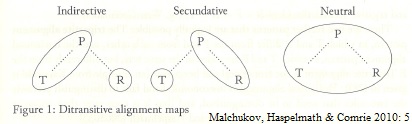
Tw 1

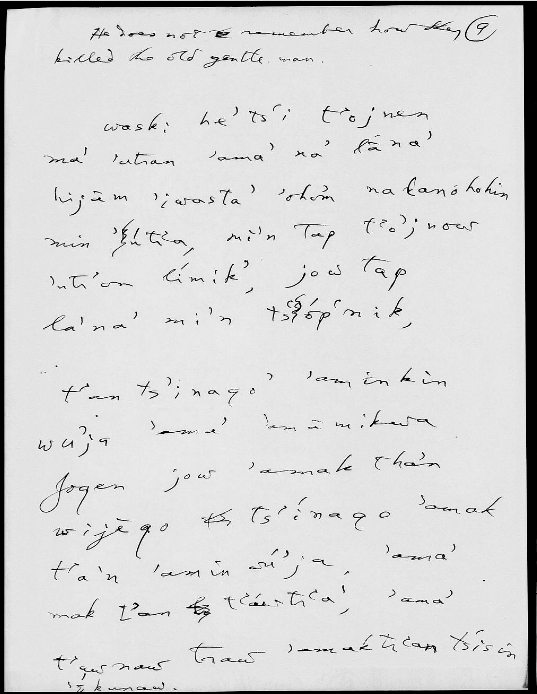
Yowlumne (aka Yawelmani) is a Yokuts language of the Valley Yokuts branch native to California. It appears near the bottom right of the large purple area of the map.

Tw 2



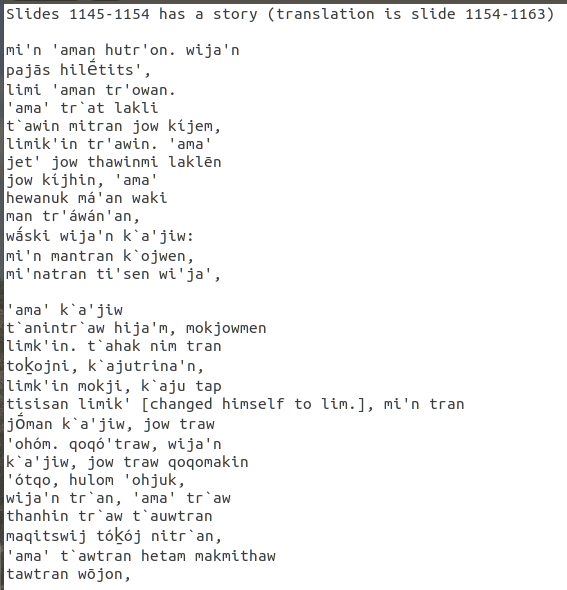
Yowlumne has a complicated system of secundative alignment in ditransitive constructions (Weigel 2005). Secundative alignment is where the indirect object (R) with a ditransitive verb patterns like the direct object (P) of a transitive verb (Malchukov, Haspelmath & Comrie 2010).

Tw 3



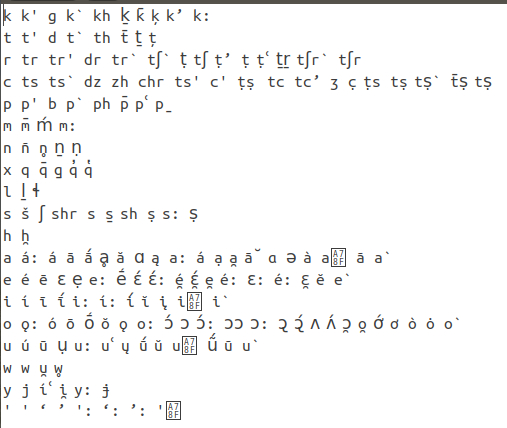
Large amounts of available data that document the alignment system in Yowlumne are found in messy, handwritten archival documents in the archives of John Peabody Harrington and Stanley Newman, recorded between 1910 and 1940. This data is not readily searchable in this form.

Tw 4



Digitization and accessibility to these documents takes place in several stages. The first is digital transcription of 17 texts (so far).

Tw 5



The second stage is running a preliminary text normalization process using an algorithm involving Levenshtein distance. Harrington in particular confused many sounds in his transcriptions, so I use sound classes to group these sounds in the Levenshtein distance calculations.

Much of the available data that would assist in determining the details of this system, however, appear in messy, handwritten archival documents in the archives of John Peabody Harrington and Stanley Newman, recorded between 1910 and 1940. The current work focuses on the procedure to achieve two outcomes: 1) rendering the data accessible for analysis, and 2) making preliminary observations on how the secundative alignment manifests in passive sentences. Accessibility to the data is achieved through first transcribing a number of available texts in digital form, then running a preliminary text normalization process using an algorithm involving Levenshtein distance applied to sound-classes containing commonly confused sounds on the part of the original transcribers. This first pass at normalization is then hand-checked for accuracy, and used to train a Transformer model (Vaswani et al. 2017) that can then be used to normalize data obtained from the archives. The data normalized by the Transformer model can then be searched by lexeme. This enables selecting individual ditransitive verbs to chart out their attested argument structures, including in passive environments. Based on preliminary results drawn from several stages of this process, it is determined that, as recorded in the archival data, ditransitive and applicativized transitive verbs in Yowlumne behave in the same way and generally passivize only on primary objects, with no effect on the marking of secondary objects. This is true without regard to the semantics of individual verbs or the thematic roles of their arguments. In the case of applicativized transitive verbs, this is significant in that the addition of the applicative onto the verb forces the erstwhile transitive object to take secundative case, and when the argument licensed by the applicative is made subject with passivization, this has no effect on the marking or status of the demoted transitive object. These findings and the computational approach used to achieve them will be of interest to those working on ditransitive alignment issues as well as those dealing with noisy archival data.