Kairak is spoken by about 750 people on the New Guinea Islands, off the Papua New Guinea mainland. It is a member of the Baining (Papuan) language family.

The data below (slightly simplified) illustrate how Kairak speakers express the past, present, and future tenses with different types of verbs. Your job is to identify the patterns involved, then answer the questions below.

1/2/3 indicate 1st, 2nd and 3rd person; ‘sg’ is singular, ‘pl’ is plural, ‘du’ is dual, i.e. when two people are involved (translated here as 'both'). Kairak distinguishes masculine (‘m’) and feminine (‘f’), and also human vs non-human.

Pronunciation notes: ā is a low central vowel sound a bit like the ‘u’ in (British English) ‘cup’; ŋ represents the ‘ng’ in ‘sing’; ɲ represents the ‘ny’ sequence in ‘canyon’.

### Type 1 Example tsup ‘to smoke’

<table>
<thead>
<tr>
<th>Person</th>
<th>Present</th>
<th>Future</th>
<th>Past</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg</td>
<td>ŋut sup</td>
<td>ɲu sup</td>
<td>ɲa sup</td>
</tr>
<tr>
<td>2sg</td>
<td>ɲit sup</td>
<td>ɲi sup</td>
<td>ɲa sup</td>
</tr>
<tr>
<td>3sg m</td>
<td>kāt sup</td>
<td>kā sup</td>
<td>ka sup</td>
</tr>
<tr>
<td>3sg f</td>
<td>yit sup</td>
<td>yи sup</td>
<td>ya sup</td>
</tr>
<tr>
<td>1du</td>
<td>unit sup</td>
<td>uni sup</td>
<td>un sup</td>
</tr>
<tr>
<td>2du/3du</td>
<td>anit sup</td>
<td>ani sup</td>
<td>an sup</td>
</tr>
<tr>
<td>1pl</td>
<td>urit sup</td>
<td>uri sup</td>
<td>ut sup</td>
</tr>
<tr>
<td>2pl</td>
<td>ɲānit sup</td>
<td>ɲāni sup</td>
<td>ɲāni sup</td>
</tr>
<tr>
<td>3pl</td>
<td>rit sup</td>
<td>ri sup</td>
<td>ra sup</td>
</tr>
<tr>
<td>3pl non-human</td>
<td>ɲārit sup</td>
<td>ɲāři sup</td>
<td>ɲāři sup</td>
</tr>
</tbody>
</table>

Other type-1 verbs:
- tsek ‘to raise’
- tvāstāmn ‘to meet’
- tsiqut ‘to try’
- tŋes ‘to dig’
- tkur ‘to show’

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**Type 2:** Example *yam* ‘to swing’

<table>
<thead>
<tr>
<th>1sg</th>
<th>2sg</th>
<th>3sg m</th>
<th>3sg f</th>
<th>1du</th>
<th>2du/3du</th>
<th>1pl</th>
<th>2pl</th>
<th>3pl</th>
<th>3pl non-human</th>
</tr>
</thead>
<tbody>
<tr>
<td>ŋu yam</td>
<td>ni yam</td>
<td>kā yam</td>
<td>yi yam</td>
<td>uni yam</td>
<td>ari yam</td>
<td>uri yam</td>
<td>nāni yam</td>
<td>ri yam</td>
<td>nāri yam</td>
</tr>
<tr>
<td>I swing</td>
<td>you (sg) swing</td>
<td>he swings</td>
<td>she swings</td>
<td>we both swing</td>
<td>you/they both swing</td>
<td>we swing</td>
<td>you (pl) swing</td>
<td>they swing</td>
<td>they (non-human) swing</td>
</tr>
</tbody>
</table>

**Other type-2 verbs:**
- *monāk* ‘to cook’
- *sameņ* ‘to speak out’
- *vālāŋ* ‘to kill’
- *mānatām* ‘to sleep’

**Type 3:** Example *tet* ‘to go’

<table>
<thead>
<tr>
<th>1sg</th>
<th>2sg</th>
<th>3sg m</th>
<th>3sg f</th>
<th>1du</th>
<th>2du/3du</th>
<th>1pl</th>
<th>2pl</th>
<th>3pl</th>
<th>3pl non-human</th>
</tr>
</thead>
<tbody>
<tr>
<td>ŋa tet</td>
<td>ni tet</td>
<td>ka tet</td>
<td>ya tet</td>
<td>un tet</td>
<td>an tet</td>
<td>ut tet</td>
<td>nāni tet</td>
<td>ra tet</td>
<td>nāri tet</td>
</tr>
<tr>
<td>I go</td>
<td>you (sg) go</td>
<td>he goes</td>
<td>she goes</td>
<td>we both go</td>
<td>you / they both go</td>
<td>we go</td>
<td>you (pl) go</td>
<td>they go</td>
<td>they (non-human) go</td>
</tr>
</tbody>
</table>

**Other type-3 verbs:**
- *tān* ‘to come’
- *ton* ‘to go inside’
- *dudābāt* ‘to set fire to the bush’

*Continued on next page*
F1. Translate the following into Kairak. (8 pts)

(a) I tried
(b) They both dig
(c) We cooked
(d) They [the dogs] will kill
(e) You (sg) sleep
(f) He came
(g) You (pl) will go inside
(h) She sets fire to the bush

F2. Translate the following into English: (8 pts)

(a) rit văstămna
(b) ani kur
(c) rat sek
(d) ĕn sameŋ
(e) ra monăk
(f) un ton
(g) jia răn
(h) ut mudăbăt

F3. Provide the translations as indicated. (3 pts)

(a) If yit sal means ‘she gives birth’, what is ‘to give birth’?
(b) If ra ru means ‘they will put’, translate ‘he put’.
(c) If unit nari means ‘we both feel’, what does ani nari mean?

F4. Some of the forms are ambiguous, i.e. they do not fully distinguish the person or tense. Besides the ambiguity between 2nd and 3rd person dual (‘you both’ / ‘they both’), which other forms are ambiguous? In your answer book, complete the following statements: (6 pts)

(a) In type-1 verbs [verb form] can be either [tense] or [tense] with [person], and also
(b) [verb form] shows the same ambiguity with [person].
(c) In type-[x] verbs, [tense] and [tense] are the same for [which person].