## 5.1a: More on the Future Indicative: labial stems

In Lesson 3 you learned how to add **-σ** to verbal stems ending in a vowel (with no phonetic changes) and to verbal stems ending in a *dental consonant*. It turned out that dentals drop before **-σ**, so all we need to do when we transform a dental stem from present to future is omit the final consonant!

It remains to observe how stems ending in the other two types of "stops" (labial and palatal) react to  $\sigma$  when they encounter it, be it in the Future or in any other form. This is a constant phonetic transformation. The charts below should not be memorized. It is far more useful to pronounce the sounds and develop an instinct for these changes. The principle that produces these changes is very common in languages generally: assimilation. If a labial consonant, for example  $\pi$ , is followed by a rough breathing (this would not happen in the Future tense that we are studying), it will change into  $\phi$ , becoming aspirate in order to ease the transition to the following sound.

a) Labial consonants are:  $\boldsymbol{\pi}$  (unvoiced),  $\boldsymbol{\beta}$  (voiced), and  $\boldsymbol{\varphi}$  (aspirate). If followed by  $\boldsymbol{-\sigma}$  there are two steps in their transformation. First all become unvoiced, then they combine just as in English  $\boldsymbol{p}$  combines with  $\boldsymbol{s}$ : cf. upside. But in Greek there is a special letter for this sound, the letter  $\boldsymbol{\psi}$ . The following two verbs,  $\boldsymbol{\pi} \dot{\boldsymbol{\epsilon}} \boldsymbol{\mu} \boldsymbol{\pi} \boldsymbol{\omega}$  (to send), ending in an unvoiced labial, and  $\boldsymbol{\lambda} \dot{\boldsymbol{\epsilon}} \boldsymbol{i} \boldsymbol{\beta} \boldsymbol{\omega}$  (to pour), ending in a voiced labial, will both have  $\boldsymbol{\psi}$  in the future.

| present stem + <b>T</b><br>+ personal endings | present stem + <b>O</b><br>+ personal endings | present stem + <b>O</b><br>+ personal endings | = future                              |
|---|---|---|---------------------------------------|
| πέμπ- <b>σ</b> -ω                             | λείβ- <b>σ</b> -ω                             | γράφ-σ-ω                                      | πέμψω, γοάψω, λείψω                   |
| πέμπ- <b>σ</b> -εις                           | λείβ- <b>σ</b> -εις                           | γράφ-σ-εις                                    | πέμψεις, γοάψεις, λείψεις             |
| πέμπ- <b>σ</b> -ει                            | λείβ- <b>σ</b> -ει                            | γράφ-σ-ει                                     | πέμψει, γοάψει, λείψει                |
| πέμπ- <b>σ</b> -ομεν                          | λείβ- <b>σ</b> -ομεν                          | γράφ- <b>σ</b> -ομεν                          | πέμψομεν, γοάψομεν, λείψομεν          |
| πέμπ- <b>σ</b> -ετε                           | λείβ- <b>σ</b> -ετε                           | γράφ-σ-ετε                                    | πέμψετε, γοάψετε, λείψετε             |
| πέμπ- <b>σ</b> -ουσι(ν)                       | λείβ- <b>σ</b> -ουσι(ν)                       | γράφ-σ-ουσι(ν)                                | πέμψουσι(ν), γοάψουσι(ν), λείψουσι(ν) |

The Future Infinitives are, respectively,  $\pi \acute{\epsilon} \mu \psi \epsilon \iota \nu$  (to be about to send, to be going to send),  $\lambda \epsilon \acute{\iota} \psi \epsilon \iota \nu$  (to be about to pour, to be going to pour), and  $\gamma \varrho \acute{\alpha} \psi \epsilon \iota \nu$  (to be about to draw or write, to be going to draw or write).