clauses, on the other hand, are used in those parts of the sequence where Heikki moves on to argue why it is best to buy the three-day ticket to the Tuska festival. In lines 3–7, in the turn that contains the OSG2 clauses of this example, Heikki provides a reasoning for his argument; he gives a concrete example of how one can act if they have a three-day ticket. The subordinating conjunction, the complementizer *että* (line 4), marks what follows it as a paraphrase of the prior talk (see Koivisto, Laury & Seppänen 2011:71) and thus highlights the demonstrating and illustrative task of the turn.[12] The verbs used in his turn describe agentive action (*jättää* 'to leave', *käydä* 'to go', *hakea* 'to get, to pick up', *mennä* 'to go', *juoda* 'to drink'). In addition, the open 2nd person singular forms in Heikki's turn are used in an affective context that involves evaluation, and they function as a part of an assessment sequence (see e.g. Goodwin & Goodwin 1992). In this context, Heikki's assessment sequence could also be interpreted as functioning as a piece of advice to Tuomas who is a bit hesitant to buy the three-day ticket to the festival; in this case, the OSG2 forms in (14) can be understood as carrying a somewhat hearer-directed meaning at the same time as they are generalized descriptions of a certain way of acting.

Interestingly, in (14), Tuomas in his response turn (lines 8–10) does not respond to the affective content of Heikki's turn at all, but instead asks, with the help of the zero-person, whether one can still bring water into the festival area. With his turn and the zero-person construction in it, Tuomas thus brings the conversation back to a general level, which Heikki then continues in his following response in lines 11–12, where he also moves on to using the zero-person. In this context, the change in person form from OSG2 to ØSG3 not only signals a change in the ongoing action, but also a change in perspective and footing (see Goffman 1981).

6. CONCLUSIONS

This study has provided a systematic examination of two Finnish open personal constructions, the zero-person and open 2nd person singular, based on a large

conversational database. We have analyzed the distributional semantico-grammatical differences in the use of the zero-person and open 2nd person singular in subject positions in everyday conversational data and examined how these differences are portrayed on the clausal and sequential level in a conversational context. Our approach has been twofold: firstly, we have performed a statistical analysis in order to trace the semantico-grammatical tendencies of the zero-person and open 2nd person singular and, secondly, we have analyzed these tendencies in a conversational context from a qualitative point of view, with an interactional linguistic approach.

Given previous research, the zero-person and open 2nd person singular have a number of similarities, but, as our analysis has shown, there are also differences between the two constructions, with regard to the syntactic and the sequential and interactional environments in which the constructions in question appear. The statistical analysis shows that the most significant differences between the ØSG3 and OSG2 clauses in our data are related to the elements in the initial field and the occurrence of the conditional mood, but also in the realization of the object NP and in the distribution of the verb types.

Our qualitative analysis shows that the differences related to the realization of elements in the initial field have their base in the grammar of the two constructions: as there is no subject in ØSG3 clauses, there is room in the initial field for elements other than the subject, whereas in the OSG2 clauses, the subject position is often occupied by the 2nd person pronoun, and the object NPs thus tend to occur after the predicate verb.

As for the differences related to the occurrence of the conditional mood, they can be explained with the different interactional contexts in which the two constructions regularly occur. The conditional mood is typical in contexts where the zero-person is at least partially speaker-referential, that is, in contexts of (joint) planning or stance-taking. However, the use of the open 2nd person singular in such contexts might lead to misleading interpretations, given the addressee-referential nature of the 2nd person singular form.

Regarding the distribution of verb types in the ØSG3 and OSG2 clauses of our data, we have shown that the type of action in the ongoing sequence has an impact on which construction type is being used. The tendency that perception verbs as well as verbs of event and change favor the ØSG3 clauses may have to do with the proto-patient role of implication of affectedness that the zero-person often holds. The OSG2 clauses are used to a greater extent in illustrative contexts, in which the speaker exemplifies a certain way of acting or provides an example of the state of affairs. This explains why OSG2 clauses favor verbs of action, motion and location as well as speech act verbs. The way the distribution of verb types between ØSG3 and OSG2 clauses is related to their distribution of interactional tasks is especially clear in the cases of co-occurrence of the two constructions; for example, when ØSG3 and OSG2 clauses occur in the same sequence, ØSG3 clauses are frequently used to introduce

a situation or a change of perspective, while the OSG2 clauses typically exemplify or describe concrete action in a specific situation.

The results of this study clearly indicate that there is an interplay between the grammatical tendencies and interactional tasks of the zero-person and open 2nd person singular constructions, and our findings thus support the idea of grammar and grammatical structures as sensitive to the ongoing conversational activity, emerging in their contexts of use. Furthermore, our results suggest that a mixed methods design can be profitable in studying the interplay between grammar and interaction. Thus, by integrating both quantitative and qualitative methods we have been able to provide a detailed analysis not only of the semantico-grammatical tendencies of the two referentially open personal constructions but also of the pragmatics of these tendencies in conversational data. By doing this, we have offered an empirical contribution to a growing understanding of the contextual variation and distribution of two referentially open personal constructions from the perspective of Finnish.

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APPENDIX

Transcription symbols

.	falling intonation
,	level intonation
?	rising intonation
↑	step up in pitch
↓	step down in pitch
speak	emphasis
>speak<	faster pace than in the surrounding talk
<speak>	slower pace than in the surrounding talk
°speak°	quiet talk
sp-	word cut off
spea:k	lengthening of a sound
#speak#	creaky voice

£speak£	smiley voice
.h	audible inhalation
h	audible exhalation
.speak	word spoken during inhalation
[	beginning of overlap
]	end of overlap
=	latching of units
(.)	micropause (less than 0.2 seconds)
(0.6)	pause length in tenth of a second
(speak)	item in doubt
(-)	item not heard
boldface	focused item in the transcript

DATA SOURCE

Arkisyn: A morphosyntactically coded database of conversational Finnish. Database compiled at the University of Turku, with material from the Conversation Analysis Archive at the University of Helsinki and the Syntax Archives at the University of Turku. Department of Finnish and Finno-Ugric Languages, University of Turku. http://urn.fi/urn:nbn:fi:lb-2017022702.

NOTES

1 The authorship of this article is shared jointly between the authors. However, each author has had their own areas of expertise in this study: Mikael Varjo has extracted the zero-person clauses from the Arkisyn database and performed their qualitative analysis. Karita Suomalainen has extracted the open 2nd person singular clauses from the Arkisyn database and performed their qualitative analysis. Furthermore, Mikael Varjo is responsible for extracting the data points from the data set as well as choosing, performing and explaining the statistical model and its results, whereas Karita Suomalainen is responsible for outlining and explaining the theoretical background for this study as well as conducting the interactional analysis of the data.

2 As Siewierska (2008:3) notes, the term 'impersonal' has been used in different ways within linguistics, depending on the approach scholars have taken; it has been used to denote subjectless constructions, constructions featuring only a pleonastic subject, and constructions which lack a specific agent (for a more detailed discussion, see ibid.:3–6).

3 We will not go into the details of the category of person in Finnish in this article. For a more detailed description of person in Finnish, see Helasvuo & Laitinen (2006).

4 The Finnish unipersonal passive has been considered a fundamental part of the grammatical person system in Finnish since Tuomikoski (1971).

5 In this article, by zero-person clauses we mean clauses where the zero-person functions syntactically as a subject. Similarly, open 2nd person singular clauses are to be understood as clauses with open 2nd person singular subject, unless stated otherwise.

6 These include clauses such as *Täällä ei opi mitään* 'You don't learn anything here' and *Huomenna klo 5 saa nukkua* 'Tomorrow at 5 a.m. one may sleep'. Some adverbials may very well be also after the verb and still form the necessary or sufficient conditions, especially if

there is a preverbal object NP as in clause *Sen työn tekee hetkessä* 'That job you can easily do' (all examples taken from Hakulinen & Karttunen 1973).

7　However, in the statistical analysis in chapter 4, we have included only clauses with a finite verb and excluded unfinished utterances. The number of ØSG3 clauses is thus 1483 and that of OSG2 clauses 178. Furthermore, we have excluded clauses with an oblique subject from our data since there is not a sufficient number of clauses with an OSG2 in order to perform a statistical analysis (N = 15). In Finnish, the subject is in the oblique case (the so-called genitive subject) in clauses expressing necessity, and with these subjects the predicate verb always takes the 3rd person singular form. Because of this unipersonality, it would not have been reasonable to combine the necessive clauses with the rest of our data. (For more on the Finnish genitive subject and necessive clauses, see e.g. Leino 2015.)

8　As the implied subject in all of our clauses is human or at least animate, we have adjusted the classification of Pajunen (2001). However, this adjustment is connected mainly to the concrete verbs category. For instance, the transitive verbs of Pajunen's verbs of motion are here classified as verbs of action if the motion is caused by an implied human agent (proto-agent) and, on the contrary, those verbs of motion that lack this proto-agent, such as *pudota* 'to fall down', are classified as verbs of event and change. This leaves our category of motion verbs with only verbs such as *käydä* 'to go to', 'to visit', *kävellä* 'to walk', *mennä* 'to go' and *lähteä* 'to leave' that are intransitive and require a proto-agent.

9　As none of the verb type categories can objectively be considered as neutral, we have chosen the most common category – the modal verbs – as the reference group.

10　The constituents we consider to be in the initial field are, by default, both possible preverbal constituents (the one in the pre-field and the one in the theme position). In the case of compound verbs (e.g. compound tenses and negative forms), the first part of the predicate verb may occupy the pre-field, and in these cases there may be an adverbial or an object NP only in the theme position.

11　In fact, if the model were to be performed without the mental verbs, the *p*-value would no longer be significant at the .05 level ($p = .089$).

12　In relation to the illustrative role of the OSG2, it is noteworthy that the OSG2 clauses often occur in so-called subordinate contexts, preceded by subordinating conjunctions like *ku* or *että* that link the OSG2 clause(s) to the earlier talk. Out of these conjunctions, especially *että* has been shown to function as an index of that the following talk is a paraphrase, a summary, a candidate understanding or an upshot of earlier talk (Laury & Seppänen 2008; Koivisto et al. 2011:71). However, a more precise analysis of OSG2 in subordinate contexts needs to be left for future studies.

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