

Participant-internal Possibility Modality and It's Coding by – A *Bil* Analytical Construction in Kazakh

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Doi:10.5901/mjss.2015.v6n5s2p211

Abstract

This paper discusses the semantic paradigm of the participant-internal possibility modality as a subcategory of modality and it's coding in Kazakh with –A bil analytical construction. We will show that –A bil expresses all semantic properties of participant-internal possibility modality such as inherent/ learnt and mental/physical. Therefore constitutes the core of the functional-semantic field of the given modality. The paper also accounts for the relation of –A bil in modal usage with other category operators such as aspect, tense and voice.

Keywords: modality, ability, participant-internal, converb, functional approach

1. Introduction

Despite the available vast literature on modality there is still does not exist the single definition of the domain of modality in linguistics. Mostly modality is understood as a united meaning of its subcategories which are still under scrutiny and new concepts are being offered which make difficult to stabilize the semantics of modality. It is not once noted that “the number of modalities one decide upon is to some extent a matter of different ways of slicing the same cake” (Perkins, 1983, p.10). Moreover F. Nauze stated that “there is no perfect typology of modality but only good typologies suited to the purpose of a given study” (Nauze, 2008, p.12). In this paper we tried make general claims about the architecture of modality, stabilize the sub-entirety of it – participant-internal possibility modality (henceforth PIPM) which is defined as “... a kind of possibility internal to a participant engaged in the state of affairs (Note 1). In the case of possibility we are dealing with a participant's ability (capacity)” (Van Der Auwera & Plugian, 1998, p. 80) and its expression with analytical construction –*A bil* in Kazakh, a south Kipchak Turkic language (Note 2).

Our central hypothesis is that –*A bil* belongs to the core of the ‘functional-semantic field’ of participant-internal possibility modality and expresses all semantic meanings of ability like inherent/learnt and mental/ physical in Kazakh. As a result of our investigation we have found out that –*A bil*, unlike its counterpart –*A al*, only expresses PIPM in Kazakh (Note 3).

Modality and its coding got a careful study in Indo-European languages which will be discussed in detail in Section 3, but the only work devoted to the modality in Kazakh is done by S. Qulmanov. He explores modality as a functional-semantic category and its means of expression in Kazakh. He defines possibility, probability, obligative, volitive, prohibitive and preventative modality meanings in Kazakh and language units which express these meanings (Qulmanov, 2011, pp.525-655). However there are a great many works on separate means of expression of modality in Kazakh. For instance Kh. Mamadilov investigates verb constructions denoting modality in Kazakh (Mamadilov, 1996, pp. 1-146), E. Zhanpeysov studies sentential modality in Kazakh (Zhanpeysov, 1959, p. 167) and I.E. Mamanov delves into the complex verb constructions which express modality in Kazakh (Mamanov, 1958, p. 32).

The data in this paper was drawn from 10 novels in Kazakh which comprise 3500 pages and 140 sentences or passages were collected with ability meaning. In 35 per cent of cases ability meaning is given by –*A bil* analytical formant.

The structure of the paper is as follows. Section 2 outlines methodology applied to the research. In Section 3 we will briefly look at the theoretical issues on the topic. In Section 4 we discuss terminological issues denoting "ability" meaning and its semantic properties. Section 5 contains the core of our analysis, i.e. peculiarities of *-A bil* in giving ability meaning and its interaction with other grammatical forms in Kazakh.

2. Functionalist Approach to the Modality

Modality is expressed in language in a variety of ways: morphological, lexical, syntactic, or via intonation. As a result of our investigation we have found out that in Kazakh PIPM is mostly expressed lexico-morphologically and syntactically (Note 4). Moreover, there are several lexico-morphological forms which are related with each other in a certain way rather than chaotically. In order to cover broad range of forms which have a single semantic function and to explain the relation between these forms, the functional approach is chosen to carry out the investigation. It is worth to note that the present article is a part of a bigger research work on the topic and here we only focus on *-A bil* as an operator of PIPM.

The term "functional" can be used to characterize many works in linguistics, including S. Dik (Dik & Hengeveld, 1997), J. Nuyts (Nuyts, 1992), A.V. Bondarko, scholars of Prague school, but we follow Bondarko's model. Generally "functional" approach is opposed to "formalist" approach and this opposition is explained by Bondarko as follows. He describes functional grammar/approach as a systemically integrated one, traditional grammar or "formalist" approach as a systemically differential one. In the case of the former we move from meaning to forms which can belong to different layers of language and investigate the interaction between these forms. As for the latter, we move from form to meaning and systemize homogeneous forms (Bondarko, 1987, p. 7).

Functional approach of Bondarko is based on two key concepts: "functional-semantic field" defined as a "system of interacting linguistic means belonging to various linguistic structures and united by their semantic functions" (Bondarko, 1991, p. 308) and "categorical situation" which is viewed as "semantic structure constituting one of the complex semantic situation expressed by an utterance" (Bondarko, 1991, p. 308). Thus, the functional-semantic field is a binary system having its semantic plane as well as plane of expression represented by various language units. It is possible to distinguish core and periphery components of the functional-semantic field. Analysis of actual language data reveals that PIPM in Kazakh constitutes a functional-semantic field and analytical construction *-A bil* belongs to the core of it. We rely on two findings to draw the conclusion: first *-A bil*, as it was mentioned above, expresses only ability meaning and is able to gloss all semantic shades of PIPM such as inherent, learnt, physical and mental ability of the subject of the preposition; second is high usage frequency, i.e. ability meaning is given in 35 per cent by *-A bil* analytical construction. That percentage represents majority on the whole after *-A al* analytical construction.

3. The Scope of Modality

It is hard to delineate the notion of modality in a simple way. In fact, as Bybee and Perkins put it, "it may be impossible to come up with a succinct characterization of the notional domain of modality" (Bybee & Perkins, 1994, p. 176). It is due to the sets of specific notions or categories grouped together under modal umbrella. There is no unanimity among scholars concerning the terms used to refer to these categories. It is common to use different labels to the same concepts or the single term describes concepts which differ from each other to some extent. For instance, in the works of western scholars modality traditionally is defined in terms of three concepts: dynamic, deontic and epistemic, while post-soviet countries' linguistics defines objective and subjective modality, then offers different categories under these broad concepts. In order to avoid exhaustive description we will focus on the most important works of both approaches to the modality.

The terms 'epistemic', 'deontic' and 'dynamic' are taken from a pioneering work on modal logic by Von Wright. He defines epistemic modality as "modes of knowing", "deontic – modes of obligation" and calls the modal concepts which refer to abilities and dispositions dynamic modalities (Von Wright, 1951, p. 4). This taxonomy is used in linguistics. In general, the core definition of epistemic category is noncontroversial in linguistics: it indicates to what extent the speaker is committed to the truth of the proposition. But there is a controversy when it comes to deontic and especially, to dynamic modality.

Palmer, 1990 claims that the modality is "grammaticalization of speaker' (subjective) attitudes and opinion" and classifies three subcategories which should be considered as modal: epistemic, deontic and dynamic. Palmer's deontic modality deals with permission, obligation and promise or threat, while dynamic modality covers such notions as ability and volition (Palmer, 1990, p. 36-101). However, in his later work he proposes slightly different viewpoint concerning subclasses of modality. He distinguishes propositional modality which is concerned with "speaker's attitude to the truth-

value or factual status of the proposition" and event modality "to refer to an event that is not actualized, events that have not taken place but are merely potential". Sub-entities of propositional modality are epistemic and evidential modality, whereas deontic and dynamic modalities belong to the event modality (Palmer, 2001, p. 8). Unlike the former work, in the latter Palmer considers evidentially as a subtype of modality and introduces hyper categories like event and propositional modalities. Moreover, he classifies epistemic, evidential, deontic and dynamic modalities into sub-concepts.

The next author who groups deontic and dynamic modalities under one umbrella is Coates J. But she suggests another term for it: root modality. She motivates the term by the reason that such modals as *must* and *may* in their non-epistemic use gain both deontic and dynamic meanings; they are interrelated and form a continuum which is inappropriate to cut as Palmer does (Coates, 1983, pp. 20-21).

Bybee et al. propose another set of labels for dynamic and deontic modalities: agent-oriented modality, which "reports the existence of internal and external conditions on an agent with respect to the completion of the action expressed in the main predicate" and speaker-oriented modality where speaker impose conditions on the addressee. The former mostly coincides with dynamic meaning and comprises such meanings as obligation, necessity and ability, root possibility while the latter is close to deontic modality and made up by imperative, prohibitive, optative, hortative, admonitive and permissive meanings. Moreover, they suggest subordinating modality, modality marked in subordinate clauses, as well as epistemic (Bybee & Perkins, 1994, p. 177). However, it is rather difficult to understand the difference between agent-oriented obligation (AOO) and speaker-oriented obligation in their classification. We think that in agent-oriented obligation enabling factor in external such as social rules, whereas in speaker-oriented modality obligation derives from the speaker. As it is, necessity could be used instead of AOO. Complementing the ideas of Bybee et al. on modality Van Der Auwera and Plugian demonstrate their insight into modality in their work "Modality's semantic map". Understanding modality as "a paradigm with two possible choices, possibility and necessity", they distinguish four modality domains: participant-internal modality, participant-external modality, deontic and epistemic. Each of these modality types can be classified in terms of possibility and necessity (Van Der Auwera & Plugian, 1998, p. 80). Their taxonomy is presented in Table 1 taken from their work.

Table 1. Van Der Auwera J. et al. modality types

Possibility			
Non-epistemic possibility			Epistemic possibility (Uncertainty)
Participant-internal possibility (Dynamic possibility, Ability, Capacity)	Participant-external possibility		
	(Non-deontic possibility)	Deontic possibility (Permission)	
Participant-internal necessity (need)	(Non-deontic necessity)	Deontic necessity (Obligation)	Epistemic necessity (Probability)
	Participant-external necessity		
Non-epistemic necessity			
Necessity			

So, in the English literature modality mostly associated with concepts which hark back to Aristotle's and Kants' modality: necessity and possibility (e.g. Palmer F., Coates J, Van Der Auwera & Plugian) as well as modality can be understood in relation to the subject's implementation (Bybee et al, Van Der Auwera & Plugian).

In post-soviet linguistics modality is understood as: 1) reference of the proposition to the reality; 2) the relation of the subject of the utterance to the action (e.g. subject can, must or want to do something); 3) the degree of confidence of the speaker in the proposition. Thus, first and second interpretations make up objective modality while third can be referred as subjective modality.

The most prominent work on modality in non-English literature is Bondarko A.V., at least as we think and know, which lays in the base of most works on modality in Post-soviet countries' linguists. He defines modality as the commitment of the proposition of the utterance to the truth value in terms of reality and unreality from the speaker's point of view. Moreover, in line with reality and unreality he also mentions the notion "potential" situation, situation which links reality and unreality, when the event is not yet actualized but is bound to. Potential situation involve modalities of possibility, necessity, optativeness and imperative (Bondarko, 1990, p. 59).

As a conclusion of the section on the scope of modality, we account for modality as "semantic domain pertaining to elements of meaning that language expresses. It covers a broad range of semantic nuances – jussive, desiderative, intensive, hypothetical, potential, obligative, dubitative, hortatory, exclamative, etc. – whose common dominator is the addition of a supplement or overlay of meaning to the most neutral semantic value of the proposition of an utterance, namely factual and declarative" (Bybee & Fleischman, 1995, p. 2). The overlaying meaning can be explained in terms of possibility and necessity as the action or situation described in the preposition can be 1) necessarily/possibly true/false

from the point of speaker (epistemic modality); 2) necessary/possible to do from the point of speaker (participant-external modality); 3) necessary/possible to do for the subject of the sentence (participant-internal modality). The latter meaning covers ability meaning which will be discussed in detail in the next section.

4. Participant-internal Possibility Modality

As it was discussed in Section 3, various linguists examine ability meaning in the scope of different subdomains of modality. In addition, they present it either in a narrow or in a broad sense. For instance, F. Palmer groups Abilitive in line with Volitive under the label of dynamic modality which is a sub-type of event modality. He defines Abilitive in terms of not only ability which is internal to the subject but also includes external enabling factors, which makes it possible to the subject to carry out the action, illustrating the difference with the following examples:

He can run a mile in five minutes. (Dynamic: he has the ability)
He can escape. (Dynamic: the door's not locked) (Palmer, 2001, p. 10).

Coates J. as well as Bybee et al. use terms "ability" in parallel with "root possibility". J. Coates assumes that these two meanings comprise "continuum of meaning extended from the core of "Ability" to the periphery of "Possibility" (Coates, 1983, p. 14), whereas Bybee and Perkins indicate that ability can generalize to root possibility which "is not restricted to the internal condition of ability, but also reports on general external conditions, such as social and physical" (Bybee & Perkins, 1994 p. 178). We suppose that the reason to follow a broad approach to ability meaning is motivated by the semantics of English modal verb *can* which expresses these both meanings.

Considering both English and non-English literature on modality Van der Auwera et al. favors the term "participant-internal possibility which deals with a participant's ability (capacity)" for ability (Van Der Auwera & Plugian, 1998, p. 80).

E. Beljaeva, a Russian linguist who investigates ability meaning and its means in Russian, uses the term "возможност" (Note 5). She states that "functional-semantic field of possibility comprises lexical, morphological and syntactic forms which express speaker's opinion towards the relation between subject of the sentence and (subjective or objective) potential of the subject which leads to various outcomes of potential situation – its actualization or non-actualization" (Beljaeva, 1990, p. 126). She includes in the domain of possibility not only participant-internal possibility but also participant-external possibility including deontic modality. Internal possibility can be further classified as learnt and inherent, external possibility can be deontic and non-deontic. In its turn, possibility in general can be actual or permanent. The former means that relation between the subject and his potential is temporary and the latter refers to the permanent or habitual possibility. It is represented in Table 2.

Table 2. Semantic properties of possibility according to E.I. Beljaeva

Possibility			
Internal		External	
Learnt	Inherent	Non-deontic	Deontic
Actual/Permanent possibility			

Most works focused on the semantics of ability in modality took this approach. For instance, Ju.Ovsejčik analyses possibility modality in French language (Ovsejčik, 2004); R. Gabitova investigates possibility and impossibility modality and its means of expression in Bashkir language (Gabitova, 2007); S. Qulmanov accounts for the expression of possibility modality in Kazakh (Qulmanov, 2006).

Observing different perspectives on the semantics of ability meaning we likewise side Van der Auwera and Plugian, 1998 for several reasons: 1) the term and concept under the term is specific and precise which allows us to examine semantic plane and plane of expression of PIPM from different angles. Other works mentioned above lump different concepts together under one domain which makes the research exhaustive 2) 'participant –internal possibility' can be opposed to its counterpart "participant-external possibility" which allows us to look at the relation between them. These meanings in English as well as in Kazakh can be expressed by a single language unit; 3) PIPM refers not only to the ability but also capacity of the participant. According to The good English Guide «ability is an acquired skill: her ability to speak several languages. A capacity is more an innate talent: her capacity for learning languages" (Howard, 1993, p.43). Thus, participant-internal possibility can be further classified as inherent/ learnt and mental/physical. Moreover, we exploit ability meaning in relation to animate subjects.

5. –A+*Bil* is a Marker of the PIPM in Kazakh

The construction V+[Converb Aux]+T+AGR in Kazakh is called *kürdeli etistik* i.e. compound verb (Qasimova, 1989, p. 292) or complex verb structure (Meral, 2012, p. 239) and the structure in the hyphen is called *estistiktiñ analitikalıq formantı* (Oralbayeva, 1979, p. 5) i.e. analytical verb constructions which is composed by converb suffix and inflected by auxiliary verb adding the lexical verb various grammatical meanings such as modal, espectral, etc.

The most explicit marker of PIPM in Kazakh is –A *bil* analytical construction. It is composed of present converb (Note 6) –A (with variants –e (used after stems ending in consonant) and –y (used after stems ending in vowels); this do not change the meaning) and auxiliary verb *bil* which lexically means “know”, but in this format its meaning is bleached. As a result of grammaticalization the meaning of ‘*bil*’ in the analytical construction is modalized and means “to be able to” in Kazakh.

According to Clauson G. verb “*bil*” had three different usages in Turkic languages before thirteenth century: 1) used by itself; meant “to know”; 2) used with object i.e. as a transitive verb; 3) as an auxiliary verb with the main verb ending in converb –u/ü (Note 7): meaning was “to know how to, to be able to (do something) (Clauson, 1972, p. 18). Erdal M. also mentions that –U *bil* was used in Kutadgu bilik, a great Qarakhanid text, to mean ability (Erdal, 2004, p. 260). Nowadays in Kazakh all of mentioned usages of old *bil* are preserved. Moreover, Schöning C. indicates that –A *bil* is an ability form in Middle, Northern west and Southeastern Turkic languages (Schöning, 1987, p. 2).

Our data shows that –A *bil* only has ability reading. It can be connected with the meaning of the lexical verb *bil* which is the component of the analytical construction. Bybee and Perkins claim that in many languages ability meaning derives from a verb meaning ‘to know’ or ‘to know how to’. They provide examples from the Motu where “verb *diba* means ‘to know’ as well as ‘can, be able’ and used to speak of physical as well as mental ability. The Baluchi auxiliary *zen* means ‘to know how’ and is used with infinitive to signal mental ability. The Danish auxiliary *kunne* (cognate with English can) formerly meant ‘know’ and thus signaled mental ability. The Mwera auxiliary *manya* is glossed as ‘know how to’. The Nung auxiliary *sha* also means ‘to know’ and signals mental ability” (Bybee & Perkins, 1994, p. 190). Thus, it is the typological feature of the verb *bil*. The second typological feature of *bil*, which is true for Kazakh also, is that it mainly has mental PIPM meaning. The analysis of actual data in Kazakh shows that –A *bil* is able to gain mental, learnt and inherent semantic properties of PIPM. We found only two examples of –A *bil* with physical ability reading. However, in these instances physical is overlapped with mental one. The physical ability meaning is triggered by the meanings of lexical verbs such as *fight* and *defend*, because in order to fight with somebody and defend himself someone needs physical strength as well as learnt skills which demand intellect. In majority of cases –A *bil* denotes inherent ability determined by the talent, gift, personality features, intellectual ability, and psychological strength of the subject. Sometimes the distinction between these meanings is not clear cut. For instance, mental, inherent as well as learnt PIPM can be glossed in one sentence. In these cases contextual frame plays an important role in distinguishing the different facets of PIPM.

In analytical verb constructions lexical verb takes a converb suffix, thus remains in a non-finite form (note 8), whereas auxiliary verb (*bil*) is inflected by tense and personal markers. –A *bil* inflected by present tense markers shows that person have a general ability/capacity to carry out the action, by a past tense marker shows that a person had a general ability or was able to fulfill a certain single action. Therefore, –A *bil* + PRES refers to Iterative aspect and –A *bil* + PST refers to both Iterative and Dynamic aspect. Our data shows that –A *bil* is not compatible with pure future form; it mostly goes with aorist suffix and codes speaker’s belief that the subject of the sentence will be able to carry out a certain activity. In this sense, PIPM overlaps with epistemic modality. Another peculiarity of –A *bil* is its compatibility with personal markers. The great bulk of the examples have [–A *bil* + T+3 SG/PL] construction. When –A *bil* is inflected by 1/2 SG/PL form, ability meaning is accompanied by praise and pride. Thus, for neutral ability meaning its counterpart –A *al* is preferred.

If tense and personal markers are inflected to –A *bil*, voice suffixes precede –A *bil*, precisely, causative and reflexive-middle voice suffixes but not passive and cooperative-reciprocal voice suffixes (Note 9). It can be explained that the ability meaning is not compatible with passive voice meaning. The former meaning “is crucially associated with agentivity, that is, the action referred to in the main predication is carried out by someone using their own energy” (Coates, 1983, p. 245), while in the latter meaning action is done by somebody else which is mostly unknown and unimportant. Palmer F. illustrates this feature in English which is also true for Kazakh: “the semantics would suggest that neutral dynamic modals ought to be voice neutral and that subject-oriented ones ought not. If it is possible for Bill to beat John, it is possible for John to be beaten by Bill, but it is not reasonable to suggest that, if Bill has the ability to beat him, John has the ability to be beaten.” (Palmer, 1990, p. 101). As cooperative-reciprocal voice indicates that the action is done by more than one person and directed to each other, it is not possible to talk about directed to each other ability of several people.

6. Conclusion

The analysis of modality in Kazakh revealed the existence of sub-meaning of possibility, participant-internal possibility modality which deals with the ability and capacity of the subject of an action. We have identified that *–A bil* is a prominent operator of PIPM in Kazakh as it has an ability to express it from different semantic facets and frequently used in expressing PIPM.

The analysis describes the relation of PIMP with voice, tense and aspect. When *–A bil* is inflected by present tense it refers to iterative aspect showing a general ability of the subject, whereas with past tense marker refers to both iterative and dynamic aspects, indicating subject's general ability and ability to do a single action in the past. In Future tense form PIPM overlaps with epistemic modality, indicating speaker's commitment to the truth value of the proposition.

PIPM coded by *–A bil* is compatible with causative and reflexive-middle voice but not with passive and cooperative-reciprocal voice due to the semantics of PIPM and mentioned voices. In addition, *–A bil* is selective about personal markers: inflected by 1/2 SG/PL, gains implementation of praise and pride along with ability meaning.

The scope of the issue discussed in the present paper can be extended by stylistic variations of *–A bil* in spoken and written Kazakh.

Abbreviations

PIPM – participant-internal possibility modality
PEPM – participant-external possibility modality
CV – converb
AUX – auxiliary
PST – past tense
PRES – Present tense
T – tense marker
AGR – personal marker
1 SG/PL – first-person singular/ plural
2SG/PL – second-person singular/plural

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Notes

1. The term is given by Van Der Auwera, J. and V.A. Plugian (1998).
2. -A -is the converb suffix and verb *bil* means "know"
3. See Yeshniyaz G.S. (2014) for more information on -A al as an operator of PIPM in Kazakh.
4. See Yeshniyaz G.S. (2014) for more information about the forms of expression of PIPM in Kazakh.
5. According to Russian-English dictionary of Taube A.M. *et al.* "vozmožnost'" is translated as "possibility, opportunity, chance". Thus we use the term "possibility" in the current paper.
6. The term converb here is used to refer to a linking morpheme which links verb roots to create a morphologically more complex verb structures. The term was coined by Gustaf John Ramstedt, a Finnish Altaicist. There are two converb forms: -A and -lp in Turkic languages and both have different realizations (-e, -i and -ip, -up, -üp) in accordance with vowel harmony.
7. In Old Turkic *u/ü* used as an auxiliary verb meaning 'be able to' and as a converb. Claus Schönig states that as a converb suffix due to fusion and insignificance it went out of use and was replaced by other forms. Unfortunately, he does not give its actual form. As an auxiliary verb, according to Marcel Erdal, because of incorporation process started of the Orkhon Turkic stage it gradually became a part of a fused morpheme sequence expressing impossibility. Thus, we would like to envisage that -U turned into one of the realizations of converb -A.
8. Converbs in Kazakh do not take any personal and verbal suffix i.e. they do not conjugate in any type of case, agreement and tense markers. Thus, considered as a non-form of the verb.
9. See Johanson L. (2006) for the terminology