sciendo
DOI 10.2478/jazcas-2024-0026

DEICTIC CENTER SPLIT IN DELAYED INTERPRETATION PARADOXES: SOLUTIONS INSPIRED BY EVIDENCE FROM POLISH

TERESA FLERA
Faculty of Modern Languages, University of Warsaw, Poland

FLERA, Teresa: Deictic center split in delayed interpretation paradoxes: Solutions inspired by evidence from Polish. Jazykovedný časopis (Journal of Linguistics), 2024, Vol. 75, No. 1, pp. 19–42.

Abstract: This paper presents a nuanced theoretical approach to the semantic interpretation of indexical expressions in delayed interpretation scenarios such as the Answering Machine Paradox [AMP] (Sidelle 1991). In order for recorded messages containing indexicals to be true with respect to the context of interpretation rather than the context of recording, semantic indexical shift must take place (Kaplan 1979). This is something that truth-conditional approaches to indexicality struggle to explain. The solution proposed in this paper is inspired by evidence from the syntax of Polish negated locative statements. The occurrence of the Genitive of Negation in Polish locatives that forces a Nominative-to-Genitive shift on the main noun phrase suggests a cognitive distancing from the object whose presence at a location is denied. The fact that it occurs for sentences containing indexicals could point at a phenomenon that corroborates the need for indexical shift in such cases. The notion of deictic center split is proposed to explain how a reference-based framework can link the empty reference of an indexical at the context of interpretation with the real reference at the context of recording thus saving the intuitions behind the standard account while allowing for semantic indexical shift in AMP cases.

Keywords: deixis, indexicals, deferred reference, semantics, paradox, polish, genitive of negation

INTRODUCTION

Delayed or deferred interpretation of indexical expressions still poses a problem for many analyses of the semantics of context-dependence especially in analytic philosophy of language and truth-conditional approaches in theoretical linguistics. The most notable example of this issue is the Answering Machine Paradox (AMP) formulated by Sidelle (1991) that challenges the seminal thinking about indexicals in terms of directly referential expressions with no descriptive contribution to their semantic value (Kaplan 1979). Messages recorded on answering machines appear to go against the claim that any particular utterance of a sentence like *I am not here now* would necessarily constitute a falsehood in virtue of how semantic value is

ascribed to indexicals in any context of utterance. A true utterance of the sentence *I am not here now* would constitute an example of indexical shift, which is famously prohibited in Kaplanian semantics.

The majority of analyses dealing with this problem take into account Kaplan's metaphysics that informs his semantic stipulations against data from English and assumptions about the cognitive construction of contexts of utterance that follows English syntax. In this paper, I propose to analyse the problem of the Answering Machine Paradox from a broader cross-linguistic perspective to show that the model of a Kaplan-style context might benefit from a set of more nuanced tools. The argument aims to provide a mechanism that would explain true utterances of the sentence *I am not here now* while conserving as much as possible Kaplanian intuitions about semantics and the nature of indexicality assumed in truth-conditional analyses. The mechanism is illustrated with examples from Polish, which utilises a particular type of syntactic construction to express negated locative statements (*I am not here now* versus the affirmative *I am here now*) called the Genitive of Negation [GoN] (Pirnat 2015). An argument is made that while GoN in negated locatives is not responsible for the indexical shift that occurs in Answering Machine type sentences, the surface grammar of Polish allows to better see the nature of negated locatives and the semantic properties of the indexicals present in such constructions. Therefore, the mechanism proposed strikes as more natural for Polish due to the GoN cognitive effects, but can be generalised to the English examples, thus contributing to an extension of Kaplanian semantics that might accommodate indexical shift in certain circumstances.

This paper is organised as follows: section 1 provides terminological stipulations used throughout the paper. Since the problem as well as the solution proposed in this paper exist at the intersection between analytic philosophy of language and theoretical linguistics, section 1 is used to disambiguate the key notions referenced throughout the rest of the argument as well as to explicitly state background assumptions about the methods and tools applied in the analysis. Section 2 presents the Answering Machine Paradox along with other similar phenomena that can be approached with the same tools and problematises this type of indexical shift with respect to the assumed methodology. Section 3 gives an overview and critical appraisal of solutions to the problem most often proposed in the philosophical and linguistic literature. Section 4 presents and analyses data from Polish comparing and contrasting the GoN constructions with their counterparts in English. Section 5 details a solution to the problem posed by the Answering Machine Paradox in terms of deictic center split, which allows the benefits of indexical shift (semantically true utterances of *I am not here now* in delayed interpretation) while avoiding most of the problems posed by indexical shift understood as a change in the deictic coordinates. Section 6 concludes the discussion and proposes avenues for further applications of deictic center split.

1. DEICTIC CENTER

Deixis is the linguistic phenomenon of anchoring the reference of certain expressions in a relation to the context in which a speech act has been made. Deictic expressions are context-sensitive in virtue of possessing a quality of "pointing" towards a salient element either contained inside of the context of utterance or tied to it by a traceable relation (for overview see: Fillmore 1966; Buhler 1982; Fuchs 1993; Levinson 2004). This means that their reference will vary depending on the speaker and her spatio-temporal situation in the moment of utterance.

There is a special sub-type of deictic expressions that are the focus of this paper called indexicals (Bar-Hillel 1954; Kaplan 1979, 1989). Indexicals are deictics with three key features: a) they refer directly to elements of the deictic center, b) they are not demonstrative, and c) they do not carry descriptive content in their lexical meaning. Each of these elements is briefly discussed below.

The deictic center, also called the **origo** (Buhler 1982), is an abstract point where the axes of a spatio-temporal model of potential references accessible from all of reality converge at the moment of the speech act. These key coordinates where the time, space, and person axes overlap consist of a speaker, a time of utterance, and a place of utterance (sometimes also a possible world of utterance for purposes of modal or epistemic considerations) and correspond to the references of indexicals *I*, *now*, and *here*. In analytic philosophy of language, the deictic center is often called **context of utterance** from the seminal semantic system logic of demonstratives [LD] of David Kaplan (1979, 1989). The context of utterance is modelled as a quadruple of coordinates $c = <c_a, c_t, c_l, c_w>$ denoting the references for *agent*, *time*, *location*, and *world* fixed automatically upon utterance. Throughout this paper, the terms **deictic center** and **context of utterance** are assumed to be generally interchangeable when discussing the problems of indexical reference, though for reasons of clarity the term **deictic center** is preferred when referring to the abstract model of meaning ascription, while **context of utterance** is preferred when referring to the spatio-temporal frame where an utterance is located. The first feature of indexical expressions can be defined as tying their meaning directly to the elements present in the physical context of utterance such as the speaker, the time of speech, or the location of speech.

The distinction between demonstrative and non-demonstrative deictics is not fully agreed upon (Ciecierski 2010, 2019). Many theories claim that all deictics have demonstrative elements or that their meaning can be modelled in terms of demonstrative components, which makes every deictic demonstrative.[1] In this discussion, I follow again the distinction made by Kaplan (1979) that demonstratives

[1] This analysis of deixis in the philosophy of language has been first proposed by Russell (1940) in his theory of egocentric particulars.

are expressions which require (or would at least benefit from) a physical gesture of pointing or a description. Such expressions include *this*, or *that*, which are usually accompanied by nouns such as *this book*, *that woman*, etc. or a pointing gesture as in the command "give me *this [gesture to an object in the context of utterance]*". Indexicals, on the other hand, fix their referents lexically and do not benefit from gestures or descriptions. Indeed, any accompanying gestures are either for emphasis (a speaker saying ***I** will be the one to do the dishes* while pointing at herself) or irrelevant (a speaker saying *I will be the one to do the dishes* while pointing at John still refers to herself, the pointing might be confusing to the audience, but will not semantically override the reference of the indexical or make any contribution to it).

The question about descriptive content in indexical expressions is not a settled debate, since some analyses convincingly suggest that descriptive uses of indexicals are possible (Nunberg 1993, 2004; Kijania-Placek 2014), while other accounts propose formalisations that allow a descriptive nature for all indexicals (Stojanovic 2005). The claim that pure indexicals could be hidden descriptors across the board is unconvincing, because there are no descriptions that could be successfully substituted for indexicals in all contexts to preserve their properties of picking out referents from the deictic center automatically. The lexical rule that allows *I* to fix the speaker is meta-language description that cannot be substituted into actual uses of *I*. Many examples can be found of situations where *I am hungry* and *the person speaking now is hungry* would not be given the same semantic value (Perry 1979, 2001).

When it comes to cases where indexicals appear to be *used* descriptively, especially when co-occurring with certain operators, the problem is more complicated. In rare cases it can be understood that a newly chosen Pope might say *I am usually Italian* to mean that the majority of Popes had been Italian, or someone might say *today is always the biggest party of the year* to mean that the biggest party occurs on the date that also happens to be the date of the utterance. These examples are more compelling. This phenomenon could be explained as a special type of context-dependent anaphora (Kijania-Placek 2015) or a type of quasi-metalinguistic use where the reference rule rather than reference itself enters into the truth-conditions (Perry 2001). Both of those proposals allow to save the intuition about the directly referential nature of the indexicals while explaining descriptive uses semantically, but these solutions are not without issues. This discussion is far from settled and while it remains outside the scope of the present text, it is possible that descriptive uses of indexicals could constitute another avenue for potential application of the mechanism proposed here for cases of the AMP.

For the purpose of presenting the problem it is assumed that indexicals are directly referential expressions (Kaplan 1979), meaning that their only contribution to the semantic value of an utterance is their reference. This assumption is challenged (though not fully rejected) in later sections of the discussions. In this aspect, the semantics of indexicals would be akin to that of proper names. While non-directly

referential expressions such as *a cat* contribute a member of the set of cats that can be defined through descriptive features of cats, the expression *I* contributes the speaker. This is similar to how a description such as *the 45th President of the United States* contributes a set of properties and happens to refer to Donald Trump, but the expression *Donald Trump* simply contributes the person named Donald Trump without reference to any of his properties.

The deictics considered in this discussion are thus a very narrow class of expressions, which refer directly to elements of the deictic center, are not demonstrative, and are modelled as carrying no descriptive content. These expressions are: *I* (in all morphological variants), *here*, and *now*. The indexical operator *actually* is also argued to fit the three features (Lewis 1970), but it does not participate in delayed interpretation paradoxes and is outside the scope of this paper.

The problem presented in this paper deals with one particular instance of a situation in which indexical expressions appear to refer to something different than their relevant deictic center coordinates. Such a phenomenon is called **indexical shift** in more philosophical and truth-conditionally centered theories and **deictic projection** in cognitive approaches as well as psycholinguistics and sociolinguistics (Moore 2010; Åkerman 2017). The solution proposed in this discussion assumes a truth-conditional framework with a distinction between semantics and pragmatics in meaning-generation mechanisms. The present paper argues that conceptualisations of indexical shift in truth-conditional approaches are unsatisfactory and a different mechanism in necessary to explain the discussed paradoxes in such a framework. Therefore, deictic projection as understood in other methodologies is not further analysed here.

2. THE PARADOXES

The most well-known philosophical paradox involving the problem of delayed interpretation of indexicals is the Answering Machine Paradox (Sidelle 1991). One of the consequences of a semantics of indexicals is the observation that the sentence *I am here now* expresses a necessary truth whenever uttered (Kaplan 1989; Predelli 1998a). No particular utterance of the form *I am here now* can turn out false after fixing the propositional content from the deictic center, because in virtue of how speech acts are situated in reality each utterance takes place at some spatio-temporal location. This location becomes the context of utterance and thus fixes the coordinates of the deictic center. Therefore, utterances of *I am here now* must be true based on the uncontroversial fact that whoever is making an utterance (referent of *I*) is at the physical location of utterance (reference of *here*) at the time of utterance (reference of *now*). In light of the same fact, every utterance of *I am not here now* must be false.

Sidelle (1991) observed that in fact true utterances of the sentence *I am not here now* are possible in instances of delayed interpretation, for example when recorded

on an answering machine. When someone attempts to reach another person on a landline and hears the message *I am not here now, try again later or leave your contact information* they interpret the semantic value of the utterance as: the speaker recorded on the answering machine whom they are trying to reach (referent of *I*) is not present at the location of the landline (referent of *here*) at the time of calling (referent of *now*). Excluding atypical circumstances in which the owner of the phone is present but unable or unwilling to respond to the call, such recorded messages are intuitively judged as true.

Further examples can be made that have the same effect. Consider a will opening with lines *since I am now in a better place, it is time to dispose my fortune to the family* or more in the climate of mystery novels, a video opening with the line *if you are watching this recording, I am now dead*. It is quite clear that the *now* interpreted with reference to the context of writing or recording would be false since at the time of creating the token of the utterance, the author was alive. However, knowing the circumstances under which the will would be read and interpreted or the video watched, the author chose to refer to a time after her own death with the indexical *now*, and has apparently done so successfully.

The paradox thus arises from an apparent mismatch between the deictic center fixed upon the original utterance (recording a message on an answering machine, or writing a will) and the deictic center of the utterance at the moment of interpretation (calling a landline and reaching the answering machine or reading the will after the author's passing). For clarity's sake, I call them deictic center of utterance [DC_u] and deictic center of interpretation [DC_i].

DC_u – the set of deictic center coordinates fixed for the situation in which a token of the utterance is first produced by the speaker (act of recording, writing, etc.)

DC_i – the set of deictic center coordinates fixed for the situation in which an interpreter interacts with the existing token in the intended way (plays the recording, reads a written message, etc.).

Two important preliminaries that will be elaborated on in the discussion are in order. Firstly, note the qualifier **intended** in the definition of the DC_i. It is crucial to recognise that not every instance of recorded speech containing indexical expressions will generate a delayed interpretation paradox and require interpretation with respect to a DC_i. Tokens that are recorded, but either not intended to be interpreted at all, or intended for interpretation with reference to DC_u will not require any projecting or splitting mechanisms discussed in following sections. Examples of such utterances include personal journals and diaries, which often include indexicals in descriptions of the author's activities on the day a particular entry is made. Someone reading the diary at a later date (even many years after the author's death) will not interpret these

indexicals with reference to their own context. Instead, they remain fixed at DC_u and refer to the times and places at which events described in the diary took place.

Secondly, since the intentions of recording a token of a given utterance matter in the later fixing of interpretation contexts, there can be multiple DC_is for one token created by the DC_u. For example one message on an answering machine can be played back many times over the course of being owned by a particular individual. Each time it is played back, a new DC_i is fixed for the purpose of interpretation.

The exact ways of fixing relevant DC_is for a recorded token of an utterance are discussed in the last section.

3. THE SOLUTIONS

Two categories of solutions are generally proposed to this problem in analytic philosophy of language. This categorisation relies on the tenets of truth-conditional semantics accepted in this paper that semantic content is literal and truth-evaluable, while pragmatic content may supervene on the literal utterance, but is not strictly speaking the meaning of an utterance (Grice 1967; Borg 2004). The first category are pragmatic solutions, which claim that the indexicals contained in paradoxes from delayed interpretation actually always refer to the coordinates of the DC_u regardless of interpretation conditions and the utterances are always false (Borg 2004; Powell 1998; Connolly 2017). These solutions explain the apparent shift in indexical reference to coordinates of another context by arguing that the shifted reference is pragmatic arising due to conversational mechanisms. A simple Gricean analysis can reveal the calculation necessary to start from a false and irrelevant message interpreted in reference to the DC_u to a true and relevant message by simply reasoning about the intention of the message to be played back at DC_i (Grice 1967; Neale 1992). Literally, the recorded message still states that the speaker is not present at the location of the landline at the time of recording, but pragmatically this false message can convey the implicature that the speaker is also not present at the location of the landline at the time of calling.

An important argument in favour of pragmatic solutions is that the DC_u interpretation is available to the semantic reasoning. Connolly (2017) argues that shifted interpretations of indexicals in Answering Machine type problems are generalised conversational implicatures. Against an earlier claim by Cohen and Michaelson (2013) that the content of answering machine recordings at DC_i cannot be an implicature because it is not cancellable, Connolly makes an argument from pedantic humour. He observes that implicatures based on falsehoods in general face problems with cancellability since implicature cancellation demands falling back on the literal content, which in the case of a message like *I am not here now* is not a useful strategy. However, since the only indexical shifted in this scenario is the *now* (from the time of recording [DC_u] to the time of playback [DC_i]), he proposes to

change the message to *I am not at home now*. The tension between DC_u and DC_i interpretations still arises – the literal interpretation would mean that the speaker was not at home at the time of recording (likely false, since the message was probably recorded at the intended location of the landline, that is the speaker's home), while the useful interpretation is that the speaker is not at home at the time of calling (likely true, otherwise the speaker would have answered the phone).

Connolly notes that while his alleged implicature arises as expected in normal cases, it can be cancelled with pedantic humour assuming the recorded message interpreted at DC_u is true. He proposes to imagine a situation where the phone owner purchases an answering machine for their phone and decides to record the message to be played back at the store with the help of the clerk. The resulting recording could be something like this:

> I am not at home now: I'm recording this in the shop. And when this is played back I probably won't be home; although I might be home but just not bothered to pick up. (Connolly 2017)

In this case, Connolly argues, the first statement *I am not at home now* carries the implicature of shifting the interpretation of *now* to the time coordinate of DC_i, but the second part of the recording cancels this implicature and reverts the interpretation to the literal content, which consists of the temporal coordinate of DC_u. This possibility to recover semantic access to DC_u is an important point in favour of the otherwise unsatisfactory pragmatic solutions.

The reason why pragmatic solutions like the one proposed by Connolly are generally unsatisfactory is that pragmatic effects supervening on false statements is a category that delayed interpretation problems do not seem to fit neatly into. Gricean pragmatics assumes that while a statement can contribute implicated conversational content on top of the conversationally inappropriate literal content, the speaker is still responsible for the truth of what is said (Grice 1967; Sadock 1978; Neale 1992). With the exceptions of effects such as irony and metaphorical speech, where no literal content can be fallen back onto, the literal message uttered should be true (though conversationally faulty). In the case of an utterance of *I am not here now*, the mechanism does not work, which in fact is what forced Connolly to alter the example for postulating an implicature. The interpretation at DC_u is recoverable in terms of our awareness of a lapse in time and space between recording and playback, but it is not semantically useful. The only interpretation that has any truth-conditional consequences is the interpretation at DC_i. So while the availability of original deictic coordinates should be accounted for, centering them as the literal content of the utterance with additional content triggered pragmatically is not an acceptable solution.

The second class of solutions to the problems of indexical shift by delayed interpretation are semantic solutions. These approaches are much more heterogeneous

than pragmatic solutions, but agree on the claim that the content calculated at a relevant DC_i in the case of recorded messages is the actual semantic content and can undergo literal truth-evaluation. In other words, semantic solutions favour indexical shift for Answering Machine Problem type examples (Predelli 1998a, 1998b; Recanati 2001, 2004; Mizuta 2015).

Since indexicals are still presumed to be directly referential, that is contributing only their referent to the semantic value, solutions to AMP that opt for indexical shift must question one of Kaplan's assumptions about the mechanism of indexical reference. One of such solutions would be arguing that while indexicals generally refer automatically, their rule for reference can be overridden by an operator. Kaplan famously rejected such an idea, but treating indexicals as expressions that can be influenced by certain modal operators is an interesting proposal. When it comes to delayed interpretation paradoxes such as the AMP, adding an explicit operator might make the shifted reading even more natural, for example in a sentence such as *if you are watching this recording, I am now dead* (Santorio 2010; Giorgi 2010). It is clear, that the speaker could not have been dead at the time of recording, so there is intuitive merit to the claim that the antecedent *if you are watching this recording* shifts the context of evaluation for the consequent to the DC_i in which someone is watching the recording. The problem is that in the case of AMP no antecedent is necessary to evoke the shift, but implicit operators for shifting indexicals have been proposed for other types of discourse.[2]

Another semantic solution is to claim that certain indexicals can be ambiguous and while sometimes the words *I*, *here*, and *now* behave as described above, they have also other potential meanings. One approach proposed by Recanati (2001) was to treat *here* and *now* not as indexicals *per se*, but as perspectivals, which would work in a more-or-less Kaplanian way, but contain an additional parameter of perspective. This way, while the rules of semantic reference would allow indexicals to refer to their deictic center coordinates in normal cases, the deictic center could be altered if a different perspective coordinate fixed the need for a shifted reading. Kaplan himself reflected on the possibility that *now* could potentially have a scope that would allow it to refer to the time of playback rather than time of recording in answering machine cases (Kaplan 1989, p. 491). However, this is only briefly mentioned in a footnote and it is unclear how his semantics would accommodate this issue systemically considering the reference of indexicals is supposed to be automatically fixed upon utterance. This would mean that if a speaker uttered a sentence containing the *now* indexed to DC_i, it would either not count as an

[2] The most controversial implicit operator in formal semantics is David Lewis' (1978) fictional operator that would fix the evaluation of everything in its scope to a fictional possible world. Since fictional stories often do not contain any explicit statements of their fictional status while still being understood by readers as fiction and not evaluated with respect to the actual world, this operator is thought to be implicit. Exploring the drawbacks of this proposal is outside the scope of this paper.

utterance until it was played back in DC_i or it would count as an utterance but somehow remain unevaluable semantically until DC_i coordinates became available upon playback. Neither of those solutions seems in line with Kaplan's broader understanding of indexicals.

Another interesting semantic solution to indexical shift especially pertinent to the following discussion is that the requirement of proper contexts must be dropped, thus allowing utterances made by agents not physically present at the location and time of utterance (Predelli 1998a, 1998b; Perry 2001). This would basically turn each playback of the recording into a new utterance made "long distance" by the speaker, thus turning each DC_i into a DC_u for a new sound token of the recorded message. The deictic centers thus fixed would be unusual in that the agent coordinate would not be physically present at the time and space coordinates of the context of utterance, thus allowing the evaluation of such a sentence to turn out true. This is ontologically problematic, but linguistically satisfactory, since it seems to capture the intuition used in processing such recorded messages – we indeed imagine the speaker informing us in real time of their absence at the place we called. If it turned out that the speaker was indeed at home at the time of calling and simply decided to let the recorded message play back by not answering the phone, we would judge the recorded message to be false. Not because we judge it with respect to the DC_u of recording, but because we judge it with respect to the DC_i of a particular call. If the speaker is absent then, the message is true. If they are present, but simply do not answer, then the message is false.

It can be argued, against the idea of allowing improper contexts to model as the deictic center, that we accept these playback recordings as separate utterances because we understand what purpose they were recorded with and that they are indeed recordings. Someone who has never encountered an answering machine before might be confused upon hearing the message if they believed that instead of a recording they are hearing an utterance delivered in real time. This is a valid criticism going back to the observation made in the previous section that indexical shift to DC_i does not arise for every instance of a recorded message containing indexicals. In order for the shift to be successful, the interpreters must be aware either of the convention that the speaker is making use of like in the case of answering machines, or of the speaker's intention to shift the interpretation to the interpreter's DC_i (sometimes communicated explicitly like in the examples with the qualifier *if you are watching this recording, I am dead*).

Furthermore, it is unclear whether content fixed automatically before the reference of an indexical was shifted by a hypothetical monster would be recoverable for instances of apparent cancellation like in the case provided by Connolly (2017). While usually the reading at DC_i is the only relevant message provided by such instances, the metaphysical intuition captured in LD that there is always a primary context of utterance that adheres to the rules of automatic reference fixing for

indexicals is difficult to shake in light of the fact that such a context is always recoverable for any apparent indexical shift. This problem is remedied by the solution proposed in this paper, which allows semantic and cognitive access to both coordinates along with a mechanism for favoring either the DC_u or DC_i interpretation in a more nuanced fashion.

4. POLISH LOCATIVE COPULA "NIE MA"

While the main problem with potential indexical shift in delayed interpretation paradoxes results from the mismatch of coordinates between DC_u and DC_i, there is additionally a syntactic phenomenon worth considering in apparently true utterances of *I am not here* in Polish. The claim of this paper is not that Polish may elicit indexical shift in instances where English would not or that indexical shift in Polish may be governed by a different syntactic mechanism. Quite to the contrary, the evidence from Polish inspires a mechanism that, it is argued in the present paper, can be generalised onto other languages for the purpose of explaining indexical shift in instances of delayed interpretation.

In Polish, the copula of locative and existential statements in the present tense systematically switches from a *be* to *have* under negation (Witkoś 2000; Twardzisz 2012). Furthermore, this switch is connected with the Genitive of Negation on grammatical subject nouns (Witkoś 2000, 2008). Consider the examples:

1.	Janek	ma	książkę.	
	John.NOM	have.PRES.sg.3	book.ACC.sg	
	"*John has a book*"			
NEG1.	Janek	nie	ma	książki.
	John.NOM	NEG	have.PRES.sg.3	book.GEN.sg.
	"*John does not have a book*"			

2.	Książka	jest	na	stole.	
	Book.NOM.sg.	be.PRES.sg.3	on	table.LOC.sg	
	"*The book is on the table*"				
NEG2.	Książki	nie	ma	na	stole.
	Book.GEN.sg	NEG	have.PRES.sg.3	on	table.LOC.sg
	"*The book is not on the table*"				

3.	Jestem	w	domu.		
	be.PRES.sg.1	in	house.LOC.sg		
	"*I am at home*."				
NEG3.	Nie	ma	mnie	w	domu.
	NEG	have.PRES.sg.3	I.GEN	in	house.LOC.sg
	"*I am not at home*"				

The Genitive of Negation [GoN] is a change of case to Genitive under main verb negation that arises for certain categories of verbs. It is present as obligatory in Old Church Slavonic and preserved in Polish as well as some other Balto-Slavic languages (Pirnat 2015). In Polish, it usually concerns direct object nouns, which switch from Accusative in the affirmative to Genitive in the negative. An example of a typical occurrence can be seen in (1) – since the verb *mieć* (to have) licences GoN, the case of the object *książka* (book) switches from the normal accusative (*książkę*) to the genitive (*książki*) when the main verb is negated. The subject noun keeps its Nominative case under negation.

Examples (2) and (3) show a less typical, but also prevalent case of GoN in Polish where the case switch concerns the subject noun. This is a Nominative-to-Genitive switch under main verb negation rather than the usual Accusative-to-Genitive. Notice, that in (2) the noun *książka* (book) is clearly the subject of the verb *być* (to be) in a typical locative construction. However, in NEG2 the verb has switched to a negated *mieć* (to have) and the noun *książki* (book) obtained a Genitive case marking paralleling the way direct objects typically behave in Accusative-to-Genitive GoN constructions.

Witkoś (2000) posits an analysis of this phenomenon in terms of a change in subjecthood status of the noun undergoing a change in case. The copula *nie ma* in negated locative constructions does not exhibit any morphological features expected of a proper copula with reference to its subject. In Polish, verbs tend to exhibit morphological agreement with their subject noun on features of number and sometimes gender.[3] While in affirmative constructions this is exactly the case (the verb *to be* realised in 3rd person singular in (2) *jest*, and as first person singular in (3) *jestem*), all the negated sentences realise the verb with the default third person singular agreement features. Lastly, Polish is a *pro*-drop language, which means that the subject of a sentence does not need to be overt. In (3) the first person singular pronoun, which is the subject of this sentence lacks an overt realisation, instead leaving the agreement features on the verb to suggest the person and number of the *pro*. Objects, on the other hand, must be realised overtly whenever the arity of a verb demands it. Notice how in (3) the *pro* is dropped and there is no first-person pronoun realised in the sentence, but NEG3 requires this pronoun to appear overtly marked for Genitive (*mnie*).

All of these observations suggest that the subject nouns of locative constructions no longer behave like subjects under negation, taking instead the grammatical function of objects. Since the Genitive-marked noun appears to lose subjecthood, an alternative candidate for the subject of these sentences would be the locative phrase (Twardzisz 2012). In the case of NEG2, the subject would be the locative phrase *na*

[3] Depending on tense. Verbs in present tense usually do not have gender agreement with the subject noun, while verbs in the past tense tend to be marked for gender.

stole [on the table], while the *book* would turn into an object in a construction with the closest English rendering in terms of *on the table is where the book isn't* or *on the table is what does not have the book*. There are some compelling arguments that locative and adverbial phrases can semantically function as nominals when they express nominal concepts such as referring to a particular area where the book is not located, and thus could be suitable candidates for subjecthood (Twardzisz 2012; cf. Langacker 1991). However, as mentioned above, the locative phrases are not grammatically necessary in the negated sentences. A sentence such as *Nie ma jednorożców* [NEG; have.PRES.3sg; unicorns.GEN] is perfectly grammatical and generally interpreted as existential, meaning that there are no unicorns anywhere which is why it does not need to be specified. Similarly *nie ma chleba* [NEG; have.PRES.3sg; bread.GEN] just means that there is no bread *somewhere*. Depending on the context, it could be that there is no bread at someone's home, someone's favourite bakery, or there is no bread anywhere in the region due to a massive famine. While it could be argued that Polish is *pro*-drop and for this reason the locative phrase subject does not need to be overt, this is a weak explanation in light of the fact that a better one is available as argued by Witkoś (2000, 2008).

The subjects of these negative locative constructions, Witkoś argues, are expletives that allow only for default agreement with the copula.[4] This means that the main nouns are functionally objects in negative locative or existential constructions, while the subjects of these sentences are semantically null and only

[4] When functioning in possessive constructions, the verb *mieć* (to have) also agrees with subjects in features of number and sometimes gender. In these circumstances, the agreement features do not change under negation.

4.	Kasia	i	Janek	mają	książkę.	
	Katie	and	John	have.PRES.pl.3	book.ACC.sg	
	"*Katie and John have a book*"					
NEG4.	Kasia	i	Janek	nie	mają	książki.
	Katie	and	John	NEG	have.PRES.pl.3	book.GEN.sg
	"*Katie and John do not have a book*"					

5.	Mam	książkę.	
	Have.sg.1	book.ACC.sg	
	"*I have a book"*		
NEG5.	Nie	mam	książki.
	NEG	have.sg.1	book.GEN.sg
	"*I do not have a book*"		

In the case of negative locatives and existentials, only the third person singular default agreement "nie ma" is possible regardless of the number and gender of the subject noun in affirmative versions. This is evidence of the fact that the copula no longer agrees with the main noun (which together with the licensing of GoN suggests that these nouns function as objects) as well as of the fact that whatever subject the copula does agree with is never overt and licenses only default agreement.

posited for reasons of grammaticality. The closest English equivalent to NEG2 would in this case not be *the book is not on the table* as it is usually translated, but rather *there is no book on the table* with the expletive subject construction *there is*.

Crucially, English does not allow the negated dummy subject construction *there is no x* for instances where *x* refers to something specific. Note how *the book is not on the table* is grammatical, while *a book is not on the table* is not. Instead, the construction *there is no book on the table* is used when no particular book is being talked about and the point of the utterance is rather to state something about the state of the table (not having any books on it). In line with this pattern, the construction *there is no x* is not possible for proper names (**there is no John at the party*) or personal pronouns (**there is no I/me at home*). This division is not present in Polish, which instead exhibits a uniform pattern of negation for all subjects, including pronouns and proper names, thus allowing the pronoun *I* ("ja") to become the genitive object of a semantically subject-less construction like in NEG3.

It is important to stress here that the change in case does not annul the indexical nature of the first person pronoun in Polish. However, it does create a cognitive distance between the speaker actively making a statement (the coordinate fixed to the deictic center automatically) and the coordinate being referred to by the pronoun. Similarly to how in the English sentence *John pushed me into a lake* the first person pronoun marked for Accusative *me* is still indexical and thus refers to the speaker coordinate of the context of utterance, the first person pronoun marked for Genitive in Polish also does not lose its indexical properties. In the vast majority of instances, this change in case would not be semantically remarkable. However, the fact that it concerns locative and existential constructions adds another layer of cognitive complexity to these examples.

True negative locatives and existentials create semantic problems simply in virtue of the ontology and cognitive features of the referents of such statements (Catwright 1960; Voltolini 1994). There is a legitimate argument to be had for whether a true claim that something is *not* located in a given space is a claim about the object whose presence (or existence) is being negated, or about the location which is not occupied by either a specific object or any object of a given type (Atlas 1998). This issue is generally separate from the Answering Machine Problem, because the problems of negative locatives with indexicals do not tend to arise outside of the discussions around delayed interpretation. This is precisely for the reason that in any more ontologically-focused discussion it is assumed that negative locatives with agent and place indexicals cannot be true.

The tension that arises ontologically in Answering Machine type sentences is captured in the disagreement between proponents of semantic and pragmatic solutions to the problem. If these sentences are true in the semantic sense, then it must be the case that utterances can be successfully made and fix indexical reference without the basic requirement of the speaker being physically present at the place

and time of utterance. This premise is difficult to accept, because of the ontological notion that each utterance has an author and this author is located in space and time while making an utterance. Therefore, even for messages intended for delayed interpretation, the circumstances of producing the token that carries the content over to another interpretation context are possible to recover. Even knowing that the recorded message *I am not here now* one hears on an answering machine ought to be interpreted with reference to DC_i fixed by the instance of playback, any recipient understands that there is a DC_u at which the owner of the recorded voice actually uttered the words into a recorder. This is why the concept of full semantic indexical shift is so unappealing to many philosophers working in the analytic tradition that relies on an ontologically grounded notion of reference. It is simply metaphysically implausible to imagine true negative locatives of this sort being uttered, since this requires an agent speaking from outside their own deictic center.

The examples from Polish allow for considering a more refined intuition. While strictly truth-conditionally utterances of a sentence such as *I am not here now*[5] are also necessarily false upon utterance, they feel much less metaphysically implausible. This is because the first-person pronoun is an object marked for Genitive, but there is no semantic subject to focus the context of utterance, so the speaker is more removed from the interpretation of the content in virtue of the grammar.

Based on this intuitive removal, the notion of deictic center split is proposed. While in English much of the focus is placed on the indexical *now* in the Answering Machine Paradox, since it is clear that *I* refers to the same speaker on both interpretations (the person who recorded the message is the same one who is not present at the time of calling), I argue that data from Polish suggests that what really splits the deictic center is the speaker coordinate. The indexicals *here* and *now* fix a DC_i with respect to the time of playback automatically in virtue of the type of interaction that calling a phone is. What creates the paradox in these recorded messages is the whereabouts of the speaker. Intuitively, we interpret the recorded message of *I am not here now* as an utterance made by the speaker with reference to DC_i where the interpretation of *here* and *now* are relevant for the receiver of the message – the place where this recorded message is uttered (the location of the landline the receiver is trying to reach) and the time of calling. However, in order to make such an utterance, the speaker would have to be physically present at the relevant time and location thus making the utterance false. Thus, the paradox arises – the speaker is present at the time and location of utterance in order to make the utterance and complete the proper deictic center, but at the same is not present because the utterance is true and made via a recorded message, which allows the speaker to as-if make the utterance long-distance.

[5] Nie ma mnie tutaj teraz.
NEG have.PRES.sg.3 I.GEN here now
"*I am not here now*"

There is a crucial feature of the context of utterance and thus the deictic center that is rarely mentioned explicitly, but seems to illuminate this discussion. This is the fact that while the notion of deictic center comes up as relevant only in analyses of deictics, all utterances automatically fix the DC_u coordinates simply in virtue of being made by someone and situated spatio-temporarily (Kaplan 1979). This means that even utterances that do not contain overt deictics such as *a bachelor is an unmarried man*[6] do have a deictic center with coordinates for speaker, time, and location filled automatically upon utterance. The difference between statements with and without overt deictics is that the truth-conditions of a statement such as *a bachelor is an unmarried man* can be defined regardless of any particular deictic center, because they will be the same for any given utterance. Defining the truth-conditions of an utterance with overt deictics such as *I am not here now* requires knowing the relevant context of utterance and thus the deictic center coordinates.

This semantic duality is captured more clearly in the grammatical structure of Polish negated locatives. The deictic center DC_i fixed upon playback of the recording contains the place-holder for the speaker coordinate along with the time and location coordinates as a proper deictic center should in order to be fit for semantic evaluation. This DC_i is fixed in accordance with Kaplanian rules from the context of utterance, meaning that the speaker coordinate is assumed to be located in the space where the recording is played from, that is the landline with the answering machine. However, the physical person who is the reference of the indexical *I* is not located in that space at the time of DC_i.

There are two ways out of this – either assuming the truth of the recorded utterance via empty reference (the speaker coordinate of DC_i is not filled by any person) or allow the reference of the of indexical *I* to be filled by the person whose voice is recorded on the answering machine at a distance, thus allowing an indexical to refer to something from outside of the deictic center. The first solution cannot be accepted in a truth-conditional framework, since reference failure of indexicals does not allow for any semantic content to be calculated thus rendering the utterance meaningless, which is counterintuitive.[7] Therefore, this paper argues for the second option, which is achieved not through a shift in the evaluation, but through a split

[6] It is unclear whether perfectly non-deictic utterances exist in natural language at all, since all full propositions must contain a tensed verb, which already ties the interpretation to a temporal coordinate of the utterance (Sayward, 1968). Furthermore, the evaluation always takes place with respect to a specific possible world in the modal framework, which is also rarely specified, but potentially necessary for a full truth-conditional evaluation. If non-deictic utterances exist at all, the likeliest candidates are tautologies and analytic truths since the definitional "is" in the example given is the closest a tensed verb can get to not semantically requiring a temporal interpretation.

[7] In a strict interpretation of LD reference failure for indexicals is not even *possible* in the strong sense of logical possibility for the ontological reasons already discussed extensively – for an utterance to exist, it must be made by *someone* at *some time* and *some place.*

that allows to keep the speaker coordinate of DC_i unfilled while at the same time fixing the reference of the indexical *I* to the speaker of DC_u who is outside the context of utterance (playback) at the time of playback. Through this split, the content *I am not here now* as played back on an answering machine can turn out semantically true while at the same time not overgenerating and forcing indexical shift across the board for all types of recorded speech.

5. DEICTIC CENTER SPLIT

The solution that has already been hinted at throughout the paper consists of modelling indexical reference as a mechanism that relies on a more nuanced notion of deictic center than a simple logical codification of the context of utterance coordinates. The main tenet of my approach is to add an additional layer of abstraction to the notion of the deictic center and construct it not as a set of coordinates to be filled by entities, but as a set of roles to be filled by entities. This way, the speaker (agent) coordinate of the deictic center may encompass the roles of utterer (a_u) or recorder (a_r). These roles are connected for a recorded utterance of the Answering Machine Problem type in virtue of the fact that the recorder of the token is the same entity as the utterer of each instance of playback. This relationship is akin to that of anaphoric reference where a fixed antecedent lends its reference to expressions bound to it by rules of grammar or discourse.

In the instance of recording, at DC_u, the a_u and a_r roles are collapsed together and their reference is filled by whoever the speaker happens to be. The time and location coordinates are also fixed automatically from the context of utterance. When the token is played back, a new deictic center [DC_i] is fixed from the perspective of the interpreter. The time and location coordinates are once again filled from the context of utterance (assuming that the physical location of the answering machine is where the utterance takes place). The speaker coordinate for DC_i is also filled from the new context of utterance and turns up empty, since there is no speaker present at the location of the landline – only the recording of their voice, which is not an entity that can serve as a reference for *I*. Therefore, the speaker coordinates of DC_i splits in order to find an appropriate referent to complete its propositional content. The key is that this process takes place with the fact of this entity's absence at the context of utterance already logged semantically, which allows the utterance upon playback to be true despite it having been false at DC_u.

Fixing a referent to the deictic center that is not located at the context of utterance is tricky, because this is the point where most attempts at indexical shift are in danger of over-generating. Splitting the deictic center rather than shifting it altogether allows better control of where the reference of a shifted indexical will end up coming from because of the required relationship between entities filling each role. In this case, since the original speaker of a_u is not present at DC_i, the role of a_r is

filled by the same entity even though it is located in a different spatio-temporal context than the other coordinates of DC_i. This is illustrated intuitively in the Polish examples, where even though the statement is made in first person, the pronoun designating the speaker is cognitively removed from the deictic center by the Genitive marking and lack of grammatical subjecthood. The semantically null subject in these utterances corresponds well with the ontological notion of the default speaker coordinate of the DC_i remaining unfilled.

The Polish construction can also grammatically show the split going the other way around. Imagine a speaker uttering the sentence *I am not at home now* in face-to-face conversation. Let's say Mary asks Jane *is your brother at home now?* to which Jane replies *I don't know. I am not at home now, I am here*. In Polish, the second sentence of Jane's answer would make use of the first person pronoun in two different cases – the Genitive for the negated part and the Nominative (on a pronominal potentially dropped as *pro*) for the affirmative part.

6. Nie ma mnie teraz w domu, jestem tutaj.
   NEG have.PRES.sg.3 I.GEN now in house.LOC.sg be.PRES.sg.1 here
   "*I am not at home now, I am here*"

In this brief outline, it can be noted that DC_u and DC_i are generally separate deictic contexts fixed for separate utterances and the connection between them comes up only when a relevant interpretation of potential indexical shift is required. The question thus arises whether this mechanism really would not over-generate in instances of recorded speech that does not warrant a shifted interpretation such as for instance a diary. Here, an argument back to the intended interpretation can be made to show how a diary that is not intended to be interpreted outside of the context of writing, whereas a message left on an answering machine serves the purpose of communication removed through space and time, thus warranting a deictic center split.

This argument tends to not be strong enough for a truth-conditional framework. Proponents of a distinction between semantic and pragmatic mechanisms in meaning-generation that truth semantics relies on claim that speaker intentions belong to the category of pragmatics and for this reason cannot shift the reference of an indexical expression semantically (Borg 2004). A more objective measurement of the shift is necessary to license a semantic mechanism. This mechanism would still be situation-dependent and different for every type of indexical shift, but for Answering Machine type sentences, the indexical shift could be triggered either by the type of situation a negative locative construction describes, the dialogue-like structure of the recorded message, or both.

How the type of locative situation would trigger indexical shift is illustrated by the examples from Polish grammar. Speaking about something that is not located in

a defined setting cognitively removes the object from the focus of the utterance. This is not visible in English grammar, since nouns whose presence or existence is denied can still grammatically behave like subjects of the utterance. In Polish, however, this dissonance between stating that something somewhere versus something not being somewhere is visible in the surface grammar of even perfectly unmarked uses. Therefore, removing the reference of the first person pronoun from the deictic center in uses such as the Answering Machine paradox type sentences is a natural consequence of the Nominative-to-Genitive GoN construction with an expletive subject. If a reference-based framework is to be preserved, the indexical must refer to something. Thus, if no referent is removed from the deictic center fixed in the context of utterance, a mechanism of indexical shift must be proposed.

The second mechanism that enforces the proposed analysis of the deictic center split for the Answering Machine Paradox type sentences is that this particular type of recorded speech is designed to mimic a dialogue at DC_i (Dingwall 1995). The purpose of a recorded message on an answering machine is to make the caller behave as-if they have reached the person they were telephoning by in turn recording their own message on the answering machine, which can then be used by the owner of the phone at a later date to return the call. Therefore, even though the speaker (recorder) is not physically present at the location of the landline, the caller is expected to behave as if they could have something like a dialogue. Upon hearing the recorded message, the caller responds by stating the issue they were calling with by addressing the answering machine as if they were addressing the (absent) speaker. This way, it is plausible to interpret both statements with reference to the same deictic center coordinates for the speaker and the caller so that classic Kaplanian-type communication using indexicals can occur. Thus, "here" is fixed with respect to the location of the landline as it would if the speaker were physically present and uttering the message upon answering their phone. *Now* is fixed to the time of calling for the same reason – it is the temporal coordinate that the caller shares with the speaker (via recorded message) as is the case in communication where the speaker is present. And finally, the *I* notes the empty speaker coordinate at the DC_i fixed by this communicative situation and therefore defaults to DC_u for a physical entity that can act as an appropriate reference of an indexical in accordance with Kaplanian metaphysics.

This mechanism is similar to a mental-spaces based approach proposed by Mizuta (2015) who argues that Kaplanian semantics for Answering Machine type utterances can be saved if we allow a speaker of a context of utterance to be something else than a physical human entity. He proposes that the reference of the *I* in these messages is filled with a logical identity of the speaker. He calls this logical identity Agent_log, which can act as a reference in a proper context of utterance while being ultimately referentially empty in virtue of the blend of cognitive spaces between our representation of the physical identity of the person whose phone we are reaching and Agent_log when we hear the recorded message. The proposed

approach of splitting the deictic center seems to be even more acceptable for Kaplanian metaphysics, with the empty speaker coordinate at DC_i not acting directly as a reference, but allowing the referential process to pick out the other speaker role out of those available in the linked DC_is of this particular token back to the original DC_u. Ultimately, this approach allows for capturing the essence of the semantic indexical shift solutions without sacrificing either Kaplanian metaphysics or the pragmatic intuitions of accessibility of original coordinates.

Splitting the deictic center coordinates rather than shifting them has potential applications for other cases of indexical shift. A particularly interesting one that warrants further study would be first person narration in discourses of literary fiction, which tends to be extremely difficult to explain in truth-conditional frameworks. It is clear that in stories narrated in the first person, the indexicals *I* have a fictional speaker and are not a real author's false autobiography. On the other hand, many semantic solutions seeking to shift the interpretation of fiction entirely into a fictional context erase the possibility of semantically retrieving information about the fiction's author, which is problematic especially in borderline cases of quasi-autobiographical fictions (Lewis 1978; Predelli 2020). Tying the roles of author (a_a) and narrator (a_n) in the deictic center through perhaps a relation of pretense (Currie 1990) or mimesis (Walton 1993) where the author pretends to be the narrator for the purpose of the fiction is an avenue for further research into this mechanism.

Furthermore, the concept of deictic center split could potentially be useful for explaining operator-governed indexical shift in cases where no delayed interpretation paradox arises, but instead a counterfactual context must be produced. Utterances such as *if I were you, I would marry me* (Giorgi 2010) give proponents of truth-conditional semantics a real headache, because a system that can track all the uses of *I* in this statement and not return a semantic value where someone is to marry themselves appears incompatible with Kaplan's intuitions. It would certainly be worth exploring in future research whether the antecedent in those cases could split the speaker coordinate of the deictic center so that it could track their hypothetical counterpart in a counterfactual context.

The present discussion has presented only a sketch of a potential mechanism for solving instances of indexical shift in AMP type scenarios based on grammatical intuition that cannot be observed in English. It is possible that other instances of indexical shift through deictic center split would also benefit from cross-linguistic studies.

6. CONCLUSION

Analysing indexical shift in terms of a deictic center split instead of a complete replacement of one set of deictic coordinates with another allows for a more nuanced approach to this phenomenon without giving up key tenets of truth-conditional

reference-based semantics. In this paper, I argue for applying the notion of alternative deictic centers for different tokens of an utterance linked via this token as a solution to the problems posed by Answering Machine Paradox type utterances. This approach necessitates neither overriding original deictic coordinates fixed at the context of recording nor arguing for improper context of utterance that violate Kaplanian metaphysics. Still, it provides grounds for obtaining semantic truth-conditions with shifted deictic reference to analyse recorded messages of the form *I am not here now* as literally true upon playback.

For the case argued in this paper, the solution of deictic center split is inspired by Polish grammar and the phenomenon of GoN present in negated locative constructions, which suggest a cognitive distancing of the speaker coordinate from the reference of terms in an utterance even when deictic pronouns are used. However, the notion of deictic center split requires more research as it could potentially be applied to other problematic cases of potential indexical shift in truth-conditional frameworks. In the case of the answering machine message, the agent coordinate can encompass the roles of speaker upon playback and original recorder with one role remaining empty to fill DC_i and set the correct truth conditions for the utterance, while the linked role provides an actual reference for the indexical completing the propositional value of the utterance. A similar idea could perhaps be applied to literary fiction narrated in first person where the roles of author and narrator could interact in a split deictic coordinate. Such an analysis might explain the phenomenon of truth-in-fiction and indexical reference to non-existent objects, but whether or not this could still be argued without rejecting Kaplanian metaphysics remains to be studied.

References

ÅKERMAN, Jonas (2017): Indexicals and Reference-Shifting: Towards a Pragmatic Approach. In: *Philosophy and Phenomenological Research*, Vol. 95, No. 1, pp. 117–152. DOI: 10.1111/phpr.12216.

ATLAS, Jay David (1988): What are negative existence statements about? In: *Linguistics and philosophy*, Vol. 11, No. 4, pp. 373–394. DOI: 10.1007/bf00668680.

BAR-HILLEL, Yehoshua (1954): Indexical expressions. In: *Mind*, Vol. 63, No. 251, pp. 359–379. DOI: 10.1093/mind/lxiii.251.359.

BORG, Emma (2004): *Minimal semantics*. New York: Oxford University Press. 285 p.

BUHLER, Karl (1982): The deictic field of language and deictic words. In: R. Jarvella – W. Klein (eds.): *Speech, place and action: Studies in deixis and related topics*. New York: Wiley, pp. 9–30.

CARTWRIGHT, Richard L. (1960): Negative existentials. In: *The journal of philosophy*, Vol. 57, No. 20/21, pp. 629–639.

CIECIERSKI, Tadeusz (2019): Hybrid expressions. In: G. Bella – P. Bouquet (eds.): *11th International and Interdisciplinary Conference on Modeling and Using Context*. Cham: Springer, pp. 51–61.

CIECIERSKI, Tadeusz (2010): Varieties of Context-Dependence. In: P. Stalmaszczyk (ed.): *Philosophy of Language and Linguistics: Volume I: The Formal Turn*. Germany: De Gruyter. pp. 63–84.

COHEN, Jonathan – MICHAELSON, Eliot (2013): Indexicality and the answering machine paradox. In: *Philosophy Compass*, Vol. 8, No. 6, pp. 580–592. DOI: 10.1111/phc3.12039.

CONNOLLY, Niall (2017): I'm Here Now, But I Won't Be Here When You Get This Message. In: *Dialectica*, Vol. 71, No. 4, pp. 603–622. DOI: 10.1111/1746-8361.12208.

CURRIE, Gregory (1990): *The nature of fiction*. New York: Cambridge University Press. 219 p.

DINGWALL, Silvia (1995): "Hello. This Is Sally's answering machine." Deixis in answerphone messages. In: *Bulletin VALS-ASLA*, Vol. 62, pp. 129–153.

FILLMORE, Charles J. (1966): Deictic categories in the semantics of 'come'. In: *Foundations of language*, Vol. 2, No. 3, pp. 219–227.

FUCHS, Anna (1993): *Remarks on Deixis*. Heidelberg: Julius Groos Verlag. 80 p.

GIORGI, Alessandra (2010): *About the speaker: Towards a syntax of indexicality*. Oxford Studies in Theoretical Linguistics No. 28. Oxford: Oxford University Press. 229 p.

GRICE, Paul (1967; 1989): *Studies in the Way of Words*. Harvard University Press. 406 p.

KAPLAN, David (1979): On the logic of demonstratives. In: *Journal of philosophical logic*, Vol. 8, No. 1, pp. 81–98.

KAPLAN, David (1989): Demonstratives: An Essay on the Semantics, Logic, Metaphysics, and Epistemology of Demonstratives and other Indexicals. In: J. Almong – J. Perry – H. Wettstein (eds.): *Themes from Kaplan*. New York: Oxford University Press. pp. 481–56.

KIJANIA-PLACEK, Katarzyna (2014): Situation semantics, time and descriptive indexicals. In: P. Stalmaszczyk (ed.): *Semantics and beyond. Philosophical and linguistic inquiries*. Berlin: Walter de Gruyter, pp. 127–148. DOI: 10.1515/9783110362480.127.

KIJANIA-PLACEK, Katarzyna (2015): Descriptive indexicals, propositional attitudes and the double role of context. In: H. Christiansen – I. Stojanovic – G. Papadopoulos (eds.): *Modeling and Using Context: 9th International and Interdisciplinary Conference, CONTEXT 2015, Larnaca, Cyprus, November 2-6, 2015. Proceedings.* Springer International Publishing, pp. 287–301.

LANGACKER, Ronald W. (1991): *Foundations of Cognitive Grammar, vol. 2, Descriptive Application.* Stanford: Stanford University Press. 589 p.

LEVINSON, Stephen C. (2004): Deixis. In: L. Horn – G. Ward (eds): *The handbook of pragmatics*. Cornwal: Blackwell, pp. 97–121.

LEWIS, David (1970): Anselm and actuality. In: *Noûs*, Vol. 4, No. 2, pp. 175–188.

LEWIS, David (1978): Truth in fiction. In: *American philosophical quarterly*, Vol. 15, No. 1, pp. 37–46.

MIZUTA, Yoko (2015): A Mental Spaces Analysis of the Answering Machine Paradox: The Agent of the Context of Utterance Revisited. In: *Journal of Cognitive Science*, Vol. 16, No. 4, pp. 535–564.

MOORE, Allan (2010): Where is here? An issue of deictic projection in recorded song. In: *Journal of the Royal Musical Association*, Vol. 135, No. 1, pp. 145–182. DOI:10.1080/02690401003597813

NEALE, Stephen (1992): Paul Grice and the philosophy of language. In: *Linguistics and philosophy*, Vol. 15, No. 5, pp. 509–559. DOI: 10.1007/bf00630629

NUNBERG, Geoffrey (1993): Indexicality and deixis. In: *Linguistics and philosophy*, Vol. 16, No. 1, pp. 1–43. DOI: 10.1007/bf00984721

NUNBERG, Geoffrey (2004): *Descriptive indexicals and indexical descriptions*. In: M. Reimer – A. Bezuidenhout (eds.): *Descriptions and beyond*. New York: Oxford University Press, pp. 261–279.

PERRY, John (1979): The problem of the essential indexical. In: *Noûs*, Vol. 13, No. 1, pp. 3–21. DOI: 10.2307/2214792.

PERRY, John (2001): *Reference and reflexivity*. Stanford: CSLI. 338 p.

PIRNAT, Žiga (2015): Genesis of the genitive of negation in Balto-Slavic and its evidence in contemporary Slovenian. In: *Slovenski jezik/Slovene Linguistic Studies*, Vol. 10, pp. 3–52.

POWELL, George (1998): The deferred interpretation of indexicals and proper names. In: *Working papers in linguistics*, Vol. 10, pp. 143–172.

PREDELLI, Stefano (1998): 'I am not here now'. In: *Analysis*, Vol. 8, No. 2, pp. 107–115. DOI: 10.1111/1467-8284.00110.

PREDELLI, Stefano (1998): Utterance, interpretation and the logic of indexicals. In: *Mind & Language*, Vol. 13, No. 3, pp. 400–414. DOI: 10.1111/1468-0017.00083

PREDELLI, Stefano (2014): Kaplan's three monsters. In: *Analysis*, Vol. 74, No. 3, pp. 389–393. DOI: 10.1093/analys/anu059.

PREDELLI, Stefano (2020): *Fictional discourse: A radical fictionalist semantics*. Oxford: Oxford University Press. 183 p.

RABERN, Brian – BALL, Derek (2019): Monsters and the theoretical role of context. In: *Philosophy and Phenomenological Research*, Vol. 98, No. 2, pp. 392–416. DOI: 10.1111/phpr.12449.

RECANATI, François (2001): Are 'here' and 'now' indexicals? In: *Texte*, Vol. 127, pp. 115–127.

RECANATI, François (2004): Indexicality and context-shift. Presented at *Workshop on indexicals, speech acts and logophors*. Harvard University. Available at: https : / / jeannicod . ccsd . cnrs . fr / ijn _ 00000552 /document.

RUSSELL, Bertrand (2013): *An inquiry into meaning and truth*. 2nd ed. (reprint) New York: Routledge. 349 p.

SADOCK, Jerrold (1978): On testing for conversational implicature. In: P. Cole (ed.): *Syntax and Semantics: Pragmatics*. Brill Academic Press, pp. 281–297.

SANTORIO, Paolo (2010): Modals are monsters: on indexical shift in English. In: *Proceedings of Semantics and linguistic theory 20*, pp. 289–308. DOI: 10.3765/salt.v20i0.2561.

SAYWARD, Charles (1968): Propositions and eternal sentences. In: *Mind*, Vol. 77, No. 308, pp. 537–542.

SIDELLE, Alan (1991): The answering machine paradox. In: *Canadian Journal of Philosophy*, Vol. 21, No. 4, pp. 525–539. DOI: 10.1080/00455091.1991.10717260.

STOJANOVIC, Isidora (2005): A different story about indexicals. Amsterdam: ILLC Research Reports.

TWARDZISZ, Piotr (2012): 'To be' and not 'to have' in Polish locationals. In: *Rice Working Papers in Linguistics*, Vol. 3. Available at: https://rls.rice.edu/rwpl/vol-3/.

VOLTOLINI, Alberto (1994): Can negative existentials be referentially vindicated? In: *Lingua e stile*, Vol. 29, pp. 397–419.

WALTON, Kendall (1993): *Mimesis as make-believe: On the foundations of the representational arts*. Harvard University Press. 480 p.

WITKOŚ, Jacek (2000): Nominative-to-Genitive Shift and the Negative Copula nie ma: Implications for Checking Theory and for the Nature of the EPP in Polish. In: *Journal of Slavic linguistics*, Vol. 8, No.1/2, pp. 295–327.

WITKOŚ, Jacek (2008): Genitive of Negation in Polish and single-cycle derivations. In: *Journal of Slavic Linguistics*, Vol. 16, No. 2, pp. 247–287. DOI:10.1353/jsl.0.0002.

Resumé

ROZDELENIE DEIKTICKÉHO CENTRA PRI PARADOXOCH S ČASOVÝM POSUNOM: RIEŠENIA INŠPIROVANÉ PRÍKLADMI Z POĽŠTINY

V príspevku sa predkladá odlišný teoretický prístup k sémantickej interpretácii indexálnych výrazov typu *ja*, *tu* a *teraz* v situáciách s časovým posunom pri interpretácii deiktickej scény. Jedným z prípadov tohto javu je tzv. paradox telefónneho záznamníka (*Answering Machine Paradox*, *AMP*; Sidelle 1991). Tieto paradoxy vznikajú, keď sa výpovede viet ako *Teraz tu nie som* či *Teraz som mŕtvy*, obsahujúce indexálne výrazy, ukážu ako pravdivé vzhľadom na kontext interpretácie. Keďže podľa štandardného výkladu sémantiky indexálnych výrazov by sa tieto jednotky mali interpretovať skôr vzhľadom na kontext zaznamenania než na kontext interpretácie (Kaplan 1979), takéto paradoxy sa ťažko vysvetľujú tými prístupmi k indexikalite, ktoré sú založené na pravdivostných podmienkach. V príspevku sa preto ako riešenie tohto paradoxu ponúka vysvetlenie pomocou tzv. rozdelenia deiktického centra. V tomto koncepte sa indexálne *ja* v zaznamenaných výpovediach typu *Ja tu teraz nie som* interpretuje ako sémantické ukotvenie neprítomnej entity. Takýmto spôsobom nedochádza k sémantickému indexálnemu posunu v zmysle Kaplanovej definície, ale zaznamenaným výpovediam, ktoré si vyžadujú časovo posunutú interpretáciu indexálneho výrazu, možno napriek tomu priradiť adekvátnu pravdivostnú hodnotu. Naznačené riešenie je inšpirované dokladmi zo syntaxe poľských negovaných lokatívnych konštrukcií. Prítomnosť genitívu negácie v poľských lokatívnych konštrukciách, ktorá si vynucuje zmenu nominatívu na genitív v podmete vety, možno vnímať ako signál, že tu dochádza ku konceptuálnej dištancii vo vzťahu k objektu, ktorého prítomnosť na danom mieste sa popiera. V príspevku sa argumentuje, že v dôsledku tohto javu mená vo funkcii subjektu v afirmatívnych lokatívnych konštrukciách (indexálne zámeno pre prvú osobu *ja* vo vete *Ja som teraz tu*) strácajú status gramatického subjektu v negovaných lokatívnych konštrukciách. Fakt, že k tomu dochádza vo vetách s indexálnymi výrazmi, by mohol indikovať, že ide o jav, ktorý si v daných prípadoch vyžaduje pri interpretácii uplatnenie mechanizmu napodobňujúceho indexálny posun. Koncept rozdelenia deiktického centra umožňuje vysvetliť, ako sa v teoretickom prístupe založenom na referencii môže prepojiť prázdna referencia indexálneho výrazu v kontexte interpretácie so skutočnou referenciou v kontexte zaznamenania. Takéto riešenie umožňuje v prípadoch AMP postulovať sémantický indexálny posun bez toho, aby sa spochybnili základné východiská štandardnej teórie.