Say after Me: A short manual and tutorial

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Contents

1 Introduction .................................................. 1
  1.1 Say after Me ............................................. 1
  1.2 About this manual and tutorial ......................... 1

2 Chinese tones ................................................ 2

3 Tutorial .................................................... 2
  3.1 Startup and program layout ............................... 3
  3.2 Playing and listening to example words .................. 4
  3.3 Recording words with your own voice .................... 4
  3.4 Comparing your recording to the native speaker example words 4
  3.5 Practicing on your own ................................... 5
  3.6 The Play Play Record button ............................. 5
  3.7 Additional tips .......................................... 5

1 Introduction

1.1 Say after Me

Say after Me is a web based program for pronunciation training developed by Johan Dahl at the Centre for Languages and Literature at Lund University. It allows students to listen to native language examples, record themselves and compare the two. Second language students may use the program when practicing intonation pronunciation (e.g. Chinese tones) of new words, e.g. from the glossary of a chapter of a text book. The program allows you to listen to how the new words are pronounced by a native speaker. To compare your pronunciation to the native speaker’s, you can record the same word with your own voice. The pitch contours of both words are displayed on the computer screen, and you can visually compare the two contours as well as listen to both words and compare the pitch auditive. The purpose of the program is to facilitate identifying – and correcting – pitch and intonation errors in your own pronunciation.

Say after Me is still under development. Future versions will include better aligning of the two pitch contours, as well as a basic automatic qualitative comment feature, where the user can get immediate feedback from the program of her /his progress.

1.2 About this manual and tutorial

This is a short manual and tutorial for Say after Me. The manual is by no means exhaustive, but only provides a sample of possibilities of the software, which is still under development to include more features as well as more exercises for several different languages.

Since the exercises in this tutorial were originally created for Swedish students of Chinese, several of the program instructions etc. are written in Swedish. English translations of Swedish words and
sentences are provided in this manual for users with little or no knowledge of Swedish. One example is the word Övningar (Exercises), which is immediately followed by its English translation within parentheses.

The author of his manual is not a native speaker of English, which may explain the large number of language errors. :-) Any comments, suggestions for improvement, supplements or reports of errors are welcome! Please address them to the IT pedagogue at it-pedagog@sol.lu.se.

2 Chinese tones

Say after Me was initially developed for a course in standard Chinese for Swedish students at the Centre for Languages and Literature at Lund University. So far, only exercises for this course have been included in the program, so this tutorial will be about practicing pronunciation of the Chinese lexical tones. Do not be alarmed! You do not require any previous knowledge of the Chinese language to be able to follow this tutorial. However, if you are interested in learning more about the Chinese tones, you can easily find a number of excellent websites with descriptions and sound examples. Try googling for ”Chinese tones”, or visit some of the following sites:

http://www.wku.edu/~shizhen.gao/Chinese101/pinyin/tones.htm

Whether you have some previous experience with Chinese tones or not, Figures 1 and 2 may be helpful.

![Figure 1: The four Chinese tones (from http://www.wku.edu/~shizhen.gao/Chinese101/pinyin/tones.htm).](image)

<table>
<thead>
<tr>
<th>Tone</th>
<th>Mark</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>dā</td>
<td>High and level.</td>
</tr>
<tr>
<td>2nd</td>
<td>dá</td>
<td>Starts medium in tone, then rises to the top.</td>
</tr>
<tr>
<td>3rd</td>
<td>dǎ</td>
<td>Starts low, dips to the bottom, then rises toward the top.</td>
</tr>
<tr>
<td>4th</td>
<td>dà</td>
<td>Starts at the top, then falls sharp and strong to the bottom.</td>
</tr>
<tr>
<td>Neutral</td>
<td>da</td>
<td>Flat, with no emphasis.</td>
</tr>
</tbody>
</table>

![Figure 2: The four Chinese tones (and the neutral tone) with short descriptions (from http://www.wku.edu/~shizhen.gao/Chinese101/pinyin/tones.htm).](image)

3 Tutorial

Say after Me is a web-based program. All you need is a computer with an Internet connection and a browser program. You can use either a PC (with Windows or Linux) or a Mac. Just make sure that the computer has Java installed (Java is normally installed when you buy most computers, but one
reason why the program may not work on your computer may be that Java is not installed properly. Use these step-by-step instructions to try some of the functions and exercises that the program offers.

3.1 Startup and program layout

1. Start *Say after Me* by entering the following into the address field of a web browser (e.g. Firefox): http://project.sol.lu.se/sam/

2. The program layout of *Say after Me* consists of three frames. In the Exercises frame at the top left of the browser window, you can select an exercise under the heading Övningar (Exercises) from a list. In the Example frame at the bottom left, the example words are displayed under the heading Exempel (Example) once you have selected an exercise (Välj en övning ovan (Select an exercise above)). The right frame with the heading *Say after Me* is the main frame where the program runs, once you have selected an example. Figure 3 shows the program layout in the browser, after selecting an exercise (but before selecting an example).

![Figure 3: Program layout of Say after Me on a PC.](image)

3. Click on the link Glosor (New words) directly under the Folder named Lektion 1 (Lesson 1).

4. The examples of Lesson 1 are now displayed to the bottom left part. Click on example [1] wo.

5. Before the first example can be loaded into the main frame, the program has to start a small Java program (this is the reason why you need to have Java installed on your computer). First an alert window is shown on the screen. If you are using a Mac, computer the alert looks like the one to the left in Figure 4. On a PC, the alert windows look like tho one to the right.

![Figure 4: The alert window shown on a Mac (left) and PC (right) the first time you select an example in Say after Me.](image)

6. Click Trust if you are using a Mac or Kör (Run) if you are using a PC to start the Java program.

7. The example is now loaded into the main frame. At the top, some information about the example word is displayed; the chinese character, latin alphabet transcription (in pinyin) as well
as translation into Swedish jag, mig (I, me). Below, the rectangle-shaped graph displays the waveform and pitch contour of the example word, both in blue colour. The x-axis shows time, while pitch, i.e. fundamental frequency ($F_0$), is shown on the y-axis. At the bottom, there are a number of buttons for playing examples as well as recording your own voice. A picture of the main frame with short descriptions is shown in Figure 5.

Figure 5: The main frame of Say after Me (on a Mac) of the example [1] wo.

### 3.2 Playing and listening to example words

1. Click the *Play* button to listen to the example word (with headphones). It was produced by a native speaker of standard Chinese.

2. Listen to the example word a couple of times (by clicking the *Play* button). While listening, pay special attention to the tone (melody) of the word. Look at the blue pitch contour and try to follow the line that moves over it as the example word is played.

### 3.3 Recording words with your own voice

1. When you have listened to the word a number of times, try to repeat the word with your own voice after the native speaker (as you probably guessed, this is where the name *Say after Me* comes from). Try to imitate the native speaker as closely as possible, especially the tone (melody). You may repeat this a any number of times to practice the pronunciation of the word.

2. When you think you can manage a fairly good imitation of the word, it is time to record your own voice. Press the *Record* button. When the red text *Recording...* appears in the graph, start speaking to record the word with your own voice (speak into the headset microphone). Press the *Stop* button as soon as you are done.

3. Your recording now appears (in red colour) in the same graph as the example word (in blue). Figure 6 shows an example of a recorded word. If your recording looks very different from the one in Figure 6, see Section 3.7, point 1.

4. You can listen to your own recording by pressing the red *Play* button (see Figure 6).

### 3.4 Comparing your recording to the native speaker example words

1. Now that you have a first recording of your own voice, you can compare it to the example word of a native speaker. Click the blue *Play* button to listen to the example, the red one to listen to your recording and the *Play Both* button to play both versions (first the example and then your recording).
2. You can also compare the pitch contours visually. Look at the shape of the blue and the red contours. Are they of the same shape? What are the differences – if any?

3. If you have identified any differences between your recording and the example word, you may want to record a new (improved) version. Follow the same procedure as in Section 3.3. You can record the word as many times as you like, and compare it to the example word. Are the two versions becoming more similar? If so, you have improved your pronunciation of the pitch, i.e. the tone of the word. Well done! :-)

3.5 Practicing on your own

1. Now that you know the basic functions of Say after Me, you can continue practicing your pronunciation of the Chinese tones by selecting other examples from Lesson 1 or one of the following Lessons. Have fun!

3.6 The Play Play Record button

1. One special feature which may come in handy after having used the program for some time is the Play Play Record button. You can press it to hear the example word twice and then immediately start recording your own voice. You do not even have to press Stop to stop the recording. However, it may take some practice to master this function, since the recording time begins and ends automatically. Try it out!

3.7 Additional tips

1. One reason why your recordings may look different from the ones shown in the figures of this manual may have something to do with how they were recorded. The longer you wait before speaking after pressing the Record button, the more silence is recorded in the beginning, and therefore more white space is shown to the left of the pitch contours in the graph. When you have spoken (and recorded) the word, the longer you wait before pressing the Stop button, the more silence is recorded at the end, and the more white space is shown to the right of the pitch contours. Figure 7 shows examples of long pitch contours resulting from short times between pressing the Record and Stop buttons and recording the word, and of long pitch contours due to long times of silence before and after pressing the buttons and speaking.

2. Figure 7 also shows an example of an pitch calculation error made by the program. This may happen if there is a background noise (e.g. someone else talking in the vicinity) or if the program cannot detect the pitch of the recording correctly for some other (program-related) reason. If this should happen to one of your recordings, you can either disregard the shorter contour (often a small dot) and focus on the longer pitch contour, which in most cases is the correct one, or make another recording of the same word. Some of the example words have similar pitch calculation errors, e.g. Lesson 1: [16] yisheng and Lesson 5: [5] daxue.
Figure 7: Examples of long (left) and short (right) pitch contours as well as an pitch calculation error for the word /1\ wo.