1. Motivation

- Direct objects in Aymara (Jaqiaq, spoken in the Lake Titicaca region, primarily in Bolivia & Peru) generally undergo final vowel deletion.
- Past descriptions (e.g. Hardman 2001, Coler 2014) have characterized this process as the means of marking accusative case.
- It follows from such an analysis that case-marking is achieved by subtractive morphology.
- Our claim: it's phonology fed by syntax, not morphology proper.
- Putative accusative case-marking is an instance of the more general process of "vowel suppression" (term due to Coler 2014).
- The verb phrase is one of the syntactic / prosodic domains of application for vowel suppression. This is paralleled elsewhere, e.g. the noun (determiner) phrase.
- Vowel suppression may be undone in prosodically marked contexts (see Sec. 5, 6).

2. Data Collection & Method

- Primary data come from elicitation with one native speaker born near Puno, Peru, who has resided in the Bay Area of CA for several years.
- Additional data from published narrative texts (Albí & Layme 1992), and from Coler (2014)'s grammar of the Muylaq dialect.

3. Background: Direct Objects & "Accusative Case"

- (1) and (2) show final vowel suppression of their direct objects (papa & khuchi, resp.) under unmarked phrasing. Examples herein show deleted vowels in parentheses beneath surface forms.

    (1) Qal jaqt’awaytxa qal(a) jaq-’a-way-�(a)-�(a)-�(a)-�(a)-�(a)
    rock kick-INST-DIST-1ST-3M-TOP
    ‘I kicked the rock.’ (STL-KPB_20141103)

    (2) Jupa phayaskex jupa-x(a) phaya-ski-x(a)
        3SG-TOP pig cook-PROG-3M
        ‘She’s cooking the pig.’ (STL-KPB_20150414)

4. Evidence I: Phrase-internal Vowel Suppression

- Final vowel deletion between words is more pervasive than the accusative case analysis might otherwise lead us to expect. (3) and (4) show suppression inside nominal expressions.

Adjective + Noun

- ch’iyar(1) kanisma
      ch’yr(a) kanisima
      ‘black shirt’ (Coler 2014: 186)

- ch’ei of (5) and (6) show suppression on adverbials that immediately precede the verb, including the negation marking jani, indicating a lack of morphosyntactic selectivity.

Negation + Verb

- jani mang’a-tay-a-si-xi-(u)-ti
    NEG eat-INT-DIST-REFL-2SG-IMP-IRR
    ‘Please don’t me.’ (ZJO_20140925)

5. Evidence II: Suppression blocking within marked prosody

- In certain marked prosodic configurations, suppression can be blocked.
- Examples include a “dying breaths” prosody, whereby each phrase is its own intonational domain, as well as list intonation.

Speaker gives the following with their dying breaths:

    (8) Ch’oq/ // kimsa pacha // achua
        ch’uq(i) kimsa pacha/achu-y(a)-a-xa
        1SG/ time harvest-3M-OP
        ‘I harvested potatoes three times.’ (STL-KPB_20141201)

- Speaker is giving a list of things the man ate:

    (9) Achila phayaskex jupa-x(a) phaya-ski-x(a)
        achila-x(a) uka paya imilla wawa-naka-ru(tu) katu-tya-tay
        grandchild DEM two girl child-PL-ALL receive-DW-T-s-3M-3DIS
        ‘The old man received two girls.’ (Layme 65-66)

- Speaker is giving the following with their dying breaths:

    (10) Ch’oq // kimsa pacha // achuyta
        ch’uq(i) kimsa pacha/achuy-y(a)-a-xa
        1SG/ time harvest-3M-OP
        ‘I harvested potatoes three times.’ (STL-KPB_20141201)

- (7) Achilax uka paa imilli wawanaka katuyatu
    achila-x(a) uka paya imilla wawa-naka-ru(tu) katu-tya-tay
    ‘I harvest potatoes three times.’ (STL-KPB_20141201)

- (11) Ch’oq // kimsa pacha // achuyta
    ch’uq(i) kimsa pacha/achuy-y(a)-a-xa
    1SG/ time harvest-3M-OP
    ‘I harvested potatoes three times.’ (STL-KPB_20141201)

- Right-dislocation

    (12) Manq’a phayaskex jupa-x(a) phaya-ski-x(a)
        manq’a jupa-x(a) phaya-ski-x(a)
        DEM man-TOP guinea.pig potato eat-DIST-3M-3DIS-3TOP
        ‘The man ate guinea pig, potatoes.’ (STL-KPB_20141110)

6. Evidence III: Suppression blocking in dislocation

- Right- and left-dislocation of a direct object may block suppression. All else being equal, this is unexpected under a case analysis (cf. Ott & de Vries 2015, a.o.).

Left-dislocation

- Khuchi’(u) // jupa phayaskex
    khuchi jupa-x(a) phaya-ski-x(a)
    3SG-TOP pig cook-PROG-3M
    ‘Pig, she’s cooking.’ (KPB_20150413)

Right-dislocation

- Jupa phayaskex // uka khuchi’(i)
    jupa-x(a) phaya-ski-x(a) uka khuchi
    3SG-TOP cook-PROG-3M DEM pig
    ‘She’s cooking [it], that pig.’ (KPB_20150413)

7. Analysis

- (i) The verb phrase in Aymara is realized as a phonological (q) phrase, intermediate to the word and intonational phrase (cf. Nespor & Vogel 1986).
- (ii) Vowel suppression is a phonological rule that applies at the right edge of a word inside a VP-derived q-phrase. The rule operates differently in other syntactic domains, e.g. there are minimum size requirements for vowel suppression in nominal expressions (Coler 2014). Addressing its operation across other domains is a goal for future work.
- In expressions like (8) and (9), the marked prosodic configuration blocks application of rule (12i).

8. Cross-linguistic support

- It is extremely common for a transitive verb and its direct object to form a single prosodic constituent. In particular, reduction and neutralization processes within said constituent is well-attested elsewhere.
- For example, in Turkish (Inkelas 1996), DO + Verb is a domain of application for voicing alternations, shown in (12).

9. Conclusions

- The accusative case analysis misses generalizations regarding vowel suppression.
- It also forces a treatment of expressions like (7) as instances of vacuous case-stacking.
- Most importantly, it cannot account for blocking under marked prosody and dislocation without additional stipulations to block case marking.
- A related alternative would be to treat this as noun-incorporation, taking direct object + verb to be a single word. This treatment is unattractive because definite and specific readings are available.
- A promising future direction is to connect our prosodic analysis with the syntactic notion of phase.

Acknowledgments: We wish to thank all consultants, HK, as well as participants in the 2014 IS field methods course at UC Berkeley, our instructor, Lev Michael, and Peter Jespersen and Sharon Inkelas for their help in the development of this project.