

1 Establishing Genetic Relationship

The data below contains lexical items from Japanese, Korean, Mandarin and Cantonese. Your task is to decide whether or not one can establish that these languages are genetically related *based solely* on the given data. If you decide that it is not possible to do so, discuss the difficulties and your reasoning. If you decide that it is possible to establish the genetic relationship in this case, cite the relevant evidence for your claim.

1.1 Vocabulary

| Gloss | Mandarin | Cantonese | Japanese | Korean |
|--------|----------|-----------|----------|------------|
| star | xing | sing | hoshi | byeol |
| moon | yue | jyut | tsuki | dal |
| water | shui | soei | mizu | mul |
| fire | huo | fo | hi | bul |
| sky | tian | tin | sora | haneul |
| safety | anquan | oncyun | anzen | anjoen |
| angel | tianshi | tinsi | tenshi | cheonsa |
| family | jiazu | gaazuk | kazoku | gajog |
| police | jingcha | gingcaat | keisatsu | gyeongchal |
| health | jiankang | ginhong | kenkō | geongang |

1.2 Syntax/Morphology

I ate rice.

Mandarin

- (1) wo chi-le fan
I eat-PERF. rice
'I ate rice.'

Japanese

- (2) watashi-ha gohan-o tabe-ta
I-NOM. rice-ACC. eat-PFV.
'I ate rice.'

Korean

- (3) na-neun ssal-eul meog-eossta.
I-NOM. rice-ACC. eat-PFV.
'I ate rice.'

2 Reconstruction of Proto-Central-Pacific

| Maori | Hawaiian | Samoan | Fijian | Gloss |
|--------|----------|--------|--------|-------------|
| pou | pou | pou | bou | ‘post’ |
| tapu | kapou | tapu | tabu | ‘forbidden’ |
| takere | kaʔele | taʔele | takele | ‘cry’ |
| noho | noho | nofo | novo | ‘sit’ |
| marama | malama | malama | malama | ‘moon’ |
| kaho | ʔaho | ʔaso | kaso | ‘thatch’ |

1. List the sound correspondences that show alternations.
2. Formulate sound change rules (Pay attention to the direction of the sound change rules)
3. Reconstruct the proto sounds and forms
4. Draw a family tree based on number of innovations and shared innovations