

## Assignment

|     |            |                  |              |                  |
|-----|------------|------------------|--------------|------------------|
| (1) | French     |                  |              |                  |
|     | ɛəvəniɛ    | come back        | ʒə tə lə dɔn | I give it to you |
|     | ɛəvniɛ     | id.              | ʃ tə lə dɔn  | id.              |
|     | ɛvəniɛ     | id.              | ʃ tə l dɔn   | id.              |
|     | *ɛvniɛ     | id.              | *ʃ t lə dɔn  | id.              |
|     |            |                  | *ʃ t l dɔn   | id.              |
|     | lə səkɔɛ   | the secret       | ʒə t le dɔn  | id.              |
|     | *lə skɔɛ   | id.              | *ʒə t l dɔn  | id.              |
|     | lə dɔgɛ    | the degree       | ʒə tə l dɔn  | id.              |
|     | *lə dgɛ    | id.              |              |                  |
| (2) | Czech      |                  | Polish       |                  |
|     | lɔkɛt      | elbow NOMsg      | vɔjna        | war NOMsg        |
|     | *lɔkt      | id.              | *vɔjena      | id.              |
|     | lɔkte      | id. GENsg        | vɔjen        | id. GENpl        |
|     | *lɔkɛtɛ    | id.              | *vɔjn        | id.              |
|     | lɔkɛtɲii   | id. adj.         | vɔjenni      | id. adj.         |
|     | *lɔktɲii   | id.              | *vɔjnni      | id.              |
|     | dɔmɛk      | house NOMsg      | buwka        | bread roll NOMsg |
|     | *dɔmk      | id.              | *buwɛka      | id.              |
|     | dɔmku      | id. GENsg        | buwɛk        | id. GENpl        |
|     | *dɔmɛku    | id.              | *buwk        | id.              |
|     | dɔmɛtʃɛk   | id. dimin. NOMsg | buwɛtʃka     | id. dimin. NOMsg |
|     | *dɔmtʃɛk   | id.              | *buwtʃka     | id.              |
|     | *dɔmɛtʃk   | id.              | *buwɛtʃɛka   | id.              |
|     | *dɔmtʃk    | id.              | *buwtʃɛka    | id.              |
|     | dɔmɛtʃku   | id. dimin. GENsg | buwɛtʃɛk     | id. dimin. GENpl |
|     | *dɔmtʃku   | id.              | *buwtʃɛk     | id.              |
|     | *dɔmɛtʃɛku | id.              | *buwɛtʃk     | id.              |
|     | *dɔmtʃɛku  | id.              | *buwtʃk      | id.              |

|     |                 |                  |              |                       |
|-----|-----------------|------------------|--------------|-----------------------|
| (3) | German          |                  |              |                       |
|     | ʔinərəs         | inner neut.      | ʔinərliç     | internal              |
|     | *ʔinrs          | id.              | *ʔinrliç     | id.                   |
|     | ʔinrəs          | id.              | ʔinərstə     | most internal         |
|     | ʔinərs          |                  | *ʔinrstə     |                       |
| (4) | Moroccan Arabic |                  |              |                       |
|     | ktib            | write pf 3m sg   | kittib       | use to write pf 3m sg |
|     | *kitib          | id.              | *kttib       | id.                   |
|     | *ktb            | id.              | *kittb       | id.                   |
|     | *kitb           | id.              | *kttb        | id.                   |
|     | kitbu           | write pf 3m pl   |              |                       |
|     | *kitibu         | id.              |              |                       |
|     | *ktibu          | id.              |              |                       |
|     | *ktbu           | id.              |              |                       |
| (5) | Czech o – uu    |                  | Polish o – ó |                       |
|     | nuʃ             | knife NOMsg      | krɔva        | cow NOMsg             |
|     | *nɔʃ            | id.              | *kruva       | id.                   |
|     | nɔʒɛ            | id. GENsg        | kruf         | id. GENpl             |
|     | *nuuʒɛ          | id.              | *krɔf        | id.                   |
|     | nuʃki           | scissors NOMpl   | krufka       | id. dimin. NOMsg      |
|     | *nɔʃki          | id.              | *krɔfka      | id.                   |
|     | nuuʒɛk          | id. GENpl        | kruvɛk       | id. dimin. GENpl      |
|     | *nɔʒɛk          | id.              | *krɔvɛk      | id.                   |
| (6) | Czech VV- V     |                  | Polish ą – ę |                       |
|     | ʒaaba           | frog NOMsg       | zɔmp         | tooth NOMsg           |
|     | *ʒaba           | id.              | *zɛmp        | id.                   |
|     | ʒap             | id. GENpl        | zɛmba        | id. GENsg             |
|     | *ʒaap           | id.              | *zɔmba       | id.                   |
|     | ʒapka           | id. dimin. NOMpl | zɔmbɛk       | id. dimin. NOMsg      |
|     | *ʒaapka         | id.              | *zɛmbɛk      | id.                   |
|     | ʒabɛk           | id. dimin. GENpl | zɔmpka       | id. dimin. GENsg      |
|     | *ʒaabɛk         | id.              | *zɛmpka      | id.                   |

| (7) French ATR |                      | French [ə] – [ɛ] |                                |
|----------------|----------------------|------------------|--------------------------------|
| fet            | to party 1sg         | məχsəle          | to cut into pieces, infinitive |
| *fet           | id.                  | *məχsɛle         | id.                            |
| fete           | id. infinitive       | məχsɛl           | to cut into pieces, 1sg        |
| *fete          | id.                  | *məχsəl          | id.                            |
| mɛtχ           | meter                | məχsɛləmã        | id. noun                       |
| *mɛtχ          | id.                  | *məχsələmã       | id.                            |
| mɛtχik         | metrical             | apəle            | to call, infinitive            |
| *mɛtχik        | id.                  | *apɛle           | id.                            |
| alɛχt          | alert (noun)         | apɛl             | to call, 1sg                   |
| *alɛχt         | id.                  | *apəl            | id.                            |
| alɛχte         | to alert, infinitive | apɛləβɑ          | to call, future 3sg            |
| *alɛχte        | id.                  | *apələβɑ         | id.                            |
| sɛləβi         | celery               | səvβe            | to wean, infinitive            |
| *sɛləβi        | id.                  | *sɛvβe           | id.                            |
| βɛtəβɑv        | turnip               | sɛvβ             | to wean, 1sg                   |
| *βɛtəβɑv       | id.                  | *səvβ            | id.                            |
| səβɛn          | serene               | sɛvβəβɑ          | to wean, future 3sg            |
| *səβɛn         | id.                  | *səvβəβɑ         | id.                            |
| sɛkɛnite       | serenity             | səvβɑʒ           | id. noun                       |
| *sɛkɛnite      | id.                  | *sɛvβɑʒ          | id.                            |
| səβɛnəmã       | serenely             |                  |                                |
| *səβɛnəmã      | id.                  |                  |                                |

## Questions

1. Under (1)-(4), you may observe vowel-zero alternations in five different languages. For each language, determine the distribution of vowels and zeros. Give your result in form of SPE-type statements with a structural description known from rewrite-rules, but do NOT try to figure out which alternant is underlying.
2. How many different types of vowel – zero alternations are represented by these data? According to which parameter(s)?  
Nota: alternations may be optional or obligatory, this is an additional parameter illustrated by the data, but which is of no interest here.
3. It is not reasonable to assume that there are different vowel-zero alternations in nature that share all properties except one, but are instances of distinct phonological mechanisms. Rather, theory is called to be able to express the cross-linguistic variation encountered by a single device which is endowed with a parameter.  
Conceive of such a theory within Government Phonology. If you can, do the same within another theoretical framework. The mechanism you develop should not bear any disjunctive statement in its structural description.  
You will now have to decide which underlying representation you grant to the alternations.
4. Under (5)-(6), various segmental alternations in Polish and Czech are presented: they concern vowel length, two nasal vowels and [ɔ] vs. [u]/ [uu]. Determine the context in which the different alternants appear (still using SPE-type rewrite-conventions), but do not try to figure out which alternants are underlying.
5. The contextual conditions that you have established for (5)-(6) are identical with a subset of those that control the data under (1)-(4). Assuming that this cannot be accidental, try to accommodate the new facts within the theory of vowel-zero alternations that you have proposed under 3): you will have to enlarge the scope of your mechanism so that it can cover both vowel-zero alternations and those that engage alternants none of which is zero. Try to conceive of a theory which is as restrictive and general as possible, and does not contain any disjunctive statement in its structural description (or the representative thereof in non-SPE-terms).
6. Under (7), two French alternations are introduced, one concerning the ATRness of the mid front unrounded vowel, the other engaging schwa and [ɛ]. Describe the context in which the different alternants occur (still using SPE-type rewrite-conventions), but do not try to determine the underlying identity of the alternating objects.
7. The contextual conditions that you have established are identical with the ones you know from a subset of vowel-zero alternations and (5)-(6). Can you conceive of a unique and uniform mechanism that covers all alternations that are controlled by this highly specific context?
8. The major challenge raised by (7) is the fact that French is not a Slavic language. If identical contextual conditions must be ascribed to a single phonological cause, is it possible to "export" the typical analysis practised in Slavic so that it covers the French data as well? If not, what could be an alternative?
9. Try to develop a theory that is as general enough to be able to treat all data that are governed by the same context in a way that they do not appear as accidentally related. Use the tools of Government Phonology or of any other theory you wish.