Morphological Similarity and Contact:
Plurals, Punctuals and Pluractionals in Konso and Gawwada
(Cushitic, Southwest-Ethiopia)

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1 Introduction

Konso and Gawwada are East Cushitic languages of the Afro-Asiatic phylum spoken in southwest Ethiopia. They belong to the Konsoid and Dullay subgroups, respectively (see figure 1). The Konsoid group consists of Konso, Diraytata (also referred to as Diraasha and, previously, Gidole), and Bussa (or Musiyye; Black 1974). The Dullay cluster consists of Gawwada, Ts'amakko and Harso-Dobase (Tosco 2007).[1] From an administrative point of view, the Konso live in the Konso Zone; the Diraahe and Bussa (Musiyye) live in the Dirashe Special Wereda ("district"), and the Ale (Gawwada and Harso-Dobase) live in the Ale Special Wereda, while the Ts'amay (the speakers of Ts'amakko) are part of the South Omo Zone in the Southern Nations, Nationalities and Peoples' Regional State (SNNPRS).

Sasse (1986) discovered the existence of a small language area fully located within southwest Ethiopia: the *Sagan Language Area* (from the name of a river crossing the area), which consists of languages and dialects belonging to different subgroups of East Cushitic, a still unclassified language (Ongota, or, in Sasse's terms, Birelle) and, "with some reservations," the Omotic languages (of the Ometo subgroup) Koyra and Zayse. Leaving aside the unclassified Ongota (ISO 639-3 code: bxe) and Omotic Zayse-Zergulla (zay) and Koorete (or Koyra, Koore, etc.; kqy), the following East Cushitic languages are considered to be part of the language area in question (Sasse 1986: 327):

- Burji (bji), the southernmost and most isolated member of Highland East Cushitic (HEC);
- the languages of the Konsoid subgroup of Oromoid: Konso (kxc), Dirayta (or Diraasha, Gidole, etc.; gdl), Kusume (a dialect of Konso spoken in the Dirashe Special Wereda and considered a separate ethnic group, often called in the literature Gato), and Bussa (or Mossiya; dox);

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[1] Currently, the Gawwada and the other Dullay-speaking peoples except Ts'amay are referred to in Ethiopia as Ale. In this article, we maintain the use of Gawwada rather than Ale because Gawwada is the commonly used name in the literature and our data do not come from other Dullay varieties.
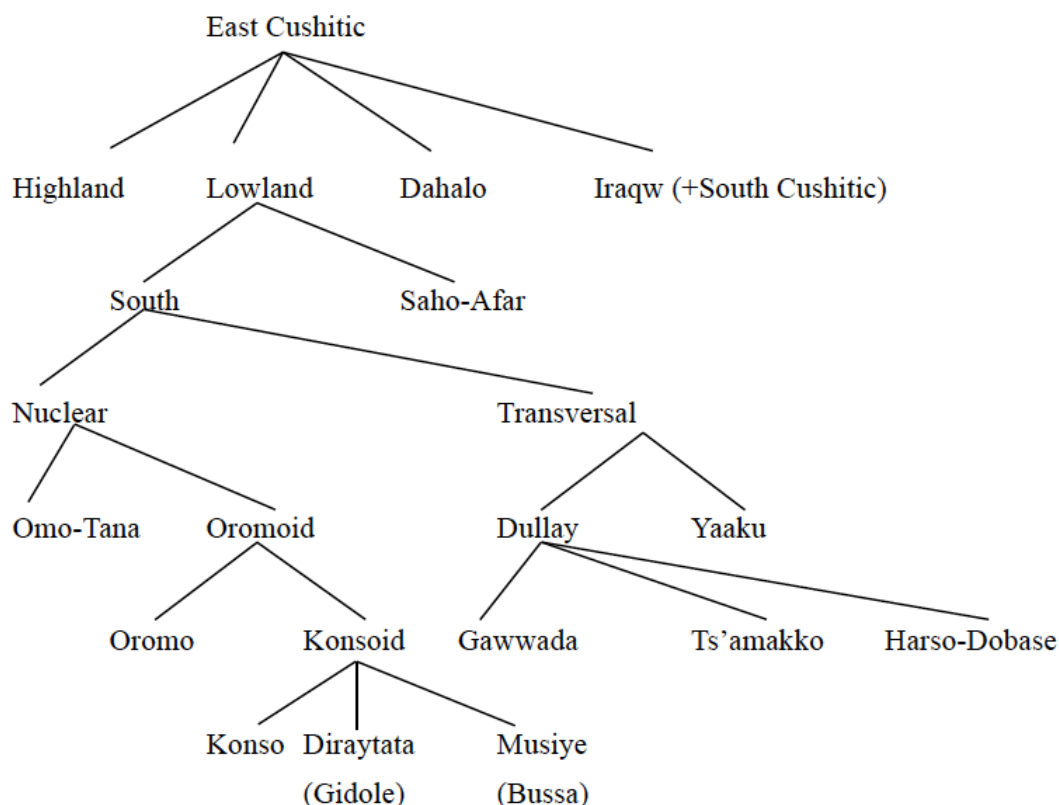
• the languages and dialects of the Dullay cluster: Gawwada (gwd) and a number of varieties such as Dihina, Dobase, Gaba, Gergere, Gollango, Gorrose, and Harso, as well as, geographically more apart, Ts'amakko (tsb).

In this article, we will restrict our attention to Gawwada and Konso, which are the largest and best-known members of Dullay and Konsoid, respectively. As has been known since at least Emeneau's (1956) seminal article on the Indian language area, a prerequisite for the establishment of a language area is the presence of languages belonging to the same language groups of the supposed area but geographically located out of it (and, obviously, not displaying the features which are to be ascribed to the language area). The same point has been made by Tosco (2000) with regard to the traditional Fergusonian picture of the Ethiopian language area. A major concern about the *Sagan Language Area* discussed in this article is the absence of members of the Dullay and Konsoid languages outside of the area under scrutiny: both groups are fully contained within the area (with the partial exception of Ts'amakko, a member of Dullay, linguistically as well as geographically very close to Gawwada). Evidence for the areal character of a feature must, therefore, be sought among kin languages spoken outside the area; the classificatorily isolated nature of Dullay is a major obstacle to this, while the presence of Oromo alongside Konsoid within the Oromoid subgroup of East Cushitic may provide at least partial negative evidence for the area in question. Actually, vindicating the validity of the *Sagan Language Area*, Oromo does not display any of the features which will be listed below, nor, in particular, the complex morphological isomorphism which will be our main concern here. The position of Dullay and Oromoid within a classificatory tree of East Cushitic is shown in figure 1.

Linguistic contact between Burji, Dullay and Konsoid languages has been extensive. As to its origin and direction, Sasse (1986: 337f.) describes the situation as follows:

> The historical events that can be inferred from the synchronic linguistic situation are roughly as follows. The contemporary center of language contact in the Sagan river area is in the Gardula mountains, in particular the Harso-Gidole contact zone. However, there is a less recent contact zone farther south, which once connected the Dullay speakers directly with the Burji. If this assumption is correct, it can be concluded that the Burjis, speakers of a HEC language coming from somewhere in the north, entered the scene rather early and developed a number of common traits in conjunction with speakers of Dullay varieties before the Konsoid peoples became the leading figures as far as the production of isoglosses is concerned. This Dullay-Burji connection was probably disrupted by the southward extension of Konsoid speakers. The focus of language contact then shifted to the north, always from the north to the south. Dullay and Konsoid groups go in pairs, Harso/Dobase-Gidole/Bussa in the north, and Gollango/ Gawwada-Konso in the south. As a result, Dullay Konsoid isoglosses fall into northern and southern ones, the northern ones being dominant and the southern ones recessive.

Figure 1: The classification and articulation of Dullay and Oromoid within East Cushitic (from Tosco 2000, with modifications)

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                        East Cushitic
          ┌───────────────┼──────────────┬──────────────────┐
      Highland         Lowland         Dahalo        Iraqw (+South Cushitic)
                   ┌───────┴───────┐
                 South          Saho-Afar
          ┌────────┴──────────────────────┐
       Nuclear                        Transversal
     ┌────┴──────┐                  ┌──────┴──────┐
  Omo-Tana    Oromoid             Dullay        Yaaku
            ┌────┴────┐         ┌────┼──────────────┐
         Oromo     Konsoid   Gawwada  Ts'amakko  Harso-Dobase
               ┌────┼────┐
            Konso Diraytata Musiye
                  (Gidole) (Bussa)
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Before Sasse, Black (1974, 1975) had already assumed that the Dullay speakers were the autochthonous population of the area, predating the arrival from the north of the Konsoid-speaking peoples, whose settlement in their present location shifted the main focus of interaction to Konsoid and Dullay. As a result, according to Black (1974: 44),

> [I]t is clearly the case that there has been extensive borrowing between Konsoid and Werizoid,[2] of which Gawwada is a dialect … [W]hereas the detected borrowings are from Werizoid into Konsoid, some undetected borrowings perhaps went in the other direction.

Black's view that Dullay was the main origin of contact is refuted by Amborn *et al.* (1980: 61):

> ... es sich nicht einfach um ein Substratverhältnis, sondern um eine über einen sehr langen Zeitraum wirksame kontinuierliche Folge von Konvergenzerscheinungen handelt. Mit anderen Worten, das Konso-Gidole hat sich nicht (nur) auf Kosten des Dullay ausgebreitet, sondern Konso-Gidole- und Dullay-Sprecher müssen seit vielen Jahrhunderten in einem sehr engen, durch abwechselnde Prestigesituationen und unterschiedliche Intensität gekennzeichneten sprachlichen Kontakt gestanden haben, sodaß es zu einer

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[2] Black (1974) uses the label "Werizoid" for the languages and peoples which, since Amborn *et al.* (1980), are usually called "Dullay" in the literature. The issues of denominations, both scientific and at the administrative level, are covered in Tosco (forthcoming).

> starken wechselseitigen Durchdringung, niemals aber zur Aufgabe der einen oder der anderen Sprache geführt hat.

Whatever the origin of contact, it is true that, at least nowadays, the Dullay speakers are clearly outnumbered, demographically and economically, by the Konso, who are locally the largest ethnic group. (The Ethiopian census of 2007, for example, gives more than 250,000 Konso speakers as against 120,000 speakers for the whole of Dullay.) Still, and maybe surprisingly, bilingualism is very low: according to a very provisional SIL survey (Wedekind 2002), just 10% of the Gawwada could understand Konso, and a bare 5% could speak it.

Another witness of a complex and variegated contact situation is the relative scarcity of Gawwada words that can be unambiguously ascribed to Konso (Tosco 2009). Many loans have not obviously been detected so far due to the sheer absence of sound lexical repertoires, but it is clear that a mere analysis of lexical borrowings does not do justice to the depth and complexity of this area. Maybe, for this reason, Sasse focused mainly on phonology and morphology for his list of areal features. These are perhaps the most relevant:[3]

- The absence of voice opposition among the plain stops, whereby /p/, /t/, and /k/ are realized as voiced in intervocalic position (/p/ is spirantized in Konso), and, in Gawwada, also word-initially, and as long voiceless when geminate. The status of the voiced velar [g] is doubtful and could be a separate phoneme in certain varieties. Moreover, absence of phonological voicing is extended in Gawwada to phonemes other than stops.

- Inceptive verbal forms, with the suffix *-aaw/-aay* in Konso and *-uy* in Gawwada; Konso:[4] *halkeett-aaw/aay-* 'to become night', *kalaakal-aaw/aay-* 'to become evening'. All of these are followed by the feminine gender marker *-t* and the perfective suffix *-i*, as in *i-halkeett-aaw-t-i* 'it became night'. A Gawwada example is *ʔawn-e* 'night' → *ʔawn-uy* 'to become night'.

- A suffix *-a(a)mp* for permanent quality, as in *kod-* 'to work, do' → *kod-aamp-ayta*, *kod-aamp-ayteeta* 'a hard worker (M/F)'; Gawwada: *sor-* 'to run' → *sor-amp-akk-o*, *sor-amp-att-e* 'a good runner (M/F)'.

- A noun-forming suffix **-ayt* (Gawwada: M **-ayt-ko* → *-akko*; F **-ayt-te* → *-atte*); Gawwada: *č'uppul-akk-o/č'uppul-att-e* 'a bad, vicious man/woman'; Konso: M *-aamp-ayta*; F *-aamp-ayteeta*: *kirp-* 'to sing' → *kirp-aamp-ayta* 'singer', *ɠot-* 'to dig, farm' → *ɠot-aamp-ayteeta* 'farmer (F)'.

- The use of *-n-* (fossilized stative affix of an existential verb) in inflection; in Gawwada, it is a future marker: *ʔan=ʕaf-i* (1=spread-PF.1SG) 'I spread (it)' (past)

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[3] The transcription follows IPA conventions throughout, except that < y > stands for /j/, < š > for /ʃ/, and < č >, < č' > for /tʃ/, /tʃ'/. In glosses, the Leipzig Glossing Rules are adhered to.

[4] Here and below examples, transcriptions and glosses are our own, rather than Sasse's.

→ *ʔan = ʕaf-n-i* (1=spread-FUT-PF.1SG) 'I'll spread (it)'. In Konso, it rather marks a habitual or progressive, as in *in = tooy-ni* 'I am watching'.

We will restrict our attention to yet another isogloss which shows a striking isomorphism in form and function between Gawwada and Konso (and the other Dullay and Konsoid varieties, respectively): the use of reduplication in nominal and verbal morphology, in the shape of the nominal plurals and of the punctual and pluractional verbal extensions as well as in the derivation of certain locatives.[5] The article is organized as follows: in section 2 we discuss the overall nature of number and gender in Konso and Gawwada. In section 3 we analyse the use of reduplication in the nominal plurals, while in sections 4 and 5 we proceed to the punctual and, respectively, pluractional derivation. In Konso and, marginally, in Gawwada, we find some nouns and verb roots with suppletive pairs (one for singular and another for plural). These are discussed in section 6. In section 7 we present double derivation and the semantic interpretation of punctuals and pluractionals. Finally, in section 8 we discuss the comparative perspectives and conclusions. Data for this article come from the present authors: Ongaye Oda Orkaydo provides data for Konso, his native language, and Mauro Tosco provides data for Gawwada from his extensive fieldwork.

2 An overview of gender and number

In both Konso and Gawwada, the category of number finds its expression in the nominal as well as in the verbal domain. In both languages we can distinguish three number values for nouns: singulative, plurative, and an unmarked (and untagged) basic form (for Konso, see Ongaye 2013a; for Gawwada, cf. Tosco 2010). In both languages, the singulative and plurative are morphologically marked on the basic (or preternumeral, in the sense that it does not specify a number value) form that is morphologically unmarked. In both languages, moreover, we can distinguish three gender values, with a plural identified as a third gender value alongside masculine and feminine.[6] In a parallel way, the same three gender values (feminine, masculine and plural) are distinguished on verbs.

Gender and number interact in many meaningful ways. In Gawwada it is possible to analyse nouns as obligatorily composed by a stem and a gender affix, as well as, in many instances, a number affix which appears between the stem and the gender marker:

$$\text{STEM} \{+\text{NUMBER}\} + \text{GENDER}$$

Preternumeral (morphologically non-derived) nouns may be masculine, feminine or plural in gender. From preternumeral nouns singulative nouns, either masculine or feminine, are derived, as well as plurative nouns which are always plural in gender.

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[5] Sasse (1986: 334) duly mentions the presence of a "singularitive" (i.e. our punctual) verbal extension as an isogloss of the area (#16 in Sasse's list), but without mentioning the nominal plural and the pluractional extension.

[6] Reasons for such an analysis can be found in Ongaye (2013a) and Tosco (forthcoming). The point is immaterial for the present article although we believe it allows a more coherent analysis.

Leaving aside a few exceptions, the interplay of gender and number in Gawwada can be represented as follows (figure 2):

Figure 2: The interplay of gender and number in Gawwada
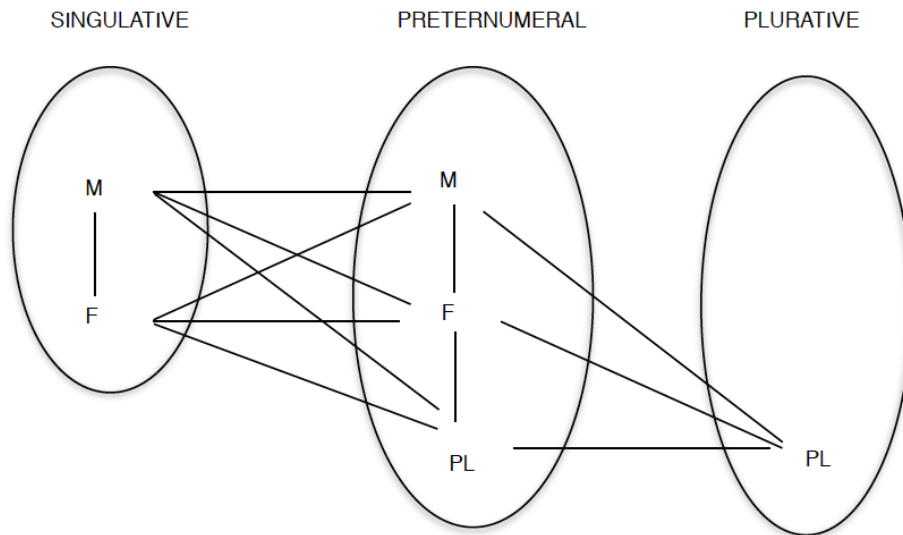
The head noun triggers gender agreement in a few determiners such as adjectives:

(1) a. *šaamɓ-o*   *heet'-a*   'a nice boy'   (Gawwada)
         boy-M   nice-M

     b. *šeett-e*   *takk-ay*   'a little girl'
         girl-F   little-F

     c. *miis-e*   *lahh-ooma* 'green leaves'
         leaf-PL   green-PL

By and large, this analysis applies to Konso, too, although it is not possible to segment gender and number affixes which are expressed with a single portmanteau morpheme.

In both languages, all countable nouns that are plural in gender take plural gender agreement on the verb when acting as subjects. Examples are nouns such as Konso *kahar~raa* 'sheep' (singulative: *kahar-ta* 'a ewe'), *harree~wwaa* 'donkeys' (singulative: *harree-ta* 'a donkey'), and Gawwada *ʔaturr-e* 'cats' (singulative: *ʔaturr-itt-e* 'a cat'), *ʔorr-e* 'potters' (singulative masculine: *ʔorr-itt-o* 'a potter'). There are also semantically singular nouns (denoting a single instance of a countable item) and nouns which denote uncountable entities and take plural agreement on the verb when subjects. Examples are the nouns *inn-aa* 'child' and *piš-aa* 'water' in Konso, and *minn-e* 'house' and *ker-e* 'headrest' in Gawwada. Examples (2) and (3) show semantic-syntactic number mismatch in agreement.

(2) a. *inn-aa=sini*   *i=piʔ-i-n*   (Konso)
         child-PL=DEF.PL   SBJ.3=fall-PF-PL
         'The child fell.'

(2)   b. *piš-aa=sini   i=ɲapal-i-n*
      water-PL=DEF.PL   SBJ.3=be.spoiled-PF-PL
      'The water is spoiled.'

(3)   a. *minn-e   ʔí=ɗil-am-e*   (Gawwada)
      house-PL   INDV=burn-PASS-PF.PL
      'The house burned down.'

    b. *ker-e   ʔí=ɠonɗ-am-e*
      headrest-PL   INDV=break-PASS-PF.PL
      'The headrest broke.'

3 Reduplication in nouns and locatives

Gemination is ubiquitous in Cushitic and elsewhere in Afro-Asiatic. Cushitic languages make a wide use of gemination as a morphological device (see Mous 2013 for an overview). (Partial) reduplication is, therefore, the morphological means of gemination. Reduplicating a stem-final consonant is a favourite mechanism; in Konso and Gawwada, this pattern is used in both nominal and verbal morphology. In general, one and the same morphological mechanism is given two very different, and actually opposite, semantic interpretations: the gemination of a nominal root's final consonant increases the number or semantic value of the entity, while in verbs it reduces the semantic value of the verb root in question (see section 4).[7]

(4)   basic   plurative   (Konso)

    tika   house   *tik~kaa*   (house~PLUR) 'house/s'
    ɗila   field   *ɗil~laa*   (field~PLUR) 'field/s'

(5)   basic   plurative   (Gawwada)

    ʕaɗ-o   cheek-M   *ʕaɗ~ɗ-e*   (cheek~PLUR-PL) 'cheek/s'
    paš-o   field-M   *paš~š-e*   (field~PLUR-PL) 'field/s'[8]

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[7] Furthermore, in Konso we also find many female personal names derived from male names by geminating the last consonant of the male name. Notice that most of the male names end with the mid back vowel /o/, while all the corresponding female names end with the low central vowel /a/ (see also Ongaye 2013a and 2015). The final vowel of the male names finds a correlation with the final *-o* marking on masculine nouns in Gawwada:

male name	female name	male name	female name
kallapo	*kallap~pa*	*firaato*	*firaat~ta*
kutano	*kutan~na*	*kappino*	*kappin~na*
roopo	*roop~pa*	*urmale*	*urmal~la*
katano	*katan~na*	*χalaale*	*χalaal~la*

[8] In Gawwada, it is also possible to add a plurative affix *-aɗɗ-* to nouns which are plural in gender (Tosco 2010), yielding, for instance, *minn-aɗɗ-e* (house~PLUR-PL) 'houses' from *minn-e* (house-PL) 'house' (which, as mentioned above, is morphologically a plural noun). Furthermore, unlike in Konso, the plurative suffix in Gawwada adds a semantic value to a plural noun and expresses either an exaggerated quantity of the item in question or a distributive meaning.

a.   *ʔirmatt-e*   b.   *ʔirmatt-aɗɗ-e*   (Gawwada)
    termite-PL   termite-PLUR-PL
    'termites'   'many termites'

4 Gemination in verbs: the punctual derivation

There are several verbal derivations in both Konso and Gawwada. They include causative, passive, middle, inchoative, punctual and pluractional. The latter two are the main focus of this article. We begin our discussion with punctual derivation, which basically expresses doing something only once. Different terms have been applied to this derivation: Black (1974), Amborn *et al.* (1980) and Sasse (1986) use the term "singulative" (or its German equivalent "Singularitiv"), while Tosco (2010) calls it "semelfactive" ('to do X once'). Here we rather use the term "punctual" (glossed PUNCT), which was introduced first by Savà (2005). In both Konso and Gawwada the punctual derivation makes use of reduplication. We will deal with punctuals in Konso and Gawwada separately.

4.1 The punctual in Konso

The canonical forms that allow the punctual derivation are verbal roots (not derived stems); in particular, closed monosyllabic roots whose shape is $C_1V(V)C_2$-,[9] from which the punctual is derived by geminating the root's final consonant. The closed monosyllabic root from which the punctual is derived has a plural semantic value, i.e., it denotes the plurality of an action or event (see details in section 7). In (6), for

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a.   *ʔawš-e*   b.   *ʔawš-adɗ-e*
     fruit-PL   fruit-PLUR-PL
     'fruits'   'many (different kinds of) fruits'

Moreover, in both languages a few nouns mainly denoting age and sex groups of people have suppletive forms for the plural (for Konso, see Ongaye 2013a, and for Gawwada, cf. Tosco forthcoming).

a.   singular   plural   (Konso)

     innaa   'child, boy'   *hellaa*   'children'
     inanta   'girl'   *tuparaa*   'girls'
     nama   'person, man'   *orra*   'people'

b.   (Gawwada)

     šaamɓ-o (boy-M)   'boy'   *ɗeell-e* (boys-PL)   'boys'
     šeett-e (girl-F)   'girl'   *ʔihadɗ-e* (girls-PL) 'girls'
     qaw-h-o (person-SING-M) 'person, man'   *kor-o* (people-M)   'people'

Finally, in both Konso and Gawwada gemination of the last consonant is involved in the morphology of the locative and spatial markers. Reasons of space forbid us to enter into details here (but cf. Ongaye 2013a and Tosco 2013).

[9] A limited number of Konso verb roots appear with final vowel /i/ (Ongaye 2013a: 40). Such roots do not allow the punctual derivation:

     as[i]-   'to wait'   *as~s[i]
     pir[i]-   'to finish'   *pir~r[i]
     pal[i]-   'to ripen; ready to eat' *pal~l[i]
     ker[i]-   'to grow old'   *ker~r[i]
     par[i]-   'to sunrise; day break' *par~r[i]
     raaʔ[i]-   'to hang down'   *raaʔ~ʔ[i]

instance, we have the Konso verb roots *tuuk-* 'to push for a long period or many times' and *nooɗ-* 'to press many times', respectively.

(6)   verb root   punctual stem

    Ɠof-   'to pinch many times'   *Ɠof~f-*   'to pinch once'
    tuuk-   'to push many times'   *tuuk~k-*   'to push once'
    nooɗ-   'to press many times'   *nooɗ~ɗ-*   'to press once'

(7)   a. *Ɠimayta-si   karitta-awu   oppa   i=nooɗ-ay*
      old.man-DEF   belly-1SG.POSS   in   SBJ.3=press-PF[3M]
      'The old man pressed my belly many times.'

    b. *Ɠimayta-si   karitta-awu   oppa   i=nooɗ-ɗ-ay*
      old.man-DEF   belly-   in   SBJ.3=press~PUNCT-PF[3M]
      'The old man pressed my belly once.'

Not all verb roots of $C_1V(V)C_2$-shape allow the punctual derivation; several verbs appear to be frozen punctuals, where the degemination of the final consonant results either in unacceptable forms (8a) or in different lexical verbs (8b). It is possible, on the other hand, to derive "true" pluractionals from these verbs through reduplication, as shown in more detail in section 5.

(8)   a. *mitt-*   'to sever'   **mit-*
      kuss-   'to scoop (soil, etc.)'   **kus-*
      laaɓɓ-   'to pace, make stride'   **laaɓ-*

    b. *sakk-*   'to stifle'   *sak-*   'to give a will, to bless'
      ɗaww-   'to herd'   *ɗaw-*[10]   'to build (a stonewall, fence, etc.)'
      kodd-   'to become'   *kod-*   'to do'

The punctual derivation is not fully productive. Part of the reason is that verb roots with final geminate consonants or a cluster of consonants do not allow the formation of punctual due to a phonological restriction whereby Konso allows a maximum of two consonants in a syllable, making it impermissible for a verb with a final geminate or a cluster to take a third consonant as a member of a cluster, as in (9). When inflectional suffixes beginning with a consonant are added to such verb roots, an epenthetic vowel /i/ is inserted between the verb root and the suffix to break up the impermissible sequences, as in (10).

(9)   *makk-*   'to fall sick'   **makk~k-*
    kull-   'to enter'   **kull~l-*
    kirp-   'to sing a song, dance'   **kirp~p-*
    pink-   'to stretch, be stiff'   **pink~k-*
    Ɠolp-   'to castrate'   **Ɠolp~p-*

(10)   a. *[raakasi imakkiti]*

      raaka-si   i=makk-t-i
      old.woman-DEF   SBJ.3=fall.sick-3F-PF
      'The old woman fell sick.'

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[10] The verb root *ɗaw-* has many other meanings, such as 'to hit', 'to weave', 'to sing a song,' etc.

(10)   b. *[tiksik karpa inkullina]*

      tika-asiʔ   *karpa* *in=kull-n-a*
      house-DEM   into   SBJ.1=enter-1PL-FUT
      'We will enter this house.'

Moreover, the verbal derivational suffixes of the passive, causative, middle and inchoative end in consonants: *-am*, *-š*, *-aɗ*, and *-ood/-aaɗ/aɗ*, respectively. Such suffixes do not allow punctual stem derivation by geminating their consonants. Table 1 shows this restriction and the impossible derivation of punctual forms from the verbal roots *kat-* 'to sell,' *mur-* 'to cut,' *kal-* 'to return home,' and the adjectival roots *ɗer-* 'to be tall, high' and *kutt-* 'to be big.'

Table 1: Verbal derivation and punctual in Konso

verbal derivation	verb/adjectival root + verbal derivation		punctual
passive	*kat-am-*	'to be sold'	*kat-am~m-
	mur-am-	'to be cut'	*mur-am~m-
middle	*kal-aɗ-*	'to take sth. home for oneself'	*kal-aɗ~ɗ-
	kat-aɗ-	'to sell sth. for oneself'	*kat-aɗ~ɗ-
inchoative	*ɗer-aaɗ-*	'to become tall, high'	*ɗer-aaɗ~ɗ-
	kutt-aɗ-	'to become big'	*kutt-aɗ~ɗ-
causative	*kalš-*	'to make someone/sth. return home'	*kalš~š-
	ɗerayš-	'to make sth. long'	*ɗerayš~š-
	kuttiš-	'to make sth. big'	*kuttiš~š-

Although punctual verbs cannot be formed by geminating the consonants of other verbal derivations, they can be formed with verbs containing verbal derivations in addition to the punctual derivation. Except for the causative derivation, the derivational suffixes maintain their forms when the verb contains the punctual in addition. For the causative, it is only the indirect causative form that is allowed with the punctual derivation, with the punctual occurring immediately after the verb root. Thus, the prohibition of forming the punctual through the gemination of the final consonant of the verbal derivational suffixes explains the fact that the punctual derivation is found immediately after the verb root.

(11)   a. *[ahtasikka ɗoʔti ka toma tokka tittiti]*

      ahta-si=kka *ɗoy-t-i*   *ka* *toma* *tokka* *tit~t-t-i*
      wife-DEF =and jump-3F-PF and bowl one   pull~PUNCT-3F-PF
      'And then, the wife hurried and pulled a bowl once.'

    b. *[ahtasikka ɗoʔti ka toma tokka tittatti]*

      ahta-si=kka *ɗoy-t-i*   *ka* *toma* *tokka* *tit~t-aɗ-t-i*
      wife-DEF=and jump-3F-PF and bowl one   pull~PUNCT-MID-3F-PF
      'And then, the wife hurried and pulled a bowl for herself.'

(12)   *Kussitto-ʔ*   *ʔi=ɠof~f-am-ay*
      Kussitto-NOM   SBJ.3=pinch~PUNCT-PASS-PF[3M]
      'Kussitto was pinched once.'

4.2 The punctual in Gawwada

The presence of the punctual derivation in the Dullay languages was first reported by Amborn *et al.* (1980) and later by Sasse (1986) for the *Sagan Language Area*, Tosco (2010) for Gawwada, and Savà (2005) for Ts'amakko. The main issues involve the productivity of the derivation and the diversity of the canonical shapes of the non-derived verbs. The general rule for the formation of the punctual involves the reduplication of all the stem consonants except the first one as per the following rule:

$$C_1V(V)C_2(V)(V)(C_3) \rightarrow C_1V(V)C_2{\sim}C_2{\sim}(V)(V)(C_3{\sim}C_3)$$

The rule can be broken down into the following sub-rules:

 a. monosyllabic stems: $C_1V(V)C_2 \rightarrow C_1V(V)C_2{\sim}C_2$

 b. di- and plurisyllabic stems: $C_1V(V)C_2(V)VC_3 \rightarrow C_1V(V)C_1{\sim}C_2V(V)C_3{\sim}C_3$

Therefore, and different from Konso, the non-derived verbs in Gawwada can be either monosyllabic or disyllabic. The C_1VC_2 and C_1VVC_1 templates of the non-derived verbs are the most common verbal root types from which punctual stems are derived. (13) provides the templates of the non-derived verbal roots and the punctual stems derived from them: (13a-f) show the application of the rule to verbal roots with an open first syllable; (13g) shows the application of the rule with a closed first syllable ($C_1VC_2C_3VC_4$), where the formation of the punctual involves the gemination of the last stem consonant only.

(13) a. C_1VC_2 $\rightarrow$ $C_1VC_2{\sim}C_2$

ʔak-	'to take, catch'	*ʔak~k-*	'to take, catch once'
ʃuk-	'to drink'	*ʃuk~k-*	'to take a sip'
ɓad-	'to hide'	*ɓad~d-*	'to hide once'
doʔ-	'to dry up and crack'	*doʔ~ʔ-*	'to dry up and crack once'
doʃ-	'to fall (from high above)'	*doʃ~ʃ-*	'to fall from (e.g. mountain) once'

  b. C_1VVC_2 $\rightarrow$ $C_1VVC_2{\sim}C_2$

ʔooy-	'to weep, cry, groan'	*ʔooy~y-*	'to weep, cry once'
ʔeem-	'to look'	*ʔeem~m-*	'to have a look'
ɗuuk-	'to push, press'	*ɗuuk~k-*	'to push, press once'
kaak-	'to load on the back'	*kaak~k-*	'to load once on the back'
qoot-	'to distribute'	*qoot~t-*	'to distribute once'

  c. $C_1VC_2VC_3$ $\rightarrow$ $C_1VC_2{\sim}C_2VC_3{\sim}C_3$

ʔarum-		*ʔar~rum~m-*	'to clear the field before ploughing'
horik-		*hor~rik~k-*	'to buy wholesale for reselling'
kokol-		*kok~kol~l-*	'to prepare food without meat nor cabbage'
takuy-		*tak~kuy~y-*	'to be small, poor, deprived'
toluy-		*tol~luy~y-*	'to pound (coffee, etc.); to tread'

  d. $C_1VC_2VVC_3$ $\rightarrow$ $C_1VC_2{\sim}C_2VVC_3{\sim}C_3$

ʔasaap-		*ʔas~saap~p-*	'to think, reflect' (< Amharic)

(13) e. $C_1VVC_2VC_3$ → $C_1VVC_2\sim C_2VC_3\sim C_3$
         kaakuy-   *kaak~kuy~y-*   'to carry on the back (SUBJ: woman)'

         qaalam-   *qaal~lam~m-*   'to be angry/in bad terms with'
      f. $C_1VVC_2VVC_3$ → $C_1VVC_2\sim C_2VVC_3\sim C_3$
         hoorees-   *hoor~res~s-*   'to snore'
         saarood-   *saar~rood~d-*   'to be(come) crazy'
      g. $C_1VC_2C_3VC_4$ → $C_1VC_2C_3VC_4\sim C_4$
         karsat-   'to collect'   *karsat~t-*   'to collect once or one item from multiple items'

         kintaw- 'to hit/pat on the head'   *kintaw~w-*   'to give a little pat on the head'

There are very few plurisyllabic stems in Gawwada, and most of them can be analysed as involving the presence of one or more frozen derivatives (the same may apply to many disyllabic stems). In all cases of plurisyllabic stems with a punctual extension, only the last stem consonant is geminated.

(14)   plurisyllabic stem   → $C_1VC_2C_3VC_4C_4\sim C_4$
      šurramtuy- 'to throw a stick'   *šurramtuy~y-*   'to throw a stick once'

All punctual-derived stems, therefore, involve a sequence of two identical consonants resulting from the gemination of the last stem consonant. Similar to Konso, Gawwada does not allow two consonants on the coda of a word; when two final consonants are created by morphological rules word-finally (_CC#), a final vowel is added in the phonological word and resyllabification applies:

$$\_CC\# \rightarrow \_CCi\#$$

Whenever a morphological rule gives rise to a word-final cluster, as in the punctual-derived stems in (13), a final /i/ is added, as in the imperative singular forms in (15).

(15) *ʕuk~ki*   'Take (SG) a sip!'
     qoot~ti   'Distribute (SG) once!'
     ʔar~rum~mi   'Clear (SG) the field once!'
     kintaw~wi   'Give (SG) a little pat on the head!'

Resyllabification also applies, of course, to affixes beginning with a vowel (16a), while an epenthetic vowel is inserted before suffixes beginning with a consonant (16b).

(16) a. *ʔan=ʕuk~ki*   'I took a sip.'
            SBJ.1=drink~PUNCT.PF.1SG

      b. *ʔaɓ=ɓad~di-ti*   'You (SG) hid once.'
            SBJ.2=hide~PUNCT.PF.2SG

Punctual stems can also be derived from verbal stems that, in their turn, are extended with another derivation. In this case, the punctual derivation always appears at the end of the stem and involves gemination of the final consonant of the derived verb. For instance, in (17) the verbal root *ʔuyy-* 'to pick up' is first extended with the mid-

dle derivation (-aɗ[11]) 'to pick up (e.g., a child) for oneself', from which the consonant of the middle is geminated in the punctual in order to show a single instance of the action.

(17) Ɂuyy-   'to pick up'
      Ɂuyy-aɗ-   'to pick up (e.g., child) for oneself'
      Ɂuyyaɗ~ɗ-   'to pick up for oneself once'

In Gawwada, we also find some verbs with the root shape $C_1V(V)C_2C_3$ for which, just as in Konso, the punctual derivation is excluded on formal grounds, due to the impossibility of a three-consonant cluster.

(18) ɗawr-   'to forbid'   *ɗawr~r-
      ɠonɗ-   'to break'   *ɠonɗ~ɗ-
      tarɗ-   'to be tired'   *tarɗ~ɗ-

Still, a majority of CV(V)CC verbs are actually $C_1V(V)C_2C_2$, i.e., the second consonant is geminated. Many such verbs may be frozen punctual verbs, i.e. original CV(V)C verbs to which reduplication of the last consonant applied and the original root was subsequently lost, making them formally indistinguishable from punctual-derived verbs.

(19) ʕall-   'to speak'
      mayy-   'to kiss'
      rakk-   'to hang'

Evidence of an origin from a borrowed CV(V)C verb is sometimes available: the verb *rak~k-* 'to hang', which is non-derived in Gawwada, is a punctual-derived verb stem in Konso, where the non-derived verb root *rak-* 'to hang' is inherently plural in the sense that it implies a prolonged or repeated action, and the derived verb stem *rak~k-* is punctual. So, it can be argued that either the verb *rakk-* in Gawwada is a frozen punctual for which a more basic "plural" verb is not attested, or, and that may be more plausible, that Gawwada borrowed the word from Konso in its punctual form. The Konso-Gawwada connection in this domain is further strengthened by another verb.

(20) hul-   'to enter into someone's family, esp. the *pokolho*'s'[12]
      hul~l- 'to enter/go in; go down (of sun, moon)'

The verb exists in Konso, too, under the form *kull-* 'to enter', while a phonologically possible degeminated verb *kul-, "plural" in meaning, does not exist. Interestingly, however, in Gawwada *hul-* and *hul~l-* coexist, although the latter is by far most widely used, due to its more general semantics.

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[11] The form of the middle suffix *-aɗ* in Gawwada is the same as in Konso (Ongaye 2013a) and Diraytata (Wondwosen 2007) and is, of course, common in Cushitic.

[12] Cf. Amborn *et al.* (1980: 45ff.) for the role of the *pokolho*'s family as traditional religious and political leaders.

5 Pluractional derivation

The non-derived verbal forms from which the punctual is derived have a plural verbal reading. However, it is also possible to derive a pluractional from a punctual-derived stem. Again, we will discuss Konso and Gawwada separately.

5.1 Pluratives in Konso

In Konso it is possible to derive a pluractional verb from a punctual-derived verbal stem, as shown in (21). Such derivation expresses the repetition of actions or events (i.e. iterativity and frequentativity), and implies the use of less force in doing the action (cf. Ongaye & Mous 2017).

(21)   punctual   punctual + pluractional

leɓ-   'to kick many times'   →   *leɓ~ɓ-*   'kick once'   →   *le~leɓ~ɓ-*   'kick a few times'
ɠof-   'to pinch many times'   →   *ɠof~f-*   'pinch once'   →   *ɠo~ɠof~f-*   'pinch a few times'
tit-   'to pull many times'   →   *tit~t-*   'pull once'   →   *ti~tit~t-*   'pull a few times'

It is also possible to derive pluractional verbs from non-derived suppletive verbs with a "plural" meaning (as discussed in section 6).

(22)   *ɠuur*   'to cut'   *ɠuɠ~ɠuur*   'cut a few things, or one thing, into pieces'
        huuɓ-   'to uproot many times'   *huh~huuɓ*   'uproot a few things'
        ɠom-   'to bite many times'   *ɠoɠ~ɠom*   'bite a few times'
        heer-   'to buy many things'   *heh~heer*   'buy a few things'

In Konso, the phenomenon of this pluractional derivation with frequentative/iterative meaning is quite productive and can, in contrast to the punctual, apply to both non-derived and derived verbal stems (see Ongaye & Mous 2017). The shape of the reduplicant is a closed syllable with a short vowel and with the root-initial consonant in the coda if the next consonant is single or a consonant cluster (23a), and no coda if the next consonant is geminate (23b).

(23)   a. $C_1V(V)C_2(C_3)$ $C_1VC_1C_1V(V)C_2(C_3)$
             toom-   'to hit with fist once'   *tot~toom-*   'to hit with fist many times'
             ɗot-   'to stab once'   *ɗoɗ~ɗot-*   'to stab many times'
             torp-   'to shoot with spear once'   *tot~torp-*   'to shoot with spear many times'

        b. $C_1V(V)C_2C_2(VC_3)$ $C_1VC_1VC_2C_2(VC_3)$
             pidd-   'to buy one thing'   *pi~pidd-*   'to buy a few things'
             mitt-   'to sever once'   *mi~mitt-*   'to sever a few things'
             kull-   'to enter once'   *ku~kull-*   'to enter a few times'

Pluractionals derived from punctual stems follow the pattern given in (23b). This is shown in (24) with the basic verb roots (with plural meaning) *leɓ-* 'to kick many times/things', *tooy-* 'to watch', and *rak-* 'to hang many times/things'.

(24)   basic stem   punctual   pluractional + punctual
        leɓ-   →   *leɓɓ-*   →   *le~leɓɓ-*
        tooy-   →   *tooyy-*   →   *to~tooyy-*
        rak-   →   *rakk-*   →   *ra~rakk-*

When additionally taking into account the plurative (frequentative) derivation from a non-derived verb and the derived punctual derivation, we will have the following four possibilities:

(25)　C_1VC_2-　　　　*leɓ*　　　　basic stem (with plural meaning)
　　　$C_1VC_2{\sim}C_2$　　　*leɓ~ɓ*　　unctual
　　　$C_1VC_1C_1VC_2$　　*lel~leɓ*　　pluractional
　　　$C_1VC_1VC_2C_2$　　*le~leɓ~ɓ*　pluractional + punctual

5.2 Pluratives in Gawwada

In Gawwada, a plurative expressing iterativity is derived through the reduplication of the first CV(V) part of a basic stem:

$$C_1V(V)C_2X \rightarrow C_1V(V){\sim}C_1V(V)C_2X$$

where X is whatever string of segments and may be null, as in (26).

(26)　basic stem ('to do X')　　　　iterative pluractional ('to do X repeatedly')
　　　pok-　'to hit, kill'　　→　*po~pok-*
　　　koɗ-　'to do, work'　　→　*ko~koɗ-*
　　　ʃuk-　'to drink'　　　→　*ʃu~ʃuk-*
　　　qoh-　'to milk'　　　→　*qo~qoh-*

There is also a morphologically distinct, non-productive plurative extension expressing frequentativity in the examples below, and involving the complete reduplication of a CV(V)C stem or of the first CV(V)C part of a plurisyllabic stem:

$$C_1V(V)C_2X \rightarrow C_1V(V)C_2X {\sim}C_1V(V)C_2X$$

where X is again whatever string of segments and may be null, as in (27).

(27)　basic stem ('to do X')　　　　frequentative pluractional
　　　ʔood-　'to go down'　　→　*ʔood~ʔood-*

Both the iterative-plurative and the frequentative-plurative are in their turn often coupled with the punctual derivation, yielding in Gawwada the same fourfold derivation of Konso. (28a) and (28b) provide a few illustrative examples for the iterative and frequentative pluractionals, respectively.

(28)　a.　*put-*　'to win'　　　　→　PUNCT　*put~t-*
　　　　　　　　　　　　　　　　→　PLUR　*pu~put-*　→　PLUR-PUNCT　*pu~put~t-*
　　　　tul-　'to cough'　　　→　PUNCT　*tul~l-*
　　　　　　　　　　　　　　　　→　PLUR　*tu~tul-*　→　PLUR-PUNCT　*tu~tul~l-*
　　　　yuk-　'to extract, pull out'　→　PUNCT　*yuk~k-*
　　　　　　　　　　　　　　　　→　PLUR　*yu~yuk-*　→　PLUR-PUNCT　*yu~yuk~k-*
　　　　　　　　　　　　　　　　　　　　　　　　　　'to pick up'

　　　b.　*ʃuk-*　'to drink'　　　→　PUNCT　　*ʃuk~k-*
　　　　　　　　　　　　　　　　→　PLUR-PUNCT　*ʃuk~ʃuk~k-*
　　　　kot-　'to do, work, dig, cultivate'　→　PUNCT　　*kot~t-*

　　　　　　　　　　　　　　　　→　PLUR-PUNCT　*kot~kot~t-*

t'iip-	'to squeeze'	→	PUNCT	*t'iip~p-*	'to squeeze the eyes'
		→	PLUR-PUNCT	*t'iip~t'iip~p-*	'to squeeze the eyes repeatedly'

6 Suppletive forms

Pairs of singulative and pluractional verb roots are sometimes found in suppletion, both with intransitive (29a) and transitive (29b) verbs. The phenomenon is particularly widespread in Konso.

(29)　　　singulative　pluractional　　　　　　　(Konso)

　　a. *keer* 　*hir-* 　'to run'
　　　 toy- 　*ley-* 　'to die'
　　　 piʔ- 　*seh-* 　'to fall'
　　　 χaʔad- 　*paɢad-* 　'to run, fly'

　　b. *išš-* 　*leyš-* 　'to kill'
　　　 mur- 　*ɢuur-* 　'to cut'
　　　 put- 　*huuɓ-* 　'to uproot'
　　　 ɢaniin- 　*ɢom-* 　'to bite'
　　　 pidɗ- 　*heer-* 　'to buy'

In Gawwada, verbal suppletion is restricted to just one intransitive verb:

(30)　　　singulative　pluractional　　　　　　　(Gawwada)
　　　 heer- 　*ʔakam-* 　'to run'

The following verb is interesting because it involves the reduplication of the last stem consonant – therefore, formally a punctual – in order to denote a plural subject:

(31)　　*far-* 　　*far~r-* 　'to die' 　　　(Gawwada)

It is also remarkable that the meaning of these two Gawwada verbs is among those which involve suppletion in Konso. Despite denoting the same actions, suppletive singulative and pluractional verbal roots occur with different subjects: intransitive suppletive singulative verb roots occur with a singular subject, while their corresponding pluractional suppletives are found with a plural (i.e., morphologically plurative) subject. For example, the suppletive verb roots *piʔ-* and *seh-* refer to the same action of "falling" but require different subject number: the former occurs only with a singular subject such as *innaasini* 'the child' (32a), and the latter only with a plural subject such as *hellaasini* 'the children' (32b). The same applies to two instances of suppletion in Gawwada.

(32)　a. *[innaasiniʔ ʔipiʔin]*　　　　　　[*ʔinnaasiniʔ ʔisehin]*　　(Konso)
　　　 innaa-sini 　*i=piʔ-i-n*
　　　 child-DEF.PL 　SBJ.3=fall.down.once-PF-PL
　　　 'The child fell down.'

　　b. *[hellaasiniʔ ʔisehin]*　　　　　　[*hellaasiniʔ ʔipiʔin]*
　　　 hellaa-sini 　*i=seh-i-n*
　　　 child-DEF.PL 　SBJ.3=fall.many.times-PF-PL
　　　 'The children fell down.'

Suppletive transitive verbal roots are not restricted with regard to their subject, which can be either singular or plural. Restrictions apply instead in the number of arguments in object position: suppletive singulative transitive verbal roots require a single object, while pluractional verbal roots are used when a plurality of objects is involved. In (33a-b), we have the singulative verb root *išš-* 'to kill one thing' with the basic (and singular in meaning) object *karmaa* 'lion', while in (33c-d) we have the corresponding suppletive pluractional verb root *leyš-* with the pluractional *karmaɗaa* 'lions'.

(33)   a. *[namasik karmaa ʔiʔiššay]*

       nama-siʔ   karmaa   i=išš-ay
       man-DEF   lion   SBJ.3=kill.one.-PF[3M]
       'The man killed a lion.'

    b. *[orrasik karmaa iʔiššay]*

       orra-siʔ   karmaa   i=išš-ay
       people-DEF   lion   SBJ.3=kill.one.entity-PF[3M]
       'The people killed a lion.'

    c. *[namasik karmaɗaa ileyšay]*

       nama-siʔ   karm-aɗaa   i=leyš-ay
       man-DEF   lion-PLUR   SBJ.3=kill.more.than.one-PF[3M]
       'The man killed lions.'

    d. *[orrasik karmaɗaa ʔileyšay]*

       orra-siʔ   karmaɗaa   i=leyš-ay
       people-DEF   lion-PLUR   SBJ.3=kill.more.than.one-PF[3M]
       'The people killed lions.'

In summary, verbal roots with inherent plural interpretation may appear in four forms: one non-derived and three derived forms. Verbal roots with suppletives show two forms each: the root and the frequentative/iterative.

7 Semantic interpretations of punctuals and pluractionals

The punctual and the pluractional (basic and derived) have a broad range of interpretations in both Konso and Gawwada. Among the several meanings of the punctual stems, indicating doing an action or event only once is the prominent one. For example, the punctual stems of the pluractional verb roots *č'eeq-* 'to lick' (Gawwada) and *rak-* 'to hang more than one thing' (Konso) are *č'eeq~q-* and *rak~k-* and express a single instance of the action of licking and hanging, respectively. The basic, non-derived verbs are instead plural in meaning and indicate a prolonged, and therefore multiple, action.

With certain verbs the punctual derivation also indicates the use of extra force. For example, in the Konso examples in (34) the punctual stem *ɠof~f-* (34b), derived from the pluractional non-derived verb root *ɠof-*, not only indicates doing the action of pinching once but also that the addressee of the order should do it with extra force.

(34) a. *[ʔinantoosiɠ ɠofi]*

    inanta-oosiʔ   *ɠof-i*
    girl-DEM   pinch.many.times-IMP.SG
    '(You [SG]) Pinch this girl (many times)!'

    b. *[ʔinantoosiɠ ɠoffi]*

    inanta-oosiʔ   *ɠof~f-i*
    child-DEM   pinch.many.times ~PUNCT-IMP.SG
    '(You [SG]) Pinch this girl hard once!'

Intensity may also be expressed in adjectival verbs through gemination. For example, the intensity of the Gawwada adjectival root *heet'-* 'to be good, nice, beautiful' is shown by the gemination of the stem-final consonant: *heet'~t'-* 'to be very good, nice, beautiful'. In Konso, a few colour adjectives likewise employ gemination in the expression of intensity.

(35) *tiim-*   'to be red'   *tiffiim-*   'to be very red'
      paɠaar- 'to be good'   *paɠɠaar-* 'to be very good'[13]

The intensity interpretation of the pluractional has a different reading compared to the intensity of the punctual. In the pluractional, intensity is derived from a fast repetition of the action in one single event, while in punctuals intensity comes from the use of extra force in a single action. Interestingly, in Gawwada, the punctual derivation may also indicate quite the opposite; so we find instances of the punctual used to express a reduction of the force with respect to the plural basic verb. An example is *kintaw-* which means 'to hit or pat on the head,' while its punctual stem *kintaw~w-* refers to giving a little pat on the head. The punctual derivation may also indicate the individuation of an item among multiple items or sub-events. In Gawwada, for example, the non-derived verb *č'oh-* refers to milking in general (and, therefore, all the udders of an animal), while the derived punctual stem *č'oh~h* denotes milking one udder only. By the same token, the verb root *yiʔ-* refers to eating (insofar as chewing is involved), but for taking just one bite the punctual stem *yiʔ~ʔ-* is used.

The punctual also expresses speed and rapidity of an action. This interpretation is mainly available with process verbs for which the derived punctuals express the reduction of time employed in performing the action. For example, the Konso verb *faɠ-* 'to wash' (whose object has to be something hard, e.g. a calabash or bowl) is a process verb which indicates one event in which the process of washing takes place. When a punctual stem *faɠ~ɠ-* is derived it refers to a quick, summary washing. In Konso such punctuals are mainly accompanied by the directional adverb *χata* 'downwards'.

(36) *[innaayyu kannoosiχ χata faɠɠi]*

    innaa-yyu   *kannoota-asiʔ* *χata*   *faɠ~ɠ-i*
    child-1POSS.PL   calabash-DEM   down   wash.many.times-PUNCT-IMP.SG
    'My child, wash this calabash fast!'

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[13] Different patterns are used for other colour adjectives; e.g., stem alternation is involved in *poor-* 'to be black', *puɠɠuur-* 'to be very black'.

There are instances in Gawwada showing the cause–effect relation between basic and punctual. The cause is indicated by an non-derived plural verb and the effect by a punctual stem derived from it. For example, the verb root *dil-* refers to baking or burning with a hot stick in order to cure an illness, or for aesthetic purposes, while the derived punctual stem *dil~l-* is 'to brand', which is actually the result of burning with a hot stick.

We have already seen that punctuals are derived from verb roots which inherently have a plural reading, in the sense that a plurality of participants (either subjects or objects) is involved, a plurality of actions, or a combination of both (see Ongaye & Mous 2017 for Konso). If a plurality of actions is involved, it is never limited to two or even just a few instances of the action; it can refer to several events or to a plurality within one event. For example, in (37) we have the singular subject *raaka* 'old woman' and the singular object *innaa* 'child' used with the plural verb *ɠof-* 'to pinch many times'.

(37) *raaka-si*   *innaa-sini*   *i=ɠof-t-i*   (Konso)
      old.woman-DEF   child-DEF.PL   SBJ.3=pinch.many.times-3F-PF
      'The old woman pinched the child many times.'

Pluractionality may also indicate the plurality of either subject or object. In (38) we have the plural subject *raakkaa* 'old women' and the plural object *hellaa* 'children'.

(38) *raakkaa-sini*   *hellaa-sini*   *i=ɠof-i-n*   (Konso)
      old.women-DEF.PL   children-DEF.PL   SBJ.3=pinch.many.times-PF-PL
      'The old women pinched the children.'

Pluractionals derived from punctual stems have the semantic interpretation of reduced plurality. That is to say, the meaning is not "many" but rather "a few".

(39) *[raakasi inantasi iɠoɠoffiti]*   (Konso)
      raaka-si   *inanta-si*   *i=ɠo~ɠof-f-t-i*
      old.woman-DEF   girl-DEF   SBJ.3=ITER~pinch.many.times~PUNCT-3F-PF
            'The old woman pinched the girl a few times.'

Punctual stems may express doing something completely. For instance, the non-derived verb *put-* in Gawwada expresses winning or succeeding while *put~t-* expresses defeating or winning completely. With respect to doing something completely, Konso employs two strategies. The first (non-productive) strategy is to reduplicate the verb:

(40) *fap-*   'to become rotten, soaked'   *fap~fap-*   'to become completely rotten, soaked'
      pul-   'to steer, scatter'   *pul~pul-*   'to dismantle completely'

The same strategy is also found in Gawwada, but here it implies the fast repetition of the action:

(41) *ʔano*   *pun-o*   *ʔan=ʕuk~ʕuk~k-i*   (Gawwada)
      IDP.1SG   coffee-M   SBJ.1=drink~drink~PUNCT-PF.1SG
      'I gulped down coffee.'

The second strategy in Konso is the use of the postposition *oppa* 'into'. In the following example, the postposition has the meaning 'all over'. This adverb is used with pluractional verbs and never with punctual stems.

(42)   *[… ka ɠeetti ka oppah hooffaa ɠuʔti]*
     … ka   ɠeed-t-i   ka   oppa-ʔ   hooffaa   ɠud-t-i
     … and   take-3F-PF   and   in-LOC   holes   pierce-3F-PF
     '… and then, she pierced holes all over it.'

It has been shown that the gemination of a verb root-final consonant reduces the number of arguments or event or action in Konso. In Gawwada, however, some verbs reveal that this is not always true as there are cases in which the gemination of the root-final consonant increases the number of arguments or expresses iterativity or frequentativity. For example, it was seen above in section 6 that the verb *far-* 'to die' (but also: 'to be finished; to be worn out, blunt') requires a singular argument while its derived stem *far~r-* requires only a plural argument. Similarly, the verb *tuq-* 'to spill (a liquid)' indicates a single action of spilling, whereas its derived stem *tuq~q-* 'to pour repeatedly; to irrigate' shows iterativity or frequentativity.

8 Summary and conclusions

The presence of a single rule ("reduplicate the last stem consonant") in both nominal and verbal derivational morphology is by itself interesting. However, there is a huge difference in meaning: in the punctual derivation, the process generally reduces the number of actions, events, and processes, while in nominal derivation reduplication increases the number of entities. But the mere fact that the same rule applies in two genetically not closely related but geographically contiguous languages (and language groups) is, of course, revealing to deep and prolonged contact. The present paper has explored the application and use of this rule and a few of the many fascinating parallels between Konso and Gawwada. There are, indeed, also many differences. While both languages disallow the derivation of punctual from verb roots ending in geminate consonants or consonant clusters (which is a mere reflex of a wider ban on three-consonant clusters in Cushitic and beyond), in Konso the punctual derivation is also excluded from derived stems, whereas in Gawwada it applies both to verb roots and derived verb stems. While frozen punctuals occur in both languages, stem suppletion is found in a sizable number of verbs in Konso but in just one case in Gawwaada (*far-* to die', actually being a semantically irregular punctual, as discussed in section 6 above).

Our study fully confirms Sasse's (1986) insights on the *Sagan Language Area*: Konso and Gawwada (and the whole of Konsoid and Dullay) do share a great amount of linguistic features at all levels of analysis. Furthermore, these features are so specific in their morphology and so complex in their semantic values that casual resemblance and spontaneous parallel development can safely be excluded. Nor are the same features in any way inherited from a parent language (in our case, Proto-East Cushitic, Proto-Lowland East Cushitic or any further subdivision).

What can be said about the origin of this isomorphism? Can we claim that the punctual derivation is originally a verbal phenomenon of the Dullay varieties that was imported into the Konsoid varieties through an intensive social contact? Remembering that a vital proof of areal contact is provided by the absence of a feature in genetically related languages outside the area (section 1), we may say yes: Oromo, when considered together with Konso and the other related neighbouring languages, is the only other member of the Oromoid subgroup of East Cushitic which does not show any instance of punctuality and pluractionality in verbs – let alone of the complex morphological mechanisms based upon reduplication which express them.

A second proof of the origin of these phenomena in Dullay may be tentatively found in the wider applicability of these derivations in Gawwada, whereby in Konsoid (or at least in Konso) the punctual derivation is possible only on monosyllabic verb roots. Although CVC and CVVC stems prevail in the Dullay languages (as generally in East Cushitic) we have seen how it is possible to derive punctuals from longer verb roots. In this case – and this we consider a decisive proof in favour of a Dullay origin – we may remember the more complex derivation rules in Gawwada, where in disyllabic stems not only the stem-final consonant but, rather, any non-initial stem consonant is reduplicated; cf. (13c-f) above. Also among the nouns, albeit reduplication of the last stem consonant being the basic strategy for making a pluractional among non-derived and native nouns in Gawwada, it is still only one among several mechanisms in Konso. In this sense, the question about the source of many common Konso/Gawwada features, which was discussed but remained unanswered in Tosco (2009), may find a first answer: the Dullay-speaking peoples are the descendants of the original, or at least the oldest, still present inhabitants of this part of southwest Ethiopia, where Cushitic languages from different groups, but also Omotic languages and one unclassified language, Ongota, are spoken. This is interesting also because at least in historical times (since the end of the nineteenth century), it has rather been the Konso dominating the local scene in demographic, economic and political terms. Moreover, bilingualism seems to be limited (Wedekind 2002), and relations are not always peaceful.

Gawwada and Konso share a major part of their vocabulary, even in the core lexicon. While century-long mutual contact, as proposed by Amborn *et al.* (1980: 61), did take place, at least certain features may be ascribed to Dullay, vindicating Black's (1975) early remarks on the Dullay speakers as autochthonous and the Konsoid speakers as later (but certainly very early) immigrants.

Abbreviations

DEF	definite	IMP	imperative
DEM	demonstrative	INDV	individualizer
F	feminine	ITER	iterative
FUT	future	LOC	locative
IDP	Independent pronoun	M	Masculine

MID	middle	PUNCT	punctual
NOM	nominative	SBJ	subject
PASS	passive	SG	singular
PF	perfective	SING	singulative
PL	plural	1	first person
PLUR	plurative	2	second person
POSS	possessive	3	third person

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