

## The Coptic *er-ʃan* Conditional as a ‘CERTAINTY’ Conditional

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### 1 Introduction

In much literature on the topic, the conference theme “Tense and Aspect in Conditionals” is broadly understood in terms of the repercussions that tense and aspect marking in the protasis (antecedent) clause have on the semantic interpretation of the conditional sentence construction. The explorative study presented here goes in the opposite direction, exploring the interpretative effects that verbal tense, aspect and mood marking in the apodosis (antecedent) clause have on the semantic interpretation of the protasis clause, which is not specified for any of these values.

The empirical domain of our case-study is the grammar of conditional constructions in Coptic, which is perhaps one of the most complex areas of the syntax–semantics interface. Coptic (Ancient Egyptian [Afroasiatic], ca. 3<sup>rd</sup>–12<sup>th</sup> c. CE) stands out crosslinguistically in possessing a specialized conjugation pattern that is syntactically restricted to the protasis clause of a bi- or multiclausal conditional construction. The *er-ʃan* conditionals is a compound tense, which is composed an initial relativizer *ere/e=* and a morphologically invariant conjugation base *ʃan*. There is no corresponding simplex form without the initial relativizer and just the conditional auxiliary element *ʃan*. The complete inflectional paradigm of the *er-ʃan* conditional is presented in the in the below table. (The triconsonantal verb *so:təm* ‘to hear’ (√S-T-M) illustrates a typical paradigm.)

TABLE 1. The inflectional paradigm of the *er-ʃan* conditional conjugation

1SG	e=i	ʃan	so:təm	1PL	e=n	ʃan	so:təm
2SG.M	e=k	ʃan	so:təm	2PL	e=tetən	ʃan	so:təm
2SG.F	er-	ʃan	so:təm				
3SG.M	e=f	ʃan	so:təm	3PL	e=u:	ʃan	so:təm
3SG.F	e=f	ʃan	so:təm			ʃan	so:təm
Before full NP	er	ʃan	NP so:təm				

The Coptic *er-ʃan* conditional belongs to a group of so-called “clause conjugations”, which cannot occur as an independent clause and which rely for their temporal, aspectual and modal specification on the fully specified main clause they are in construction with (Polotsky 1960). In view of the fact that Coptic *er-ʃan* conditionals lack independent tense, aspect and mood marking, the question raised by Funk (1985), Kaufmann (2005), and many others, whether verbal

tense and aspect are interpreted differently in protasis clause than in other syntactic environments simply does not arise.

This does not mean that the interpretation of Coptic **er-ʃan** conditionals is unpredictable and at random. In the Coptic descriptive tradition, it has long been observed that **er-ʃan** conditionals have modal condition and consequence (IF–THEN) as well as temporal-order (WHEN) interpretations, which hang together in a complex fashion. We take the modal interpretation to be the “stronger” reading, as it posits a causal or at least co-dependent relationship the situation reported in the protasis clause and the situation reported in the apodosis clause. By the same token, the temporal (WHEN) interpretation is the “weaker” reading, as it only asserts a temporal precedence relation between the protasis and the apodosis situation. A garden-variety example for the stronger modal reading is shown below. The faith of the female interlocutor is presented as the *conditio sine qua non* for the perception of God’s glory.

(1) Modal interpretation of **er-ʃan** conditional with andative future **na** apodosis

**er-**    **ʃan**    Ø            pisteue    te=            **na**    nau    e-p-eʒu  
REL-    COND    (=CL.2.F.SG)    believe.ABS    CL.2.F.SG=    FUT    see.ABS    PREP-DEF.M.SG–glory  
əm=pə-nu:te  
LINK=DEF.M.SG–God

“If you (woman) believe, you will see the glory of God.” (John 11:40, ed. Quecke)

The IF–THEN schema of condition and consequence does not come out of nowhere but arises as a consequence of the verbal tense selected in the apodosis clause. We will present evidence and arguments that the combination of **er-ʃan** protasis and epistemic future **na** apodosis clause contributes a certainty component to the denotation of the conditional sentence as a whole (Kaufmann 2005). We refer to this modal–evidential component as CERTAINTY conditionality and attempt to show that it goes beyond predictivity and realis or fulfillable conditionals .

The semantically weaker, temporal link amounts to a temporal contingency between the protasis event and the apodosis event. This is the most salient reading of **er-ʃan** conditionals with habitual aspect apodosis clauses. The habitual aspect auxiliary **ʃare/ʃa=** describes the plurality of actions and generalizable patterns of events. We will insist on defining the habitual as a pluractional aspect and not as a tense, since it combines with the preterit auxiliary **ne** to express a general pattern of events in the past. Accordingly, present and past tense reference are not part of its core grammatical meaning.

(2) Temporal interpretation of **er-ʃan** conditionals with habitual aspect apodosis

**e**    =s            **ʃan**    to:ʁwən    e-ʃlɛl            **ne**    **ʃa**    =s            ʃlɛl  
REL    =CL.3F.SG    COND    raise.ABS    to-pray.ABS    PRET    HAB    =CL.3F.SG    pray.ABS  
nəmma=s  
with=CL.3F.SG

“When(ever) she (Hilaria) rose to pray, he used to pray with her (sister).” (Hilaria 9:12, ed. Drescher)

In the absence of information to the contrary, the past habitual **ne fare/fa=** entails that general pattern of events no longer holds at the moment of speaking. We call this the “life time effects”. Bearing in mind that statement about past habits are in principle verifiable, we arrive at an understanding as to why **er-fan** conditionals with past **ne fare/fa=** habitual apodoses can only be interpreted temporally to the exclusion of cause-effect relations.

The stronger modal and the weaker temporal reading are sometimes difficult to tear apart. This has led to the traditional contention that the conjugation base **fan** itself is semantically ambiguous. For this reason, or so runs the argument, one must resort to conditional and temporal connectors for disambiguation purposes (Funk 1985: 412 note 70; Layton 2000: 272–273 §346). We will argue for a view to the contrary, according to which polysemy does not entail that the grammatical pattern in question is semantically ambiguous. The multifaceted meanings of Coptic **er-fan** conditionals can be unified by subsuming them under CERTAINTY conditionality. But one has to be careful that CERTAINTY conditionality has two sources—one that derives from the certainty implicatures of the epistemic future and another that derives from the verifiability of a general pattern of events that is germane to the semantics of habitual aspect.

## 2 The modal reading of er-fan conditionals with epistemic future tense apodoses

Coptic has two morphologically and syntactically distinctive future tenses. One is the epistemic future tense **f=na so:xtəm** ‘he will hear’ and the other is the deontic future tense **e=f e-so:xtəm** ‘he must/should/is to hear’. This section is about the interpretative effects of epistemic future **na** apodoses. As an aside, the epistemic future tense marker **na** has diachronically been derived from a Late Egyptian and Demotic andative (‘GOING TO’) construction, which is formed with the deictic motion verb **nfy** ‘to go’ (double-weak:  $\sqrt{n-f-y}$ ) and an infinitive clause.

There is no evidence for an underlying biclausal configuration of the epistemic future tense **na**. The monoclausal structure SUBJECT > AUXILIARY > VERB of epistemic future tense sentences is exemplified below. In spite of its andative origins, the epistemic future indicates movement away from the deictic center, but does not further specify the nearness or remoteness of the event in question. In brief, it is neither a nearby future nor a futurate present (Reintges 2011: 80–83; 2018 [2004]: 265–267 §7.3.3.3). The Last Judgement is ascertained to come about but the precise time of its occurrence is left open.

### (3) The epistemic future tense auxiliary **na**

Subject	Auxiliary	Main Verb	Direct Object
pə-tʰɔ̃js	<b>na</b>	krine	ən-nə-laos
DEF.M.SG-lord	FUT	judge.ABS	PREP-DEF.PL-people

“The Lord will judge the nations.” (Psalm 7:8, ed. Budge)

The IF–THEN schema of condition and consequence emerges as the most salient reading of **er-fan** conditionals with epistemic future **na** apodoses. The inferential component of this particular protasis–apodosis configuration is particularly transparent in the context of complex deductive argumentation involving two premises. The first premise is expressed by an identificational nominal sentence, in which the subject expression and the nominal predicate are predicatively

related to each other by means of a demonstrative copula pronoun. The second premise is expressed by the **er-ʃan** protasis clause, which resumes the identificational nominal predicate. The future tense **na** apodosis expresses the logical consequence (inference)

Example (4) illustrates the tripartite structure of this hypothetical syllogism. In the initial identificational nominal sentence, the speaker (Jesus Christ) identifies himself with the living bread from heaven. In the subsequent protasis clause **er-ʃan wa wom** ‘If someone eats from’, the nominal predicate **p-ɔ̄ik** ‘the bread’ is resumed in the locative partitive phrase **eβɔl həm pei-ɔ̄ik** ‘out from this bread’. The epistemic future apodosis **f=na ʔo:nəh ʃa-eneh** ‘he will live forever’ asserts that since the heavenly bread is identified with the Savior, the eating of it guarantees eternal life. It provides the logical conclusion of the two antecedent premises.

(4) **er-ʃan** protasis with epistemic future tense **na** apodosis in deductive argumentation

ʔanɔk	pe	p-ɔ̄ik	[ <sub>RC</sub> et	ʔo:nəh	[ <sub>RC</sub> ent	ʔa	=f
INDEP.PRON.1SG	COP.M.SG	DEF.M.SG–bread	REL	live.STAT	REL	PERF	=CL.3M.SG
eḯ	eβɔl	hən	tə-pe ]				
come.ABS	PCL	from	DEF.F.SG–heaven				
<b>er-</b>	<b>ʃan</b>	wa	wom	eβɔl	həm	pei-ɔ̄ik	
REL-	COND	one	eat.ABS	PCL	from	DEM.M.SG–bread	
<b>f=</b>	<b>na</b>	ʔo:nəh	ʃa	eneh			
CL.3M.SG=	FUT	live.ABS	until	forever			

“I (am) the living bread which came from heaven. If someone eats from this bread, he will live forever.” (John 6:51, ed. Quecke)

Under the salient modal interpretation, **er-ʃan** conditionals with epistemic future **na** apodosis are commonly interpreted in terms of a cause–effect relation. CERTAINTY conditionality pertains to the predictability of the causal relationship itself, whereby one event will inevitably lead to another event. This point is illustrated in example (5), which has a somewhat surreal flavor. Before his entrance into Jerusalem, Jesus is requested by the Pharisees to silence his disciples and the people in their entourage, who praise him as the Messiah. He countenances this move by asserting that the appraisal is appropriate. If the disciples and the crowd were to be silenced, it will so happen that inanimate stones fill the void.

(5) **er-ʃan** protasis with epistemic future tense **na** apodosis denoting causal relationship

<b>er-</b>	<b>ʃan</b>	naï	ka	ro:u:	nei-ʔo:ne	<b>na</b>	tʔi
REL-	COND	DEM.PRON.PL	leave.CS	mouth=POSS.3PL	DEM.PL–stone	FUT	take.CS
ʃkak	eβɔl						
cry	PCL						

“If these (disciples) (here) are silenced, these stones (here) will cry out.” (Luke 19:40, ed. Quecke)

First person singular futures are known to convey a promissive illocution, whereby the speaker is the agent of the anticipated action and takes responsibility for its actualization. In the context of a pledge or oath, the speaker deliberately diminishes her own agency and transfers it to a

supernatural authority, making it dependent on that authority’s approval. As shown by example (6) below, this rhetorical move does not depart too much from the IF–THEN schema of **er-ʃan** conditionals with epistemic future tense **na** apodosis clauses.

- (6) **er-ʃan** protasis with promissive 1<sup>st</sup> pers. sing. epistemic future tense **na** apodosis

etʃe	pai	<b>er-</b>	<b>ʃan</b>	pə-nu:te	kaʔat		
for	DEM.M.SG	REL-	COND	DEF.M.SG-God	permit.CS.1SG		
ti=	<b>na</b>	ho:	erɔ=i	e	=i	ɔ:	
CL.1SG=	EPIST.FUT	satisfy.ABS	PREP=CL.1SG	REL	=CL.1SG	do.STAT	
ən-	hɛ:ɡɛ:mɔn	ɛ:	əm-	matɔi			
in-	general	or	in-	soldier			

“Because of this, if God allows me, I will satisfy myself being a general or a soldier.”  
(Shenoute I.1 38:6–7, ed. Amélineau)

Since Kiparsky and Kiparsky (1970), it is generally assumed that BELIEVE verbs are the type of factive verbs that entail the truth of the embedded proposition. Example (7) is an instance of an embedded **er-ʃan** conditional with epistemic future tense **na** apodosis. The embedding verb is the Greek borrowed BELIEVE verb **pisteue**. The point to be observed here is that CERTAINTY conditionality goes hand in hand with the factive reading inherent to matrix BELIEVE verbs. In the case at hand, the certainty is about the spiritual benefits occasioned by the prospective visit of the venerable monk.

- (7) **er-ʃan** protasis with epistemic future tense **na** apodosis in complement clause of the Greek BELIEVE verb **pisteue**

ʔawo:	ti=	pisteue	[t <sup>f</sup> e	e	=f	<b>ʃan</b>	eī	ʃarɔ=n
and	CL.1SG=	believe.ABS	COMP	REL	=CL.3M.SG	COND	come.ABS	to=CL.1PL
tən=	<b>na</b>	kien	hɛɥ	tɛr=n	hitən	ne=f-ʃlɛl]		
CL.1PL=	FUT	find.CS	gain	all=POSS.1PL	through	DEF.PL=POSS.3PL-prayer		

“And I believe that if he (the venerable monk) comes, we will all profit from his prayers.” (Hilaria 10:30–31, ed. Drescher)

CERTAINTY conditionality is not restricted to assertions but may also carry over to interrogative speech acts. As Kaufmann (2005: 251) pointed out, certainty pertains to the “presumption of decidedness”. The speaker/questioner presupposes that the question is already settled and that her addressee/answerer can provide the elicited piece of information.

To see this more clearly, consider another case of complex deductive argumentation with two premises. The first premise is the identificational nominal sentence ‘you (are) the salt of the earth’. The second one is represented by the **er-ʃan** protasis ‘If the salt gets insipid’. The apodosis clause is formulated as a constituent question ‘with what will they make it salty?’ and contains, as may be expected by now, the epistemic future tense **na**. As an aside, Coptic is a *wh-in-situ* language in which the questioned constituent appears in a clause-internal position. Accordingly, the instrumental *wh*-phrase **ən-u:** ‘with what’ in the apodosis clause appears in the canonical sentence-final position of adverbial modifiers.

(8) **er-*jan*** protasis with constituent question epistemic future tense **na** apodosis

ənto:tən            pe            pe-hmu:            əm=pə-kah  
 INDEP.PRON.2PL    COP.M.SG    DEF.M.SG-salt    LINK=DEF.M.SG-earth  
**er-**    **jan**    pe-hmu:    de    βa:βe    e    =u:    **na**    malh=f  
 REL-    COND    DEF.M.SG-salt    PCL    insipid.ABS    REL    =CL.3PL    FUT    salt.CS=CL.3M.SG  
**ən-u:**  
 with-what

“You (are) the salt of the earth. If the salt gets insipid, with what will they make it salty (with what will it be made salty)?” (Matthew 5:3, ed. Balestri)

Two observations are worth noting. First, the interrogative scope of the wh-phrase **ən-u:** ‘with what’ extends only to the apodosis clause, leaving the **er-*jan*** protasis clause out of its scope. The **er-*jan*** conditional is interpreted as having declarative illocutionary force. Second, the wh-question has a rhetorical flavor, as it is common knowledge that there is no way in which tasteless salt can be made spicy again. Accordingly, the declarative counterpart of the instrumental wh-phrase **ən-u:** ‘with what’ would be a negative indefinite ‘nothing’.

### 3 The temporal reading of **er-*jan*** conditionals with habitual aspect apodoses

There is another route that CERTAINTY conditionality can be arrived at and this is by pluralizing apodosis events. The way to do this is by selecting habitual aspect auxiliary **fare/fa=**, which minimally involves two instantiations of the same type of event. Habitual aspect is pluractional in typically involving repeated, iterative, and distributive action. But it also carries an additional implicature that the recurrent event is characteristic of the behavior of the subject (for further details, see Reintges 2018 [2004]: 276–8 §7.3.6.2). The pluractional semantics of the habitual aspect auxiliary **fare/fa=** can be made more specific by adverbial modification. The proposed partitive noun phrase **u-mε?ese ən=sɔp** ‘many times’ imposes a frequentative reading on the present habitual form **fa=f aspaze** ‘he kissed (me)’.

(9) Present **fare/fa=** habitual aspect with topicalized adverb of iterative quantification

u-mε?ese            gar            ən=sɔp            **fa**    =f            aspaze            əmmɔ=i  
 INDEF.M.SG-crowd    PCL            LINK=time    HAB    =CL.3M.SG    kiss.ABS    PREP=CL1.SG  
 e-ta-tapɔ:

on-DEF.F.SG.POSS.1SG-mouth

“For many times, he (the venerable monk) would kiss me on my mouth.” (Hilaria 10:11–12, ed. Drescher)

Just like in the case of present tense sentences, present habituals can have a generic interpretation. Proverbs, which thematize general conditions of human experience, exemplify this gnomic use, which at first blush seems to contradict with the plurality reading of habitual aspect. On closer inspection, it appears that for generalizations about the human condition to be valid, there must be more than one instantiation of the event type in question, which may be the relevant factor motivating habitual aspect selection.

(10) Gnomonic use of present **fare/ʃa**= habitual aspect in proverbial contexts

**fare** u-ʃe:re      ən=saβe:      so:ɪtəm      ənsa      pe=f-ejot  
 HAB    INDEF.SG-boy    LINK=prudent    listen.ABS    after    DEF.M.SG=POSS.3M.SG-father  
 “A prudent son listens to his father.” (Proverbs 13:1, ed. Worrell)

The most salient reading for **er-ʃan** conditionals with habitual aspect apodosis clauses is one of temporal contingency, in which the protasis event precedes the apodosis event in the timeline. Importantly, the temporal precedence relation between protasis and apodosis pattern of events does not exclude the possibility of a causal relationship. Rather the non-temporal reading is not the most salient one and involves additional inferencing. A garden-variety exemplar is given below. The **er-ʃan** protasis clause describes the confrontation of the protagonist Hilaria with the desolate state of her own sister. As a reaction to it, she descends into an emotional state of despair with loss of self-control and hysterical attacks of crying. The selection of the habitual aspect in the apodosis asserts that “perception–reaction” chain of events took place on several occasions.

(11) **er-ʃan** protasis with present **fare/ʃa**= habitual aspect apodosis

**e**    =s            **ʃan**    kio:ʃət      ehun    e-hra=s  
 REL   =CL.3F.SG    COND   look.ABS      PCL    at-face=POSS.3F.SG  
**fare**    pe=s-sa                                      ən=hun      βol            eβol  
 HAB    DEF.M.SG=POSS.3F.SG-part    LINK=inside    loosen.ABS      PCL  
**ʃa**      =s            pahət=s                                      etʰən    nə      =s            ri:me    (...)  
 HAB    =CL.3F.SG    throw.CS=CL.3F.SG    on      CONJ    =CL.3F.SG    weep.ABS  
 “When she (Hilaria) looked at her (her sister), her inner part dissolved, she threw herself on the ground and wept (...).” (Hilaria 9:13–14, ed. Drescher)

The pluractional semantics of habitual aspect can be quantified over. This is what happens in example (12), in which the universal quantifier adverb **ən-wəeif nim** ‘at every time, always’ takes scope of the entire conditional sentence. Wide quantifier scope has a syntactic correlate in that the adverbial quantifier is placed in the topmost position of the conditional sentence, preceding the **er-ʃan** protasis in linear order.

(12) **er-ʃan** protasis with present **fare/ʃa**= habitual aspect apodosis in universal quantifier context

ən-wəeif    nim    **e**    =u:            **ʃan**    wo:            [RC e    =u:            wom  
 in-time    every    REL    =CL.3PL    COND   finish.ABS    REL    =CL.3PL    eat.ABS  
 əm-pe=u:-kuḷ                                      əm=ɔ:k      **ne**    **ʃa**    =u:            so:wəh  
 PREP-DEF.M.SG=POSS.3PL-small    LINK=bread    PRET    HAB    =CL.3PL    gather.ABS  
 e-ne=u:-erɛu  
 to-DEF.PL=POSS.3PL-RECIPROC

“Every time when they finish eating their small (rations) of bread, they used to gather together.” (Vita Pachomii Sahidice 137:3–4, ed. Lefort)

The **er-ʃan** conditional can take the form of an impersonal existential clause **e=s ʃan ʃo:pe** ‘if it happened’ into which a finite or nonfinite clause containing the semantically contentful material

is embedded. An illustrative example in this regard is the following one (13). The infrequency adverb **ən-u-səp** ‘once in a while, now and then’ surfaces inside the embedded infinitival clause, but takes scope of the protasis **e=s jan ʃo:pe** clause. The possibility of quantificational expression to scope out of their clausal domain appears to be restricted to embedded infinitival clauses, as in the case at hand.

- (13) **er-jan** protasis with present **ʃare/ʃa=** habitual aspect apodosis and temporal as well as modal interpretation.

alla	e	=s	jan	ʃo:pe	[e-tre	=f	jan	k <sup>i</sup> o:nət
but	REL	=CL.3F.SG	COND	happen.ABS	PREP-CAUS	=CL.3M.SG	get_angry.ABS	
ən-u-səp ]	e	ʃa	=f	k <sup>i</sup> o:nət	kata	t-he		
in-INDEF.SG-time	REL	HAB	=CL.3M.SG	get_angry.ABS	according.to	DEF.F.SG-manner		
ən=n-	[RC et	wəʔəβ ]						
LINK=DEF.PL-	REL	purify.STAT						

“When/if it happened once in a while that he (Pachomius) got angry, then he got angry in the manner of the saints.” (Vita Pachomii Sahidice 3:20–21, ed. Lefort)

Infrequency of action is not necessarily in tension with the semantics of habitual aspect, which, under our definition, needs to fulfill a minimality conditional of two same-self events. In the above conditional sentence, a modal interpretation cannot entirely be excluded. In this case, the speaker/narrator neither asserts nor denies the possibility that the charismatic monastic leader Pachomius had angry fits. In entertaining this possibility two provisions are made. For one thing, the flareup were occasional and for another thing, they happened in a manner befitting for a saint.

The gnomic use of habitual aspect can also be observed in **er-jan** conditionals. The discourse paragraph in (14) involves inferential reasoning about the correlation between the direction of the wind and its climatic effects. That is to say, the northern wind brings with it a cooling effect, whereas the southern wind is correlated with an all-encompassing heat.

- (14) **er-jan** protasis with present **ʃare/ʃa=** habitual aspect apodosis in inferential context

<b>er-</b>	<b>jan</b>	u-tɛɣ	ən=əmhit	eḯ	eβɔl			
REL-	COND	INDEF.SG-wind	LINK=north	come.ABS	PCL			
<b>ʃa</b>	=tetən	eḯme	[t <sup>f</sup> e	u-kβɔ:	p-	[RC et	na	ʃo:pe ]]
HAB	=CL.2PL	know.ABS	COMP	INDEF.SG-cold	DEF.M.SG	REL	FUT	happen.ABS
<b>er-</b>	<b>jan</b>	u-tu=rɛs	eḯ	eβɔl				
REL-	COND	INDEF.SG-wind=south	come.ABS	PCL				
<b>ʃa</b>	=tetən	eḯme	[t <sup>f</sup> e	u-kauma	mən	u-hmən		
HAB	=CL.2PL	know.ABS	COMP	INDEF.SG-heat	with	INDEF.SG- warmth		
p-	[RC et	na	ʃo:pe ]]					
DEF.M.SG	REL	FUT	happen.ABS					

“When/if a northern wind comes, (then) you know that a chill will come to pass. If a southern wind comes, (then) you know that a burning heat and warmth will come to pass.” (Pistis Sophia 348: 17–20, ed. Schmidt)

Although the inference drawn is unique, the factive knowledge verb **eime** ‘to know’ is pluralized as though there were several knowledge-acquisition events. But the plurality reading of habitual aspect pertains to the regular occurrence of the southern and the northern winds and the associated temperature rise and drop, which are described in the factive complement clauses of the knowledge verb **eime**. To summarize, **er-fan** conditionals with **fare/fa=** habitual aspect apodosis clauses have a salient temporal reading with outliers in the modal domain. The source of CERTAINTY conditionality is the verifiability of multiple occurrence of the same event.

#### 4 Modal strengthening effects

The picture developed so far becomes more complex when modal strengthening effects are being considered. By this, we mean that the modal reading of **er-fan** conditionals is reinforced at the expense of the weaker temporal reading (Declerck 1997). The modal strengthening effects can be observed in in two specific environments, one of which are deontically modalized apodosis clauses and the other is negative polarity contexts.

The deontic future **e=f e-so:ɬəm** ‘he should/must hear’ is the modalized counterpart of the epistemic **na** future. Diachronically speaking, it derives from a locative construction, with the directional preposition **e** ‘to’ and an infinitival clause. As shown by example (15), the deontic future seldom refers to future time, but rather involves a subjective judgement on part of the speaker about the necessity or desirability for some event to be actualized. From this modal profile, we can understand why the deontic future is particularly well-suited for the expression of directive speech acts (Reintges 2018 [2004]: 267–269 §7.3.3.4).

(15) Deontic future tense used as a directive speech act

**e =k e wom de ən-ne [RC nt ʔa pə-nu:te**  
 REL =CL.2M.SG DEON.FUT eat.ABS PCL PREP-DEF.PL REL PERF DEF.M.SG-God  
**tənnɔɥ=su: na=k ]**  
 send.CS=CL.3PL to=CL.2M.SG

“You should rather eat from the (things) which God sent to you.” (Apophthegmata Patrum n° 20, 4:16–17, ed. Chaîne)

In combination with deontic future tense apodoses, the **er-fan** protasis clause has a restrictive function and narrows down the applicability of the directive to very specific circumstances. Particularly clear cases involve second person singular deontic future forms like **e=k e-nehse** ‘you should arise’.

- (16) **er-ʃan** conditionals with deontic future apodosis clause in directive speech act

ʔawo: ʔɔn ne-snɛy e =u: ʃan amelei  
 and PCL DEF.PL-brother.PL REL =CL.3PL COND neglect.ABS  
 e =k e nehse əmmɔ=u: həm pə-nomos  
 REL =CL.2M.SG DEON.FUT arise.ABS PREP=CL.3PL in DEF.M.SG-law  
 əm=pə-nu:te  
 LINK=DEF.M.SG-God

“And again (as for) the brother, if they become negligent, you should arise them in the law of God.” (Vita Pachomii Sahidice 94:14–16, ed. Lefort)

In **er-ʃan** conditionals with deontic future tense apodoses, the situation reported in the protasis clause is hypothetical but foreseeable and based on world knowledge or shared cultural experience. The actualization of the hypothetical condition is not at issue but rather taken as a given. Although differing in this regard from **er-ʃan** conditionals with epistemic future apodoses, the IF–THEN schema that underlies the modal reading is retained. The description of the hypothetical situation in the **er-ʃan** protasis can be quite elaborate. The following precept from the Rules of Pachomius speaks about how to take care of an injured brother who cannot find rest at night.

- (17) Modal interpretation of **er-ʃan** conditionals with deontic future apodosis clause in prescriptive course of action contexts

**er- ʃan** u-sɔn de ʃɔʔɔkie=f nə =f təm  
 REL- COND INDEF.SG-brother PCL hurt.CS=CL.3M.SG CONJ =CL.3M.SG NEG.AUX  
 ənkwɔ:tək alla e =f mɔʔɔʃe ehun eβɔl nə =f  
 sleep.ABS but REL =CL.3M.SG go.ABS PCL PCL CONJ =CL.3M.SG  
 ər khria ən-u-ʃtɛn ε: u-kuj ən=neh  
 do.CS need PREP-INDEF.SG-tunic or INDEF.SG-small LINK=ointment  
**er-e** pe=f-rm=ən-ɛj βok e-pə-ma  
 REL-DEONT DEF.M.SG=POSS.3M.SG-NMLZR=LINK-house go.ABS to-DEF.M.SG-place  
 ən=nə-oikonomos nə =f tʰit=u: na=f  
 LINK=DEF.PL-manager CONJ =CL.3M.SG take.CS=CL.3PL for=CL.3M.SG

“If a brother hurts himself and he cannot sleep but goes in and out and needs a tunic or a small (quantity) of ointment, his steward should go to the place of the managers and fetch them (these goods) for him (the injured brother).” (Praecepta Pachomius n° 105, 32:3–5, ed. Lefort)

The modal strengthening effects can also be observed in the context of negative polarity. Example (18) features a negated **er-ʃan** conditional, in which negative polarity is lexicalized by the negative auxiliary verb **təm** ‘to do not’. The conjunction **ɛʃo:pe** ‘if’, which represents a truncated existential clause ‘if (it) happens’, underscores rather than disambiguates the already present modal interpretation. It should furthermore be observed that the apodosis is an imperative clause **ʔa-tʰi=s ən-t-ekkle:sia** ‘Tell it to the church’, which is the most typical syntactic form of directive speech acts.

- (18) Modal interpretation of negated **er-ʃan** conditional with imperative apodosis clause

eʃo:pe de e =f ʃan təm so:təm ənsɔ:u:  
 if PCL REL =CL.3M.SG COND NEG.AUX hear.ABS after=CL.3PL  
 ʔa-ti =s ən-t-ekkle:sia  
 AUG-say.CS =CL.3F.SG to-DEF.F.SG-church

“If he (the brother) does not listen to them, say it to the church!” (Matthew 18:17, ed. Balestri)

As noted by Shisha-Halevy (2003), the deontic and the epistemic future have a negative portmanteaux counterpart **ənnē**, which fuses negation and future time reference. The negative future **ənnē** is commonly found in a verbal cluster with the ability modal auxiliary **əʃ** ‘to be able to, can’. The only available interpretation for **er-ʃan** conditional with negative future **ənnē** apodosis is a modal one.

- (19) Modal interpretation of **er-ʃan** conditional with negative future **ənnē** apodosis

ʔawo: er ʃan u-εῖ ποῖράτ' e-nə=f-ερεῦ  
 and REL COND INDEF.SG-house divide.ABS to-DEF.PL=POSS.3M.SG-RECIPROC  
 ənnē- ʃ p-εῖ [RC et əmmau ] ʔahe rat=f  
 NEG.FUT CAN DEF.M.SG-house REL there stand.ABS foot=POSS.3M.SG

“And if a house(hold) becomes divided into each other, that house(hold) would not be able to stand (upright).” (Mark 3:25, ed. Balestri).

There are even more complex examples of modal strengthening through negation, in which both the **er-ʃan** protasis and the apodosis clause are negated. One of the rare examples for the double-negation configuration is shown below. The **er-ʃan** conditional is negated by the negative auxiliary **təm**, whereas the epistemic future **na** in the apodosis clause is negated by the standard bipartite negation **nə ... ʔan**. The apodosis clause is further modalized by the ability modal auxiliary **əʃ**.

- (19) Modal interpretation of negated **er-ʃan** conditional with negated epistemic future tense **na** apodosis

er- ʃan təm pə-ro:me apotasse ən-enka nim  
 REL- COND NEG.AUX DEF.M.SG-man give\_up.ABS PREP-thing each.M.SG  
 [RC et həm pə-kosmos] nə =f na ʃ ʃo:pe  
 REL in DEF.M.SG-world.M.SG.NOM NEG<sub>1</sub> =CL.3M.SG FUT CAN become.ABS  
 ʔan əm monakhos  
 NEG<sub>2</sub> as monk.M.SG.NOM

“If a man will not give up everything that is in the world, he won’t be able to become a monk.” (Apophtegmata Patrum nr. 242, 74: 28–29, ed. Chaîne)

It generally appears that negative polarity is incompatible with a temporal reading, regardless of whether the negation marking appears in the protasis, in the apodosis or in both.

## 5 Discussion and outlook

TABLE 2. Modal and temporal interpretations of **er-fan** conditionals

Apodosis Tense/Aspect/Mood	Modal IF-THEN reading	Temporal WHEN reading
Epistemic future <b>na</b> apodosis	+	(+) (marginal)
Habitual aspect <b>fare/fa=</b> apodosis	(+) (marginal)	+
Deontic future apodosis	+	–
Imperative apodosis	+	(+) (marginal)
Negated protasis or apodosis	+	–

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