## (J) A Vintage Sound System (1/2) [10 points]

The Chinese language was first spoken in a small area in Henan, China, around 1000 BCE, during the Zhou Dynasty. However, by the time of the Tang Dynasty ( 700 CE ), many words had changed significantly. For example, the sound -aj lost its final -j. Below is a table of some words in Chinese, according to a recent historical reconstruction of the language. Each word has two pronunciations: those of the Zhou era (Old Chinese) and those of the Tang era (Middle Chinese). (A pronunciation guide is provided on the final page.) However, some pronunciations in the table are missing.

| Old Chinese (Zhou) | Middle Chinese (Tang) | English Translation |
| :---: | :---: | :---: |
| (1) | dó | 'to come to' |
| $m^{¢}$ a | mō | 'soot' |
| rajs | ljè | 'to revile' |
| p`zk | (2) | 'north' |
| $p^{\wedge} a t$ | (3) | 'to stop in the open' |
| I'ep | dẽp | 'butterfly' |
| (4) | bãk | 'calm, still' |
| dzak | dzjẽk | 'stone' |
| braj | bjē | 'to exhaust' |
| $\eta^{\text {¢ }}$ ajs | øà | 'hungry' |
| $p^{\text {¢ }}$ eks | pè | 'favorite' |
| $p^{¢}{ }^{\text {j }}$ | $p \bar{a}$ | 'wave' |
| $d z^{\text {¢ }}$ a | (5) | 'wealth' |
| t'ep | tẽp | 'paralyzed' |
| $k^{\varsigma} e$ | kē | 'chicken' |
| na? | ní | 'ear' |
| gres | gjè | 'water-chestnut' |
| pra? | pí | 'border town' |
| ga | gī | 'his' |
| ${ }^{\text {s a }}$ aj | (6) | 'to flow' |
| grajp | gjé | 'to stand' |
| tak | tĩk | 'to go to' |
| $s^{〔}$ ks | sò | 'frontier' |
| mrajp | mjé | 'to share with' |
| be? | bjé | 'female servant' |
| raj | ljē | 'to drag into' |
| (7) | sī | 'silk' |
| I'ek | dẽk | (name of an ancient tribe, the Beidi, to the north of China) |

## （J）A Vintage Sound System（2／2）

J1．Fill in the missing pronunciations（1－7）in the table on the previous page from the following choices：$d \bar{a}$ ， $\left.d z o ̄, s a, ~ p o ̃ k, l^{〔} \partial\right\}, b^{〔} a k, p a ̃ t$ ．

J2．Match the Old Chinese words on the left to the Middle Chinese words on the right：

Old Chinese
1．$p^{\varsigma} a j ? s$
Middle Chinese
A．pjē＇humble＇
2．$p^{〔} a j$ ？
B．pà＇to winnow＇
3．pajp
C．mjē＇rice gruel＇
4．$p e$
D．pẽk＇wall（of a house）＇
5．$p^{〔} e k$
E．pjé＇that＇
6．mraj
2.

3.

4.
5.

6. $\square$

J3．Give the Middle Chinese pronunciations of the following Old Chinese words：

| Old Chinese | Middle Chinese | English Translation |
| :--- | :--- | :--- |
| kraj | $\mathbf{( 1 )}$ | ＇bridle＇ |
| $n^{\varsigma} a$ | $\mathbf{( 2 )}$ | ＇violent＇ |
| rak | $\mathbf{( 3 )}$ | ＇female servant＇ |
| $p r e$ | $\mathbf{( 4 )}$ | ＇pole＇ |
| $b^{〔} a r$ | $\mathbf{( 5 )}$ | ＇double＇ |
| $m^{〔} a j s$ | $\mathbf{( 6 )}$ | ＇dust＇ |

J4．Give the Old Chinese pronunciations of the following Middle Chinese words．If there are multiple possi－ bilities，write all of them，separated by commas．

| Old Chinese | Middle Chinese | English Translation |
| :--- | :--- | :--- |
| $(7)$ | $\eta j e \bar{e}$ | ＇to make a sacrifice to the deity of the soil＇ |
| $(8)$ | tõk | ＇to obtain＇ |

## (J) A Vintage Sound System (3/3)

J5. Explain the sound changes that occurred between Old and Middle Chinese:
$\square$

Pronunciation Notes:

- The letter ${ }^{\text {}}$ after a consonant marks pharyngealization of the preceding consonant (constriction of the throat).
$-j$ is pronounced like $y$ in English yes.
- ? is the so-called glottal stop (the sound between the two syllables of $u h$-oh).
- $\partial$ is the vowel of English cut.
- $\eta$ is the final sound of English hang.
- The symbols ${ }^{-}$, ', ` and ~ mark tones.


