

AN EWP MODEL OF QUECHUA AGREEMENT:  
FURTHER EVIDENCE AGAINST DM

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In this paper we first describe the Quechua verbal agreement paradigm using two generative morphological theories and then argue that Anderson's EWP accounts for the data better than Distributed Morphology (DM). Kerke (1996) has already shown evidence against DM using this paradigm, and we provide additional support for this.

The Quechua verbs conjugate to agree with the subject and the object of the VP in one of three tenses (Table 1). Each cell contains up to five morphemes, from a selection of twelve, which appear consistently in the same order. Though there is some semblance of regularity in the paradigm, there are numerous exceptions. For example, there is a great deal of syncretism with plural subjects or objects, but the distribution of the plural suffixes *-ku* and *-chis* are difficult to describe. The past tense forms are almost always identical to the present tense with the addition of *-rqa*, but there are some unpredictable deviations. The seemingly unexplainable idiosyncrasies raises the question of whether there are indeed rules at all in the grammar or if each cell is simply a separate entry in the lexicon.

Anderson's EWP was designed to incorporate paradigms such as these into the language's grammar and has been used to effectively explain the irregularity and syncretism in Italian, Georgian, and Potawatomi verb conjugations (Spencer 1991; Anderson 1992). Meanwhile, DM has been used to account for the paradigms in Classical Arabic, Tamazight Berber, and Ugaritic (Noyer 1997; Harley & Noyer 1999). Both theories are robust enough to handle even the most complex paradigms, but the question is whether they can do so elegantly.

In this paper we present an account of the full Quechua agreement system for the first time in both EWP and DM. The EWP model features 22 rules organized into 6 blocks, which neatly account for the fixed order as well as the mutual exclusivity among them, without the need of an Athapaskan-like templatic approach (see Anderson 1991). The explanation in DM did describe the paradigm, but it was significantly more complicated than the EWP rules. The 11 impoverishment rules neatly describe the syncretism, but the 29 Vocabulary Items obfuscate many of the generalizations that do exist in the paradigm.

The least elegant and the largest portions of both theories are devoted to explaining the erratic distribution of *-ku* and *-chis* suffixes. In the EWP, an entire block of 7 rules is required, and in DM 6 Vocabulary Items capture the distribution, but only after 4 more specific rules apply first to handle the troublesome cells. What is not apparent in the DM model is that the other morphemes in those cells are usually regular, and this is captured in EWP.

We conclude that because of the more elegant description in EWP, it is a superior model for this paradigm than DM. The theoretical significance of this is that though DM is generally more accepted by the academic community, this is a case in which its description is inferior to an EWP model.

past present future	1SG obj	1PL.EXCL obj	1PL.INCL obj	2SG obj	2PL obj	3SG obj	3PL obj
1SG subj				rqayki yki s(q)ayki	rqaykichis ykichis sqaykiku	rqani ni saq	rqani ni saqku
1PL.EXCL subj				rqaykiku ykiku s(q)aykiku	rqaykiku ykichis sqaykichis	rqayku yku sayku	rqayku yku sayku
1PL.INCL subj							rqanchis nchis sunchis
2SG subj	warqanki wanki wanki	warqankichis wankiku wankiku	rqanki nki nki				rqanki nki nki
2PL subj	warqankichis wankichis wankichis	warqankichis wankichis wankichis	rqankichis nkichis nkichis				rqankichis nkichis nkichis
3SG subj	warqa wan wanqa	warqaku wanku wanqaku	warqanchis wanchis wasunchis	rqasunki sunki sunki	rqasunkichis sunkichis sunkichis	rqa n nqa	rqa n nqa
3PL subj	warqaku wanku wanqaku	warqaku wanku wanqaku	warqanchis wanchis wasunchis	rqasunki sunkiku sunkiku	rqasunkichis sunkichis sunkichis	rqaku nku nqaku	rqaku nku nqaku

Table 1: The Quechua agreement system. Rows represent subjects and columns represent rows (so to say “I see you.PL”, one would add the suffix -ykichis to the root riku-). Rows and columns are arranged in a person hierarchy rather than by person and plurality in order to better see the patterns. Grayed cells represent reflexivity, which, if along the diagonal, simply get the suffix -ku before that person’s 3SG.OBJ form, or are otherwise deemed impossible by speakers. Within each cell, the past tense is on top, present in the middle, and future on the bottom. Parentheses represent optional phonetic material. Other than y representing a palatal glide and ch representing a postalveolar affricate, segments can be interpreted as IPA symbols.

## REFERENCES

- Anderson, Stephen R. 1992. *A-Morphous morphology*. (Cambridge Studies in Linguistics 62). Cambridge: Cambridge University Press.
- Harley, Heidi & Rolf Noyer. 1999. Distributed morphology. *Glott international* 4(4). 3–9.
- Kerke, Simon van de. 1996. Agreement in Quechua: evidence against Distributed Morphology. In Crit Cremers & Marcel den Dikken (eds.), *Linguistics in the Netherlands 1996*, 121–131. (AVI Publications 13). John Benjamins Publishing Company.
- Noyer, Rolf. 1997. *Features, positions and affixes in autonomous morphological structure*. New York: Garland.
- Spencer, Andrew. 1991. *Morphological Theory: An Introduction to Word Structure in Generative Grammar*. 1st ed. (Blackwell Textbooks in Linguistics). Oxford: Basil Blackwell.