

# Tense and aspect systems in Dardic Languages

A comparative study

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## **Abstract**

The languages belonging to the group commonly known as the “Dardic languages” are on some levels insufficiently researched and have barely been subject to any comparative research on their finer grammatical structures, such as their *tense and aspect systems*. This comparative study analyses three Dardic languages spoken in the central Dardic speaking area (Khowar, Gawri, Palula) in view of their tense and aspect system, to find out how similar the languages are in this respect. The comparison is based on Dahl’s 1985 Tense and Aspect questionnaire, partly to have an equal, comparable data set, and partly to be able to tie the results to the greater field of language typology. The study shows that the languages studied have a common primary focus on IPFV:PFV distinction, where past tense often is a secondary implicature following perfective aspect. There are notable differences in how and if the languages mark *future tense* and *habitual aspect*. The subject merits further studies on an extended sample and with more languages from the Dardic group.

## **Keywords**

Tense, aspect, Dardic, Indo-Aryan, comparative study, Khowar, Palula, Gawri

# Tense and aspect systems in Dardic languages

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## **Abstract**

Språkgruppen som ofta benämns som “dardiska språk” är i vissa avseenden ofullständigt utforskad, och har knappt alls genomgått någon komparativ forskning vad gäller språkens finare grammatiska strukturer, såsom deras *tempus- och aspektsystem*. Denna komparativa studie har till syfte att analysera tempus- och aspektsystemen hos tre dardiska språk (khowar, gawri och palula) som samtliga talas i de centrala delarna av det område där språkgruppen är koncentrerad, detta för att undersöka hur lika eller olika varandra de är i det avseendet. Jämförelsen baseras på Östen Dahls *Tempus- och aspektformulär* från 1985, dels för att få så jämförbar data som möjligt från de tre språken, och dels för att göra det möjligt att knyta resultaten till större språktypologiska undersökningar. Resultaten visar att de studerade språken alla har primärt fokus på *IPFV:PFV-distinktion*, där dåtidreferens ofta är en implikatur som följer på perfektiv aspekt snarare än en ren tempuskategori. Det finns stora skillnader i hur och om språken alls markerar *framtidstempus* och *habituell aspekt*. Ämnet bör utforskas vidare i en studie av fler språk från den dardiska gruppen och förslagsvis med tillgång till mer data än i den aktuella studien.

## **Nyckelord**

Tempus, aspekt, dardiska, indo-ariska, komparativ studie, khowar, palula, gawri

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## **Abbreviations, terms and notions used in the paper:**

AUX *Auxiliary*  
FUT *Future*  
HAB *Habitual*  
HABG *Habitual generic*  
IPFV *Imperfective*  
L2 *Second language*  
PASTi *Imperfective Past*  
PFCT *Perfect*  
PFV *Perfective*  
PLPFCT *Pluperfect*  
PRED *Predictive*  
PROG *Progressive*  
PRS *Present*  
PST *Past*  
PTCP *Participle*  
QUOT *Quotative*  
SOV *Subject-Object-Verb (primary) word order*  
T&A *Tense and Aspect*  
TAQ *Dahl's Tense and Aspect Questionnaire*  
1sg *First person*  
2sg *Second person*  
3sg *Third person*  
1pl *First person plural*  
2pl *Second person plural*  
3pl *Third person plural*

### **Transcription systems in the study**

Transcription systems: In the study I have used the transcription systems used by the respective informants when filling out the questionnaire. These varied among the informants. For the *Gawri* and the *Palula* questionnaire this means an "orientalist" transcription system, similar to that used by many scholars of South Asian languages. For Khowar the international phonetic alphabet (IPA) was used.

Cross-linguistic categories from Dahl's typological study are written abbreviated and in CAPITALS, e.g. PFCT

Language specific verbal categories are written with capital initial letter and italics, e.g. *Simple Past*



# 1. Introduction

*Dardic languages* is a cover term for a group of Indo-Aryan languages, mainly spoken in the mountainous parts of the north-western corner of the Indian subcontinent, particularly in north-western Pakistan and in northern India. Due to their relative isolation in the mountains, they have retained traits that other Indo-Aryan languages have lost, as well as developed new traits that have made them different from their surrounding neighbours (Bashir 2003:822). The term “Dardic” is in itself somewhat contested, with some experts wanting to abandon it completely (e.g. Strand; we will develop this in section 2.3). However, since the term is quite well established, I will use it as a convenient umbrella term, along with e.g. Bashir.

Due to the unstable political situation in the area, extensive research on some of these languages is still in its initial stages. How well researched the languages are differ greatly. While a number of them have been quite thoroughly described grammatically, others have been described only briefly by passing linguists, and although these descriptions seem quite authoritative they have become outdated and would profit from being updated (e.g. Morgenstierne’s important work, which dates back to the 1930’s), and the languages still lack in *systematic comparison* within the group. The Dardic languages are often mentioned briefly as a questioned group but not described in much detail, in works on the Indo-Aryan languages. E.g. in Masica’s 1991 work *The Indo-Aryan Languages*, the main work of reference when it comes to the Indo-Aryan languages, the group’s dubious status is mentioned and a couple of the languages are described, but there is no thorough description of the group as a whole. The little comparative research that has been made has mainly focused on lexicon and phonological features, and comparisons of their finer grammatical structures are few and far between. One area that barely has received any attention at all is their *tense and aspect (T&A) categories*. Although descriptions of their separate T&A systems can be found, they have never been systematically compared to each other to see how different or how similar the Dardic languages are in this respect.

In light of the above mentioned debate on whether the Dardic languages should be considered a family branch or not, it could also be interesting to see to what extent these temporal and aspectual categories bear similarities or differ, as this may give some clues to the subject of classification. However, since the Dardic languages are a less documented group that has barely been from an areal-typological perspective, this work will mainly be of interest for mere documentation purposes in the greater field of language typology. This study will thus investigate *what* T&A categories each of the languages studied employs, *how* these are marked, and if we can identify any similarities or differences between them.

Personally, I have had no connection to the Dardic languages prior to this study. The subject caught my interest because of its distance yet relatedness to the Germanic and Romance languages that I master; I want to widen my own, personal knowledge of language structures as well as counteract the euro-centrism that unfortunately still influences the linguistic field. I also see great worth in continuing the research on tense and aspect systems in the world’s languages, as I consider a more detailed knowledge on how these structures interact crucial for further development of the field.



## 2. Background

### 2.1 Tense and aspect – general background

The subject of tense and aspect (T&A below) has interested researchers for quite some time, although originally mainly focusing on the tense and aspect systems *within* specific languages. Tense and aspect in a cross-linguistic perspective has been much less researched, only since the last century, and especially when reaching outside the Indo-European linguistic zone. Some large-scale typological studies of the tense and aspect categories in the languages of the world have been performed in the last decades (e.g. Dahl 1985, Dahl & Velupillai 2011, Bybee et al. 1994), and there have also been a number of general theories and models of tense and aspect put forward (eg. Reichenbach 1947, Smith 1997, Vendler 1967). Probably the two most well-known textbooks on the subjects of tense and aspect as cross-linguistic categories are both written by Comrie and date back to the mid-70's and 80's (1976, 1985), but are still regularly cited even today.

*Tense* and *aspect* are two phenomena that unfortunately are often confused in classical grammars, both conceptually and terminologically. It is not all peculiar, given that some language-specific categories that in grammatical descriptions have been called “tenses” semantically contain both temporal and aspectual values, and vice versa; some aspect categories seem connected to certain tenses, even cross-linguistically. Perfectivity, for example, is often associated with past time reference, and imperfectivity with non-past temporal categories (Dahl & Velupillai 2011). Both tense and aspect are intimately connected with *time*, but are so in quite different ways. Comrie defines the difference in the following way (1976:5):

[...] tense is a deictic category i.e. locates situations in time, usually with reference to the present moment, though also with reference to other situations. Aspect is not concerned with relating the time of the situation to any other time-point reference to other situations, but rather with the internal temporal consistency of the one situation; one could state the differences as one between situation-internal time (aspect) and situation-external time (tense).

While tense places a situation<sup>1</sup> *in* time (or, if we use Reichenbach's time line model<sup>2</sup>: *on* a timeline) from an *external* point of view, and in relation to some reference point (very often the moment of

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<sup>1</sup> The term ‘situation’ here and onwards is used as in Smith (1997) and should be considered a neutral umbrella term for the different verb types (commonly divided into subgroups in the theory of *Aktionsarten* or *lexical aspect*), and will be referring to a verb type regardless of it being e.g. a *process*, *state*, or *achievement*.

<sup>2</sup> For a short introduction to the theory, see e.g. Dahl (1985) pp.29-31. For the full theory see Reichenbach (1947)

speaking); aspect on the other hand views the situation from *within* and describes its *internal* constituency (1976:5). While tense will let you know *when* something happened, happens or will happen; aspect will tell you if the situation happened regularly, repeatedly, whether it was or is still in progress, seen as a single whole and finished event, etc. Described like this the two concepts are rather easily separated from one another, but when one studies a language one quickly notices that a single form often expresses the two features at the same time, although maybe not with equal priority.

## 2.2 Tense and aspect cross-linguistically

The Dahl (1985) study investigated which cross-linguistic temporal and aspectual categories are commonly found in the languages of the world using of a specifically designed questionnaire consisting of approximately 200 sentences with context descriptions, to be formulated in the informant's native language. The sample used was quite large, 64 languages from various language families. Dahl's study found evidence supporting his hypothesis that the different T&A categories in the languages of the world generally can be reduced to a fairly small set of *cross-linguistic categories*, mainly by studying the typical contexts in which they are used, both morphologically and syntactically (Dahl, 1985:182). When looking at what cross-linguistic categories seem to be the most important, the most common aspectual categories were the *imperfective/perfective* opposition, and the *progressive*. The most common temporal categories were *future* and *past*.

Other interesting findings were that the members of one cross-linguistic T&A category tended to be marked in the same way; e.g. out of the 17 clear instances of PAST that Dahl could find, 15 were marked morphologically, while 18 out of 19 instances of the progressive (PROG) category were marked periphrastically. Dahl drew the conclusion that there is reason to believe that the semantics of a given category influences the way by which it tends to be expressed. He proposes that inflection is favoured by categories with binary features (where a characteristic is either present or not) while categories with more of an operator logic (where order of application and its likes changes the meaning) favour periphrastic constructions (1985:184-185).

Dahl also notes that even though one form, as mentioned above, might pertain to temporal as well as aspectual values, one of the two is usually the dominant one. As an example he mentions Perfective (PFV) that in its nature often pertains to both 'perfectivity' and 'past time reference'. "[...] it is clear, however, that perfectivity is subject to less variation than past time reference – and there is thus good reason to regard PFV as a basically aspectual category." (1985:23)

### 2.2.1 Tense

As mentioned above, tense mainly situates an event *in* time. Comrie claims that human languages differ in the way they locate a situation in time in two ways; one is with which accuracy you can locate the situation, and the other one is "the relative weight assigned to the lexicon and to the grammar in establishing location in time" (1984:7).

Dahl instead defines three properties that are typical for tense categories:

- (i) They are expressed by the choice of one of several possible morphological forms of the finite verb or the auxiliary.
- (ii) They semantically depend on the relation between the time that 'is talked of in the sentence and the time of the speech act – what is often referred to as 'the deictic centre'.
- (iii) They have to be expressed - the choice of tense form has to be made - whether or not there is an explicit time indicator such as an adverbial in the sentence. (1985:24)

Note that he does not judge any of the three properties a *necessary* condition for a definition of tense – such a judgement would restrict the notion.

Something that seems to be a condition proper of *tense*, that distinguishes it from the notion of aspect, is property (ii). Tense is a deictic category; it situates the situation spoken of in relation to the moment of speech. Aspect is on the other hand, as Dahl states, not deictic (1985:24).

### 2.2.2 Perfective/Imperfective aspect

The internal constituency of a situation, with which *aspect* is concerned, could simply be described as its beginning, its middle part, and its end. Comrie (1976:16) argues that *perfective* aspect (PFV) expresses a situation as a *single whole*, without possibility to distinguish these three phases. In short, it describes the complete situation. While some researchers have defined the PFV as showing the situation as a *punctual* event, i.e. a 'point' on the timeline, Comrie here objects: a 'point' seems to preclude the possibility of internal constituency, he says, while this constituency is very much included in a PFV event. Earlier descriptions of PFV as "punctual" might also be understood as if the situation would be a quick action, which is not true; also very long, drawn out situations can be expressed in a PFV manner.

*Imperfectivity* (IPFV) on the other hand takes into account the different phases of a situation, in that it "pays essential attention to the internal structure of the situation" (Comrie 1976:16). Since the beginning and end of the situation are not "included" in the imperfective sentence (note that including them would make the situation a "complete whole", a PFV) it follows that we cannot say anything about whether or not the situation just began, has been going on for a while, has ended or will end at all. I.e. the IPFV expresses only part of the situation, and delivers no information about its endpoints at all (Smith 1997: 73).

IPFV can be divided into different categories such as *habitual* and *progressive*. It is quite common that a single form is grouping these uses in a general imperfective category, but many languages have one or several categories that only account for certain uses of imperfectivity, e.g. a purely habitual (HAB); generic habitual (HABG) – habituals of a generic, lawlike character such as 'cats (generally) meow'; or PROG aspectual category.

Dahl does not attempt to create a general definition of the aspectual categories as much as to find their *prototypical uses*, in which the assumed perfective categories typically denotes, in his words:

[...] a single event, seen as an unanalysed whole, with a well-defined result or end-state, located in the past. More often than not, the event will be punctual, or at least, it will be seen as a single transition from one state to its opposite, the duration of which can be disregarded. (1985:78)

Note again that this is not a *definition* but a *description* of the typical uses of the PFV cross-linguistically. A grammatically expressed IPFV:PFV distinction was found in 45% of the languages studied by Dahl and Velupillai (2011).

### 2.2.3 Progressive/continuous and habitual aspect

Comrie defines both progressive/continuous and habitual aspect as *types* of imperfectivity. In some languages both types of the imperfectivity are expressed by one form, as a general IPFV category; in other languages they are expressed differently, with several different forms. The habitual aspect, he points out, is not merely a case of iterativity, and habituality can be used to describe situations that are not iterative at all. Instead, he says:

[...] they describe a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment but, precisely, as a characteristic feature of a whole period. (Comrie 1976:28)

He adds that any discussions on whether a situation is extended or repeated enough to be regarded a “characteristic feature” are conceptual, and not a linguistic matter. The linguistic form of habituality is simply used when a situation is judged (extra-linguistically) to fill the requirements of a characteristic feature.

Dahl’s study found that the different HAB categories were often connected:

One result of our investigation is the finding that although the notions of habituality and genericity play an important role in many T&A systems, it is less common for them to be represented by independent categories: in particular, it was not possible to identify any case of a marked category restricted to generic contexts only. (Dahl 1985:209)

### 2.2.4 The Perfect and its relatives

The title of this section is the title employed by Dahl when describing the number of categories that are related to perfect (PFCT) – a category that he with his 1985 work could postulate as a cross-linguistic category.

In his 1976 work, Comrie lists the different types of the English *Perfect*, namely of *result*, *experience*, *a persistent situation*, and of *recent past* (Comrie 1976:56). Dahl points out that rather

than types of perfect, these are types of *uses* that are typical for PFCT and that language-specific categories that have mainly one of these uses but not the others, often are different in their semantics from the PFCT. He concludes that what seems to relate these uses to each other is that they all have a point of reference which is different from the point of the event spoken of (Dahl 1985:133).

He further notes that some of these uses are quite hard to distinguish: *resultative* use of perfect often “shades off into the experiential use” because of variations in what is to be considered a “result” of an event (1985:135); the *recency* of the perfect can be connected to the *resultative* use because a recent event can be said to be more likely to have a *persistent result* (1985:136), which is consistent with the use of PFCT for a persistent situation.

Therefore, PFCT does prototypically occur in sentences where a prior event has created the present situation, whether the present situation is a direct result of the event or the experience of it. The reference point will very often be of a recent past and the situation or the result of the situation will very often be persistent (e.g. someone *being* dead, *having* read a book).

It is also noteworthy that PFCT in many languages (although not all languages with a PFCT category) is hard to combine with a definite time adverbial (Dahl 1985:137), and that the use and distribution of the PFCT and PFV categories is so very different that it is very unlikely to confuse them<sup>3</sup> (1985:138). He also found that PFCT was rather consistently marked periphrastically (1985: 129).

The “relatives” spoken of are the *Experiential*, the *Pluperfect*, and the *Quotative*. The *experiential* is defined as typically occurring in “sentences in which it is asserted (questioned, denied) that an event of a certain type took place at least once during a certain period up to a certain point in time.” (Dahl 1985:141).

The *pluperfect* (PLPFCT) is often defined as a combination between past and perfect and has often been called “Past perfect” e.g. in English (Dahl 1985:144). The prototypical use of the category is undoubtedly when speaking of something that happened *before* a certain point of reference, but it also has other uses, such as contrafactive constructions in English and is sometimes developed into being used as a general remote past, e.g. in Hindi-Urdu and Bengali (1985:146-147).

The last of the “relatives” of the PFCT, *Quotative* (QUOT), can sometimes be seen appearing as “non-witnessed” or “second-hand information”. In today’s linguistic discourse “imperceptive” is sometimes used. Dahl describes the basic use of the category as “to indicate that the speaker has not experienced himself what he is reporting in the sentence but rather has it from a secondary source”. (1985:150) It is common among languages, “probably most” of the languages, as Dahl expresses it, have some way of expressing hearsay information (i.e. *be said to* in English), but QUOT differs in that it is grammaticalised, i.e. has to be systematically expressed.

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<sup>3</sup> For a more extensive description of the differences, see Dahl (1985) pp. 138-139

## 2.2 The Dardic Languages

The classification of “Dardic languages” as a group is, as was already hinted at above, somewhat controversial, and there is an on-going debate as to whether the term mainly collects these languages due to their geographical position in the same area, or should be regarded as one genealogical branch on the Indo-Aryan family tree. For example, although Ethnologue<sup>4</sup> and many other classification systems group “Dardic” on the Indo-Aryan family branch (northwestern zone), others are reluctant to use the term; e.g. Strand, who criticises the term altogether, and propagates that it should be abandoned. Strand proposes an alternative classificatory system where the different subgroups are placed immediately onto the Indo-Aryan branch, without the intermediate level “Dardic”, which he judges “linguistically baseless” (Strand 2001:251).

Experts on the languages such as Bashir also contest the view of this whole group coming from the same proto-language, and she stresses that the group is largely based on geographical convenience and works as a “cover term” for languages that are similar. She claims that the term includes *both* shared genealogy and geographical components, and says that they cannot all be traced back to a common genetic past, but that they in part have shared genetics and are similar enough for the term to be used in a classificatory sense (Bashir 2003:822). According to her, there are several reasons for their present similarities; some traits that have been lost in the lowlands have been conserved in the mountainous parts of the area that is the home of the group. In their isolation, the languages have also developed new traits that have affected several of the different subsets, as well as influenced each other through language contact (Bashir 2003:822). Debates aside, the term is quite well established and is used as a convenient umbrella term for this group of languages that are spoken in the same area and that do share some common traits, and as such I will use the term in the present study.

Exactly how many languages actually are to be included in the “Dardic” group is, as is often the case, hard to establish. Firstly, it is debated which languages are to be included in the group (Masica 1991:461), and secondly there is the seemingly never-ending problem of what differentiates a language from a dialect; how different do the language varieties have to be in order to be considered different *languages*? How should linguists define the difference: is it the opinion of the speakers that should decide, the degree of mutual comprehension, or the official status in a country?

In the area in question, the difference between language and dialect is generally hard to define, especially since few of the languages have official legitimacy or an established writing system<sup>5</sup> and

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<sup>4</sup> Lewis, M. Paul, Gary F. Simons, and Charles D. Fennig (eds.), 2013. *Ethnologue: Languages of the World, Seventeenth edition*. Dallas, Texas: SIL International. Online version: <http://www.ethnologue.com>. 13.02.05

<sup>5</sup> Henrik Liljegren, p.c.

how many languages are grouped under the term is therefore subject to discussion. Ethnologue counts 27 in its most recent version; the database aspires to use linguistic definitions (intelligibility) rather than social notions, but the source is famous for being quite generous with the label “language”. Consensus among experts seems to be that the number of languages in the group is somewhere around 20+. In the present study the blurry line between dialect and language will not be an issue, however, since the three linguistic varieties in question are classified as belonging to different linguistic subgroups; they are thus not subject to any debate on possible dialect affiliation to another language in the study.

As mentioned above, the group tends to be loosely divided into 6 subgroups (presented here from west to east; Pashai, Kunar, Chitral, Kohistani, Shina, and Kashmiri (Bashir 2003:824-25). As can be seen in *Figure 1* below the subgroups are spoken in quite separate areas; even though different communities of the same subgroups are sometimes separated by other subgroups, some even slightly scattered over the area.

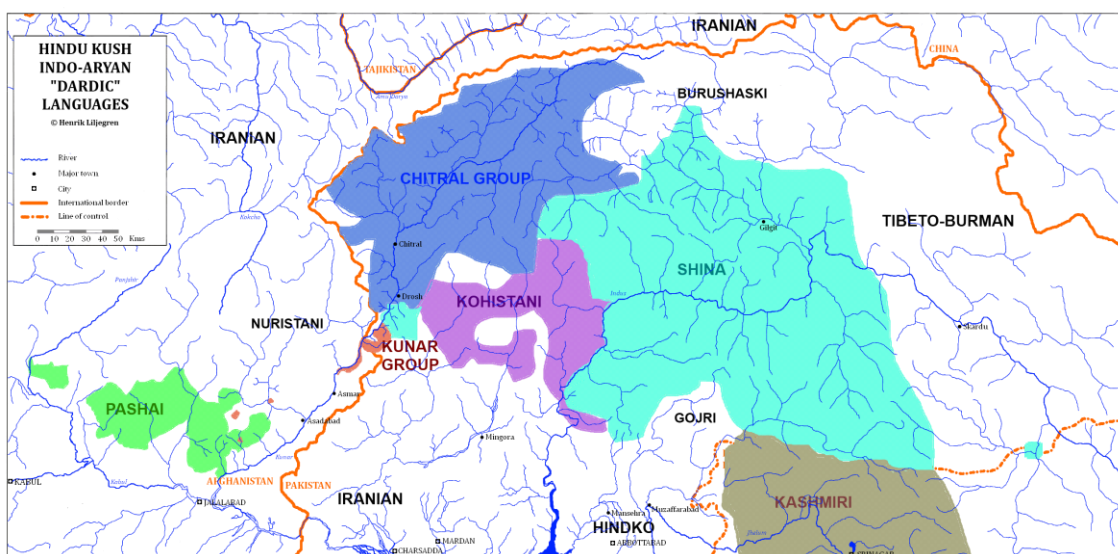


Figure 1. Map over Hindu Kush Indo-Aryan “Dardic” languages which illustrates the geographical distribution of subgroups in the area.

Typologically, the three languages studied below are quite typical for the indo-aryan group; they all have a dominating SVO (Subject-Verb-Object) word order and postpositions are the preferred adpositions, which is quite common among SVO languages. Both Gawri and Palula have split-ergative systems where the perfective patterns are essentially ergative, and the pattern in the non-perfective categories is essentially nominative-accusative (Liljegren 2008:55, Baart 1999:134). The lack of split-ergative case marking a primary differentiating feature for Khowar, which along with its sister language Kalasha are the only Dardic languages to have retained a consistent nominative-accusative case marking system. They are further differentiated from the rest of the Dardic group in that they have both lost inherent gender, and that they express grammaticalised evidentiality in the verbal paradigm (Bashir 2003:823).

Both Palula and Khowar are essentially concatenative languages, but they differ in synthesis; while Palula’s cumulative suffixes may express several grammatical features Khowar suffixes can

generally be segmented in meaning and are thus separative. Gawri is in part non-linear as it is subject to some stem and tone modification, although suffixation is the main morphological marking type. Like with Palula, Gawri suffixes are often cumulative.

Here will follow a short description of each language that we are going to study, to introduce the languages in their proper social contexts:

### 2.3.1 Gawri

Gawri is also known as Kalam Kohistani, or Bashkarik in older literature, and is part of the Kohistani subgroup. It is like most Dardic languages spoken in the mountainous areas of northern Pakistan, in the upper Swat and Panjkora valleys. The word *Kohistan* literally means ‘land of mountains’ in Urdu and Persian, and *Kohistani* when denoting the language, can be translated to ‘mountain language’. According to Ethnologue<sup>6</sup> it is the most widely understood indigenous language in the northern Swat and Dir Kohistan with its 100 000 speakers (a growing number); the male population of the speakers are also proficient in Pashto (the female less), and among the educated Urdu is also known and used.

Traditionally the Gawri speaking people have been farmers, and remain to be so mainly in summer time, while travelling to other cities in Pakistan during winter to look for other jobs. Baart and Sagar – the two leading experts on the language who have published phonetic descriptions, grammars as well as text collections in the language – inform us that during the last decades the flow of tourism into the area has increased, which has created jobs and commerce. Unfortunately the sector does not generate much wealth in the area itself since mainly outsiders own the establishments. Education is rare in the area; Baart and Sagar estimates that less than ten per cent of the male population and “very few women” have received education (Baart & Sagar 2004:7). The population is Sunni Muslim and there are no sectarian divisions within the religious views. Baart and Sagar describe the political life as active where the population partakes in both provincial and national politics.

### 2.3.2 Khowar

Khowar, together with its sister language Kalasha, make up the Chitral subgroup in the Dardic group. The language is not particularly well-researched, although there are a few descriptions of the language. There exists one introductory description of the language written in 1895 by Captain O. J. T. O’Brien that also contains a vocabulary list that was of great use. A French-based introduction to the language written by a second language speaker named Eric L’homme (1999) also contained a word list that to some extent helped the glossing process. Georg Morgenstierne, the famous

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<sup>6</sup> Lewis, M. Paul, Gary F. Simons, and Charles D. Fennig (eds.), 2013. *Ethnologue: Languages of the World, Seventeenth edition*. Dallas, Texas: SIL International. Online version: <http://www.ethnologue.com> (10/06-13)



Norwegian linguist that was very active in the region, did spend some time in Chitral and there collected tales, songs and poems; but according to sources (Endresen & Kristianssen, 1981:215) he never focused his full attention on Khowar the way he probably intended. The most extensive description of the language is written by Elena Bashir, who has made some valuable research on the language, especially in comparative studies with its sister language Kalasha, and is to be considered the modern times expert on the languages. The verbal system is quite thoroughly described in her Ph.D dissertation from 1988.

Khowar is the *lingua franca* of the Chitral region in northern Pakistan, i.e. it is used for wider communication to speakers of different mother-tongues. It is perhaps the most archaic of the Dardic languages, as it preserves some traits that are typical for old Indo-Aryan languages in phonology as well as vocabulary and grammar (Bashir 2003:843). According to Bashir the language counts 300 000 speakers, while the most recent version of Ethnologue<sup>7</sup> counts around 240 000. Urdu is a widely used second language, especially among the educated part of the population. There are both newspapers and radio programmes in Khowar. The population is Muslim, both Sunni and Ismaili (a branch of Shia Islam).

### 2.3.3 Palula

Palula is a fairly small language compared to the other languages presented in this study, counting only 10 000 speakers (Liljegren 2008:24). Among the Dardic languages it is considered belonging to the Shina subgroup. It is almost solely spoken in the Chitral Valley in the mountain region of northern Pakistan where the speakers are concentrated mainly in two fairly small areas, and has until recently been a quite undocumented language. Liljegren was in 2008 the first to complete an extensive description of the language's grammatical structure.

The Palula speakers usually have some L2 knowledge in Pashto and/or Khowar, and among the educated Urdu is known, which is the language of higher education. Monolingual speakers are rare, consisting of mostly old, some women and small children; most have at least some L2 knowledge. Palula is mainly a language spoken among native speakers, and when a non-Palula speaker is present, the language is switched to one of wider communication. (Liljegren 2008:40-41). They are Sunni Muslim.

The locations where Palula is spoken are according to Liljegren (2008:23) confined to an area of 40 km along the Kunar river. The area has rudimentary infrastructure, he continues, and the population lives mainly of agriculture, animal husbandry and timber harvesting. The education level in the area is increasing steadily, and with this a higher portion of the population has turned to other work sectors than agriculture, such as employment by the government or in private sectors as e.g. school teachers or within administration. A number of Palula families have also left the area for larger cities in more urban areas in the search for better employment (2008:25).

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<sup>7</sup> Lewis, M. Paul, Gary F. Simons, and Charles D. Fennig (eds.), 2013. *Ethnologue: Languages of the World, Seventeenth edition*. Dallas, Texas: SIL International. Online version: <http://www.ethnologue.com> (10/06-13)

### 3. Purpose and question formulation

The present study investigates the T&A systems of three languages each belonging to three different subgroups of the Dardic languages, and compares in what respect and to what extent the languages are similar and/or differ from each other.

The study will first map the three respective systems, taking into account *what* temporal and aspectual categories the language uses, *how* these are marked, and which of them seem to be major categories in the languages. The three systems will then be compared to each other in respect of similarities and discrepancies.

In the study we will look at the following:

- How are the respective T&A systems constructed? Which contrasting grammatical categories can we identify in each given language?
- Are the different categories marked morphologically or periphrastically?
- Are the respective systems similar to each other or very different? In what ways do they differ?

# 4. Data and method

## 4.1 Data

### 4.1.1 Choice of languages

The present study will focus on the central Dardic languages spoken in the mountainous region of north-western Pakistan, where languages of many different subgroups are spoken in one fairly small area. The choice of languages is thus based on geographical closeness and distribution in subgroups, but is also one of methodological convenience: as mentioned above very little research has been made on the Dardic languages, so we have decided to include languages for which exists a full version of Dahl's T&A questionnaire (TAQ). The TAQ offers the possibility to make a somewhat equal judgement of the languages and can serve us as a tool to analyse them in a similar way. The languages included in the study are thus ones of which a complete questionnaire is available today.

The study includes one language from 3 of the 6 subgroups, and are all spoken in the central Dardic area. The languages included in the study are *Khowar* for the Chitral group; *Gawri* for the Kohistani group; and *Palula* for the Shina group. The Pashai, the Kashmiri and the Kunar subgroups will thus not be included in the present study. Had it been possible, it would have been preferable to include the Dameli language of the Kunar group, given its geographical closeness to the other three, and further studies on the subject should preferably try to include it.

The vitality and relative size of the languages in the study are furthermore all quite different from each other. In Ethnologue's Language status classification<sup>8</sup>, *Gawri* is considered threatened, *Khowar* is used as a local lingua franca in a relatively large portion of northern Pakistan, while *Palula* is spoken in a relatively small geographical area. These differences in vitality and number of speakers should however not affect the present study, since we are solely comparing each language's T&A system. An initial worry arose that *Khowar*, given its status as an important second language of many *Palula* speakers, might have influenced the latter and thus created new similarities, but given that relatively little *Khowar* vocabulary has entered the *Palula* lexicon and only in relatively recent times<sup>9</sup>, it seems highly unlikely that the finer grammatical structures that are the interest of the present study could have been influenced either.

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<sup>8</sup> Lewis, M. Paul, Gary F. Simons, and Charles D. Fennig (eds.), 2013. *Ethnologue: Languages of the World, Seventeenth edition*. Dallas, Texas: SIL International. Online version: <http://www.ethnologue.com/about/language-status> (130513)

<sup>9</sup> Pers. comm. Henrik Liljegen

The questionnaires were all collected by Henrik Liljegren during his fieldwork in northern Pakistan, and in connection with his serving as a consultant with at the Forum for Language Initiative (FLI) in Peshawar. The informants, *Naseem Haider* from Ashret, Chitral (Palula), *Muhammad Zaman Sagar* from Kalam, Swat (Gawri), *Farid Ahmad* from Bunni, Chitral (Khowar) and *Afsar Ali* from Mastuj, Chitral (Khowar), were all mother tongue speakers of their respective languages. They had already received basic linguistic training through the programme at FLI, and received instructions from Liljegren to enable them to correctly fill out the questionnaires. The data used in the analysis of the T&A systems consists of:

- The Dahl 1985 TAQ, which has been filled out by native informants that have at least basic linguistic training
- Descriptive grammars or partial grammatical descriptions available
- Dictionaries and word lists; in the extent to which it is necessary to be able to gloss the questionnaires
- A small corpus of annotated texts

#### **4.1.2 The questionnaires**

The T&A questionnaire (TAQ) was designed by Östen Dahl in a research project that would turn into his work *Tense and aspect* (1985), a typological study of the major cross-linguistic T&A categories in the world's languages. The latest version of the questionnaire consists of 197 sentences in English to translate into the language studied, of which some sentences together make up short narrative stories. The nucleus of the predicate for each English sentence is given in its infinitive form, to prevent the English verbal form from influencing the translations directly. A description of the context in which the utterance is delivered is also included above the translation sentence (e.g. "Standing in front of a house"). In a few sentences further precisions are included within parentheses in the sentence to translate; they were not intended to be translated but had in my samples sometimes been so. For further information on the design of the questionnaire and the study as a whole, see Dahl (1985: 44-50).

The questionnaires that the present study had at its disposal were glossed to a varying level; i.e. the Palula questionnaire was fully glossed by Henrik Liljegren while the others consist only of translations, without keys to neither grammatical categories nor the meaning of the separate lexical items. To analyse the respective T&A systems it thus required an analysis of each questionnaire in which the respective phrases, lexemes and morphemes were broken down and glossed to the best judgement possible from the material. For some of the languages, grammatical descriptions were of great help; for others very little published information exists in this area (e.g. Khowar). To aid the translation and glossing the annotated texts and word lists that exist for each language were of great use, by which help the glossing hopefully could be as precise and detailed as possible.

The main information source for the analysis part of this study is thus first-hand sources given in form of the questionnaires. This procedure had some disadvantages; for one, I have myself not had any part in the design of the questionnaire. Also the TAQ:s have been filled out without my being present, which makes it harder to judge whether or not the informants have fully understood the

intended meaning of the sentences correctly; sometimes they are ambiguous, which was taken into consideration during the analysis work. On the other hand, this particular T&A questionnaire has the advantage of being a very well tested one, with good documentation of both problems and sources of errors that will allow us to be extra vigilant where the risk of mistranslations is especially great; for more information on this, see Dahl (1985: 47-50). In these parts of the questionnaire the use of annotated texts for further comparisons was especially important.

## 4.2 The Languages

As mentioned above the questionnaires varied in their level of glossing. The Palula questionnaire was fully glossed by Henrik Liljegren after collection, and was thus already analysed in great detail. The two other questionnaires (Khowar and Gawri) were glossed during the preparative work of the study. Due to lack of time and professionalism in detailed glossing, focus was here put on the predicative elements, while the glossing of pronouns, demonstratives and such were left more sketch-like. This should not affect the analysis of the temporal and aspectual categories, since the nuances left out mostly concerned visibility nuances and such.

After each questionnaire had been glossed an analysis was performed on the material to determine what T&A categories were included in the language samples. I here focused on the *major T&A categories* as defined by Dahl (1985:52-53), to ensure that the importance of peripheral categories did not get exaggerated from just one or a couple of instances in the data. This means that for a form – potential T&A category – to be considered relevant it had to appear with at least 6 instances in the questionnaire. To be able to perform an accurate analysis, it was made sure that the form was not used too disparately for a semantic analysis to be possible; if no apparent pattern had been detected the form would have been disregarded of; this was not the case for any of the forms identified in the study.

The verb forms carrying the same morphemes were grouped together, along with their English translations and the contexts in which they were used. A simple semantic analysis of the tense and aspect was performed on each occurrence of the verb form in an attempt to pinpoint the general semantic meaning of the morpheme. In the margin there was also room for comments, where it was noted if there were any alternative translations, if a second informant (for Khowar, where I had a second TAQ available) or grammatical description disagreed, or if there seemed to have been a misunderstanding concerning the meaning of the sentence to translate (e.g. if one usage of the form stood out and it seemed plausible that the English sentence might have been interpreted another way than intended, in which case the sentence was left out).

The different semantic analyses for one form were then combined in an attempt to single out the general meaning of the form/category. In the cases where it was relevant, peripheral meanings were noted, and the hypothetical categories were tested with the help of the “prototypical occurrences” of the category that Dahl had listed in his work. Dahl has denoted the ”prototypical occurrences” for each of the major cross-linguistic T&A categories that he found in his study, i.e. in what sentences the form will normally be found if said T&A category exists in a language (e.g Dahl 1985:78).

These prototypical occurrences were, once a potential category had been identified, checked against the occurrences of that form in the questionnaire.

If a majority of the prototypical occurrences had the expected form, this was considered evidence in favour of the category. The prototypical occurrences were also used to find negative evidence, i.e. the prototypical occurrences of a semantically opposed category were compared to the hypothetical category (e.g. testing the potential PFV category for typical PASTi occurrences) – if none of the prototypes were found it strengthened the hypothesis. Some categories, e.g. the PROG contain both semantically *present* progressives and semantically *past* temporal progressives. For these categories I have thus separated the prototypical present time PROG cases from the past time PROG cases to test categories such as the *Past imperfective*.

**Table I. Example of analysis grid with sentence number, English translation, context information, and estimated semantic meaning of the form. Gawri, TAQ sentences 009-012**

No.	Form	Eng. translation	Context	Semantic meaning
009	čun -a~ -š	He WRITE letters	A: I went to see my brother yesterday. B: What he DO? (=What activity was he engaged in?)	Hesternal past; progressive (imperfective) act; visual
010	čun -a~ -š	He WRITE a letter	A: I went to see my brother yesterday. B: What he DO? (=What activity was he engaged in?)	Hesternal past; progressive (imperfective) act; visual
011	čun -a~ -š	He WRITE letters	A: I talked to my brother on the phone yesterday. B: What he DO? (=What activity was he engaged in?)	Hesternal past: progressive (imperfective) act; non-visual
012	čun -a~ -š	He WRITE a letter	A: I talked to my brother on the phone yesterday. B: What he DO? (=What activity was he engaged in?)	Hesternal past: progressive (imperfective) act; non-visual

The collected information was presented in a table where information on potential category, number of occurrences, type of marking (peripheral or morphological), as well as how many of Dahl's prototypical occurrences of the cross-linguistic category that were found to have the form (see Table II, p. 19). With all this taken into account, it allowed us to create a sketch of each language's respective T&A system. The traits that were common to two or three of the languages were then compared to each other in view of marking type (periphrastical/morphological); frequency in the TAQ; and how many of Dahl's prototypical occurrences it fulfilled. This comparison was made to try to judge the relative likeness of the different languages in terms of T&A systems. When discussing the results we also compared the them with Urdu, which, being an official language in the region where the languages are spoken (i.e. in Pakistan, along with English), may be suspected to have influenced them.

**Table II. Example: Results from Khowar: category, no. of occurrences (min. 6), amount of the prototypical cases, marking type (P=Periphrastic/M=Morphological).**

Type	No. occur.	Prototypical x/y	Marking type
<b>PRS</b>	24	3/7 PROG (out of which 3/3 with PRES relevance)	M
<b>PAST</b>	56	7/8 PFV 2/9 PFCT	M
<b>PAST PROG</b>	20	4/7 PROG (out of which 4/4 with PST relevance) 6/7 PASTi	P
<b>FUT/HAB</b>	22	7/8 FUT, 3/8 HAB, HABG 5/8	M
<b>PRS PFCT</b>	18	4/9 PFCT	P
<b>PLPFCT</b>	18	1/7 PLPFCT 0/9 PFCT	P
<b>QUOT</b>	17	4/6 QUOT	P

# 5. Results

## 5.1 Gawri

### 5.1.1 Gawri T&A system in the literature

Joan Baart, in his grammatical description of Gawri, uses a definition of aspect that is maybe more consistent with Comrie's definition (1976:5), than Dahl's (1985:78) namely:

"Perfective aspect views an action or event as a whole, from outside, as it were. As the action or event is viewed as a whole, an implicature is that the action or event is complete. In contrast, imperfective aspect views an action or event from inside, as in progress, and, by implicature, as non-complete." (Baart 1999:111)

He identifies aspect marking as the most salient trait in Gawri T&A categories; an aspect marker indicates that the situation is complete (perfect), non-complete (imperfect), or just began (inceptive); while its absence indicates that the situation is yet to begin (future or hypothetical).

He further defines 9 tense-aspect categories that are summarized below (1999:112):

*Habitual*: IPFV aspect but unmarked for tense. Habitual or iterative aspect but not bound to a specific time frame.

*Present continuous*: IPFV aspect and PRS tense. The event viewed from the inside, non-complete and ongoing at the present time. Might also express definite future.

*Past imperfective*: IPFV aspect and PST tense. Continuous or habitual situation in the past.

*Simple perfective* [sic]: PFV aspect, unmarked tense. Even viewed from 'the outside', as complete, and usually having occurred in the past (but not always), focus on the completion, and used for the main story line in narrative texts.

*Perfect*: PFV aspect and PRS tense. Describes a currently relevant state brought about by the situation expressed.

*Past Perfect*: PFV aspect and PST tense. Focuses on the result of the situation expressed, but relevant at a time in past, not the present.

*Past inceptive*: Inceptive aspect and PST tense. Describes a situation that has just begun.

*Contingent Future*: Unmarked aspect and tense. Situation that has not yet begun; future or hypothetical. The speaker does not commit to the situation actually taking place.

*Contrafactive*: Unmarked aspect and past tense. A situation that could have occurred but did not occur.



## 5.1.2 Gawri T&A system in our study

### Aspect in Gawri

All finite verbs (with the exception of the ‘future’, if it at all is to be considered a temporal category in Gawri) are overtly marked for aspect, either with an overt imperfective or perfective marker, both of which take different shapes depending on the gender of the noun phrase. This is not the case for tense, and *aspect* does thus seem to be the more salient property of the Gawri T&A system. The perfective and imperfective markers divide all finite verbs into two paradigms. We have chosen not to analyse the two markers as part of the stem, which would make it a perfective and an imperfective stem respectively, mainly because gender is inherent in the aspect markers, which takes different form depending on both gender and co-text<sup>10</sup>. The salience of aspect is not surprising; aspect is commonly the primary category before tense in many of the IA languages (Masica 1991:262).

#### *Imperfective aspect*

The imperfective marking in Gawri is *-a~* or *-an* for masculine nouns and *-ē~*, *-ēn* together with feminine; which one in the pairs seems to mostly depend on co-text but is not used consistently in our data; Baart claims that the previous version precedes the present tense marker *-t*, but in our data we have found many examples of the second preceding the present tense marker too. The imperfective marker appears on *all imperfective verbs* with one exception: *thu* (‘am/are/is’), *āš* (‘was/were’), which are copulas and thus not referring to an event, i.e. imperfectivity can be considered inherent. The paradigm of ‘to be’ is notably diminished compared to other verbs, however there is one aspectually marked form of *thu*, namely *āšā~* that seems to be used in habitual, or unreliable information contexts. Unfortunately we have too few instances of this usage to draw any conclusions. Baart just denotes it as the masculine habitual of the copula (1999:44).

The overt aspectual marker comes immediately after the stem in the word, and before the temporal marker, as in (1):

(1) *He is writing a letter (TAQ no.006)*

sä	xāt	čun	<b>-a~</b>	-t
he	letter	write	<b>IPFV</b>	PRS

The imperfective marker can be combined with the temporal markers *-t* for *Present progressive* and *-š* for *Past imperfective*. It can also stand without temporal marker, to create a habitual aspect form.

#### *Habitual aspect*

When no tense marker is added to the imperfective marker it signifies a habitual form, which seems to collect both present and past time reference habituals, e.g. *čuna~* ‘writing’.

(2) *He writes letters (TAQ.018)* (Q: What your brother usually DO after breakfast? A:)

sä	xāt	čun	<b>a~</b>
he	letter	write	<b>IPFV</b>

<sup>10</sup> Co-text: intra-textual context, i.e. surrounding graphemes.

### *Perfective aspect*

The perfective is usually formed by the addition of a final syllable *-u*, or *-y* or *-īn* to the stem, according to Baart depending on the form of the verb stem (vowel final or not) and the gender of the object noun (1999:46); e.g. the ‘write’ in (1) can become *čunu*; *yāg*, ‘come’, can become *yāy*; and *čukug*, ‘sting’, can become *čuki*. All of these allomorphs did not occur in the present data set; *-u* and *-i* were undoubtedly the most common endings. There are also a few irregular verbs (e.g. *dit*, *kir*, *mūr*) whose perfect form could be grouped with the others with the help of annotated parallel texts. The aspectual markers in Gawri are thus fusional; apart from expressing aspect its form inherently and obligatorily expresses gender.

Together with a tense marker, present or past, the stem and aspect marker form *Perfect* or *Pluperfect* forms, and in lack of a tense marker the *Perfective* is formed.

### *Perfect aspect*

The perfective aspect marker together with a temporal marker, creates a *Perfect* or *Pluperfect*, as seen in example (3) (*Pluperfect*):

(3) *When I came home he had written two letters.* (=that is what he accomplished during my absence) (*TAQ no.139*)

yā	šikā	yā	-y	tē	tān	du	xāt	čun	-u	-š
I	home	come	<b>PRFV</b>	and	he	two	letters	write	<b>PRFV</b>	PST

### ***Tense in Gawri***

There are two types of overt tense markers in the Gawri questionnaire, namely *-t* (present tense) and *-š* (past tense) that appear verb-finally after an aspectual marker. E.g. *čuna-t* ‘is writing’ *čuna-š* ‘was writing’. In the perfective paradigm the tense marker expresses the difference between the *Perfect* and the *Pluperfect*: in the imperfective paradigm that between the *Present progressive* and *Past imperfective*. When no tense marker appears in the two paradigms the aspect marker will create a *Habitual* from the imperfective, and the lack of both temporal and (imperfective) aspectual markers will form the *Perfective*.

There is also one finite form that lacks both tense and aspectual markers all together, i.e. the so called “Future”<sup>11</sup> form *čunäy* ‘will write’ that can express future but instead seems to be used as a modal category, expressing both instances of predictive future and hypothetical (conditional) meaning, the latter not only with future time reference. We have chosen to consider *-äy* a modal marker with some future time reference uses, but not a purely temporal marker, since it seems likely that the future reference is an implicature of the irrealis modal value than a temporal reference in itself.

Tense is not always overtly marked, especially not in the perfective paradigm where the *Perfective* (without overt tense marker) is the most common (63 *Perfective* instances vs. 19 *Perfect* and 30 *Pluperfect* instances); however, if you are daring enough to consider perfective aspect an indication of past time reference (as mentioned in the *Background* section there is a strong connection

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<sup>11</sup> Described as Contingent Future by Baart, see *Background* section, Gawri.

between perfective aspect and past time reference), non-markedness for tense becomes much less common, the *Habitual* form being the only T&A category lacking overt tense marking.

Furthermore, predicative nominals and predicative adjectives are expressed by the aid of copula verbs. In the questionnaire we found two copula verbs, namely *hōg* (become) and *thu*, which the literature confirmed as being the two existing copulas (Baart & Sagar 1999:44). The paradigm of *thu* - ‘to be’ is both suppletive (past form *āš*) and notably diminished compared to other verbs (i.e. the two tenses present and past, accompanied by a habitual *āša*~). The fact that there is no future form of the copula verb might speak in favour of our theory of Gawri lacking a specific future tense form.

### *Present*

Present time reference seems very consistently marked with the *-t*. The only exception is that of the copula *thu* ‘to be’, as mentioned above. It is possible that the present marker *-t* is in fact a diminished form of the copula *thu* that has become cliticised (especially that the past marker *-š* in form is similar to the past form of the copula *āš*) although these are just speculations. A diachronic study on the subject could shed light on the origin of the tense markers.

### *Past*

Past time reference is, as mentioned (if we do *not* consider the possible temporal implicature of the perfective aspect), much less overtly marked. There are many instances with past time reference that do not carry the *š*-marker; however, when a form carries the marker it is always clearly referring to a *past time*. There is no apparent remoteness distinction in Gawri; the same marker is used no matter whether the situation held yesterday, right before the moment of speech, a year ago, or many years ago.

### *The so-called future*

Future time reference with intention is often expressed by the *Present* tense in our data, and the category Baart calls “Future” seems to more often than not have other uses than he describes. Firstly it is used in a few conditional sentences that give it clear *modal* semantics, and not only a hypothetical future, but also a hypothetical present, e.g:

(4) *my brother hopes that the water is cold. TAQ no.124*

mā~	jā	umād	kārant	ū~	ī~	ū	šidāl	<b>hōy’</b>
my	brother	hope	is.doing	that	this	water	cold	<b>will.become</b>

If the marker *-äy* would at all be considered a future marker it is not obligatory of expression; semantic future time reference is expressed both by *Perfectives*, *Present progressives*, and *Habituals*; the overt FUT-marking only seems to be used when expressing **prediction** and **conditional** meaning (as well as one instance of performative action “I NAME this child X...”). “Future” is therefore judged not a stable temporal category, and it seems more likely that the overt marker does in fact express modality (i.e. irrealis). We will for the sake of discussion keep it in the comparison below to see how it works together with Dahl’s prototypical occurrences.

### 5.1.3 Tense-aspect categories

In the TAQ presently studied we find combinations of tense and aspect markers that together create 6 tense-aspect categories that we can identify as “major” (finite category having more than 6 occurrences in the TAQ):

**Table III– the hypothetical temporal and aspectual categories found in the Gawri TAQ (min. 6 occurrence)**

<i>Imperfective</i>	<i>Perfective + Perfect</i>
<b>Present progressive (PRS PROG)</b>	<b>Perfect (PFCT)</b>
<b>Past Imperfective (PASTi)</b>	<b>Pluperfect (PLPFCT)</b>
<b>Habitual, generic (HAB)</b>	<b>Perfective (PFV)</b>
<b>(“Future” Conditional)</b>	

**Table IV – Results from Gawri: category, no. of occurrences, amount of the prototypical cases, marking type (P=Periphrastic/M=Morphological).**

	No. occur.	Prototypical occurrences	Marking type
<b>PRS PROG</b>	20	3/7 PROG (out of which 3/3 with PRES relevance) 3/8 FUT	M
<b>PASTi</b>	26	7/7 PASTi, 4/7 PROG (out of which 4/4 with PST relevance)	M
<b>HAB</b>	24	5/8 HAB, 6/8 HABG, 1/8 FUT	M
<b>PRS PFCT</b>	19	5/9 PFCT	M
<b>PLPFCT</b>	30	7/7 PLPFCT	M
<b>PFV</b>	63	7/8 PFV	M
<b>”FUT”/COND</b>	11	3/8 FUT	M

#### *Present progressive (IPFV marker + PRS marker)*

The present progressive views the situation as ongoing, non-complete, and part of the situation is true for the present time of speech. The form is used to express *progressive aspect in present tense*, but there are also a couple of instances where the form is used for immediate future (with intention); e.g:

(5) *I am going to write a letter (TAQ no.022)*

ya xät čuṇat  
I letter am.writing

I.e. just like in Baart’s category descriptions above, future time reference is expressed by the *Present progressive*. The *Present progressive* also seems to be used when the future event is scheduled, even if we only have 2 instances of this.

The *Present progressive* occurs in 3/7 of Dahl’s “prototypical occurrences” of PROG; but if we study the temporal semantics of these, it occurs in 3/3 cases of the progressive with *present* time reference, which seems to confirm our categorisation as a PRS PROG. The future reference use was

further confirmed by 3/8 of the prototypical FUT occurrences (the same number that is found in Baart’s “future” category).

*Past imperfective (IPFV marker + PST marker)*

The Past imperfective views the situation as *ongoing in the past*; the situation held in the past but does not hold for the present time, and is internally viewed as a non-complete situation. The category is also used for habitual situations that held in the past but that do not hold for the present time being. It seems thus obligatory to overtly mark past time reference in imperfective contexts.

Out of Dahl’s prototypical occurrences of PASTi, it is included in 7/7; it thus seems likely that we are talking about a true PASTi category. It is also used in 3/7 prototypical HAB (the three which have semantic past time reference).

*Habitual (IPFV marker)*

The HAB is unmarked for tense, but marked for imperfective aspect and usually expresses *habits* that hold for the present time, or *iterative* aspect. It is also used to describe the habitual *general characteristics* of things (such as that a cat generally meows, a bag generally doesn’t break, etc.), and has in a couple of instances been used to express semantic future that seems to carry some element of intention, but less clear than the cases expressed by the present progressive, e.g:

(6) *if you do not stop playing with the ball, I will take it away* (i.e. ~ [...] I it taking away’ TAQ no.146)

täy ĩ~ bāl sä nātūg bās nä kīr tē ya ās **dukārē~**  
 you this ball with play ?enough not made and I this taking.away

Of Dahl’s prototypical HAB occurrences we found the *Habitual* form in 5/8 cases (i.e. all cases apart from the three that had past time reference), respectively 6/8 HABG, it thus seems safe to conclude that the habitual is a non-past HAB form. It only fulfils 1/8 prototypical FUT:s, but is nonetheless used in some cases of future time reference.

*Perfective (PFV marker)*

The Perfective is used mostly, but not solely, for perfective actions, i.e. seen as a complete whole. It is not restricted to past time reference but is used in context whose semantics would rather imply future time reference, as in (7):

(7) *When I grow old I will buy a big house.* (TAQ no.152)

ya ghān **hū** tē ya ghāna lār mū -lä ghin ā~  
 I old **become.PFV** and I big house us for buy.HAB

This goes along with Baart’s explanation (1999:112) that the event, albeit in the future, is still regarded as a *complete* event; its completion is required for the following statement to hold. PVF aspect in temporal subordinate clauses is not unheard of and can be found in other languages (Dahl 1985:80).

In the TAQ, the sentences 161 and onwards were designed to find possible narrative categories. Here we almost exclusively find *Perfective* forms which is quite typical cross-linguistically and singles the PFV out from the PFCT category (Dahl 1985:139). This supports Baart’s claim that the main narrated story is always in the (*Simple*, in his words) *Perfective* form, while other forms are “used for supplementary material (explanations, flashbacks, etc.).” (1999:112).

The *Simple perfective* can furthermore be considered a probable PFV form, since it encases 7/8 prototypical cases of the PFV in Dahl's work.

*Perfect (PFV marker + PRS marker)*

The Perfect depicts a situation as a complete, un-analysable whole (perfective), which *has got present relevance*. Thus the difference between example (8) and (9):

(8) *I opened the window (it is still open). TAQ no.069*

mäy dārēt pat kīt  
I window open Make.PFCT

(9) *I opened the window (the window is now closed again) TAQ no.062*

mäy dārēt pat kīs  
I window open Make.PLPFCT

The difference between the two is that the Perfect (8) still has present relevance, while the second (9) is completely in the past; the action is not only regarded as a complete whole but is no longer relevant for the present; the situation has even been “undone” and instead the *Pluperfect* is used (note that this is not a prototypical usage of the PLPFCT, but shows the difference between present relevance and not in Gawri). All of the examples with *Perfect* in the TAQ have present relevance in some way.

It occurs in 5/9 of the prototypical PFCT cases; something that also speaks in favour for the categorisation.

*Pluperfect (PFV marker + PST marker)*

The *Pluperfect* is regarding the event as a complete whole, where the result of the situation is relevant for a point in the past, just like Baart claims (1999:113).

(10) *I had not met him (yet) TAQ no.052*

ya tās sä mēlā nä hus  
I him with found not had.become

However, in our questionnaire, the use is not restricted to these situations i.e. it is not a “past in the past”. Neither is the form to be regarded as a sort of remote past, in the way many languages use it (Dahl, 1985:147); it is used for both remote and hodiernal past time reference, as in example (11). It can furthermore be used together with definite time adverbs (i.e. it is used in all examples Q.141-144, where temporal adverbs are present), which the prototypical PFCT generally cannot.

(11) *(Yes,) I met him in the market this morning. (TAQ no.141)*

ya tās sä sārā bāzār mäy huš  
I him with **morning** market met **had.become**

7/7 out of Dahl's prototypical occurrences of PLPFCT have this form.

### *“Future” / modal category*

As mentioned in the tense-discussion above, future does not seem to be a temporal category and it seems questionable to include it at all as a T&A category. As was already noted above, both the *Present progressive* and the *Habitual* take some of Dahl’s prototypical cases of the FUT category. However, the “Future” marker does in fact appear on 3/8 of the prototypical cases of future reference in Dahl’s description, albeit its apparent mainly modal use.

### *Marking*

Another interesting feature of the Gawri language is that the T&A marking system seems to be completely inflectional. The non-finite forms are never paired with finite forms into compound tenses, only coordinated: in complex sentences with two verbs separated by a conjunction a non-finite verb form is used before the conjunction and a finite after, or vice versa. Here Gawri has a specific participle that Baart calls “Conjunctive participle”, where the first verb in a coordination takes a non-finite form implying conjunction with the next verb. Gawri might thus be considered a strongly inflectional language, which might be a development where previous free temporal particles have become part of the inflection, as was discussed above.

Here it is also interesting to note Gawri’s polyexponential characteristics, where gender is inherent in the aspect marker, the form of which varies partly depending on gender, and partly the form of the stem.

## **5.2 Khowar**

### **5.2.1 Khowar T&A system in the literature**

Bashir identifies four oppositions within the Khowar verb systems: *tense* (past and non-past), *aspect* (durative and non-durative), *evidentiality* (actual and inferential), and *specificity* (specific and non-specific) (2003:846). She says that inferential evidentiality denotes recently required information or situations that have not been personally witnessed by the speaker. These four oppositions are combined in a large number of categories for which we will not account now since many of them are modal/evidential. However, in the area of tense and aspect solely we note the following categories (2003:847-48):

*Present/Future (non-specific)*; (stem + person-number suffix) Non-specific forms are used with future meaning, and as generic habitual present.

*Present/Future (specific)*; (stem + person-number-suffix + -an)

*Past*; (past stem + -st/-t-/Ø + past personal endings)

*Present Perfect*; (perfective participle + present of ‘be’)

*Past Perfect*; (perfective participle + present of ‘be’)

*Imperfective Habitual*; (imperfective participle + present of ‘be’)  
*Past Habitual*; (imperfective participle + -t- + person-number suffix)  
*Past Imperfective*; (imperfective participle + past of be’)  
*Past Perfective*; (past participle + past of ‘be’)

The above categories appear with one or two inferential versions of the same respective categories. Bashir identifies the forms and gives examples on how it is marked in one verb’s conjugation, but does not describe the use of each form.

## 5.2.2 Khowar T&A system in our study

### Aspect in Khowar

Khowar can in our sample express four types of aspect: imperfective/progressive, perfective, perfect, and habitual/generic.

#### *Imperfective*

Imperfective aspect is the unmarked aspect. It includes all categories that are not marked for perfectivity by either the overt perfectivity marker or the perfective participle. The inflected *Present*, the *Past imperfective*, and the *Future/Habitual* are imperfective categories. Imperfective aspect can be overtly marked with the progressive marker *-av*, and is so in all contexts apart from the present, (where the progressive and/or imperfective aspect of the situation probably is to be considered inherent). The *-av*-marker alone on a stem forms a non-finite progressive participle, but can together with a past auxiliary express the finite compound category *Past imperfective*. In the third person we notice that the auxiliary is sometimes written together with the main verb, which raises a question about whether some auxiliaries are becoming part of the inflectional system; something that is not unheard of in Dardic languages (Liljegren 2008:219). To draw any conclusion however this would need to be subject to a more extended study.

It also seems possible to combine the imperfectivity marker together with a future tense auxiliary for a *future progressive*, although we only have two examples of that in this data, which excludes the category from our list of *major* categories:

(12) *He will be writing letters* (lit. *he letters writing will-become*) TAQ no.016 where the context given is: “Q: what your brother DO when we arrive, do you think? (What activity will he be engaged in?)”

hase	xatan	nivɛʃav	bɔj
he	letters	writing	will.become

The progressive participle form can also be used without auxiliary in collocations with two verb phrases.

#### *Perfective*

The marker *-t-* is found on most verbs that do not express imperfective aspect, and has therefore been analysed as a perfective marker, i.e. it is present on most *Perfective* verbs that have not got a suppletive perfect root. It is possible that also *Future Perfect* may exist, see below.



It is possible that what we consider here to be a PFV is, or has in fact been a PST time marker; i.e. there are also two examples in the questionnaire where the progressive marker *-av* has been combined with *-t-* e.g. in (13) where both the progressive *-av* -marker and the PVF *-t-* (+person inflection) can be found:

(13) *'He was writing letters'* TAQ no.020 (Q:What did your brother usually DO after breakfast last summer?)

hase xatan niveʃavotaj

he letters was-writing

These two examples were initially interpreted as a variation of the past imperfective, but corresponds to the form Bashir (2003:847) describes as *Past habitual*. Unfortunately we only have two examples of it, which excludes it from this study (see definition of “Major category” in section 4.2). Nevertheless, we take note on the existence of the form. Since the *-av* undoubtedly is a progressive marker it seems peculiar that it would be combined with a Perfective marker, which is why its classification as *Past* or *Perfective* is not entirely definite.

### *Perfect*

The compound perfects are formed by the combination of the *perfect participle* (e.g. *biti* from *bik* – ‘become’, or *gani* from *ganik* – ‘take’) and a finite copula marked for tense. Paired with a present auxiliary it gives a *Perfect* and with a past, the *Pluperfect*. Note that there are three participles in Khowar: the progressive participle; the perfective participle; and a quotative (perfective) participle which expresses perfect in *quotative* modality. The perfect participle ending in *-i* in the regular paradigm is used when the speaker has personal experience of what s/he is expressing, and in more neutral contexts such as questions. The quotative perfect participle, ending in *-o* expresses second hand/hearsay and unsure information together with the *bik*-auxiliary (become). It can therefore express evidentiality nuances opposed to other forms e.g. (14), (15)

(14) *The king has arrived* (lit. *'(the) king arrived'*) TAQ no.135 Where the context given is “The king has been expected for weeks. The speaker has just seen him”

batʃha haj

king arrived.PST

(15) *The king (is said to have) arrived* (lit. *'king arrived became'*) TAQ no.136 Where the context given is “A person that has heard (135) but not seen the event says:”

batʃha giro biraj

king arrived.QUOT.PTCP became

In the first sentence the speaker has witnessed the king, and knows that he is here, in the second it is hearsay information, which is marked by the use of the *quotative* form. The speaker does not commit to the information expressed in the same way.

### *Habitual*

Habitual aspect is morphologically unmarked in Khowar; it neither carries the present –an nor the perfective/past *-t-* marker, but consists of the (imperfective) stem and a person marker (e.g. *-m*, *-r*, *-mi*) which creates forms such as *niveʃi -r* – ‘he (usually) writes’. It encases both habitual and habitual-generic contexts, and has the same form as the *Future* tense (to the extent that we are less inclined to define a *future* tense in Khowar, see below:).

## Tense in Khowar

Present tense in our sample is marked inflectionally, in final position on the finite verb, both in simple tenses and compound tenses. The overt marker is placed either on the head verb or the auxiliary (the only exception being when a verb is coordinated with a second verb clause, the prior thus getting an infinite coordination form).

### *Present*

There is a *Present* marker on all verbs with present time reference. The present tense marker *-an* is verb final in the regular paradigm and is found in all semantic present context, as well as on three occasions, on verbs with other temporal references, namely one future reference and two past time references. However, in all these cases the form in present is delivered in a quote, e.g:

(16) *He said that he was writing letters* (TAQ no.156), where the context delivered is “what did your brother say yesterday when you asked him if he was busy?”

hase	ravɔʃɔj	ki	hase	xatan	nivɛʃiran
he	said	that	he	letters	is.writing

### *Past*

The perfectivity marker *-t-*, directly following the verb root in the regular paradigm can just as well be considered a past tense marker, whose temporal affiliation rather is an implicature of the perfectivity than a pure temporal form. Irregular verbs have suppletive perfective forms, often with a suppletive root e.g. *praj*, 3sg Past of the verb *dik* – ‘give’. All verbs with past time reference are marked with an overt perfectivity marker (or suppletive root), either on the verb itself (the non-compound simple *Perfective*) or the auxiliary (in the compound past tenses *Past progressive* and *Pluperfect*). Two verbs carrying the *-t-* marker are semantically referring to a future time (TAQ no.103, 107); but in both cases we are dealing with temporal subclauses. E.g:

(17): *when you return I will have written this letter* TAQ no.107.

kjavat	ki	to	atʃi	hav	ava	haja	xato	nivɛʃiro	bom
when	that	you	back	came.PFV	I	this	letter	written	will.become.FUT

### *‘Future’*

Future tense is the morphologically unmarked tense; i.e. it neither carries the present *-an* nor the perfective/past *-t-* marker, but consists of the stem and a person marker (e.g. *-m*, *-r*, *-mi*) which creates forms such as *nivɛʃir* (‘he will write’). Once again we have several irregular auxiliaries/copula verbs taking completely different forms, e.g. *bɔj*, (3sg future of *bik* - become). The weak temporal reference of the form is shown not only by the lack of an overt marker, but also in the fact that the same form is also used in habitual contexts, as was mentioned above.

### 5.2.3 Tense-aspect categories

In the TAQ presently studied we find combinations of tense and aspect markers that together make up 7 tense-aspect categories that we can identify as ‘major’ (i.e. a finite category having more than 6 occurrences in the TAQ), namely the following:

**Table V – the temporal and aspectual categories found in the Khowar TAQ (min. 6 occurrences)**

<i>Imperfect</i>	<i>Perfective/Perfect</i>
<b>Present (PRS)</b>	<b>Perfect (PRS PFCT)</b>
<b>Past imperfective (PASTi)</b>	<b>Perfective (PFV)</b>
<b>Future/habitual (FUT)</b>	<b>Pluperfect (PLPFCT)</b>
	<b>Quotative (QUOT)</b>

**Table VI – Results from Khowar: category, no. of occurrences, amount of the prototypical cases, marking type (P=Periphrastic/M=Morphological).**

	No. occur.	Prototypical occurrences	Marking type
<b>PRS</b>	23	3/7 PROG (out of which 3/3 with PRES relevance)	M
<b>PFV</b>	56	7/8 PFV 2/9 PFCT	M
<b>PASTi</b>	15	4/7 PROG (out of 4/4 with PST relevance) 6/7 PASTi 0/8 PFV	P
<b>FUT/HAB</b>	23	7/8 FUT 3/8 HAB, 5/8 HABG	M
<b>PRS PFCT</b>	18	4/9 PFCT	P
<b>PLPFCT</b>	18	1/7 PLPFCT	P
<b>QUOT</b>	17	4/6 QUOT 4/7 PLPFCT 3/9 PFCT	P

*Present (Person marker + PRS marker)*

*Present* is overtly marked on all verbs with semantic present reference. The present tense marker -*an* is verb final and preceded by a person marker (-*m-*; -*r-*, or -*ni-*, for example), which combines into e.g. -*man* (1sg), -*ran* (3sg), -*nian* (6pl), (these examples are drawn from the regular paradigm; there are also a number of irregular verbs, mainly auxiliaries, that follow different paradigms, e.g. *fer* - *is*). The *Present* encases all present semantic references, and we consider the imperfective/progressive aspect as being an implicature of the present tense. The form seems to be used mainly for simple present time reference, and although there is one case where it seems to express semantic future (with intention), other future time references are grouped in one form (our “*Future/habitual*”). The *Present* does thus not seem to be the common way of expressing future time reference. Bashir does call this form “Present/Future specific” but in our data the sole future reference occurrence is to consider marginal; the fact that another category collects the greater part of the future time references makes it seem more fit for the label, (if any category does).

Out of Dahl’s prototypical occurrences it appears in 3/7 prototypical PROG cases, among which 3/3 of the PROG occurrences with present time relevance.

*Past imperfective (Progressive participle + PST AUX)*

The past imperfective consists of a Progressive participle (which is formed by adding the marking *-av* onto the reduced root of the main verb) together with an auxiliary verb in the *Past* tense. It is mostly used for expressing progressive situations in the past, but does also include past habituals. Two of the occurrences of this form are a bit surprising, since we would expect to find a *Pluperfect*, especially since Khowar has the means of expressing a ‘past in the past’ situation with two time points, e.g:

(18): *No I had not met him (before I came here)*, i.e. ‘I was not knowing him yet’ TAQ no.051. Where the context given is: “When you came to this place a year ago, did you know my brother?”

nova	ava	hatə	nə	ʒanav	ɔʃtam
no	I	him	not	knowing	was

We assume that this is rather a question of lexical aspect, since the informant is using the stative verb ‘know’ instead of ‘meet’, supposedly going well together with the *Past imperfective*.

Out of the prototypical occurrences of PASTi in Dahl’s questionnaire it is present on 6/7 verbs; out of the PROG occurrences it is marked on 4/7 cases (among which, 4/4 with past time relevance); no typical PFV contexts appear among the forms.

*Past (PST marker + Person marker)*

The *Past* category is marked overtly with a perfectivity/past time morpheme *-t-* that denotes past time reference, directly following the verb root. For the moment we have preferred the analysis where past time reference is an implicature from perfectivity, but given that the *-t-* marker is present on two verbs also marked with the progressive morpheme it is possible that it is or might have been a *past* marker. It is succeeded by a person mark, for example *-aj* (3sg), or *-am*, which gives us verb endings such as *-taj* (3sg) or *-tam* (1sg). Also here the examples are drawn from the regular verb paradigm, however the auxiliaries and copulas in the language follow irregular paradigms. They are usually suppletive taking a different verb stem in the past paradigm, e.g. *ɔʃɔj* (was, 3sg), which is the past corresponding to *ʃer* (is, 3sg) mentioned above. It collects all the semantic pasts that are not explicitly imperfective, nor compound forms.

Out of Dahl’s prototypical occurrences it encases 7/8 prototypical PFV cases, and 2/9 PFCT. It is the preferred category in narrative contexts.

*“Future” (root + person marking)*

The future category in Khowar does not seem to be purely temporal but also aspectual in that it often denotes habitual reference and other imperfective usages. It is not overtly marked for tense; i.e. it neither carries the present *-an* nor the past *-t-* marker, but consists of the (imperfective) stem and a person marker (see 5.2.2 for more information on how), in the regular paradigm, with alternative forms for irregular verbs. The weak temporal reference of the form is shown not only by the lack of overt future marker, but also in the fact that it is used in most habitual contexts that do not explicitly refer to past time.

Bashir refers to this category as “Present/Future non-specific” although, in this study’s data, no indications of present time reference can be found among the meanings of the verbs in that form. Bashir also identifies the form as being used for “habitual generic contexts”; in the present data set the category is used for both habitual generic contexts and other (non-past) habitual contexts.

Among Dahl's prototypical occurrences, the category encases 7/8 FUT, but also 3/8 HAB, and 5/8 HABG.

*Perfect (Perfective Participle + PRS AUX)*

The *Perfect* is a compound form combining the perfective participle with an auxiliary in the *Present tense* and is used for perfective situations that still have present relevance in situations denoting e.g. having met someone (still knowing them), having read a book etc.

It encases 4/9 of Dahl's prototypical occurrences of PFCT.

*Pluperfect (Perfective Participle + PST AUX)*

The Pluperfect is a compound form combining the perfective participle with a past tense marked auxiliary. In our data the form is used partly to express a 'past in the past' and past without present relevance. Because of the similarity, we have decided to call the form *Pluperfect* although it is clear that its use is wider than the prototypical *Pluperfect*. A number of the occurrences having this form do have present relevance; and it seems to encase as disparate semantic contexts as (*remote*) *past habit*, hodiernal and hesternal past with present relevance and one sentence where we would expect a past imperfective. I.e. the *Pluperfect* is hard to categorise and it might not be the most suiting name for the form (which is the same situation as for Bashir's "Past Perfect-actual" denomination).

It encases only 1/7 of Dahl's prototypical PLPFCT occurrences. One reason for that is probably that 4/7 of the prototypical occurrences instead occur in the *Quotative* form, see below:

*Quotative (Perfect quotative participle + PST AUX)*

The *Quotative* in Khowar could be considered a hearsay version of the *Pluperfect* and the *Perfect*, which means that it expresses evidentiality. It is formed by a dedicated quotative perfective participle with a past tense auxiliary, much like the Pluperfect. Since our subject of study is the T&A system only, we are mainly interested in the T&A uses of the form, putting the evidentiality aside, and we here find that it is quite consistent with the use of the above mentioned forms, especially the *Pluperfect*; i.e. it expresses "past in the past" semantic reference; previous events without present relevance; and a couple of instances perfect (past events *with* present relevance). It replaces the *Past* (simple perfective) in narrative contexts where the story told is hearsay, whether it is "second hand information" or storytelling.

As mentioned above it encases 4/7 of Dahl's prototypical PLPFCT cases, and also 3/9 of the prototypical PFCT. Out of Dahl's prototypical cases of QUOT it encases 4/6.

## 5.3 Palula

### 5.3.1 Palula T&A system in the literature

The finite verbs in Palula are marked for both tense and aspect, and mood to some extent. Apart from this the verbs are marked for gender/number or person depending on the tense-aspect category (Liljegren 2008: 53). Liljegren notes that aspect is the more salient feature (which is, as he adds, a typical trait for IA languages as we also have noted above), and identifies two stems, one imperfective and one perfective, which respectively can be marked for tense (and person agreement) to create the language's T&A category system (2008:193). The imperfective stem is used for Present, Future, and Past Imperfective. Liljegren describes the following T&A categories for the indicative mood (2008:214-226):

#### *Inflected categories*

##### *Future*

*Future* is used for future time reference; not yet realised situations that can either be near in time or in a distant future. Liljegren says that it covers both prediction as well as intention (2008:215). It is also used in conditional constructions as the apodosis verb.

##### *Present*

*Present* is used for actions that have started but that are not yet completed at the point of reference (the time of the utterance). It is the only non-periphrastic category that has tense as its primary value. The present is according to the description the only category that is morphologically marked for tense, and typically denotes non-perfect, progressive situations with present time reference, no matter if the situations are durative or punctual.

##### *Perfective (Simple past)*

Although primarily an aspectual category, the simple past is usually referring to situations that are already completed at the time of the utterance, and i.e. have past time reference, regardless of remoteness. It contrasts clearly with the Past imperfective and the two periphrastic perfect categories which express more than one time point at once.

#### **Periphrastic categories**

##### *Past imperfective*

The *Past imperfective* is formed by a person-inflected imperfective verb stem followed by past tense particle<sup>12</sup> *de*, the imperfective past expresses imperfective situations in the past. It encases past progressive situations as well as past habituals; habits that held in the past. According to Liljegren the past copula might be on the verge of becoming a suffix.

##### *Perfect*

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<sup>12</sup> In Liljegren (2008) *de* is described as a past tense copula, but he has since changed his definition to regarding it as purely a temporal marker (Liljegren, p.c)

The *Perfect* is formed by a perfective verb form and a present tense copula, the perfect expresses completed events with present time relevance. The use has been extended to inferential, and is sometimes used in place of the Simple past when expressing hearsay in narrative context. Liljegren also notes a parallel perfect form, formed by a Converb together with the present tense copula, whose use might be slightly different, rather focusing on the resulting state rather than the preceding event (223)

#### *Pluperfect*

The *Pluperfect* functions like the perfect but with relevance to a past situation instead of the present; it is also formed with the past tense particle instead of the present. It is used when the situation expressed is no longer relevant for the present time, but to a time prior to the utterance. It is sometimes used as a “past in the past” referring to a past point prior to the timeline in a narrated story, and there seems, as is quite often the case typologically, to be a drift towards a general remote past.

### **5.3.2 Palula T&A system in our study**

#### **Aspect in Palula**

##### *Perfective*

Palula is a highly aspectual language with two stems; one morphologically unmarked imperfective stem, and a morphologically marked perfective stem. Perfective verbs are overtly marked in Palula with the addition of the perfective marker (-*il*) added to the root of the verb (in the regular paradigm; there is also a number of irregular verbs, some having suppletive perfective stems). There are three forms that are perfective; *Perfective*, the simple past tense; and two compound tenses, namely *Perfect* and *Pluperfect* that together with temporal auxiliaries express perfective aspect with more than one time point.

##### *Imperfective*

Imperfectivity is the morphologically unmarked aspect in Palula, not having an overt marker. Imperfectivity is the aspectual interpretation of all verbs not containing the perfect marker (-*il*), namely the T&A categories *Present*, *Past Imperfective*, and *Future*.

#### **Tense in Palula**

Tense in Palula is expressed by both periphrastic and morphological means.

The *Present* tense is inflectionally marked by adding the marker -*áan-* to the bare (imperfective) verb root, followed by a morphological marker for gender. It is the only morphologically marked temporal category and is used in all present contexts in the questionnaire. There is also a present tense copula *hin-* (ending depending on gender), which is used as an auxiliary to mark present time relevance for perfect events.

*Past* in Palula is periphrastically marked with the help of the particle *de* and is used in the forms *Past imperfective* and the *Pluperfect* where it is a pure past tense marker. Past is also part of the meaning of *Perfective*, although morphologically unmarked, which makes us believe that the past time reference rather is an implicature of the Perfective aspect (overtly marked) while aspect being the primary meaning of the form.

*Future* is an unmarked tense, formed by the bare imperfective stem and an inflectional person marker. Although unmarked, future seems to be purely a tense; we find no other usage of the form. Future reference can also be expressed by *Present*, in our data, although we only have 2 examples of this.

### 5.3.3 Tense-aspect categories

In the TAQ presently studied we find combinations of tense and aspect markers that together create 6 tense-aspect categories that we can identify as “major” (i.e. a finite category having more than 6 occurrences in the TAQ), namely the following:

**Table VII – the temporal and aspectual categories found in the Palula TAQ (min. 6 occurrences)**

<i>Imperfective</i>	<i>Perfective</i>
<b>Present (PRS)</b>	<b>Past perfective (PFV)</b>
<b>Past Imperfective (PASTi)</b>	<b>Pluperfect (PLPFCT)</b>
<b>Future (FUT)</b>	<b>Perfect (PFCT)</b>

**Table IX – Results from Palula: category; no. of occurrences; amount of the prototypical cases; marking type (P=Periphrastic/M=Morphological).**

	No. occur.	Prototypical occurrences (Dahl)	Marking type
<b>PRS</b>	39	3/7 PROG (out of 3/3 with PRES relevance) 2/8 FUT	M
<b>PASTi</b>	19	4/7 PROG (out of 4/4 with PST relevance) 6/6 PASTi 3/3 HAB(past)	P
<b>FUT</b>	18	3/8 FUT 2/4 PRED	M
<b>PFV</b>	82	8/8 PFV	M
<b>PFCT</b>	19	2/9 PFCT	P
<b>PLPFCT</b>	13	5/7 PLPFCT	P

#### *Present (PRS marker + gender inflection)*

The present form is morphologically marked for present tense (-*àn-*) on the bare imperfective verb stem, as mentioned above. It seems to be a primarily temporal category, being overtly marked for tense, but is also used for many habitual contexts (and, in two examples future, intentional, reference). The fact that the *Present* is mainly used for typical imperfective semantic contexts raises the question whether the overt marker could be considered an IPFV marking; in some of the material it has been glossed as such. However, imperfective aspect is most often considered an



implicature of present tense. Also, it seems likely that the imperfective usage of the category (e.g. for *habitual* aspect) is a result of the unmarked root being imperfective, than the overt marker expressing imperfectivity as well. Had the marker been a pure IPFV marker, it seems likely that we would have found it on the *Past Imperfective* as well as, possibly, on the *Future* categories. This is not the case; both of the forms are formed on the bare root, i.e. the bare root does seem inherently imperfective.

Out of Dahl's prototypical occurrences it encases 3/3 PROG that have present relevance, as well as 2/8 out of the prototypical FUT.

#### *Past Imperfective (Person inflection + PST AUX)*

The past imperfective is also formed by adding a person inflection onto the imperfective verb stem and adding a past copula as an auxiliary. It only expresses progressive and habitual situations that held in the past, regardless of this past being recent or very remote in time.

It encases 6/6 of Dahl's prototypical PASTi cases, and 4/4 out of the PROG cases with *past* time relevance, as well as 3/3 of the prototypical HAB cases with past time reference (3/8 out of the total HAB occurrences).

#### *Future (Person inflection)*

Like the *Past imperfective*, *Future* is formed by adding a person marker to the imperfective verb stem. The Future is the temporally unmarked form in the imperfective paradigm, i.e. it does not carry any overt marker such a temporal inflection (like the *Present*) or a temporal auxiliary (like the *Past Imperfective*). In our data only verbs with future time reference appear in the form, whether this the future concerns intention or prediction about the future; it does however seem possible to express imminent or maybe intentional future with the use of *Present*.

Only 3/8 of Dahl's prototypical FUT have the FUT form, as well as 2/4 of the prototypical PRED.

#### *Perfective (PFV marker + gender inflection)*

The *Perfective*, or the *Simple past*, is here analysed as primarily a perfective form, with past temporal reference rather being an implicature of the perfectivity of the situation expressed by the verb. However, its restriction to past time reference makes it hard to exclude the possibility that the overt PFV marker might in fact be a past tense marker. It expresses typical perfective situations, restricted to past tense, and is also the undoubtedly most common form in our data. It contrasts with the *Past imperfective*.

8/8 of Dahl's prototypical PFV cases have this form. It is also the form that is used to express narrative contexts, which as mentioned above is typical for perfective forms.

#### *Perfect (PFV marker + gender inflection + PRS AUX)*

The *Perfect* is a compound form consisting of the perfective stem with a morphological gender marking (i.e. the same form as the *Perfective*) and is followed by a present tense auxiliary (*hín*-, final vowel depending on gender agreement). It is used to express perfect events that still have present relevance, such as in (19):

(19): *It has rained* TAQ no.059 (where the context given is: "Looking out of the window, seeing that the ground is wet")

múto híno  
 rained is

The fact that the ground is wet can be considered the present relevance of the past situation of raining; but the use is here also inferential, i.e. the speaker can, judging from the wet ground, infer that it has been raining earlier. There are several examples where the situation expressed by the verb is inferred by the context given. The perfect is also the common way of expressing that one *has met* someone in our data, i.e. the meeting still has present relevance, since the speaker still *has met* the person. It is also used in four examples when the narrative *Perfective* would be expected; it goes along with Liljegren’s (2008:22) analysis that this is a way of expressing hearsay (the examples of this in the TAQ are drawn from a retelling of what the speakers brother has told her or him).

*Pluperfect*

The *Pluperfect* is like the Perfect formed by the Perfective followed by a tense auxiliary, in this form the *Past* tense auxiliary *de*. It is used to express a past event prior to a point in the past. Unlike Liljegren (2008:225) we do not find any indication of the form being used as a remote past, e.g. in (20):

(20) (Yes) I just (=a couple of minutes ago) met him (so I know him) TAQ no.038 in answer to “Do you know my brother?”

óo ma tas sangi milaáw **bhílo** **de**  
 Yes I him with found became PST

In this example, there is no expression of remoteness but rather recentness; this is a bit surprising, since the temporally more neutral counterpart sentence “(Yes) I have met him (so I know him)” is expressed with the *Perfect* i.e. with the present auxiliary *híno* instead of *de*. This could have been an error in the data, but there are a couple of more examples of the *Pluperfect* not expressing past in the past, nor remoteness but situations taking place “yesterday”. The use of the form for expressing recent past and hesternal past does not seem to go well with Liljegren’s idea of remoteness. He also lays forward a theory of temporal adverbials triggering the *Pluperfect*, however, in (20) there is no temporal adverbial in the sentence (only in the context). Also, we find that ‘this morning’ triggers *Perfective* while ‘yesterday’ triggers the *Pluperfect* in two otherwise identical sentences, as seen in examples (21) and (22):

(21) Yes I met (PFV) him here this morning TAQ no.143 The context given being “Conversation takes place in the afternoon: Do you know my brother?”

óo ma tas sangí áaj rhoošnaám índa milaáw **bhílo**  
 Yes I him with today morning here found became

(22) Yes I met (PLPLFCT) him here yesterday. TAQ no.144 (The context being the same as in example 13)

óo ma tas sangí dhoór índa milaáw **bhílo** **de**  
 yes I him with yesterday here found became PST

From our limited data we cannot judge what triggers the use of the *Pluperfect* here in these cases where it does not seem consistent with the “typical” use of *Pluperfect* (i.e. it is used when there is no temporal adverb but *recent* past, and also together with a hesternal adverb, but not with the hodiernal adverb). All the same, the category encases 5/7 of Dahl’s prototypical occurrences of PLPFCT, so we judge this rather being a problem of an *extended* use of the *Pluperfect*, rather than a reason to question the category as such.

## 6. Discussion

As might be expected when comparing the three systems, both similarities and differences are found:

### *The salience of aspect*

One striking similarity is the importance of *aspect* in all three languages. As was noted in section 5.3.1, this is quite common among the Indo-Aryan languages and the three in the present study are no exception. They all have a grammaticalised PFV:IPFV distinction, and in all three languages aspect is marked on the verb stem while tense is, in both Khowar and Palula, on the whole marked periphrastically. It is even possible that some of the inflectional tense markers that are found in the data might rather be aspectual markers with tense as an implicature rather than its primary meaning, e.g. the Khowar past (or perfective?) marker, and the Palula present (imperfective?) marker. Gawri stands out between the three of them in that it has no periphrastic constructions at all; the T&A system is completely inflectional.

Also Urdu, to which the languages are compared due to its position as a dominant Indo-Aryan language in the region, has a primary focus on aspect which is grammaticalised in the system through inflectional markers, forming one perfective and one imperfective participle that in combination with auxiliaries take different temporal and/or modal values. The imperfective participle is mainly used for habitual contexts, and other imperfective uses (i.e. continuous aspect) is expressed by the use of a delexicalised perfective form that functions as a continuous participle (Schmidt 1999:98-123). Tense and mood is expressed by inflection on the auxiliary, and not on the main verb, a trait that is common among the Indo-Aryan languages.

### *Marking type*

As mentioned above, the tense-aspect system of Gawri is completely inflectional. The fact that its tense markers carry a strong similarity with the present and past copulas (as discussed under ‘Tense’ in 5.1.2) raises the question on whether the inflectional character of Gawri is due to cliticisation of previous free particles. This goes along with Liljegren’s discussion of a possible beginning of this in the *Present* category in Palula, something that has been seen in other Dardic languages, where previous auxiliaries have become part of the inflectional system (2008:219). This could be an interesting pattern in developing in the language group as a whole, since the auxiliaries in some Khowar compound constructions were also written together with the head noun, as was noted above.

It can also be noted that the Gawri aspect marker is fused with a gender distinction marker which creates many allomorphs of its aspectual markers. This singles out Gawri as being a more fusional language, while the other two are mainly agglutinating, in particular Khowar.

The Urdu system consists of mainly compound categories, but both of the participles can also be used alone. The finite, imperfective participle is mainly an irrealis form, and sometimes it is used in narrations of things that occurred regularly in the past, then introduced by a habitual past (Schmidt

1999:131). When the perfective participle is used alone it forms what is called the *simple past*, a true perfective form that can also be used in narration (Schmidt 1999:139).

#### *Likeness in form – a common past?*

The *Present* categories are in both Khowar and Palula marked with a present tense morpheme *-an* and *-àan-*, respectively; in form strikingly similar to the Gawri imperfectivity marker *-a~- /-an-*, which leads us to the question of a common origin (Liljegren 2008:200-20). Although the markers for the first two have been analysed as present tense markers, the semantics of PRS is, as has been noted, naturally connected with imperfective aspect. It seems likely that this is a development in one or two of the languages but it is not clear whether it is an original imperfectivity marker that has gained present tense values or a present tense marker that has slid towards imperfectivity in Gawri, leaving room for the introduction of a new present tense marker *-t*, that is now found in its stead. In this study I lean towards the first analysis, given the striking regularity of the Gawri system with both its present marker and its imperfectivity marker appearing consistently in several forms in its T&A system. However; this question remains unanswered and hopefully further studies of these three languages and others in the Dardic language group, preferably in a diachronic perspective, will bring some clarity on this subject.

#### *Differences in habitual aspect expression*

The consistently appearing imperfectivity marker in Gawri also singles the language out among the three as it without any temporal marker creates a pure *Habitual* category, encasing all habitual contexts regardless of temporal frame while the other languages have none or only partly habitual categories. Palula expresses habitual aspect with other imperfective forms, and Khowar has a combined *Future/habitual* category but does not use it for past tense habituals; indications of there being a specific *Past habitual* category have been found, but the occurrences in our data are too few to prove its existence as a ‘major’ category in the language. Further studies on an extended data set should be performed also on this matter.

In Urdu, *habitual aspect* is expressed by the imperfective participle. Habitual aspect can be said to be the main use of the imperfective participle which is then modified by temporal or modal inflections on the auxiliary (Schmidt 1999:99). However, habitual aspect can also be expressed in other ways, e.g. by an inflected form of the verb ‘do’ added to the perfective participle (Schmidt 1999:146). It seems thus as if the three languages studied here differ from Urdu, in that habituality is not the main usage of imperfectivity.

#### *Notable differences in Future categories*

The languages mark future in quite different ways. Palula has a “true” *Future* category; the category collects almost all semantic FUT references in the questionnaire, and has no alternative usage that we can find in our data – the category is morphologically unmarked for tense, i.e. it is the lack of temporal marker that creates the FUT temporal reference.

In the case of Gawri, we are questioning whether the “*Future*” tense at all can be called a future tense; the *Present progressive* is just as often used to express semantic future reference, and the form is also used in conditional contexts which leads us to wonder whether the category is in fact a modal category expressing some sort of irrealis modality.

Khowar has what seems to be a FUT category but with just as much HAB and HABG expressions as future time reference; it is thus questionable whether this category can be named “future”, combining two uses as semantically disparate as these. It seems likely that also this category has a modal value with future uses rather than future time reference being the main meaning of the category.

Urdu, for comparison has a future category which is formed with a future (originally perfective) suffix on the subjunctive form of a verb (it is analysed as a suffix although not attached to the verb) and expresses, apart from future time reference, also presumption (Schmidt 1999:104).

#### *QUOT category*

Khowar has a QUOT (perfect) category for hearsay perfect, and expresses evidentiality nuances with the help of the copula ‘become’ in other tenses, something that Palula has slight indications of (varying the tense from Simple past to Perfect when expressing hearsay in narrative contexts, as was noted above). The use of the *Quotative perfect* in Khowar corresponds to the use of both the *Perfect* and the *Pluperfect*.

Neither Gawri, nor Urdu seem to have this tendency.

In all, it can be concluded that there are some similarities that tie these languages together, such as the salience of aspect and phonologically similar forms with similar interpretations; but whether these are remnants of a common past or parallel contact developments we cannot say at this stage. There are also some notable differences between them, especially in the way the languages express habitual aspect distinctions and future tense.

The descriptions of these T&A systems merit to be performed on a larger data set with more parallel texts and preferably an extended number of languages from all 6 subgroups, and further studies will hopefully have the opportunity to do this.

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