Split Agreement and Ergativity in Kutchi

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1. Introduction[1]

The general definition of *ergativity* as stated by Dixon (1979) refers to a grammatical pattern where the subject of an intransitive clause is treated like the object of a transitive clause, but differently from a transitive subject. Furthermore, *ergative* is used to refer to the transitive subject whilst *absolutive* refers to the intransitive subject and transitive object. The example from Hindi in 1 shows agreement of the verb with the intransitive subject and the transitive object. Note: there is no agreement with the transitive subject.

1.
  a. Raam bazaar gayaa
     Ram market go(past,masc sg)
     'Ram went to the market'

  b. Raam-ne rotii   khaayi   thii
     Ram-erg bread(fem)   eat(perf,fem) be(past,fem)
     'Ram has eaten bread'.

<div align="right">Mahajan (1990:73)</div>

Verbal morphology in Indo-Aryan languages reveals a split ergative pattern along the lines of tense/aspect. A verb in the perfective aspect marks its arguments according to an ergative pattern and agrees with the argument marked for absolutive case, whilst the imperfective triggers accusative marking and agreement of the verb with the argument marked for nominative case. Established literature on this matter states that only one possible form of case and agreement mismatch exists, namely, nominative-accusative agreement with an ergative case system; it has been argued that the opposite pattern is not possible (Anderson 1977, 1985; Moravcsik 1978; Wierzbicka

1981). In this paper I discuss the case and agreement pattern in Kutchi, and argue that the latter pattern of ergative agreement with an accusative case system does in fact exist.

Kutchi is a language spoken in Pakistan and in the Raan of Kutch (in Gujarat, India)[2]. In section 2, I outline the aspectual properties of Kutchi and argue that in imperfective structures the agreement pattern is nominative-accusative where subject agreement on the verb occurs in both intransitive and transitive readings. In perfective structures, the agreement pattern appears to be ergative-absolutive. Subject agreement is present in intransitive constructions, whereas object agreement occurs in transitive constructions. Furthermore, I will illustrate that the case system for Kutchi is nominative-accusative both in the perfective and in the imperfective.

2. Aspectual Properties of Kutchi

2.1 The Imperfective

Data from Kutchi Gujarati illustrates that the agreement pattern in imperfective readings is always the same.   The contrast between 2a and 2b shows that subject agreement is present whereas the contrast between 2a and 2c illustrates that object agreement is absent. In other words, person and number agreement on the finite verb is always with the subject. In the present imperfective, the initial vowel of the suffix denotes person agreement with the subject, whilst the *r+v* part of the affix agrees with the subject in number and gender. The different endings are listed in the table in 2'.

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[2] See references at the back of this paper for sources on Kutchi.

2.

   a. Mary John ne   mar-e-ri
      Mary John CASE hit-3sg.subj-f.sg.subj
      'Mary is hitting John'

    b. Hu   John ne   mar-u-ro
      I(1sg) John CASE hit-1sg.subj-m.sg.subj
      'I(masc) am hitting John'

   c. Mary   ma-ne   mar-e-ri
      Mary   me(1sg)-CASE   hit-3sg.subj-f.sg.subj
      'Mary is hitting me(masc)'

2'.

Present imperfective subject agreement (-person-gender/number)

	f.sg	m.sg	n.sg	f.pl	m.pl	n.pl
1	-u-ri	-u-ro	-u-ru	-i-ra	-i-ra	-i-ra
2	-e-ri	-e-ro	-e-ru	-u-ra	-u-ra	-u-ra
3	-e-ri	-e-ro	-e-ru	-e-ra	-e-ra	-e-ra

This agreement pattern only applies to the present imperfective; it is not applicable to the past imperfective readings acquired. In the past imperfective readings, it is not possible to subdivide the affix into person versus gender/number agreement.

3.
   a. Mary John ne   mar-thi-ti
      mary john CASE hit- ipfv.f.sg.subj-f.sg.subj
      'Mary was hitting John'.

   b. Hu   John ne   mar-tho-to
      I(1sg) John CASE hit ipfv.m.sg.subj-m.sg.subj
      'I(masc) was hitting John'

   c. Mary ma-ne   mar-thi-ti
      Mary me(1sg) hit- ipfv.f.sg.subj-f.sg.subj
      'Mary was hitting me(masc).'

The examples in 3 illustrate that the affix which attaches to the verb denotes the past imperfective and agrees with the subject. In the present imperfective, it is clear that a particular element of the affix corresponds to a particular type of agreement with the subject, namely person, number and gender. This type of pattern is absent from the

past imperfective readings and I leave this open for further research, for it exceeds the scope of this paper. The table in 4 summarises subject agreement in the Past imperfective.

4.
Past imperfective subject agreement (only gender/number agreement, no person)

	f.sg	m.sg	n.sg	f.pl	m.pl	n.pl
1	-thi-ti	-tho-to	-thu-tu	-tha-ta	-tha-ta	-tha-ta
2	-thi-ti	-tho-to	-thu-tu	-tha-ta	-tha-ta	-tha-ta
3	-thi-ti	-tho-to	-thu-tu	-tha-ta	-tha-ta	-tha-ta

2.2 The Perfective

In this section, I will discuss the agreement pattern in perfective structures.

2.2.1 Verbs with one argument

In this sub-section I will discuss one place predicate verbs in Gujarati. Agreement in these cases is always with the subject. Example 5 shows that subject agreement is obligatory.

5.
  a. John aav-yo
    john come-m.sg.subj
    'John came'

  b. Mary aav-i
    Mary come-f.sg.subj
    'Mary came'

The verbs in 6, 7 and 8 behave on the par with *aav*[3].

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[3] Intransitive *dhudr* 'shake' and intransitive *gaa* 'sing' which can occur without an object in Kuchi Gujarati are not included in the discussion, as they only allow for an imperfective reading with the canonical subject agreement as discussed above. However, *gaa* 'sing' allows for a transitive structure, taking *song* 'song' as its direct object. In this case it agrees with the direct object, *song* 'song'.

6.
  a. bakri   has-i
     goat(f.sg) *smile*-f.sg.subj
     'The goat smiled'

7.
  a. John naach-yo
   John dance-m.sg.subj
   'John danced'

8.
  a. Mary no   haath   tut-yo
    Mary poss.m.sg *arm*(m.sg) *break*-m.sg.subj
    'Mary's arm broke'

Gujarati also has one place verbs which are a combination of a finite auxiliary *ja* (go) and a non-finite verb. Note: the stem of *ja-* transforms to *g-*, presumably for morpho-phonological reasons, when a subject agreement affix attaches to it. Interestingly, 9 (in contrast to 8) shows that it is possible to have *tut* (break) with or without *ja*, its presence does not seem to alter the meaning of the utterance.

9.
  a. Mary no   haath   tuti   g-yo
    Mary poss.m.sg *arm*(m.sg) *break go*-m.sg.subj
    'Mary's arm broke'

The following examples illustrate verbs where *ja* is obligatory. One explanation for the inability of these verbs to occur without *ja* might be that they are derived from transitive verbs. For instance, *mari ja* 'die' is derived from *mar* 'hit'. In contrast, the transitive counterpart to *tut* 'break' is formed by attaching a causative morpheme *ar*, as will be discussed below.

10.
  a. Mary   mari   g-i
    Mary   *hit*   *go*-f.sg.subj
    'Mary died'

11.
   a. John   pari g-yo
      John   fall   go-m.sg.subj
      'John fell'[4]

12.
   a. Mary kalak mate sui   g-i
      Mary hour for   sleep go-f.sg.subj
      'Mary slept for an hour'

Example 13 illustrates that *ja / g-* on its own expresses *'go'*.

13.
   a. John Bhuj g-yo
      John Bhuj go-m.sg.subj
      'John went to Bhuj'

   b. Bhuj ja!
      Bhuj go
      'Go to Bhuj!'

Furthermore, some verbs in Kutchi Gujarati also obligatorily require the auxiliary *ja* 'go', in addition to *ne*, possibly related or identical to the case marker which appears on the direct object as illustrated above, which follows the non-finite main verb. This is illustrated in the following examples.

14.
   a. John Bhuj chali ne g-yo
      John Bhuj walk   ne go-m.sg.subj
      'John walked to Bhuj / John went to Bhuj walking'[5]

15.
   a. Mary Bhuj dhori ne   g-i
      Mary Bhuj run   ne go-f.sg.subj
      'Mary ran to Bhuj / Mary went to Bhuj running.'

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[4] Note: The imperfective form with subject agreement is *John par-tho-to* 'John was falling' without the auxiliary *ja* 'go'.

[5] Note that the interpretation of 14 and 15 suggests that the ending *-i* which always attaches to the main verb in Kutchi Gujarati auxiliary and light verb constructions might be a gerund ending, such as English *-ing* deriving *walking* from *walk*.

In this section I have discussed agreement for verbs which take a single argument. I have shown that in these structures the verb agrees with the subject. I will show in the following subsections that these are the only cases where verb-subject agreement occurs in perfective aspect. In all the other cases that will be discussed in the following sections object agreement is obligatory.

2.2.2 Verbs with an obligatory pre-specified argument

In this section I will outline agreement in structures that contain a pre-specified object, which seems to be obligatory. The verbs used in this section appear to be transitive in Gujarati, and intransitive (presumably of the unergative type) in English. This is illustrated in 16.

16.
 a. John/Mary cheek   mar-i
  John/Mary sneeze(f.sg) hit-f.sg.obj
  'John/Mary hit a sneeze' (lit. 'John sneezed a sneeze')

The data in 17 illustrates DP internal modification. 17b shows object agreement, where the final vowel of the adjective *mut-o* agrees with the final vowel of the object *pano*. This is also true for 17a. Imperatively, the possibility of DP internal modification shows that *cheek* is in fact a noun, strengthening the claim that *i* in example 16 is really object agreement.

17.
 a. mut-i cheek
  big-f.sg *sneeze*(f.sg)
  'a big sneeze'

 b. mut-o pano
  big-m.sg *stone*(m.sg)
  'a big stone'

To express the concept of 'sneeze', the object *cheek* 'sneeze' is obligatory. It cannot

be substituted by any other direct object whilst expressing the same concept.

Examples for analogous structures are the following:

18.
    a. John khotu   bol-yu
        John lie(n.sg) *speak*-n.sg.ob
        'John lied' (lit. 'John spoke a lie')

19.
    a. John   udras   kha-dhi
      John   cough(f.sg) eat-f.sg.obj
      'John coughed' (lit. 'John ate a cough')[6]

Other cases highlight that complex predicate formation (with the light verb *kar* 'do')

is used in combination with a noun to derive a verbal predicate from it.

20.
   a. John   olti   kar-i
      John   vomitting(f.sg) *do*-f.sg.obj
      'John threw up'

Example 21 shows that *olti* 'vomiting' is a noun and not a verb, for *kar* 'do' agrees

with *olti*. The exact function of *ni*, which in other cases is interpreted as a possessive

marker is undetermined and I leave it open for further research. (However, in analogy

with its possessive use I will tentatively gloss it as *poss.*)

21.
   a. John/Mary   pano   ni   olti   kar-i
      John/Mary   stone(m.sg) poss.f.sg   *vomiting*(f.sg)   *do*-f.sg.obj
      'John/Mary threw up a stone'

Other similar examples follow.

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[6] Note *dhi/dho/dhu/dha* sometimes occur instead of *i/yo/yu/ya*. Distribution is yet to be determined.

22.
  a. Nick   rasoi   kar-i
     Nick   cooking(f.sg)   *do*-f.sg.obj
     'Nick cooked'

Example 23 indicates that *ni* (as in 21) not only marks possession, but also beneficiency. Interestingly, it agrees with the following noun and not the beneficent.

23.
  a. Nick   John   ni   rasoi   kar-i
     Nick   John   poss.f.sg   *cooking*(f.sg)   *do*-f.sg.obj
     'Nick cooked for John'

24 is another example of complex predicate light verb formation with *kar* 'do', where the noun precedes *kar*.

24.
   a. John kaam   kar-yu
      John work(n.sg)   *do*-n.sg.obj
      'John worked' (lit. 'John did a work')

The analysis of the data has revealed a further interesting observation. Completion of the event can be marked by adding an auxiliary *li* 'buy'. This probably derives a telic predicate from an atelic one. It will be addressed again later when discussing *kha* 'eat' and *pi* 'drink'.

25.
   a. John kam   kari   li-dhu
      John work(n.sg)   *do*   *buy*-n.sg.obj
      'John finished working' (lit. 'John bought doing a work')

2.2.3 Transitive Verbs

The data in 26 again illustrates that the verb agrees with the object, and not with the subject. 26a and 26b illustrates object agreement and the contrast between 26a and 26c illustrate that subject agreement is absent.

26.
    a. John Mary ne   dhudr-av-i
      John Mary CASE *shake*-caus-f.sg.obj
      'John shook Mary'

    b. John Rick ne   dhudr-av-yo
      John Rick CASE *shake*-caus-m.sg.obj
      'John shook Rick'

    c. Smiths Mary ne   dhudr-av-i
      Smiths Mary CASE *shake*-caus-f.sg.obj
      'The Smiths shook Mary'

Further illustrations are given below.

27.
    a. John ful   ne   jo-yu
      John flower CASE *see*-n.sg.obj
      'John saw a flower'

28.
    a. Mary John   ne   mar-yo
      Mary John   CASE *hit*-m.sg.obj
      'Mary hit John'

Note: both the verbs expressing 'die' and 'kill' are derived from *mar* 'hit'. The construction expressing 'die' has been illustrated above in 10, whereas the one for 'kill' is illustrated below in 37. K*ha* 'eat' and *li* 'drink' are further examples of

transitive verbs with object agreement in the perfective, but special. As in the case of

kaam kar 'work', it is also possible to derive the telic variant with *li* 'buy'.[7]

29.
    a. Mary murgi   kha-dhi[8]
      Mary *chicken*(f.sg) *eat*-f.sg.obj
      'Mary ate chicken' (atelic)

30.
    a. Mary (ak-i)   murgi   khai   li-dhi
      Mary *whole*-f.sg *chicken*(f.sg) *eat*   *buy*-f.sg.obj
      'Mary ate the (whole) chicken' (telic)

31.
    a. Mary pani   pi-dhu
      Mary *water*(n.sg)   *drink*-n.sg.obj
      'Mary drank water' (atelic)

32.
    a. Mary (badh-u) pani   pii   li-dhu
      Mary *all*-n.sg   *water*(n.sg) *drink* *buy*-n.sg.obj
      'Mary drank (all) the water' (telic)

The following example illustrates a transitive verb which has been derived from an

intransitive by means of a causative morpheme *ar*. The intransitive variant is

illustrated in 9.

33.
  a. John   lakri   tut-ar-i
       John   *stick*(f.sg) *break*-caus-f.sg.obj
       'John broke a stick'[9]

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[7] Note: *li-* 'buy' surfaces as *le-ro* 'He is buying', *lau-ri* 'I(fem) am buying', etc. in present imperfective clauses.

[8] The following example illustrates *li* really means 'buy'.
  (i). John   murgi   li-dhi
      John   *chicken*(f.sg)   *buy*-f.sg.obj
      'John bought a chicken'

[9] Note: In the case of *tutar* 'break' an agreement mismatch can be observed:
i. John lakri-o   tut-ar-i
  John stick-f.pl   break-caus-f.sg.obj
  'John broke sticks'

2.2.4 Transitive Light Verb Constructions

The following examples illustrate transitive constructions which consist of a main verb and the light verb *kar*. The difference between the a and the b examples indicates that *dhukhi* 'hurt'and *thung* 'harass' really are verbs, and not nouns; if they were nouns, *kar* would be expected to agree with them, and not with the direct object, as in 16 to 25. However Agreement appears to be with *John* and not *dukhi* thus illustrating object agreement.

34.
  a. Mary John ne   dhukhi kar-yo
      Mary *John* CASE *hurt*   *do*-m.sg.obj
      'Mary hurt John'

  b. John   Mary ne   dhukhi kar-i
      John   *Mary* CASE *hurt*   *do*-f.sg.obj
      'John hurt Mary'

35.
  a. Mary John ne   thung kar-yo
      Mary *John* CASE *harass* *do*-m.sg.obj
      'Mary harassed John'

  b. John Mary ne   thung kar-i
      John   *Mary* CASE *harass* *do*-f.sg.obj
      'John harassed Mary'

The data in 34 and 35 in contrast to 16 – 25 indicate that combinations of the light verb *kar* 'do' with another verb results in transitive predicates, whereas combinations of *kar* 'do' with a noun result in intransitive predicates. There are exceptions to this generalisation, in which *kar* 'do' combines with another noun, namely *fasi* 'hanging', resulting in a transitive predicate. (Note however the parallels between 23 which roughly has the literal meaning 'Nick does John's cooking' and 36 which literally translates to 'Nick does John's hanging')

36.
  a. Nick John ni   fasi   kar-i
     Nick John poss.f.sg *hanging*(f.sg) *do*-f.sg.obj
     'Nick hung John'

Another construction which exhibits similarities is shown in 37 where 'kill' is composed from *mar* 'hit' (see 28) and *nakh* 'put'.

37.
  a. Mary John ne   mari   nakh-yo
     Mary John CASE   *hit*   *put*-m.sg.obj
     'Mary killed John'

Furthermore, the transitive predicate denoting 'bite' seems to be constructed as a ditransitive, in which *dachu* 'mouth' is the obligatory direct object with which object agreement occurs; this is given in 38.

38.
  a. Bakri   John   ne   dachu   bhar-av-yu
     goat(f.sg) *John*   CASE   *mouth*(n.sg)   *dig*-caus-n.sg.obj
     'The goat bit John'

Example 39 illustrates the light verb really agrees with *dachu* 'mouth', as the latter can be pluralized. 38 and 39 show agreement between the verb and its direct object. When the direct object is pluralized (see 39) the plural agreement marker occurs on the verb.

39.
  a. Bakri   John   ne   dacha   bhar-av-ya
     goat(f.sg) *John*   CASE   *mouth*(n.pl)   *dig*-caus-m/n.pl.obj
     'The goat bit John several times'

2.2.5 Ditransitive Verbs

In ditransitive verb constructions of the *give*-type it is the indirect object that is case

marked by means of *ne*. Interestingly, object agreement is still with the direct object,

and not with the case marked object. This is illustrated in 40.

40.

  a. John   Mary   ne   chopri   di-dhi
      John   Mary   CASE *book*(f.sg) *give*-f.sg
      'John gave Mary the book'

  b. Mary   John   ne   chopri   di-dhi
      Mary   John   CASE *book*(f.sg) *give*-f.sg
      'Mary gave John the book'

  c. John   Mary   ne   pano   di-dho
      John   Mary   CASE *book*(m.sg) *give*-m.sg
      'John gave Mary the book'

40a and 40b illustrate that agreement is not with the subject or the case marked IO.

40a in contrast with 40c shows that agreement is with the DO, 'book'. In ditransitive

verbs of the *put*-type, a different pattern occurs. Both case marking and object

agreement apply to the direct object and not to the argument PP. This is illustrated in

41.

41

  a. John Mary   ne   pani   ma nakh-i
      John Mary CASE   *water*(n.sg) *in* *put*-f.sg
      'John put Mary into the water'

  b. John Rick   ne   pani   ma nakh-yo
      John Rick   CASE   *water*(n.sg) *in* *put*-m.sg
      'John put Rick into the water'

  c. John Rick   ne   gaadi   ma nakh-yo
      John Rick   CASE   *car*(f.sg)   *in* *put*-m.sg
      'John put Rick into the car'

2.2.6 Conclusion

All of the above observations are summed up in the following table. This table also includes observations where case marking is obligatorily. The subject marker -*e* is always optional. The object marker -*ne* is either obligatory or not allowed.

42

Verb	Gloss	Agr(subj)	Agr(do)	Case	Ex.
Aav-	Come	-yo/-i…	-	*Subj* (-e)	5
Has-	Smile	-yo/-i/-ya	-	*Subj* (-e)	6
Naach-	Dance	-yo/-i…	-	*Subj* (-e)	7
Tut-	Break	-yo/-i…	-	*Subj* (-e)	8
Mar-I ja-	Die ('go dying')	-yo/-i… (on ja-/g-)	-	*Subj* (-e)	10
Pari ja-	Fall ('go fall')	-yo/-i… (on ja-/g-)	-	*Subj* (-e)	11
Sui ja-	Sleep ('go sleeping')	-yo/-i… (on ja-/g-)	-	*Subj* (-e)	12
Tuti ja-	Break ('go breaking')	-yo/-i… (on ja-/g-)	-	*Subj* (-e)	9
Chali ne ja-	Walk ('go walking')	-yo/-i… (on ja-/g-)	-	*Subj* (-e)	14
Dhori ne ja-	Run ('go running')	-yo/-i… (on ja-/g-)	-	*Subj* (-e)	15
Cheek mar-	Sneeze ('hit sneeze(N)')	-	-i (with *cheek*)	*Subj (-e)*	16
Kaam kar-	Work ('do(LV) work(N)')	-	-yu (with *kaam*)	*Subj* (-e)	24
Kaam kari li-	Finish working ('buy doing work')	-	-dhu (with *kaam*)	*Subj* (-e)	25
Khotu bol-	Lie ('speak lie(N)')	-	-yu (with *khotu*)	*Subj* (-e)	18
Udras kha- *Cough eat*	Cough ('eat cough(N)')	-	-i (with *udras*)	*Subj* (-e)	19
Olti kar-	Throw up ('do(LV) vomitting')	-	-i (with *olti*)	*Subj* (-e)	20
Rasoi kar-	Cook ('do(LV) cooking')	-	-i (with *rasoi*)	*Subj* (-e)	22
Dhudr-	Shake	-	-yo/-i/…	*Subj* (-e)	26
Jo-	Watch / see	-	-yo/-i…	*Subj* (-e) DO *ne*	27

Kha-	Eat ('eat') *atelic*	-	-dho/-dhi/… (e.g. *kha-dho*)	*Subj* (-e) DO *ne*	29
Khai li-	Eat up ('buy eating') *telic*	-	-dho/-dhi/… (as in *li-dho*)	*Subj* (-e)	30
Mar-	Hit	-	-yo/-i/…	*Subj* (-e); *DO -ne*	28
Pi-	Drink ('drink') *atelic*	-	-dhu (fluids end in -u; e.g. *li-dhu*)	*Subj* (-e)	31
Pii li-	Drink ('buy drinking') *telic*	-	-dhu (fluids end in -u)	*Subj* (-e)	32
Tut-ar-	Break ('break-CAUS')	-	-yo/-i…	*Subj* (-e)	33
Dukhi kar-	Hurt ('do(LV) hurt(V)')	-	-yo/-i/…	*Subj* (-e); DO –*ne*	34
Thung kar-	Harass ('do(LV) harass(V)')	-	-yo/-i…	*Subj* (-e) *DO –ne*	35
DO ni fasi kar- *DO poss hanging do*	Hang ('do(LV) DO's hanging(N))	-	-i (with *NP ni fasi*)	*Subj* (e)	36
Mari nakh-	Kill ('put hitting')	-	-yo/-i/…	*Subj* (-e); *DO -ne*	37
Dachu bhar-av-	Bite ('bite mouth(N)')	-	-yu/-ya (with *dachu/a*)	*Subj* (-e) DO *ne*	38
De-/di-	Give	-	-thi/-tho/-tha (with the given (direct) object)	*Subj* (-e); *IO -ne*	40
Nakh-	Put	-	-yo/-i… (with the object which is put)	*Subj* (-e) DO *ne*	41

LV = light verb, (V) = verb, (N) = noun

2.3 Summary

In this section I have discussed agreement in both imperfective and perfective aspect. I first outlined the agreement properties present in the imperfective. In all imperfective structures, agreement on the verb is exclusively with the subject. In the present imperfective, the affixes which agree with the verb can be split up as *v* and

r+v, where the initial vowel agrees in person with the subject, and the *r+v* agrees in number and gender. In the past imperfective however, it is not possible to divide the affix in terms of person versus number/gender agreement. This phenomenon exceeds the scope of this paper and I leave it open for further research.

I have also outlined agreement in perfective structures. I have shown that obligatory subject agreement occurs in structures that contain a single argument (intransitive constructions). These are the only cases in the perfective where subject agreement is present. In all other cases, agreement is exclusively with the object. This is the typical ergative agreement pattern found in many Indo Aryan languages such as Hindi, Urdu, Bengali *cf: Butt (1994).* Object agreement also occurs in structures where the object is 'pre-specified' as a part of the predicate, e.g. *kaam kar* 'do work'. These predicates are typically expressed as intransitives (of the unergative type) in many languages such as English.

3. Case and Agreement

3.1 Case Pattern in Kutchi

In this section, I will show that Kutchi, unlike the majority of Indo Aryan languages does not have a split case system, but a nominative-accusative system even though it has split agreement. The table below illustrates pronoun selection (and the corresponding case ending on a proper name). The first column shows which pronoun is selected as the subject in intransitive constructions. The second and third column show which pronouns are selected as subjects and objects respectively in transitive constructions, depending on im/perfective aspect. Note that in the perfective

two pronouns are available for the 1st person singular: *hu* and *me*. If *me* occurs with the perfective ending on the verb (*yo, yu,* etc. agreeing with the object), the clause is interpreted as past perfective, if *hu* occurs with the perfective ending on the verb, the clause receives a different interpretation. This interpretation seems to correspond to the English present perfect. Interestingly, no such distinction is available for any of the other personal pronouns. The example below shows an intransative construction versus a transitive construction. This shows that the distinction between the two pronouns is not one between nominative and ergative.

43.

  a. hu   dor-yo
    I(1sg) *run*-m.sg.obj
    'I have run.' (masculine subject)

  b. hu   cheek   mar-i
     I(1sg) *sneeze*(f.sg)   *hit*-f.sg.obj
     'I have sneezed' (masculine subject)

44.
  a. me   dor-yo
     I(1sg) *run*-m.sg.obj
     'I ran.' (masculine subject)

  b. me   cheek   mar-i
     I(1sg) *sneeze*(f.sg)   *hit*-f.sg.obj
     'I sneezed' (masculine subject)

45.

		Intrans subj	trans subj	trans obj
1sg	ipfv	Hu	Hu	Mane
	pfv	Hu	Hu/me	Mane
2sg	Ipfv	Tu	Tu	Tane
	Pfv	Tu	Tu	Tane
3sg	Ipfv	E	E	Ene
	Pfv	E	E	Ene
1pl	Ipfv	Ame	Ame	Amne
	Pfv	Ame	Ame	Amne
2pl	Ipfv	Tame	Tame	Tamne
	Pfv	Tame	Tame	Tamne
3pl	Ipfv	E	E	Ene
	Pfv	E	E	Ene

Proper	Ipfv	Mavji-e	Mavji-e	Mavji-ne
names	Pfv	Mavji-e	Mavji-e	Mavji-ne

This is illustrated for the singular subject pronouns and singular object pronouns in the following examples.

Subjects in intransitives (illustrated for singular subject pronouns):

46.
   a. hu/tu/e   dor-u-ro/dor-e-ro
      I(1sg)/*you*(2sg)s/*he*(3sg)   *run*-1sg-m.sg/*run*-2sg/3sg-m.sg.subj

   'I/You/(S)he is running' (masculine subject)

   b. hu/tu/e   dor-yo
      I(1sg)/*you*(2sg)s/*he*(3sg)   *run*-m.sg.obj
         'I/You/(S)he ran' (masculine subject)

Subjects in transitives (illustrated for singular subject pronouns with an object lexically pre-specified by the predicate):

47.
  a.. hu/tu/e   cheek   mar-u-ro/mar-e-ro
     I(1sg)/*you*(2sg)s/*he*(3sg)   *sneeze*(f.sg) *hit*-1sg-m.sg.subj/*hit*-2sg/3sg-m.sg.subj
     'I/You/(S)he is sneezing' (masculine subject)

   b. hu/tu/e   cheek   mar-i
     I(1sg)/*you*(2sg)s/*he*(3sg)   *sneeze*(f.sg)   *hit*-f.sg.obj
     'I/You/(S)he sneezed' (masculine subject)

Objects in transitives (illustrated for singular object pronouns):

48.
  a. Mavji(-e)   mane/tane/ene   mar-e-ro
     Mavji(m.sg)-*CASE*   *me*(1sg)/*you*(2sg)/*him*(3sg)   *hit*-3sg-m.sg.subj
     'Mavji is hitting me/you/him' (masculine object)

  b. Mavji(-e)   mane/tane/ene   mar-yo
     Mavji(m.sg)-*CASE*   *me*(1sg)/*you*(2sg)/*him*(3sg)   *hit*-m.sg.obj
     'Mavji hit me/you/him' (masculine object)

3.2 Conclusion

In section 2 I have shown that in the imperfective aspect, subject agreement is obligatory. Contrastively, perfective aspect readings exhibit obligatory subject agreement in intransitive constructions and obligatory object agreement in transitive constructions. In conclusion, it appears that in imperfective structures, the agreement pattern is nominative-accusative where subject agreement occurs in both intransitive and transitive readings. In perfective structures, the agreement pattern appears to be ergative-absolutive - subject agreement is present in intransitive constructions, whereas object agreement occurs in transitive constructions. In this section, I outlined the case system, focusing on the pronominal system. Imperatively, I have shown that case assignment is nominative-accusative throughout. In both imperfective and perfective readings, the same case (presumably nominative) is assigned to the subject in both intransitives and transitive structures; presumably it is accusative case that is assigned to the object. A further observation which might suggest the case pattern in Gujarati is nom-acc is that subject case on proper names is always marked by *–e* which is always optional, in contrast, object case marking by *ne* is always obligatory when the object is present. Therefore, case assignment can be assumed to be consistently nominative-accusative, whilst the agreement pattern is nominative in imperfectives, and ergative in perfectives.

The analysis of the data given in the previous sections gives rise to a fundamental fact: In Kutchi Gujarati, there is no isomorphic correspondence between case marking and agreement. Imperatively, case marking is consistently nom-acc in im/perfective structures whereas agreement is nominative in the imperfective and ergative in the perfective. In section 1 (Introduction) the proposal has been addressed that this type

of case-agreement mismatch is not possible in natural language (in contrast to the possible case of nominative-accusative agreement in ergative case systems). The data from Kutchi Gujarati suggest that this claim must be rejected.

References

Anderson, Stephen R. (1977): 'On mechanisms by which languages become ergative', in: Li, Charles N. (ed.): *Mechanisms of syntactic change*. Austin, Texas: University of Texas Press, 317-363.

Anderson, Stephen R. (1985): 'Inflectional morphology', in: Shopen, Timothy (ed.): *Language typology and syntactic description (Vol. III): Grammatical categories and the lexicon*. Cambridge: Cambridge University Press, 150-201.

Butt, Miriam (1994): 'Complex Predicate Scrambling in Urdu', in: Butt, Miriam / Holloway King, Tracy / Ramchand, Gillian (eds.): *Theoretical Perspectives on Word Order in South Asian Languages*. Stanford, California: CSLI Publications, 67–90.

Butt, Miriam / Deo, Ashwini (2001): 'Ergativity in Indo-Aryan', *KURDICA* 5(3), available at: http://www.cogsci.ed.ac.uk/~siamakr/Kurdish/KURDICA/2001/3/ia-erg.html

Dixon, Robert M. W. (1979): 'Ergativity', *Language* 55, 59-138.

Mahajan, Anoop (1990): *The A/A-bar distinction and movement theory*. PhD dissertation, MIT.

Moravcsik, Edith A. (1978): 'On the distribution of ergative and accusative patterns', *Lingua* 45, 233-279.

Phillips, Colin (1995): 'Ergative Subjects', in: Burgess, Clifford S. / Dziwirek, Katarzyna A. / Gerdts, Donna B. (eds.): *Grammatical Relations: Theoretical Approaches to Empirical Issues*. Stanford, California: CSLI Publications, 341-357

Roberts, Taylor (2001): 'Split Agreement and Ergativity in Pashto', *KURDICA* 5(3), available at: http://www.cogsci.ed.ac.uk/~siamakr/Kurdish/KURDICA/2001/3/trpashto.htm

Wierzbicka, Anna (1981): 'Case marking and human nature', *Australian Journal of Linguistics* 1, 43-80.

Woolford, Ellen (1999): 'Ergative Agreement Systems', ms., University of Massachusetts. [Published as: Woolford, Ellen (2000): 'Ergative Agreement Systems', *University of Maryland Working Papers in Linguistics* 10: 157-191.]

Woolford, Ellen (2004): 'Case Agreement Mismatches', ms., University of Massachusetts. [To appear in: Boeckx, Cedric (ed.): *Agreement Systems*. Amsterdam: John Benjamins.]

'Kachchi', in: Gordon, Raymond G., Jr. (ed.) (2005[15]): *Ethnologue: Languages of the World*. Dallas, Texas: SIL International, available at: http://www.ethnologue.com/show_language.asp?code=kfr

'Kutchi language' (2005, December 26), *Wikipedia, The Free Encyclopedia*, available at: http://en.wikipedia.org/wiki/Kutchi_language