

1 Introduction

Issues:

1. Pima (Uto-Aztecan) has a single verbal lexeme used for both ‘do’ and ‘happen’: *wua* (imperfective), *juu* (perfective).
2. How are both meanings accommodated?
3. What is the syntax of these constructions?

2 ‘Do’ versus ‘happen’

This section will establish that the relationship between ‘do’ and ‘happen’ in Pima is an active-passive one. ‘Do’ is the active member of the paradigm, ‘happen’ the passive. Passivization in Pima is marked through the addition of anaphoric clitic.

- (1) a. Ha’a ’ant hai.
 jar AUX:1S:PF break(PF)
 ‘I broke the jar.’
- b. Ha’a ’at ’e= hai.
 jar AUX:PF ANA= break(PF)
 ‘The jar is broken.’

The following is from a recorded conversation between Mary M. (MM), Mary J. (MJ), and Virgil L. (VL). In all the ‘do’ sentences, the verb is in the active. The only ‘happen’ sentence has the verb in the passive.

- (2) MJ:

Kut hekid ’ab o ha=juu hegam gam o ha= ’i’ic
CONJ:PF when D:FR IRR 3PL=do(PF) those RD:BK IRR 3PL= PL,drink:CAUSE
heg bit?
DET clay

When are you going to do it to them and make them drink clay?’

- (3) MM:

Koi ’ant o m hu sha’i kei heg tash.
not.yet AUX:1S:PF IRR BK FAR INT stand(PF) DET day

‘I haven’t set a date yet.’

...

- (4) MJ: Ñee, kut has o 'e=juu?
well CONJ: PF what IRR ANA=do(PF)

'So, what's going to happen?'

- (5) MJ (cont):
M at 'ab 'eep o hema juu?
BK AUX:PF D:FR again IRR some do(PF)

'Is it possible to do another one?'

- (6) MJ (cont):
B añ cum 'elid mat 'ab o juu heg Marco, nat pi
FR AUX:1S TRY cogitate C:AUX:PF D:FR IRR do(PF) DET Marco BC:AUX:PF not
koi sha'i 'e= vakua.
not.yet INT ANA= baptise

'I would like it if it could be done for Marco, because he hasn't been christened yet.'

- (7) VL:
Has o juu?
what IRR do(PF)

'Do what?'

- (8) MJ:
'i'ic heg bit.
drink:CAUSE DET clay

'Make him drink clay.'

Now some elicited minimal pairs. Again, 'do' is active and 'happen' is passive.

- (9) Pi 'ape -kam 'o ba 'e= wua.
not good -NOML AUX PART ANA= do
'Accidents ("bad things") happen.'
- (10) Pi 'ape -kam 'añ 'ab ha= wua.
no good -NOML AUX:1S D:FR 3P= do
'I do bad things.'

The following are question/answer pairs. They confirm the pattern that 'do' is active, while 'happen' is passive.

- (11) a. Sha t 'e= juu heg Lisa?
what PF ANA= do(PF) DET Lisa
'What happened to Lisa?'

- b. Bart 'at 'ab si shoñhi.
 Bart AUX:PF D:FR really hit
 'Bart hit her.'
- (12) a. Shacu 'at has juu heg Bart?
 what.one AUX:PF something do(PF) DET Bart
 'What did Bart do?'
- b. M at si shoñhi heg Lisa.
 BK AUX:PF really hit DET Lisa
 'He hit Lisa.'

The meanings seen here are based on sentences where one of the arguments is either an event or metonymic to an event. If two individualized nouns are used, the meanings are subtly different. With the active the form, the verb refers to some kind of action on someone. If left unspecified, it takes on sexual connotations, but with appropriate adverbs or context it can mean other things. In the passive, the predicates means 'to become'. (The form of (13d) will be explained later.)

- (13) a. Freddie 'at juu heg Lisa.
 Freddie AUX:PF do(PF) DET Lisa
 'Freddie did Lisa.'
- b. John 'at sko'okam heñ= juu.
 John AUX:PF painfully 1S= do(PF)
 'John hurt me.' (Lit: 'John did me painfully.')
- c. Freddie 'at 'e= juu heg Lisa.
 Freddie AUX:PF ANA= do(PF) DET Lisa
 'Lisa became Freddie.'
 (Lit: 'Freddie happened to Lisa.' ??)
- d. Shacu 'e= juuñ -him heg 'o'ohan?
 what ANA= do -CONT DET book
 'What's the book turning into?'

3 Adding indirect objects

The addition of an indirect object into a sentence is typically accompanied by the addition of a valency increasing morpheme on the verb. One such common affix is *-id*, as seen below.

- (14) a. M añ 'aag heg 'aaga.
 BK AUX:1S tell DET story
 'I told a story.'
- b. M añ hem= 'aag -id heg 'aaga.
 BK AUX:1S 2S= tell -TRNS DET story
 'I told you a story.'

The addition of an indirect object to *wua* ‘do’ does not require the addition of any valency increasing morphology. That is not to say that it is impossible. The imperfective allomorph allows *-id*, but does not require it. I have occasionally been told that the form with *-id* is benefactive, but this is not consistent across or even within elicitation sessions. Saxton, Saxton, and Enos (1983) states the benefactive reading should be the only one possible. The affix-less form was translated as a benefactive in the dialog above (6).

- (15) a. Sha 'o wua heg Lisa?
 what AUX:3 DO DET Lisa
 ‘What’s he doing to Lisa?’
 b. Sha 'o wu -id heg Lisa?
 what AUX:3 do -TRNS DET Lisa
 ‘What’s he doing to Lisa?’

In the imperfective form for ‘happen’, an allomorph more closely related to the perfective is used. There is no valency increasing morphology present. Note, however, that there is no anaphoric clitic in this case. I don’t know why.

- (16) Shacu has juuñ -him heg Lisa?
 what something DO -CONT DET Lisa
 ‘What’s happening to Lisa?’

The forms in the perfective and future show less idiosyncrasy. With the ‘do’ meaning, the verb appears to be active, and shows agreement with the indirect object. An example is found in the dialog above (6), some elicited examples are below. With the ‘happen’ meaning, the verb still appears passive, the anaphoric clitic being present despite the indirect object.

- (17) a. Sha pt ha= juu heg heñ= wupui?
 what 2S:PF 3P= do(PF) DET 1S= glasses
 ‘What did you do to my glasses?’
 b. Sha t juu heg Lisa?
 what PF do(PF) DET Lisa
 ‘What is he doing to Lisa?’
 (18) a. Sha t 'e= juu heg heñ= wupui?
 what PF ANA= do(PF) DET 1S= glasses
 ‘What happened to my glasses?’
 b. Sha t 'e= juu heg Lisa?
 what PF ANA= do(PF) DET Lisa
 ‘What happened to Lisa?’

4 Question formation

There are two general strategies for questioning the eventive argument of *wua* ‘do’. One is to use *sha* ‘what’. When this word is used, the active transitive *wua* acquires an anaphoric

clitic. This behavior is specific to this verb, not a general feature of this question word. This question strategy is not always possible. In general, if the string would be ambiguous between active and passive readings, one is always preferred over the other. This result has held in direct elicitation, and I have no spontaneously produced evidence to the contrary. I would not be surprised if better context allowed the dispreferred reading through, though.

- (19) a. Sha 'e= wua?
 what ANA= do
 'What's he doing?'
 *'What's happening?'
- b. Sha t 'e= juu?
 what PF ANA= do(PF)
 'What happened?'
 *'What did he do?'
- c. Sha pt 'e= juu?
 what 2S:PF ANA= do(PF)
 'What did you do?'
- d. Sha t o 'e= juu?
 what PF IRR ANA= do(PF)
 'What's he going to do?'
 *'What's going to happen?'

The situation is different with the ditransitives. The verb does not acquire the anaphoric clitic – this seems to be left for the goal object. In the imperfective passive, the form of the verb stem changes to *juuñ*, but I was told there was no way to use *sha* with it without changing the meaning to 'do'. Here the dispreference seems to be universally against 'happen', though both are possible in the future.

- (20) a. Sha hem= wua?
 what 2S= do
 'What is he doing to you?'
 *'What's happening to you?'
- b. *Sha juuñ -him heg Lisa?
 what do -CONT DET Lisa
 'What's happening to Lisa?'
- c. Sha t heñ= juu?
 what PF 1S= do(PF)
 'What did he do to me?'
 *'What happened to me?'
- d. Sha t o heñ= juu?
 what PF IRR 1S= do(PF)
 'What is he going to do to me?'
 'What's happening to me?'

The other strategy is to use *shacu* ‘what, which one’ along with *has* ‘something, what’. This strategy is generally available, and especially used for sentences where the *sha* strategy is impossible. No anaphoric clitic is necessary with this question word.

- (21) a. Shacu has wua?
 what something do
 ‘What’s he doing?’
 b. Shacu has ’e= wua?
 what something ANA= do
 ‘What’s happening?’

The word *has* is typically necessary, leaving it out tends to be ungrammatical. I have two examples where it is possible, one gathered while working on another topic, the other directly elicited to check for grammaticality. I do not understand why either is possible.

- (22) a. Shacu pt o has heñ= juu?
 what 2S:PF IRR something 1S= do(PF)
 ‘What are you doing to me?’
 b. *Shacu pt o heñ= juu? ‘What are you doing to me?’
 c. *Shacu t o ’e= juu?
 what PF IRR ANA= do(PF)
 ‘What is it that’s going to happen?’ (his attempt at a meaning)
 d. Shacu t o hem= juun heg S’oam?
 what PF IRR 2S= do DET brown
 ‘What can Brown do for you?’ (UPS slogan)
 e. ?Shacu ’e= juuñ -him heg ’o’ohan?
 what ANA= do -CONT DET book
 ‘What’s the book turning into?’

The placement of *has* tends to be different from ‘do’ and ‘happen’. As a broad tendency, when ‘do’ is meant, *has* follows the irrealis particle. When ‘happen’ is meant, *has* precedes it. There are counter-examples to both patterns, so this is not a requirement.

- (23) a. Shacu pt o has heñ= juu?
 what 2S:PF IRR something 1S= do(PF)
 ‘What are you going to do to me?’
 b. Shacu t has o heñ= juu?
 what PF something IRR 1S= do(PF)
 ‘What’s going to happen to me?’

5 Referring to the event

We saw above that events can be explicitly referenced with a nominal argument. They can also be referenced with the particle *’ab*. According to Saxton, Saxton, and Enos (1983), this

particle is *hab*, but I don't have any evidence for a distinction. Perhaps the two particles have coalesced in (this variety of) Pima. Whatever the proper form, the particle functions much like English 'that' in these contexts.

- (24) a. *Shacu pt 'aagc 'ab o juu?*
 what 2S:PF say:RES D:FR IRR do(PF)
 'Why are you going to do that?'
 b. *Sha pt masma 'ab o juu?*
 what 2S:PF similar D:FR IRR do(PF)
 'How are you going to do that?'
- (25) *Sha t masma 'ab o heñ= juu?*
 what PF similar D:FR IRR 1S= do(PF)
 'How is that going to happen to me?'

6 What's happening here?

The word *wua* 'do' is a semantically vague verb about the actions (loosely speaking) of the agent (loosely speaking). The eventive argument makes reference to the result of those actions. The normal case, then is for the agent to be subject and the result to be the object. Passivization promotes the result to subject position, increasing its topicality.

Sha is used alone to question the result. The anaphoric clitic has the functional role of distinguishing an eventive object from an individual object (e.g., normal 'do' versus sexual 'do'). This functional use is blocked when there is an indirect object, because the clitic slot is already taken by the IO. A goal IO is not very compatible with an individualized object of 'do' anyways.

- (26) *Who did John do to Bill.

Shacu and *has* together question the result. *Has* appears in the syntactic position of the result argument (in some abstract sense). The position of *has* relative to the irrealis marker gives some hint about this. Recall that when the verb is active, *has* is to the right of the irrealis particle. In the active, the result is a type of object, and would be inside the VP. After passivization, the result is promoted to subject, and thus outside the VP, and in these cases, *has* is to the left of the irrealis particle. If the irrealis marker attaches above the VP (as most structural theories of aspect assume), then the difference in placement can be accounted for. The ordering is not strict, because Pima generally allows its particles and arguments to scramble.

- (27)

