# Badini Kurdish modal particles dê and da: procedural semantics and language variation | Christoph Unger

#### Abstract

In this paper I review a semantic analysis of the Badini Kurdish modal particles dê and da (Unger, 2012). This analysis claims that the modal particles are procedural indicators in the sense of Blakemore (2002) triggering cognitive inferential procedures relating to assessing the speaker's commitment to the veracity of the communicated content and to the speaker's reliability for making true claims about the eventualities described. Since audiences interpret utterances for optimal relevance following a path of least effort (Sperber and Wilson 1995), these minimal clues for constraining the pragmatic interpretation process are enough to guide audiences arriving at the temporal, modal and aspectual interpretations intended by the speaker. I argue that the standard Kurmanji particle wê triggers slightly different procedures than Badini dê. These differences provide semantic explanations to variation in Northern Kurdish dialects with respect to the indication of future time and with reference to possible but non-factual worlds.

Keywords: Procedural meaning; future time; modal particles; speaker commitment; Northern Kurdish.

#### Pirtikên raweyî yên dê û da di kurdiya badînî de: semantîka prosedûrî û cudatiyên zimanî ya navxwevî

Di vê meqaleyê de ez vedigerime ser tehlîleke semantîk (Unger, 2012) a pêştir li ser pirtikên raweyî (modal particles) yên dê û da di kurdiya badînî de. Îdiaya vê tehlîlê ew e ku ev pirtikên raweyî nîşanên prosedûrî ne, li dû pênaseya Blakemore (2002), ku rê li ber prosedûrên hişî yên bimenakirinê vedikin ku ew prosedûr fikrekê didin derheqê pabendiya axêverî bi rastbûna muhtewayê axiftinê û derheqê pêbaweriya axêverî ji bo derbirîna gotinên rast li ser encam û muhtewayê axiftinê. Ji ber ku guhdar bêjeyan bi awayê herî zêde pêwendîdar û bi serfkirina kêmtirîn hewlan şîrove dikin (Sperber û Wilson, 1995), ev serben û nîşanên mînîmal yên destnîşankirina çeperên proseya şîrovekirina mercî bes in ku guhdar bikarin pê bigihine wan şîroveyên demî, raweyî û aspektî ku mebesta axêver in. Herwiha diyar dibe ku pirtika wê ya kurmanciya standard prosedûrên hinek cudatir ji yên dê ya badînî feal dike. Ev cudatî ye li pişt cihêrengiya zaravayên kurmanciyê ya di nîşandana dema tê de û di amajeya bi cîhanên mumkin lê ne waqi'î.

نامرازهکاتی پهیومندیدار به کردار، دی و دا له کوردیی بادینیدا: ماناناسی ریکاری و جیاوازی زمانی لمم وتار ددا همول دهدم پیّداچرونه و میکم بو شیکاری ماناناسیانهی نامراز مکانی پهیومندیدار به کردار له کوردیی بادینیدا و مکوو دی و دا همینت (ئانگر، ۲۰۱۲) نهم شیکارییه داخوازی نهوه دمکات که نامر از مکانی پهیومندیدار به کردار به و مانایهی که لای بلهکمور (۲۰۰۲) هایانه داوریکی نیشاندهری ریکاربیانامیان هایه و بهم واتایه نامو پروسه زانینیانهی که نامنجامیکیان لی دهکهویتهوه پُەيومندىيان لەگەل بەراوردكردنى دەربەستبوونى ئاخيومران، راستيەتى ئەو بەستىنەى كە پەيومندى چى دەكات و ھەروەھا باو هر پذکر اوی ناخیو در آن بز ساز دانی داخواز یگهاینکی راست سه ارمت به و رو داوانهی که و مسف کر اون ههیه. چونکه بیسهر مکان قسمكان له ريّگەيمكەو، راڤه دەكەن كە بەياشترىن شنيو. يەيوەندى لەگەل ساز بكەن و ھەروەھا كەمەترىن ھەولىي بۆ بدريّت (سىيربر و ويُلُسن ٩٥ أ١)، ئهم نيشانه بجووكانه كه بروّسهي راڤعيهكي كارمكي بهدمستهوه دمدهن بقر ريّنويّني نهو بيسمرانه بهس دمكُس كه به چەند رِاڤەيەكى كاتى، پەيوەندىدار بە كردار و كاتى رِووداوەكانەوە دەگەن و ئاخنوەران مەبەستىيانە. من بەلگە دەھنىنمەو، كە لە کرمانجي ستاندار ددا نامرازي وي، به بهراورد لهگمل دي له بادينيدا، دهيته هؤي چهند شيوازيکي نهختيک جياواز بهانه چەند لنىڭدانەوميەكى ماناناسىيانە دەستەبەر دەكەن و بەمگوپىرەيە جۆراوجۆرى زارەكانى كوردىيى باكور لەرپىگەي ئاوردانەوە لە نیشانه کانی دو اروز و سهر چاو هدان به چهند جیهانیکی گونجاو به لام ناواقیع دابین دهکریت.

#### Introduction

Closely related linguistic varieties of Northern Kurdish (also called Kurmanji) show significant variation in the formal expression of eventualities in future

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Volume: 2, No: 2, pp. 177 – 200 October 2014 ISSN: 2051-4883 & e-ISSN: 2051-4891 www.kurdishstudies.net time. Standard Kurmanji refers to future time with a modal particle  $w\hat{e}/d\hat{e}/\hat{e}$  in conjunction with verb forms based on the present stem, and carrying the subjunctive prefix bi-. Apart from its use in expressing future time reference, the modal particle  $w\hat{e}/d\hat{e}/\hat{e}$  is also used in several conditional forms which are lacking in Badini Kurdish. In Badini, reference to future time is achieved with the modal particle de in conjunction with the present stem, but without the subjunctive prefix bi-. There is also a modal particle da in Badini that is used in the same construction with  $d\hat{e}$  (that is, in conjunction with verb forms based on the present stem without any modal or aspectual prefix) which can be used to express the conditional meanings of those Kurmanji conditional forms lacking in Badini, as well as other aspectual information. This latter modal particle is absent in (standard) Kurmanji. In this paper I want to argue that these differences in the expression of future time and conditional verb forms are systematically related and they are due to a difference in the linguistic semantics of the modal particle  $w\hat{e}/d\hat{e}/\hat{e}$  in Kurmanji and the corresponding modal particle dê in Badini. This analysis is based on Unger's (2012) detailed analysis of the semantics and pragmatics of the future tense marker dê as well as the modal particle da in Badini Kurdish. The analysis is cast in procedural terms: it claims that the function of these items is to put the mind of the audience in a state in which a small set of certain inferential heuristic procedures is activated. In this paper I will expand this analysis by applying it to standard Kurmanji and exploring the ways in which this analysis may explain the variation in the use of the modal particles under consideration.

This paper is organised as follows: first, I review the uses of  $d\hat{e}$  and da in Badini (section two). In the third section, I introduce the notion on procedural meaning underlying Unger's (2012) account of  $d\hat{e}$  and da. In section four, I discuss the expression of future time in Kurmanji and review the uses of the modal particle  $w\hat{e}/d\hat{e}/\hat{e}$ . Finally, I argue in section five that the procedural analysis of  $d\hat{e}$  and da in Badini sheds interesting light on the variation in the expression of future time in Northern Kurdish dialects by offering a means to analyse Kurmanji  $w\hat{e}/d\hat{e}/\hat{e}$  in procedural terms powerful enough to provide semantic motivations to the observed variations.

### The expression of future tense in Badini Kurdish

For the purposes of this paper I will discuss two varieties of Northern Kurdish: Badini Kurdish, spoken predominantly in the Dohuk Governorate of Iraq, and what I will call standard Kurmanji, spoken primarily in Turkey. The latter is described in Bedir Khan and Lescot (1986), represented in the Kurmanji literature published in Latin script since the early 1930s, and in the Corpus of Contemporary Kurdish Newspaper Texts (CCKNT)<sup>2</sup> in particular.<sup>3</sup>

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<sup>&</sup>lt;sup>1</sup> I warmly thank an anonymous referee whose comments have greatly helped to improve this paper. Ergin Öpengin and Geoffrey Haig have also given very helpful advice. Needless to say, none of them can be held responsible for the way I used their comments, and all remaining shortcomings are my own.

<sup>&</sup>lt;sup>2</sup> See Haig (2002) for a description of this corpus.

<sup>&</sup>lt;sup>3</sup> On standard Kurmanji see also the introduction to this special issue.

The former is documented in MacKenzie (1961) and exemplified in a growing body of literature published in Arabic script in Iraq (particularly since the turn of the century). Both varieties have much in common and are considered by their speakers as basically the same language. However, there is considerable linguistic variation between them. In this paper I want to discuss variations in the expression of future time in these two variations of Kurdish, looking first at Badini Kurdish.

Formal properties of the expression of future time in Badini

In this variety of Kurdish, future time reference is expressed in a construction consisting of the modal particle  $d\hat{e}$  and the verb inflected for person and number using the present tense stem, without any modal or aspectual prefix. In particular, the subjunctive prefix bi- cannot occur in this construction. Since this construction typically describes eventualities in future time, it is often referred to as the future tense form.<sup>4</sup>

in

fall-2sg-drct

The modal particle  $d\hat{e}$  immediately follows the subject noun phrase. Only the enclitic conjunction  $j\hat{e}$  "also" may intervene between the subject and  $d\hat{e}$ :

"but I am still in deep trouble, and you, too, will get into big trouble." (Hizirvan, 2003)

trouble-EZ.SG.M

big

СТ

While the order subject – modal particle is the predominant order, the modal particle can also precede the subject.

(3)	ne			hakîr	hakîm înand-in-e						got-î:	
	every			heale	er brit	bring.PST-3PL-DRCT					said-3s	G
	bab-o		ev-ê	ev-ê Sînem-ê				vê-t,				
	father-VOC		this-OBL.SG.F			Sinem-OBL.SG.F				need-3SG		
	tu	bû	kurr-ê	xo	bîn-î	yan	dê	kurr-ê	te	ji	dest-ê	te
	you	for	son- of	self	bring- 2sG	or	FUT	son-of	yours	from	hand- of	yours

<sup>4</sup> All examples from Badini quoted in this paper are taken from Unger (2012), unless otherwise indicated. The glosses, however, have been adjusted to use standard abbreviations used in this volume. Ergin Öpengin has graciously helped me in the fine tuning of these glosses. The following non standard abbreviations are used in glosses: AT postposition indicating attachment; COND conditional; CT postposition indicating containment; IAM imperfective aspect marker; IMP.2SG imperative singular; MV postposition indicating movement; VOC vocative.

ç-it, dê kurr-ê te mir-it. go-3sG FUT son-of yours die-3sG

There is a specific modal particle da in Badini which is used in the very same construction. Like  $d\hat{e}$ , this particle directly follows the subject noun phrase and requires the verb inflected for person and number on the present stem without any modal or aspectual prefixes. Unlike  $d\hat{e}$ , it does not express future tense, but is used for habitual states of affairs in the distant past or for counterfactual eventualities in the present or near past. This striking syntactic parallel to the future tense construction makes it important to consider the da-construction as well when discussing the future tense construction in Badini, and I will discuss da in more detail below. It is also noteworthy that the modal particle da and the construction it is used in do not exist in the standard Kurmanji variety of Kurdish, which is based mostly on central dialects of Kurmanji.

Uses of dê

The particle  $d\hat{e}$  used in the construction described above can be used to denote states of affairs that the speaker describes as holding at a future point in time. In other words, this construction is used to express the simple future. This can be illustrated with the following examples:

- belê hêşta tengavî-yê (4)dê kevî-ve still but EZ.SG.F in trouble-OBL.SG.F will fall-DRCT CTand VOU also di tengavî-yê mezin da. trouble-EZ.SG.F Big CT
  - "but I am still in deep trouble, and you, too, will get into big trouble." (Hizirvan, 2003)
- (5)piştî cax-ek-î kêm dê heft dêw hê-n-e after while-INDF-EZ.SG.M little demons come-3PL-DRCT FHT seven di skeft-ê ve in cave-OBL.SG.F MV

"after a short while seven demons will come into the cave." (Hizirvan, 2003)

The precise point in future time to which  $d\ell$  future construction refers to needs to be pragmatically determined. This point may be located very close to the present time. The verbs are based on the present stem and are inflected for person and number (keviye "[you] fall" in (4) and hêne "[they] come" in (5).

<sup>&</sup>quot;Every healer that they brought in [to examine him] said: Father, this Sinem, you must get her for your son or you will lose your son, your son will die." (Sînem)<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> This data is from a tape-recorded story. The following tape-recorded stories are used for this study and referred to by their one word title: *Dostini* "Friendship", *Sinem* "The story of Sinem", *Xee* "The story of Xec and Siyabend". These three stories were recorded by Mela Nasir Zaxoyî, Zakho, Iraq, 1992. *Pira* "The story of the Delal bridge in Zakho", recorded by Loqman Nûredîn Hassan, Zakho, Iraq, 1992. I am grateful to Mela Nasir and Loqman Nûredîn not only for recording these stories and allowing me to use them for studies, but also for the invaluable help they gave me for finding my way in Kurdish culture and language.

This verb form cannot be used outside the construction with the particle  $d\hat{e}$  (or da, as will be discussed below). Outside this construction, the verb based on the present stem will have to have either an aspectual prefix di- or the subjunctive prefix bi-, or the negation prefix na-/ne- if appropriate. Example (6) is taken from a tape recording where the speaker first explains that he is going to record a song, and after explaining its content, he utters the words quoted in this example. Again, the verb  $b\hat{e}jim$  "[I] say" is based on the present stem and inflected for person and number.

Another instance where the *dê* construction refers to a point in the immediate future, very close to the present, is when a guest announces the end of his visit by saying (7) (verb: *çime* "[I] go", based on present stem, inflected for person and number, with the directional suffix):

There are, of course, other ways of referring to the immediate future. Present tense is also an option, and even past tense can be used when the clause begins with a demonstrative, as in (8). This is taken from a novel, and in the story world these words are spoken by the secretary of Dr Perwer to the latter's remark about the secretary having forgotten to bring some orange juice for a guest in the office. Apologetically, the secretary uses these words to say that she will immediately correct her fault. The main verb  $\hat{cam}$  "I went" is in the past tense, and future time indication is pragmatically inferred in the situational context. A more idiomatic rendering of this utterance would be "I'll get it right away."

Apart from indicating future tense,  $d\hat{e}$  can also be used to draw attention to the speaker's estimation of the likelihood of the state of affairs. In example (9), the speaker is arguing against his father's claim that the speaker's friends are not genuine and cannot be trusted as real friends:

The second clause consists of a dê construction. This clause is closely parallel in content to the previous one, where the subjunctive prefix is used. The context makes it clear that in both instances, the speaker intends to convey one thought that can be described as *The speaker's friends give their lives for him in a world where the need arises*. Thus it appears that dê can be used to describe an idea in a possible but non-actual world. The same effect is achieved in the first clause by the subjunctive mood.

Example (10) illustrates another use of  $d\hat{e}$ . The speaker expresses the concern that a certain event is likely to occur, namely that the blood avengers or the police will get him. But since the speaker believes that this event is avoidable if his friends shelter him during the night, it is clear that the speaker does not simply intend to describe an event in future time. In addition to referring to an event in the future, he expresses a certain commitment towards the likelihood of the state of affairs to come true in the future.

(10)	Ev	şev-e		dere	dereng ş		herre				
	this	night-PROX		late		iight	go.IMP.2SG				
	dergeh-ê	wî	bi-	-qut-e				û			
	door-of	hin	n SB	sBJV-knock		-IMP.2SG		and			
	bêj-ê:	"Biray-ê		Ramazan							
	say-3sG brothe		Z.SG.M		Ran	nazan					
	min êk-ê		kuş	t-î	û	ev-e		şu	rteh-ê		
	I one-EZ.	SG.M	killed-PTCP		and this-		s-PROX police		olice-EZ	-EZ.SG.M	
	li dîf m	i ve	dê	mi	gir-in		yan				
	at after m	e MV	FUT	me	catch-3	BPL	or				
	ew neyar-	-êt			min	il c	dîf	mi	ve	dê	
	those blood	.avengers-	-EZ.PL		me	at a	after	me	MV	FUT	
	mi kuj-in	û	mi	di-vê-t							
	me kill-3PL	and	I	IAM-wai	nt-3sg						
	ev şev-e		tu	bi	min	xudan	k-î				
	this night-PR	OX	you	with	me	owner	ma	ike-2s	G		
	heta sahar-é	<u>`</u> ."									
	until mornin	ng-OBL.SG	.F								

<sup>&</sup>quot;This night, late at night, go, knock at his door and tell him: 'Brother Ramazan, I have killed someone and this police which is after me will catch me, or those avengers who are after me will kill me, and I ask that you let me stay in your house this night until morning." (Dostînî)

In the following example (11), the speaker apparently does not refer to future states of affairs at all, rather  $d\hat{e}$  is used in a clause expressing a conditional regularity: "whenever we put the last two stones, then our bridge

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falls down." The speakers claim that they have observed a regularity in the past and expect this sequence of events to happen again.

(11)	Ev-e		Ye			çîrok-a		pir-a			
	this-1	this-PROX		Is		story-of		brid	ge-of	ours	
	hind	hindî		em ava-di-k-în,							
	whenever		we	we build-IA		AM-make-1PL					
	du	du ber jê		jê di-mî from.it IAM-r		in	hot	heta dîmahik-ê,			
	au					111	until		инпанк-е,		
			fro			nain-3sG			end-OBL.SG.F		
	em	m dê deyn-în,		în,	pir-a	pir-a bridge-of		di-	-herrif-it.		
	we	FUT	lay-3PL,		bridge			IA	M-crash-3sg.		

"This is the story of our bridge: Whenever we build the bridge and only two stones remain until it is finished, when we put them in, our bridge comes crashing down." (Pira)

Example (12) shows an instance of the use of the future tense with an imperatival force.<sup>6</sup> The father is instructing his son on how he should proceed in testing his friends. (In the first sentence of (10) above, the imperative is used to the same effect.)

(12)Evșev-a got-ê saat dozdeh this night-EZ.SG.F said-to.him twelve hour dê C-î mal-a dê bêi-î wan go-2sG you FUT house-of theirs FUT say-2SG "bab-ê min-ê got-î father-of my-EZ.SG.M said-PTCP he ehe bila b-ê-t-e vêrê" SBJV-come-3SG-DRCT NA NA may here "This night," he told him, 'at twelve o'clock, you'll go to his house and say to him: My father said: may he come here immediately" (Dostînî)

Yet another use of *dê* is illustrated in (13):

Mêr-ê Sînem-ê (13)iî îî ew husband-of Sinem-OBL.SG.F also also wan tacir-a bî from traders-OBL.PL those was

<sup>&</sup>lt;sup>6</sup> A usage that is quite common across languages. See for instance German: *Hans, du wirst dich bei Maria's Mutter entschuldigen* "Hans, you have to apologise to Mary's mother." In English, this can also be expressed with the same imperative force as follows: *John, you will apologise to Mary's mother.* 

 $fe^7$ dîv roj-a çu-î ya day-EZ.SG.F After went-PTCP and FZ SG F sefer-î bi-k-it, viva SBJV-make-3SG wanted journey-OBL.SG.M bi-ç-it, bi-ç-it, em dê bêj-in SBJV-go-3SG SBIV-go-3SG sav-1PL FUT we bajêr-ê Sam-ê. town-EZ.SG.F Damascus-OBL.SG.F

In this example,  $d\ell$  is used in a parenthetical clause expressing an assumption made for concreteness. In English, this idea is typically expressed with the phrase let's say X, but in French, the future on dira can be used just as in Badini. The speaker is advancing an arbitrary example, here the name of the city Damascus, which is considered the prototypical faraway place where merchants travel to.

Example (14) illustrates a slightly different use:

(14)Siyabend wext-ê jî dê wêrê yanî em bêj-în and Siyabend time-OBL.SG.F fell there also FUT say-1PL or we bê care bibî. had.been hope "And when Siyabend fell there it was, we can say, it was hopeless." (Xec)

Again, dê occurs in a parenthetical phrase *Em dê bêjin* "We will say". This phrase is inserted before the speaker's comment that Siyabend's situation was hopeless, a stronger statement than what was used before. The parenthetical indicates that it is justified to use a stronger expression than what has been used before. In English, this can be expressed with the phrase we can say.

Finally, the particle de is used to express a generalisation in example (15):

(15)Yanî ew dar-ane bi qewet belê That-is but those trees-PL.PROX with strength are zelam-ek hinde bi iî dê ne qewet şê-t man-INDF that with strength also FUT can-3sG not dar-a Bi dest-ê hil-kêş-itin. wan XO. with hand-of those trees-OBL.PL self up-pull-3sG

"That is, those trees are strong, but even a man who is not that strong can pull those trees out with his hands." (Xec)

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<sup>&</sup>quot;Sinem's husband was one of those traders and the day after the previous one he wanted to go on a journey and wanted to go, let's say, he went to Damascus." (Sînem)

<sup>&</sup>lt;sup>7</sup> The use of the Arabic conjunctive particle fe "and" alternating with Kurdish fa "and" is an ideolectical characteristic of the speaker who has recorded this story.

In summary, the  $d\hat{e}$  construction can occur in the following types of usage: (16)

- *dê* is used for expressing future time.
- This form is also used in statements where the likelihood or the certainty of a state of affairs is more in focus than its location in future time.
- The form can be used with imperative force.
- The form is also used in cases where temporality or certainty are not at issue: parenthetical uses involving generalisations, assumptions, or emphatic statements.

A satisfactory semantic analysis of  $d\hat{e}$  must explain how this particle can be put to these uses in context. The main question is whether the a-temporal uses require a different semantic analysis than the temporal ones. In other words, is  $d\hat{e}$  ambiguous between a temporal particle and a modal particle? Or can a unified semantic analysis be maintained? If a unified analysis were feasible, should it regard the temporal or a-temporal uses as basic and pragmatically derive the one from the other? Or is there an underlying, more abstract semantic notion that gives rise to the full range of uses? Unger's (2012) analysis of  $d\hat{e}$  argues that a unified semantic analysis is available that takes the semantic meaning of  $d\hat{e}$  to indicate a more abstract semantic notion from which the temporal, modal and parenthetical uses can be pragmatically derived. Such an explanation draws on the framework of procedural semantics in the sense of Blakemore (1987 and 2002).8 In the following section I will briefly explain this notion of procedural semantics before applying it to the analysis of  $d\hat{e}$ .

### A procedural analysis of dê in Badini

Linguistic semantics, pragmatics and procedural semantics Consider the following example from Wilson and Sperber (2004: 614):

(17) a. Peter: Did John pay back the money he owed you? b. Mary: No. He forgot to go to the bank.

What does Mary intend to communicate with the sentence *He forgot to go to the bank?* Intuitively, she wants to say that the same individual that Peter referred to forgot to go to the financial institution called bank. Moreover, she advances this information as an explanation for John's failure to repay the money. But the linguistic meaning of the sentence merely specifies that some individual third person referent of masculine gender forgot to go to whatever is referred to with the word bank, ambiguous between conveying the concept BANK<sub>1</sub> "financial institution" or BANK<sub>2</sub> "edge of a river".

How does the audience bridge this gap between the linguistically encoded meaning and the speaker's meaning? According to Relevance Theory (Sperber and Wilson, 1995; 2004; 2012; Carston, 2002), the audience takes the linguistically encoded meaning as partial evidence to infer the speaker's

<sup>&</sup>lt;sup>8</sup> For an in-depth discussion of procedural semantics as well as more recent developments in this domain, see Escandell-Vidal, Leonetti and Ahern (2011).

meaning. This inference process is constrained by two factors. The first one is that the human mind strives for efficiency in processing incoming stimuli: it tends to allocate processing resources to those inputs which promise to be most relevant in a technical sense. The relevance of an input to cognitive processes increases to the extent that the stimulus achieves positive cognitive effects, that is, improvements of the individual's representation of the world. for a minimum of processing effort. The second factor is that a verbal utterance is a special kind of behaviour that can only be explained by attributing an intention to communicate and an intention to inform the audience of something to the communicator. This attribution of intentions calls for some cognitive processing to be done, or in other words, it requires the audience to put in processing effort. Because of the minds preference for processing efficiency, it follows that verbal utterances (and other communicative behaviours) raise the expectation that they will achieve at least enough positive cognitive effects to be worth the audience's attention. Comprehension then amounts to the process of verifying this expectation. and this can be done by following a heuristic procedure: access interpretive hypotheses for utterances (containing hypotheses about intended context, implicit import and explicit content) in order of accessibility, starting with the one involving the least processing effort to access, and check whether the utterance, on this interpretation, yields cognitive effects of the expected kinds and levels. If so, accept the interpretation as the one intended by the communicator; if not, continue along a path of least effort until an interpretation satisfying relevance expectations is met or the processing effort involved does not warrant continuation. 9 It should be emphasised that in this procedure, context, implicit import and explicit content are calibrated in parallel.

Applying these ideas to example (17), the process by which John comprehends Mary's utterance He forgot to go to the bank can be described as follows: John must assume that Mary must believe that her utterance is at least relevant enough to be worth Peter's attention without causing unreasonable processing effort. Moreover, this utterance is present as part of an answer to Peter's question whether John has paid back the money he owed to Mary. Hence, Peter can expect Mary's utterance to be relevant by contributing information why this John has not repaid the money yet. So the first interpretive hypothesis that comes to mind leads Peter to interpret the pronoun he as referring to John. Moreover, the concept BANK1 "financial institution" gives access to contextual information that people can withdraw money from their accounts at such an institution. Accepting the assumption that the word bank here is intended to convey the concept BANK<sub>1</sub>, Peter can make further inferences: if John forgot to go to the bank before it closed, he was unable to withdraw money, and if he did not have money he was not able to pay back the money he owed to Mary. This in turn amounts to an

<sup>&</sup>lt;sup>9</sup> For an explanation of the justification of this comprehension procedure, see Wilson and Sperber (2004) and Sperber and Wilson (1995).

explanation of why John did not repay the money he owed, and furthermore explains why Mary did not answer Peter's question with a simple No: she intended to provide an explanation for why John did not pay back the money he owed. Such an interpretation satisfies relevance expectations and does not incur unreasonable processing effort. Hence Peter is justified in assuming that Mary intended him to understand the utterance in this way.

Notice that on this account of comprehension, the linguistic meaning of utterances serves as nothing more than partial evidence to the speaker's meaning. It follows that the information that this linguistic meaning conveys must serve the needs of the inference procedures that it feeds into. These inferences operate on conceptual information, so linguistic meaning must certainly contribute conceptual information. <sup>10</sup> But the mind must also choose which possible inference paths should be followed. It would certainly be helpful if there were linguistic expressions that provide information on which inference paths to follow. Consider the pronoun He in this respect: as Kaplan (1977) has pointed out, it would be awkward to assume that the linguistic meaning of pronouns were to be taken as the content they contribute in each use, because this changes according to context. He argues instead that the linguistic meaning of pronouns (and other indexicals) is their character, which is basically a procedure to determine the referent of the indexical expression. This procedure is indeed the same across contexts. Wilson and Sperber (1993) have argued that these procedures should be understood in psychological terms as constraints on the inferential phase of utterance interpretation, as suggested by Blakemore (1987).

Tense, aspect, and modality markers can also be analysed as having procedural meaning in this sense (Smith, 1990; Amenos-Pons, 2012; Jary, 2012). Consider the following example:

- (18) a. I have read the newspaper.
  - b. I have written a book.
  - c. Mary lent money to John. John then forgot to go to the bank and hasn't repaid it as agreed. Mary was disappointed.

While (18a) and (18b) are marked with the same time indicator, the temporal interval between the eventuality and the speech time is very different: (18a) will usually be taken to refer to the same morning of the day the utterance is made whereas (18b) will be understood as referring to a time earlier in the life of the speaker. (18c) illustrates that the same past tense marker may not only refer to different points in time, but that there is also a temporal sequence between the events described that needs to be interpreted pragmatically in context. Echoing Kaplan's proposal for pronouns, if we assume that the linguistic meaning of the tense marker is not given by the time value contributed by its use but rather by the general procedure it

<sup>&</sup>lt;sup>10</sup> As Blakemore (2002) comments, this amounts to a reversal of the traditional formula "semantics first, then pragmatics" to a view where pragmatics takes centre stage and (linguistic) semantic theory is shaped by asking how semantic information can best facilitate pragmatic processes.

triggers, we can provide a linguistic semantic description of the tense marker that is context independent and is useful for the inferential phase of comprehension. In examples (18a) and (18b) the procedural meaning of the perfect tense marker may be informally described as "locate the eventuality at some time in the past with consequences still noticeable in the present." Such a constraint on temporal interpretation narrows the audience's search space for temporal values.

A procedural semantics of dê

Recall the types of uses of  $d\hat{e}$  discussed in (16) above. What do all these interpretations of the future construction have in common? A first answer is that they express semantic representations that cannot be represented as facts by either the communicator or the audience. One way of making this informal observation more precise is to say that utterances employing the future construction convey that the proposition expressed is relevant to the audience not in its own right, but as embedded in a higher-order representation commenting on the veracity of the proposition expressed.  $D\hat{e}$  functions as a linguistic trigger for this procedure. In other words,  $d\hat{e}$  activates/triggers the following procedure:

(19) Embed the explicature P of the utterance in a metarepresentational schema as follows, and determine the relevant world-time variables:

The veracity of the claims made in U cannot be verified against states of affairs represented as facts in the mutual cognitive environment.

The *cognitive environment* of an individual is the set of facts that are manifest to him at any one time. A fact is *manifest* to an individual if he is capable of representing it as true or at least probably true. A cognitive environment in which it is manifest that two individuals share it, is their *mutual cognitive environment*. (Sperber and Wilson, 1995)

But this procedure seems to be too strong. All of the following types of semantic representations can be compatible with this procedure: (20)

- future states of affairs in some possible world,
- counterfactual states of affairs in the present or past, and
- distant past states of affairs for which no mutual manifestness can be expected.

In order to eliminate type 2 cases (counterfactual states of affairs in the present or past), I assume that  $d\hat{e}$  triggers a second procedure as well:

(21) Embed the explicature P of the utterance in a metarepresentational schema as follows:

The communicator commits to the factuality of the state of affairs described in the explicature of the utterance.

<sup>&</sup>lt;sup>11</sup> Needless to say, this description of the procedural meaning of the English perfect tense is provided only for purposes of exposition and is not intended as a real theoretical analysis.

In order to see how following these two procedures the audience can arrive at a future time interpretation, let us look at example (22), reproduced from (4) for convenience:

```
(22) belê
            hêşta ez ya
                                  di tengavî-yê
                                                           da.
                                                                                   dê
                                                                                         kevî-ye
            still
                        EZ.SG.F in trouble-OBL.SG.F
                                                                                         fall-DRCT
      but
                                                           CT
                                                                      you
                                                                             also
                                                                                   will
      di
           tengavî-yê
                                     mezin
                                                da.
           trouble-EZ.SG.M
                                     Big
                                                CT
```

This utterance is part of fairy queen Ewran's words addressed to Mendê. the coward. She has just explained her situation in which she met Mendê, and now summarises her testimony with the comment in the first clause ("But I am still in deep trouble"). When the addressee gets to process the second clause ("and you, too, will get into big trouble"), conjoined to the first one with  $\hat{u}$  "and", the first easily accessible hypothesis is that she will talk about the same world (the actual world from the point of view of the participants in the fictional story world). One of the procedures triggered by dê indicates that the addressee cannot verify the veracity of the state of affairs in his representation of the actual world. This condition can be reconciled with the expectation that the speaker is talking about the actual world only by assuming that the speaker intends to talk about a state of affairs in the actual world holding at some future time. This saturation of world-time variables produces an interpretation that manifestly yields many cognitive effects as it causes the addressee to think about what it means to come into danger, about the nature of the danger and how to get out of it. But it will yield these cognitive effects only under two conditions: if the time index is not assumed to be too far into the future (the more distant in the future the danger is to be expected, the less urgency for the addressee to ponder these thoughts, the less relevant the information is), and if the speaker truly commits to the factuality of state of affairs, i.e. if she believes that the state of affairs will truly come to pass. That this latter condition holds is highlighted by the second procedure triggered by dê. The former condition is easily satisfiable by inferring a range of points in time in the not too distant future.<sup>12</sup>

Let us now have a look at some other uses to see how this analysis applies to these uses as well. Let's consider examples (23) and (24). (For a discussion of the remaining examples, see Unger, 2012.)

(23) (Reproduced from example 10 for convenience)

$\mathbf{E}\mathbf{v}$	şev-e		dereng	şev	herre	
this	night-PROX		Late	night	go.IMP.2sG	
dergeh	ı-ê	wî	bi-qut-e			û
door-c	of	him	SBJV-kno	ck-IMP.2	SG	and

<sup>&</sup>lt;sup>12</sup> On the interval problem in temporal interpretation, see Wilson and Sperber (1998).

<sup>&</sup>quot;but I am still in deep trouble, and you, too, will get into big trouble." (Hizirvan, 2003)

bêj-ê:		"Biray	-ê		Rar	Ramazan							
say-to.him bro			brothe	r-EZ.S	G.M	Rar	Ramazan						
min êk-ê			kuş	t-î	û	ev	-e	şı	şurteh-ê				
I one-EZ.SG.M			.M	kille	ed-PTCP	and	th	is-PROX	х р	police-EZ.SG.M			
li d	lîf r	ni	ve	dê	mi	gir-in		yar	1				
at a	fter r	ne	MV	FUT	me	catch-3	BPL	or					
ew	neya	ır-êt				min	il	dîf	mi	ve	dê		
those	bloc	d.av	vengers-	EZ.PL		me	at	after	me	MV	FUT		
mi	kuj-in		û	mi	di-vê-t								
me	kill-3PL		and	I	IAM-wa	nt-3sg							
ev	şev-e			tu	bi	min	xuda	an l	<b>ζ−</b> î				
this	night-1	PRO	X	you	with	me	own	er r	nake-2	3G			
heta	sahar	-ê."											
until morning-OBL.SG.F													
me ev this	kill-3PL şev-e night-1 sahar	PROZ	and X	I tu you	IAM-war bi with	min	own		make-29	SG			

"This night, late at night, go, knock at his door and tell him: Brother Ramazan, I have killed someone and this police which is after me will catch me, or those blood avengers who are after me will kill me, and I ask that you let me stay in your house this night until morning." (Dostînî)

In example (23), the speaker describes two states of affairs involving him that are obviously not holding in the actual world in the present, but whose factuality the speaker commits to by means of the procedural indicators in dê: that the police catch him and that the blood avengers kill him. The easiest way for the addressee to accommodate the claim that the speaker describes some states of affairs that do not hold in the present world but that the speaker claims nevertheless that he is committed to their factuality is to assume that the speaker describes future states of affairs in some possible world. Assuming this interpretation to be the one the speaker intended, the addressee understands that the speaker claims if the addressee shelters him this night those dreadful potential worlds could be avoided. This increases cognitive effects for the addressee by filling his mind with thoughts about what it means to help his friend, what it means to stand up to police and blood avengers, and so on. Because cognitive effects multiply in this way, the interpretation of the dê clauses as describing future states of affairs in some possible world is optimally relevant to the addressee. Let's turn to example (24), reproduced from example (11) for convenience:

```
(24)
          Ev-e
                                     cîrok-a
                                                 pir-a
                                                                me:
                          ve
          this-PROX
                                     story-of
                                                 bridge-of
                                                                ours
          hindî
                                ava-di-k-in.
                          em
          whenever
                                build-IAM-make-1PL
                          we
                                        di-mîn-in
          du
                 ber
                            i-ê
                                                                   heta
                                                                           dîmahik-ê,
                            from-it
                                        IAM-remain-3SG
                                                                   until
                                                                           end-OBL.SG.F
                 stones
          two
                dê
                         devn-in,
                                       pir-a
                                                                  di-herrif-it.
          em
                FUT
                         lay-3PL,
                                       bridge-of
                                                                  IAM-crash-3SG
                                                       ours
          we
```

The speakers start out by describing a regularity that they have observed: "Whenever we build the bridge and only two stones remain until it is finished...". The next clause *Em dê deynin* "we lay [the last two or three stones]" indicates by means of the particle *dê* that (a) the speakers intend to make a truth-claim about some state of affairs, and (b) that the state of affairs described by the explicature doesn't hold true in their shared world knowledge. This can only be harmonised by assuming that the speakers intended to talk about potential worlds, expressing a belief that their observations amount to regularities that they believe will re-occur on future occasions. Accepting this interpretation as intended leads to further inferences that are worth the addressee's attention, such as that the speakers do not understand why this regularity should hold, that they do not know what to do, and so on. Hence the utterance is optimally relevant on this interpretation.

In the discussion of these examples, we have seen in outline how the analysis of  $d\hat{e}$  as a procedural indicator for the procedures (19) and (21) can explain the varieties of temporal, modal and non-modal uses of  $d\hat{e}$ . But it can be objected that this analysis still over generates, as there is nothing to rule out  $d\hat{e}$  being applied to distant past states of affairs for which no mutual manifestness can be expected. Unger (2012) argues that this can be explained by the fact that there is a particle in Badini that is specialised for precisely such states of affairs, namely the modal particle da. A speaker aiming at optimal relevance must be expected to use this dedicated particle to express distant past states of affairs that cannot be expected to be mutually manifest, otherwise she would put the addressee to unreasonable processing effort. Because the particle da seems to be so interconnected with  $d\hat{e}$ , we should now turn to briefly examine the modal particle da.

<sup>&</sup>quot;This is the story of our bridge: Whenever we build the bridge and only two stones remain until it is finished, when we put them in, our bridge comes crashing down." (Pira)

<sup>&</sup>lt;sup>13</sup> The object is elided; I have added it to the translation in square brackets.

The following examples taken from Unger (2012) illustrate the range of uses to which the *da* construction can be put:

(25) Explanation given by native speaker: "my friend and I want to go to the field and sow wheat. But it starts to rain, and we turn around before we get there. On our way back, you meet us and ask: 'where did you go?' and we answer:"

em da genim-î çîn-in we PRT wheat-OBL.SG.M sow-3PL

"we wanted to sow wheat. [But it rained so we did not sow and we are returning home]"

(26) Context: Peri Ewran explains to Mende what almost happened before he picked her up when she was in the shape of a tortoise and the demon that was persecuting her in the shape of a tortoise egg:

Her küseletî bi Da min ke-t-e jin all in tortoiseness PRT make-3SG-DRCT wife me pasî da wergêrî-t-e reng-ê dêw-a min 11 afterwards change-3SG-DRCT shape-of demons-OBL.PL and PRT me

"Even in the shape of a tortoise he would have made [or: was about to make] me his wife and afterwards he would make me into the shape of demons." (Hizirvan, 2003)

(27) In a tape-recorded text about the history of the narrator's home village, he talks about the occupation of the villagers in former times:

> ew da genim-î çîn-in they PRT wheat-OBL.SG.M sow-3PL

"[In old time] they used to plant wheat."

(28)iivan-a wan ser tîcaret-ê bî, life-of their trading-OBL.SG.F On was ser hatin u çun-ê bî, going-OBL.SG.F on coming and was da xêr bajêr, ç-in bu PRT go-3PL other to city da hinde b-in wêrê, tişt-a PRT some things-OBL.PL take-3PL there û da hinde tişt-a zivirr-în-in=ve.

things-OBL.PL

192

and

PRT

some

return-CAUS-3PL=again

"their existence was based on trade, on traveling, they would go to another city, they would carry some goods there and they would bring other goods back again." (Sînem)

Examples (25) and (26) describe intended but unachieved actions, whereas (27) and (28) convey habitual actions in the (often distant<sup>14</sup>) past. At first glance, these uses fall into different semantic domains; the latter group has to do with aspect (habitual aspect in this case), whereas the former group of uses affects the modality of the eventualities described. However, from a different perspective we can see that these usage types have something in common: while the addressee cannot verify these descriptions in the mutual cognitive environment, the speaker can in hers. This means that the speaker has privileged access to information about the veracity of the states of affairs described and is therefore a good source for the addressee to acquire true knowledge about the states of affairs conveyed. Consider (25): the speaker talks about his and his friend's intentions or plans. Surely people can be trusted to be a reliable source of information regarding their intentions. In example (26) Perî Ewran is talking about her experiences with the demon persecuting her, and having these experiences arguably makes her a good source for information about the schemes of her persecutor. The speaker of (28) grew up in the village he talks about and must therefore be assumed to have heard stories about the former times from his forefathers. He can therefore be assumed to be a good source of information about distant past times in village history that the addressee cannot check in his own cognitive environment.15

It appears, therefore, that a unified semantic analysis of da can be developed on the assumption that this particle triggers the procedure described above in (19). This procedure is triggered by the modal particle  $d\ell$  as well. Recall that this procedure constrains for temporal and modal interpretations of the three types listed above in (20). But clearly, da is only used in types 2 and 3, that is counterfactual states of affairs in the present or past, and distant past states of affairs for which no mutual manifestness can be expected. Therefore da must trigger another procedure as well that excludes its use to refer to future states of affairs. Notice that descriptions of counterfactual states of affairs and descriptions of distant past states of affairs differ from descriptions of future states of affairs in that in the latter, the

<sup>&</sup>lt;sup>14</sup> An anonymous reviewer questioned whether temporal distance is relevant for the interpretation of *da* at all. This is an important question, and I cannot answer it in a definitive way. The fact is that uses of *da* referring to past eventualities in this way are rare in my corpus. Those that do occur do indeed refer to eventualities in the distant past. Given the rarity of these uses, this may be a mere statistical accident. On the other hand, if temporal distance was indeed irrelevant, then the question arises why *da* does not occur more frequently in the corpus to refer to any past eventualities. Given these considerations I conclude that it is better to be faithful in the description of the data to the extent that temporal distance is considered relevant for the interpretation of *da* until data is found that calls this generalisation into question.

 $<sup>^{15}</sup>$  Ergin Öpengin (personal communication) observes that in line with the discussion in this paragraph, da is never used with negative verb forms when used to describe distant habitual actions.

speaker cannot verify the veracity of the description in her own cognitive environment. Based on this observation, Unger (2012) argues that *da* triggers the following procedure as well:

(29) Embed the proposition expressed by the utterance in a metarepresentational frame of the following kind:

The communicator is a good authority for making a true claim involving the proposition expressed in this utterance.

By indicating that the communicator is a good authority for making a true claim involving the proposition expressed, the communicator conveys that she can verify the veracity of the state of affairs described in her own cognitive environment. Hence, *da* cannot be used to describe future states of affairs.

Dê, da, epistemic stance and possible worlds

Notice that the procedures triggered by dê and da affect the way in which the audience should accept the state of affairs communicated into their representation of the world: should it be represented as verifiable fact in the mutual cognitive environment, should it be represented as a state of affairs for which the communicator vouches by expressing a truth commitment, or for which she claims to be a trustworthy authority because she has evidence or justifications. The way in which the audience represents the state of affairs conveyed in the utterance influences whether and how much the audience not only comprehends the communicator's intention, but also believes her.

On this analysis, de and da do not directly constrain the audience's resolution of world-time variables. As we have seen, the procedures triggered by these particles have consequences for the audience's determination of world-time variables, that is, for temporal and modal interpretation. But these particles, and the forms expressed with them, do not directly affect temporal or modal interpretation. Rather, their effect on the temporal and modal interpretation of utterances is achieved by what Unger (2011) calls tangential procedural marking: by means of constraining the interpretation of speaker's commitment, knock-on inferences are triggered that lead to the recognition of the intended temporal and modal interpretation.

This analysis raises a question: given that the temporal and modal interpretations of utterances are so important for comprehending verbal communication, should we not expect that a language that relies solely on tangential procedural marking in this domain produce a variant in which at least one of the modal particles directly triggers temporal-modal procedures as well, thereby cutting short the inference process even further? Surely, this a logical possibility, and I want to argue that this is indeed what can be observed in Northern Kurdish: that one language variant shows a small semantic change in the modal particle  $d\hat{e}$  to the effect that it acquires a trigger for modal interpretation in addition to the procedures constraining speaker commitment recognition. In other words: the procedural analysis of  $d\hat{e}$  outlined here provides the basis to explain language variation with respect to the expression of future tense in variants of Northern Kurdish.

### Future tense in Kurmanji

The use of wê/dê/ê in Kurmanji

In standard Kurmanji, future tense is expressed in a way very similar to Badini: a modal particle  $w\hat{e}$ , which is also found as an enclitic  $=\hat{e}$  and  $d\hat{e}$ , occurs right after the subject noun phrase and the verb, inflected for number and person, is based on the present tense stem. However, in contrast to Badini, the verb requires the subjunctive prefix bi:

(30)Robbinson Wê kes-ên sivîl rews-a Robbinson on above persons-EZ.PL civilian FIT situation-of vên Sirb ku vegeriyan-e Kosovo-vê EZ.PL Serb COMPL. returned-DRCT Kosovo-OBL.SG.F lêkolînê bi-k-e. SBJV-make-3SG research "Robbinson will research the situation of Serbian civilians who returned to Kosovo." (CCKNT)

The modal particle  $w\hat{e}$  appears to be a variant of  $d\hat{e}$ , but the former is used predominantly in Kurmanji, although the latter occurs as well in written/standard Kurmanji.  $W\hat{e}$  can be shortened to  $\hat{e}$  and cliticised to the subject, particularly if the subject is expressed by a pronoun:

(31) Înşelah em-ê qezenc bi-k-in.

God.willing we-FUT win SBJV-make-1PL

"God willing, we will win." (CCKNT)

The sequence subject – modal particle may be reversed:

(32)Li ali-vê sedsal-a 21'-an din ger di de, side-of other if in century-EZ.SG.F 21- OBL.PL in ziman-ê netewe-vek-ê ziman-ê ne-b-e language-of people-IDF-OBL.SG.F NEG-be-3s language-of ragihandin-ê û çapemeni-yê, communication-OBL.SG.F printing-OBL.SG.F and Βi tunebûn wê ew her FUT towards With nonexistence mirin-ê û bi-ç-e. death-OBL.SG.F and MVSBJV-go-3SG "On the other hand, if in the 21th century the language of a people does not become a language of communication and writing, it will go down the trail of extinction." (CCKNT)

Haig and Öpengin (2014) point out that the  $w\hat{e}/d\hat{e}/\hat{e}$  construction can occur with negation:

(33) Ez-ê sibe bi wan re ne-ç-im
I-FUT tomorrow with them POST not-go-1sg
'I won't go with them tomorrow' (not numbered example from Haig and Öpengin, 2014)

In Behdînî, on the other hand, dê cannot occur with negation, so the equivalence to (33) in Behdînî would be (34) (not numbered example from Haig and Öpengin, 2014):

(34) Ez sibe digel wan na-ç-im
I tomorrow with them not-go-1sg
'I won't go with them tomorrow'

The modal particle  $w\hat{e}/d\hat{e}/\hat{e}$  is also used in a construction which Bedir Khan and Lescot (1986) call the first conditional (Konditional I)<sup>16</sup>: the subject is directly followed by the modal particle, the verb is inflected for person and number, along with the subjunctive prefix bi- but this time based on the past stem.

(35) Lezgîn dê bi-hat-a.

Lezgin FUT SBJV-came-3SG.COND

"Lezgin would have come" (German: "Lezgin wäre gekommen") (Bedir Khan and Lescot, 1986: 125)

Bedir Khan and Lescot (1986) also discuss a second future form ("Futur II"), formed with the participle and the auxiliary *bûn* "to be" inflected for person and number on its present stem:

(36) Ez-ê ket-i b-im.

I-FUT fell-PTCP be.SBJV-3SG

"I will have fallen down" (German: "ich werde gefallen sein"). (Bedir Khan and Lescot, 1986: 137)

However, these authors comment that this form is rarely used (Bedir Khan and Lescot, 1986: 138, note on §175).

The modal particle  $w\hat{e}/d\hat{e}/\hat{e}$  is also involved in two more verbal inflections: the second conditional, based on the modal particle  $w\hat{e}/d\hat{e}/\hat{e}$  and participle

<sup>&</sup>lt;sup>16</sup> In reviewing the exposition from Bedir Khan and Lescot, I use their terminology, which is heavily influenced by categories used for describing languages such as French, German and English. An anonymous reviewer has rightly commented that Kurmanji should better be understood on its own terms. For example, instead of talking about a second future tense, it would be better to say that the participial suffix -*i* entails perfectivity or completion and may combine with the future particle to yield a reading that is comparable to that of the Futur II in German. However, for the purposes of this paper I find it better in the interests of clarity to review Bedir Khan and Lescot's descriptions in their own terminology rather than to recast it in a different analytical framework.

(37), and the perfect subjunctive, which differs from the first conditional in the set of inflectional suffixes (38):

(37) Conditional 2:

min-ê dîti bi-wa

I-FUT see.PTCP be.PAST-COND

"I would have seen" (German: "Ich würde gesehen haben")

(38) Perfect subjunctive:

Perîxan-ê ji hakim re kulîlk pêşkêş bi-kir-a-n-a Perikhan-FUT from ruler AT flowers offer SBJV-made-COND-PL-

"Perîkhan should have presented flowers to the ruler" (German: "Perîkhan sollte dem Gouverneur Blumen schenken (hätte geschenkt).") (Bedir Khan and Lescot, 1986: 279)

In Badini, none of the conditionals, the perfect subjunctive, or the second future exist. The function of these forms is primarily carried out by the *da* construction.

Core questions raised by variation in the expression of future tense

As we have seen, there is a significant amount of variation between the two variants of Northern Kurdish discussed in this paper. Badini lacks a whole set of verb paradigms involving the future modal particle: it does not have forms for what Bedir Khan and Lescot (1986) call the first and second conditional, the second future and the perfect subjunctive. In turn, Kurmanji lacks the modal particle *da*, and at least one of its functions is carried out by the conditionals, the perfect subjunctive and possibly by the second future.

On closer examination, these differences may reduce to differences in the properties of the future modal particle. In Badini, the future modal particle  $d\hat{e}$  places firm restrictions on the verb: it may not be inflected for modality or aspect, and it may only occur in the present stem. The Kurmanji modal particle  $w\hat{e}/d\hat{e}/\hat{e}$ , on the other hand, requires the verb to be inflected for subjunctive mood. However, it allows for the verb inflection to be based on the past stem as well.

The question that arises at this point is whether these differences in the syntactic properties of the future modal particle are accidental formal features or whether they are conditioned by semantic properties. In this paper I want to argue for the latter hypothesis. I will do so on the basis of the semantic analysis of the Badini modal particle  $d\hat{e}$  provided by Unger (2012).

## Explaining variation in the expression of future tense

As discussed in the first section above, the most obvious difference between the future tense form in Badini and (standard) Kurmanji is that in Kurmanji, the verb in the future tense carries the subjunctive prefix *bi*-, whereas in Badini this prefix cannot be used.

It may be claimed that this difference is merely a superficial morphological fact: the subjunctive prefix just happens to be elided in Badini. On this

assumption, the syntax would be the same, and there would be a subjunctive functional head projected in the sentence in any case. However, my analysis of  $d\hat{e}$  in Badini suggests another account. On this analysis, the linguistic semantics of  $d\hat{e}$  does not refer to the notions of modality or temporality at all. So the non-occurrence of the subjunctive prefix in the Badini future tense may be due to  $d\hat{e}$  not linguistically encoding temporal or modal notions. If we assume that the Kurmanji future indicator  $w\hat{e}/d\hat{e}/\hat{e}$  differs from its counterpart in Badini in that it does trigger procedures directly affecting modal interpretation and therefore licenses, or even requires, subjunctive verb forms, then the variation observed with respect to the use or non-use of the subjunctive prefix in the future tense form is semantically motivated and not merely a morphological accident. For concreteness, let us assume that  $w\hat{e}/d\hat{e}/\hat{e}$  triggers the following procedure in addition to the ones triggered by Badini  $d\hat{e}$  (26) and (28) as well:

(39) The state of affairs expressed holds in a possible world other than the actual one.

It follows that the verbs in clauses containing  $w\hat{e}/d\hat{e}/\hat{e}$  should carry the subjunctive prefix to be consistent with this procedural indication. Once the verb is inflected for modality, different temporal stems might be exploited to express more nuances in the modal-temporal interpretation of linguistic forms. Hence forms that are absent in Badini, such as the conditional forms, the perfect subjunctive and the second future (according to Bedir Khan and Lescot, 1986) become possible. Once these forms are realised, the modal particle da becomes redundant.

Another consequence of this analysis is that it explains the fact that future constructions can occur with negation in Kurmanji but not in Behdini. The negation prefix in both dialects is subject to tense and mood information: na in the present indicative, ne in present or past subjunctive and in past indicative. This means that the negation prefix does not merely indicate negation, but also tense and mood information. According to my analysis of  $d\hat{e}$  in Behdini, tense and mood information is not licensed in this construction. Hence, the negation prefix cannot occur in this construction either. In Kurmanji, on the other hand,  $ne/d\hat{e}/\hat{e}$  does license modality information, and the negation prefix can indeed be used.

This means that one of the most significant differences in the Badini and Kurmanji verb paradigm can be explained on the basis of semantic properties of  $d\hat{e}$  and da not shared by the Kurmanji future particle  $w\hat{e}/d\hat{e}/\hat{e}$ . Although this is a strong theoretical argument in favour of the hypothesis that the future indicators in the respective dialects differ as to whether they license subjunctive forms on the verb or not, it is not a complete proof. Notice that this account claims that the future indicator in the respective dialects directly triggers different procedures, but that the pragmatic inferences it triggers leads to the same overall results with respect to the temporal and modal interpretations of the utterance. While this is certainly a plausible claim, it

must also be expected that there may be specific contexts and specific uses where overall interpretations may differ. In other words, it is still to be expected that there might be some differences of use of the future tense form in the respective dialects. In fact, I could not find any clear examples of non-modal uses of the  $w\hat{e}/d\hat{e}/\hat{e}$  construction such as (13), (14) or (15) in the CCKNT. It appears that Kurmanji  $w\hat{e}/d\hat{e}/\hat{e}$  future tense constructions exhaustively fall into the temporal or modal types of use.

If true, this would strongly confirm the hypothesis that the Kurmanji modal particle  $w\hat{e}/d\hat{e}/\hat{e}$  directly triggers a procedure relating to the modal interpretation of utterances. However, more detailed research will be required to corroborate this finding.

#### Conclusion

I have presented an analysis of the Badini future indicator dê and the "modal" particle da in procedural terms. This analysis claims that these particles trigger processing heuristics directly affecting information about verifiability of the state of affairs communicated and the kind of speaker-commitment to, or evidence for, the truth of the state of affairs conveyed. The procedures triggered by these particles do not directly affect temporal or modal interpretation, although they are effective in guiding the audience to the speaker-intended temporal and modal interpretation in a knock-on effect. I have thus put forward the hypothesis that this analysis can help provide a semantic motivation for obvious overt differences in the expression of future tense and certain types of conditionals between two closely related linguistic variants of Kurdish, Badini and standard Kurmanji. In essence, my claim is that the modal particle  $w\hat{e}/d\hat{e}/\hat{e}$  in Kurmanji differs from  $d\hat{e}$  in Badini in that it triggers a third procedure which directly relates to the modal interpretation of the utterance, thereby short-cutting the need to rely on indirectly triggered inferences for comprehending the modal meaning of the utterance.

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