Lorre – User Manual

Faculty of Humanities – Leiden University

Phonetics Laboratory

Contents

Universiteit
Leiden
The Netherlands

Version 1.1 (September 2018) by R.M.M. Peeters

1. What is Lorre?

The tool *Lorre* has been developed at Leiden University to provide students with the possibility to practice pronunciation in foreign and second language learning. It is a plugin for the program *Praat* of the University of Amsterdam: a 'phonetics software package' used in phonetic and phonological research.

With *Lorre* it is possible to 1) practice with the perception of different sounds and accents (see part 3); and 2) practice with pronouncing different words or sentences by following the example of a model speaker (see part 4). The tool can also record the expressions produced by the student, and compare these with the example. *Lorre* then produces visual feedback that shows the similarities and differences between the student and the example. You can focus your feedback on either phoneme, word and/or sentence level and the program is sensitive to phrasing (temporal structure), intonation (pitch) and/or the correct articulation (mainly vowels).

2. Getting started

Once *Lorre* is installed (for install instructions, see part 7) you can start it by clicking on the start button in your desktop and browsing via 'Programmes' to the *Lorre* files. You can also add a short-cut to *Lorre* on your desktop, to enable easy access (see part 7.3). Click on a specific exercise to start the programme. Three different windows open (figure 1). The middle blue one is the *Lorre* exercise and the other two windows belong to *Praat*, which runs in the background and can be ignored.
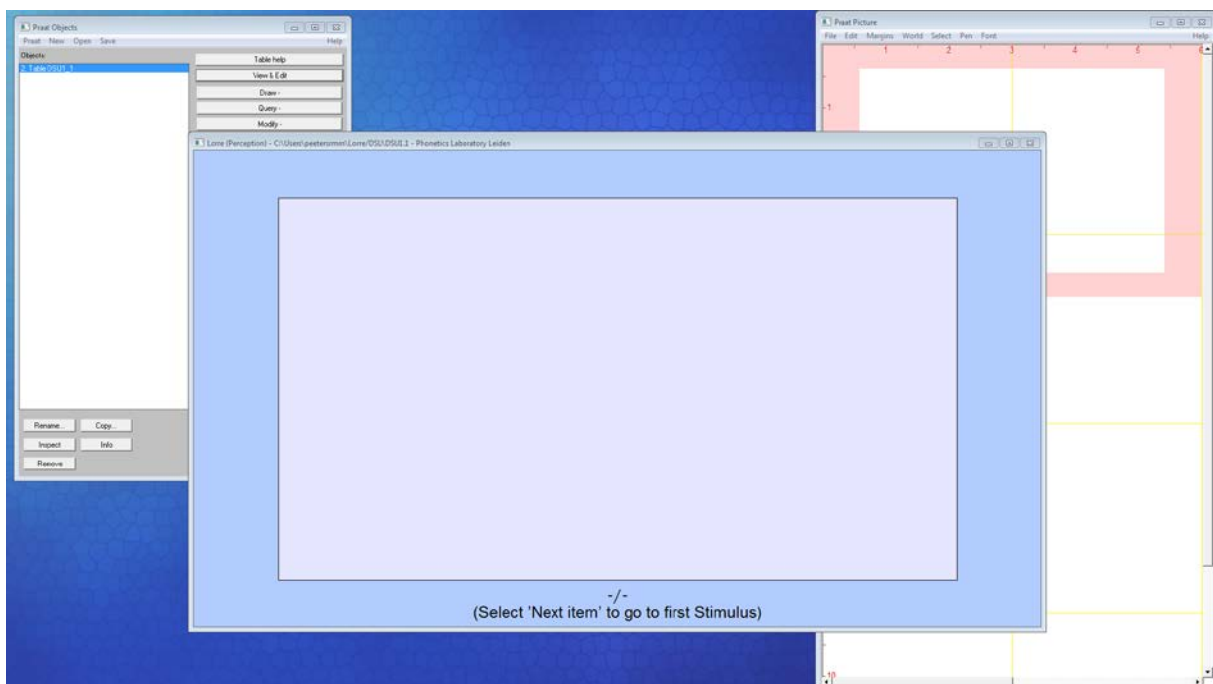

Figure 1

To start the exercise, either click on the right side of the *Lorre* window or press the → button. You can use the ← and → buttons to move back and forth between questions as well. To finish and close your exercise, press **<CTRL>** + **<C>**. You will notice that while the *Lorre* window closes, the *Praat* windows will remain open. You do not have to close *Praat* if you wish to start another exercise. If you are finished with the exercise(s), you can also close the *Praat* windows. For an overview of all shortcut keys, see part 6.
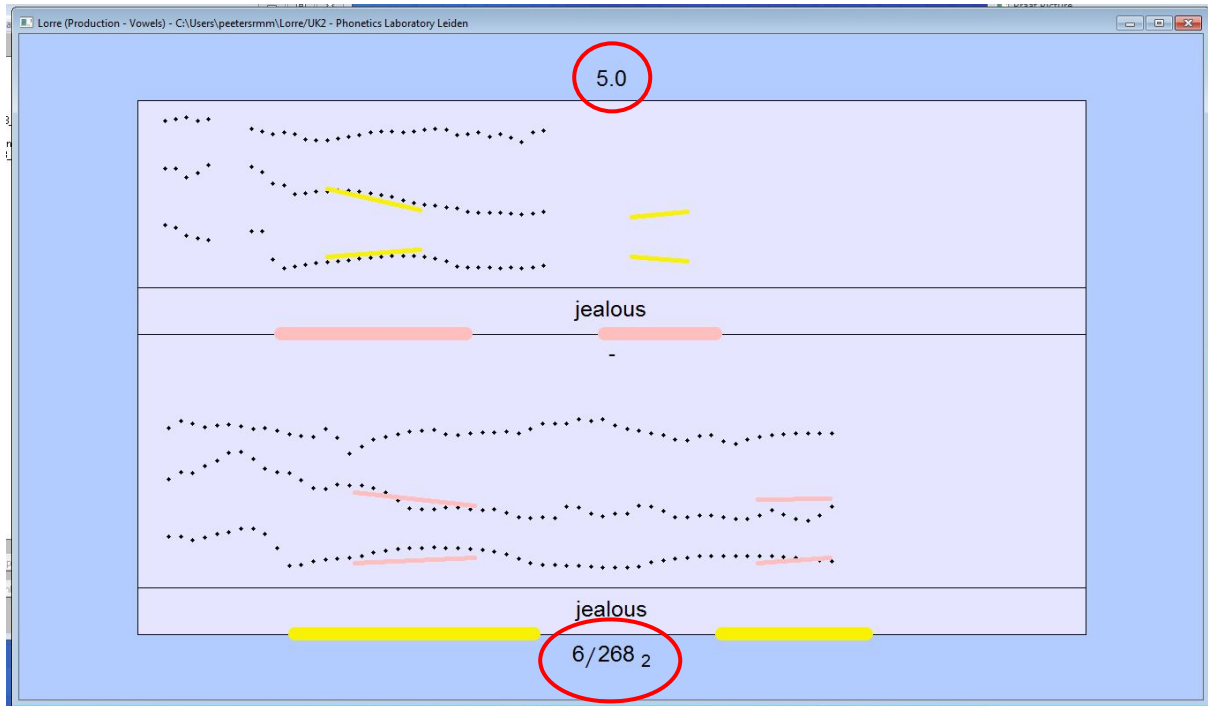

Figure 2

The *Lorre* window contains certain elements that are the same in all exercises. These are: 1) your grade (in production exercises) or your points (in perception exercises) at the top of the window; and 2) your position in the exercise at the bottom of the window. You can see in figure 2 that the grade is a 5.0. You can also see that our position is at question 6 out of 268 questions. Furthermore, there is a "2" after 268, to show that this is our second attempt at this question.

The setup of the remainder of the window depends on the type of exercise you are working on. There are two kinds of exercises: perception exercises and production exercises. If both are available for a specific sound, it is always recommended to start with the perception exercises.

3. Perception exercises

The first type of exercises that you can encounter in *Lorre* is *perception exercises*. With this type of exercise you will need to answer questions about the pronunciation of a model speaker. There are different types of questions in this exercise. With each of them you hear a model speaker pronounce

something. You are asked to pay attention to the sound, word stress or intonation. You then need to choose between two or more answers. You are not yet required to record your own pronunciation.

<u>Please note</u> that with this type of exercise, the question is only shown in the menu before you open the exercise. Once you start the exercise in *Lorre*, the question will no longer be shown.

Once a question starts, you will hear a model speaker pronounce something. You can press **<tab>** or click above the answers to play it again. The *Lorre* window will show the possible answers in different parts of the window. To answer a question, you need to click on the part that contains the answer you think is correct. Alternatively, you can press options **<1>** or **<2>**. You will hear a *high pitched sound* if you get the right answer and a *low pitched sound* if you choose the wrong one. Once you choose an answer you will automatically move on to the next question, though you can also use the ← and → buttons to move back and forth between questions (or click left or right of the answers). To finish and close your exercise, press **<CTRL>** + **<C>**. For a full overview of the mouse and keyboard shortcuts used in Perception Exercises, please <u>see part 6</u>.
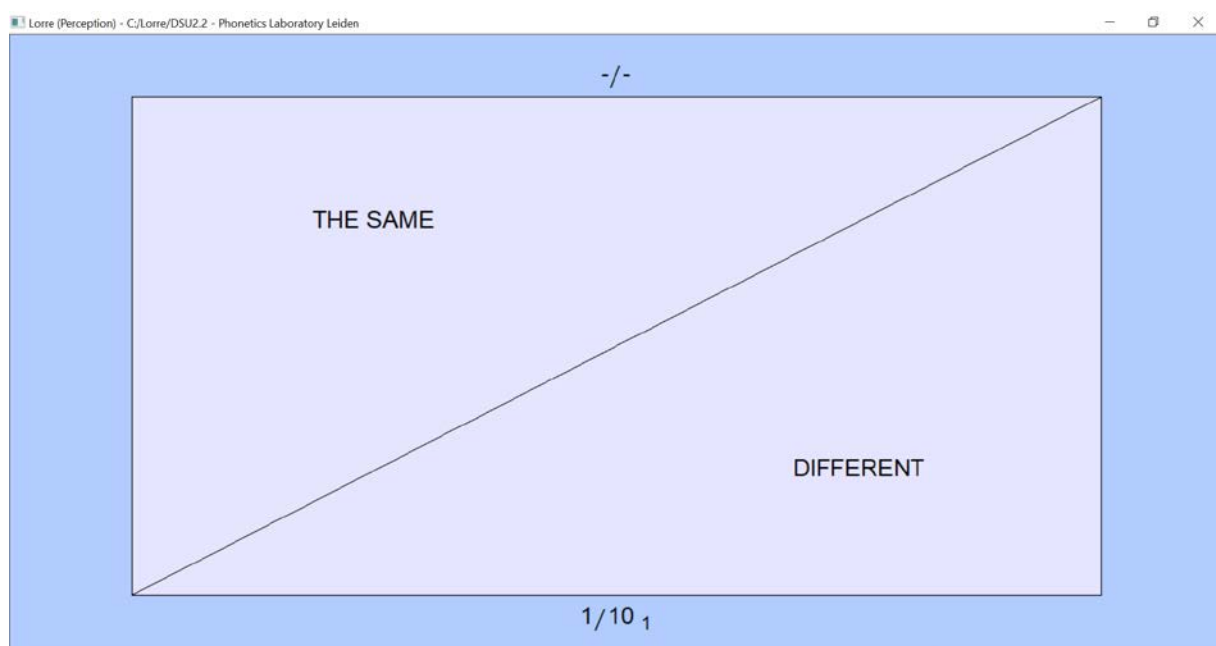
3.1 Examples

Figure 3

Figure 3 shows an example of a question concerning sound. There are different types of questions regarding sound. You can be asked:

- You can hear two words. Are the sounds the same or different?
- You can hear one word. Do you hear the sound or not?

- You can hear one word. Do you hear sound [1] or sound [2]?
- You can hear one word. Do you hear sound [1], sound [2], sound [3] or sound [4]?
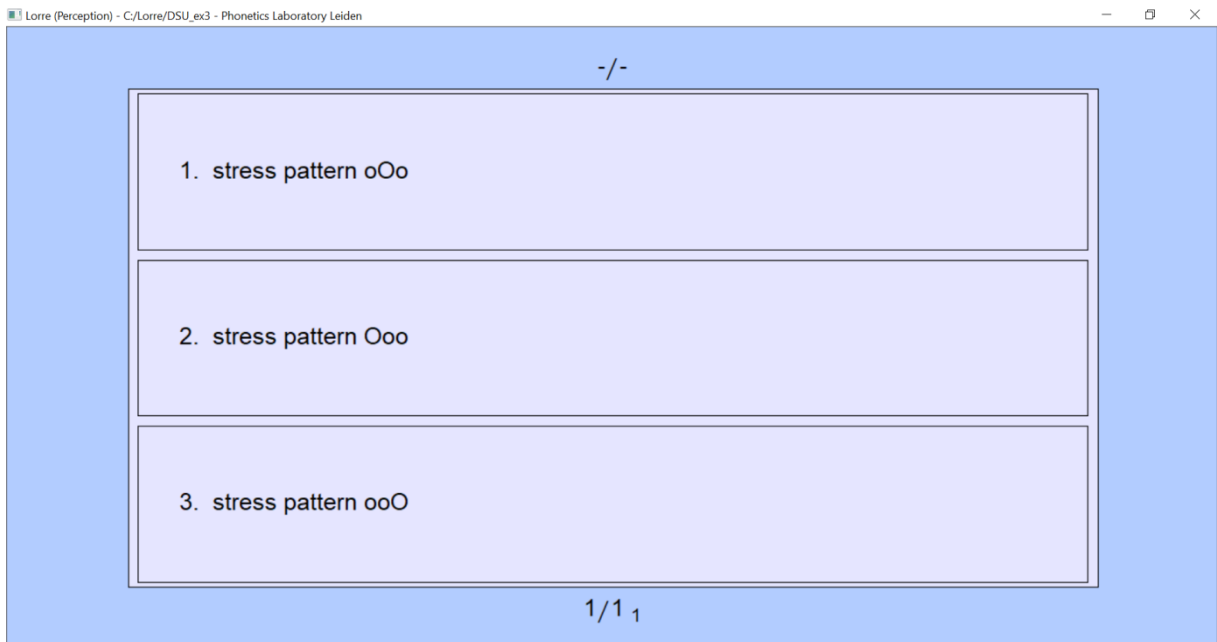
-/-

1. stress pattern oOo

2. stress pattern Ooo

3. stress pattern ooO

1/1 1

Figure 4

Figure 4 shows an example of a question concerning word stress. These questions will mainly ask:

- You can hear one word. What type of stress pattern can you hear: type [1] or type [2]?
- You can hear one word. What type of stress pattern can you hear: type [1], type [2] or type [3]?
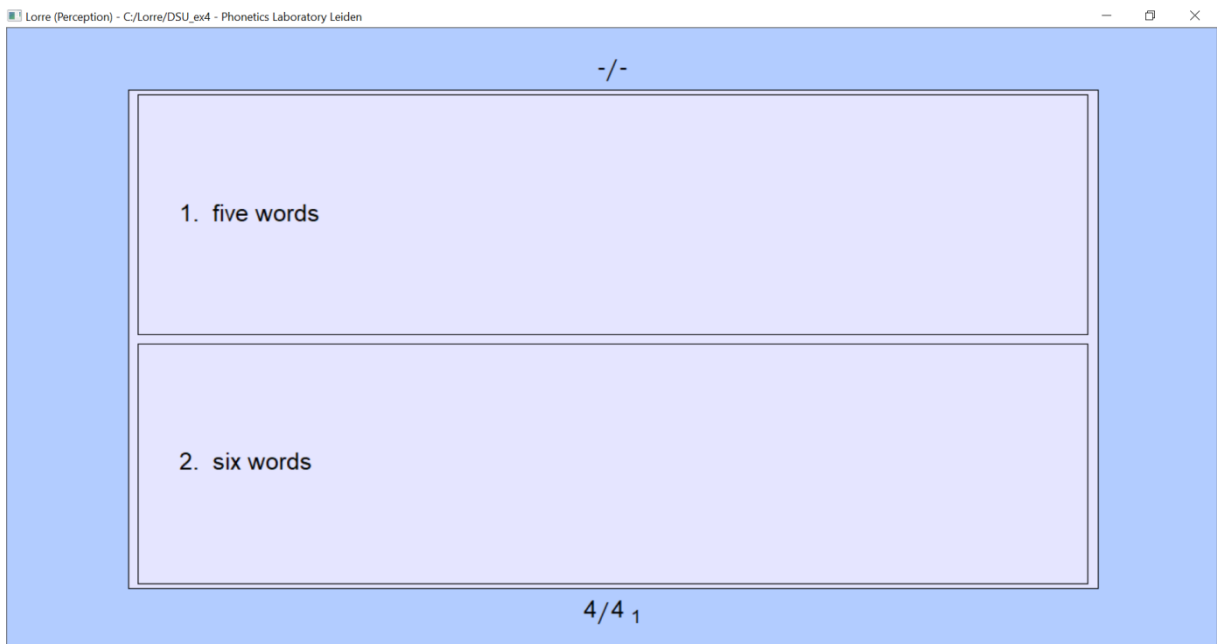
-/-

1. five words

2. six words

4/4 1

Figure 5

Figure 5 shows an example of a question concerning intonation. There are different types of possible questions. You can be asked:

- You can hear a sentence. Is this a question: [yes] or [no]?

- You can hear a sentence. How many words do you hear: [3] or [4] or [5] or [6]?
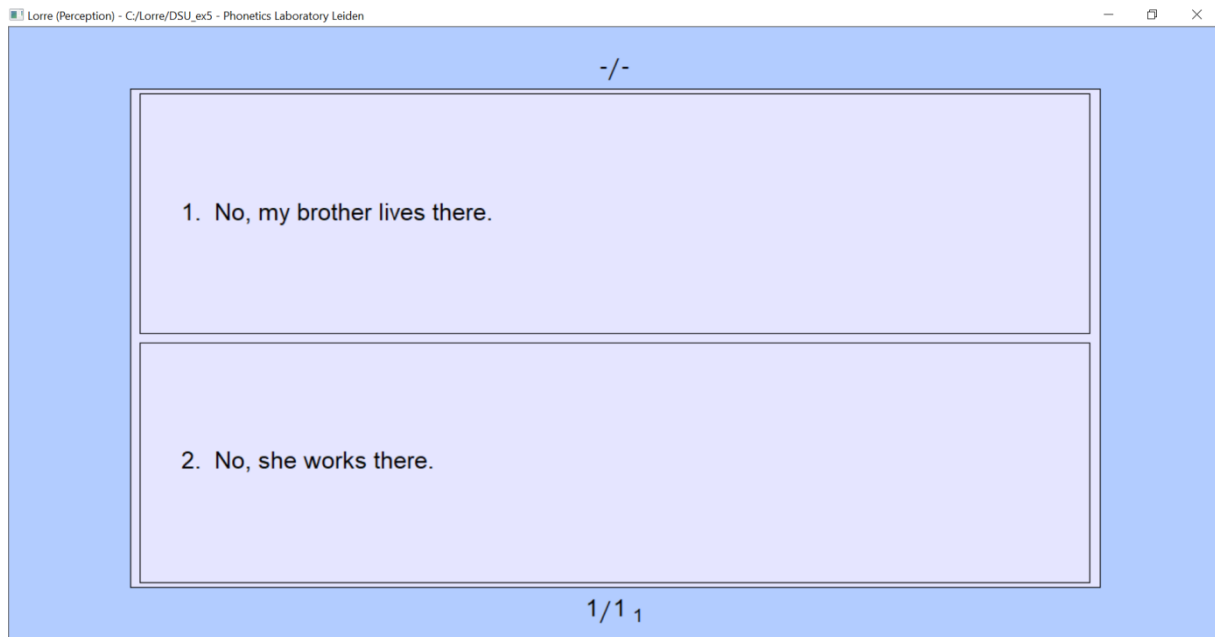
Figure 6 shows can find an example of a question concerning your understanding of a sentence. With this type of question the model speaker will produce a specific sentence or question, which you then must answer by choosing one of the options. You can be asked:

- You can hear a question. Choose the best reaction [1] or [2].

4. Production exercises

The second type of exercises that you can encounter in *Lorre* is *production exercises*. With this type of exercise you need to reproduce the word or sentence you hear. There are different types of questions in this exercise as well. With each of them you hear a model speaker pronounce something: a word, a word combination or a full sentence. You are then asked to reproduce it by speaking into a microphone. *Lorre* will analyse your speech and compare it with the model speaker. *Lorre* will then grade your reproduction and visualise the comparison.

Once a question starts, you will hear a model speaker pronounce something. You can press **<shift>** + **<tab>** or click on the sentence to play it again (or click on individual words to play those words). To record your own speech, press **<space>**. You will hear a *high beep* when the recording starts and a *low beep* when it finishes. The duration of the recording is based on the duration of the speech of the model speaker. Do not worry if your speech production is mismatched with the recording or if you receive a bad grade. It is difficult to have an exact match, even for native speakers, so the grades

should be used more as an indication. Furthermore, you can re-record as many times as you want. Just press **<space>** again to start a new recording. You can play your own recording by pressing **<tab>** or by clicking on the bottom half of the window, and switch between recordings using the ↑ and ↓ buttons. Please note that the recording you leave open in your window when you move on to the next question will be the one that is saved when you finish the exercise (via *purge*; see part 5). Furthermore, once you finish a question you will *not* automatically move on to the next question. You will need to use the ← and → buttons to move back and forth between questions (or click left or right of the window). To finish and close your exercise, press **<CTRL>** + **<C>**. For a full overview of the mouse and keyboard shortcuts used in Production Exercises, please see part 6.
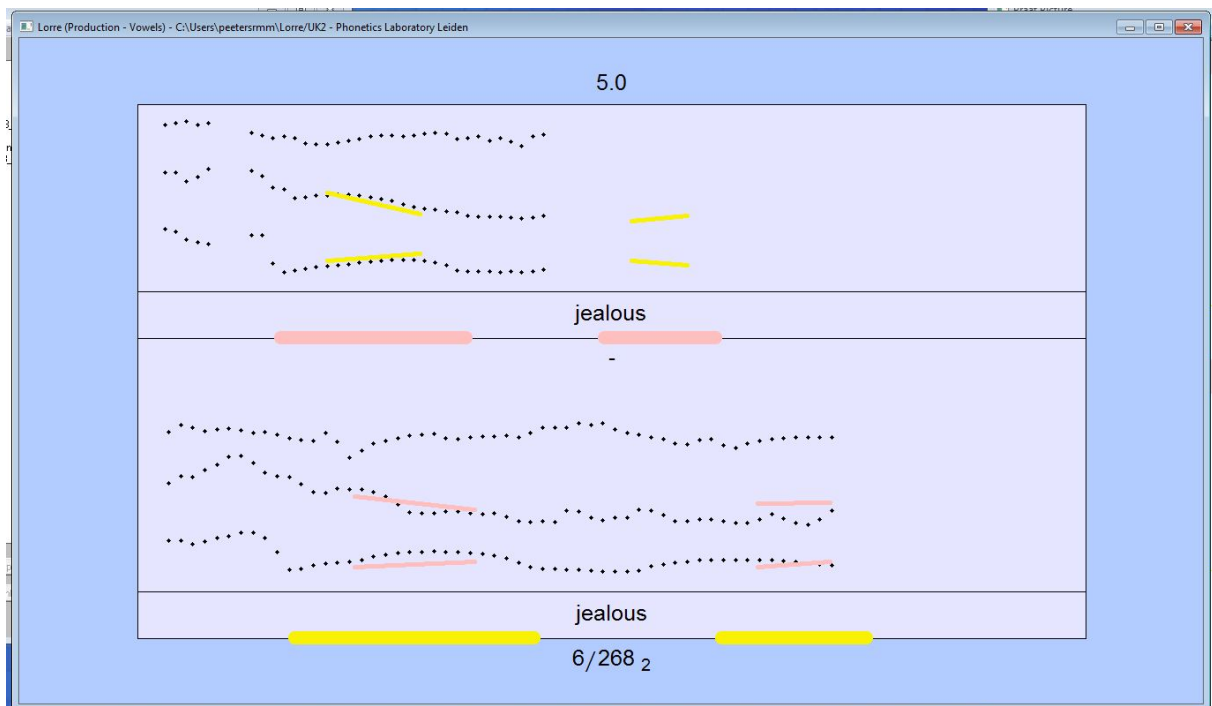
4.1 Examples

Figure 7

Figure 7 shows an example of a production exercise. There are different types of exercises. With this first example you need to reproduce one word, but there are also exercises where you need to repeat a word combination. The top half of the window shows the model speaker, while the bottom half of the window shows the student's reproduction.
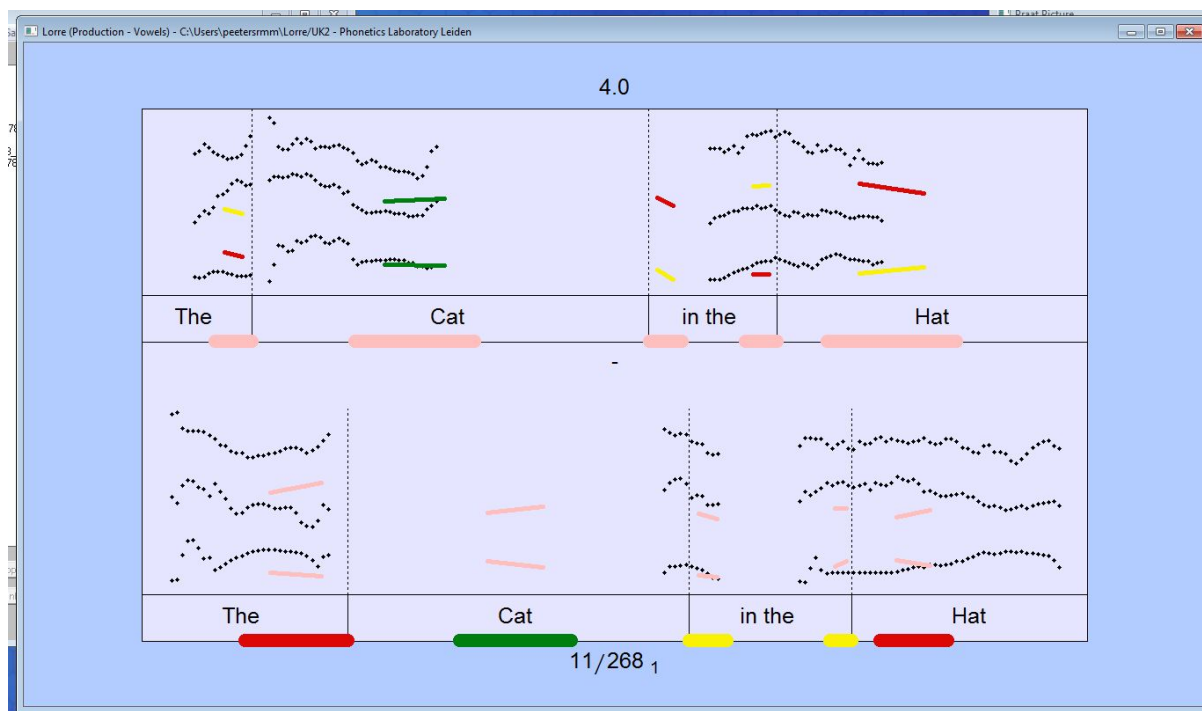
Figure 8

Figure 8 shows another example of a production exercise. There are different types of exercises. With this second example you need to reproduce a full sentence. Again, the top half of the window shows the model speaker, while the bottom half of the window shows the student's reproduction.

4.2 Modes of assessment

The *Lorre* production exercises offer four different modes of assessment, which can help visualise your speech and pronunciation. These four modes are: 1) Duration; 2) Intonation; 3) Vowels; and 4) Fricatives. They are ordered from less to more complex: for students without a background in linguistics, we recommend to use modes 1 and 2. You can access each of the modes by pressing the **<1>**, **<2>**, **<3>** and **<4>** keys on your keyboard. With each mode, both the visualisation of the model speaker and your own production will be changed accordingly, so that you may compare your own speech with that of the model speaker. As the different modes look at different aspects of your speech, your grade can also change when you switch to a different mode. However, each mode works the same: *Lorre* compares your recording with the model speaker. Your production will be coloured to show how much your production matches with the example. The colour *green* indicates a good match; the colour *yellow* indicates an okay match; and the colour *red* indicates a bad match.

The first mode of assessment is *duration* (figure 9), which can be accessed by pressing the **<1>** button on your keyboard. This mode will show you the differences in duration and realization of individual segments in both the original model speaker's production and your own reproduction.

The second mode of assessment is *intonation* (figure 10), which can be accessed by pressing the **<2>** button on your keyboard. This mode will show you your intonation, which is the variation of your pitch, compared with the model speaker. This can teach you whether your intonation patterns

closely resemble the patterns in the mother tongue of a native speaker. You can overlap the model speaker's pronunciation with your own by pressing the **<2>** button a second time.
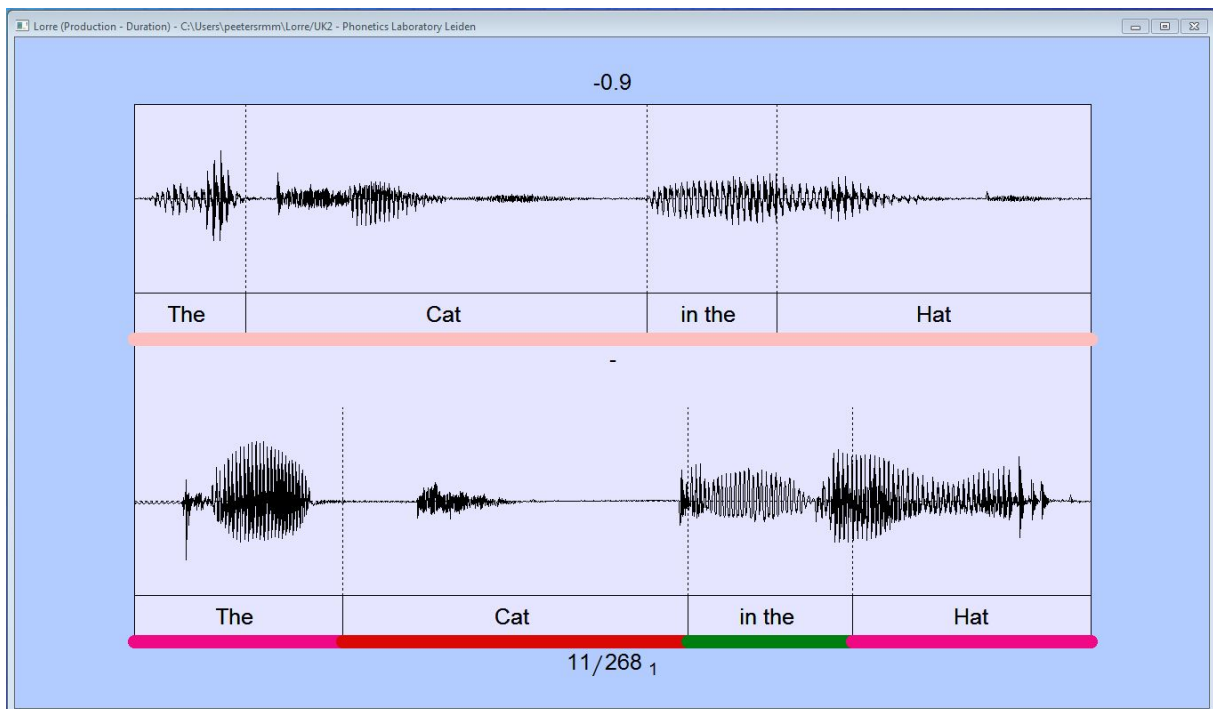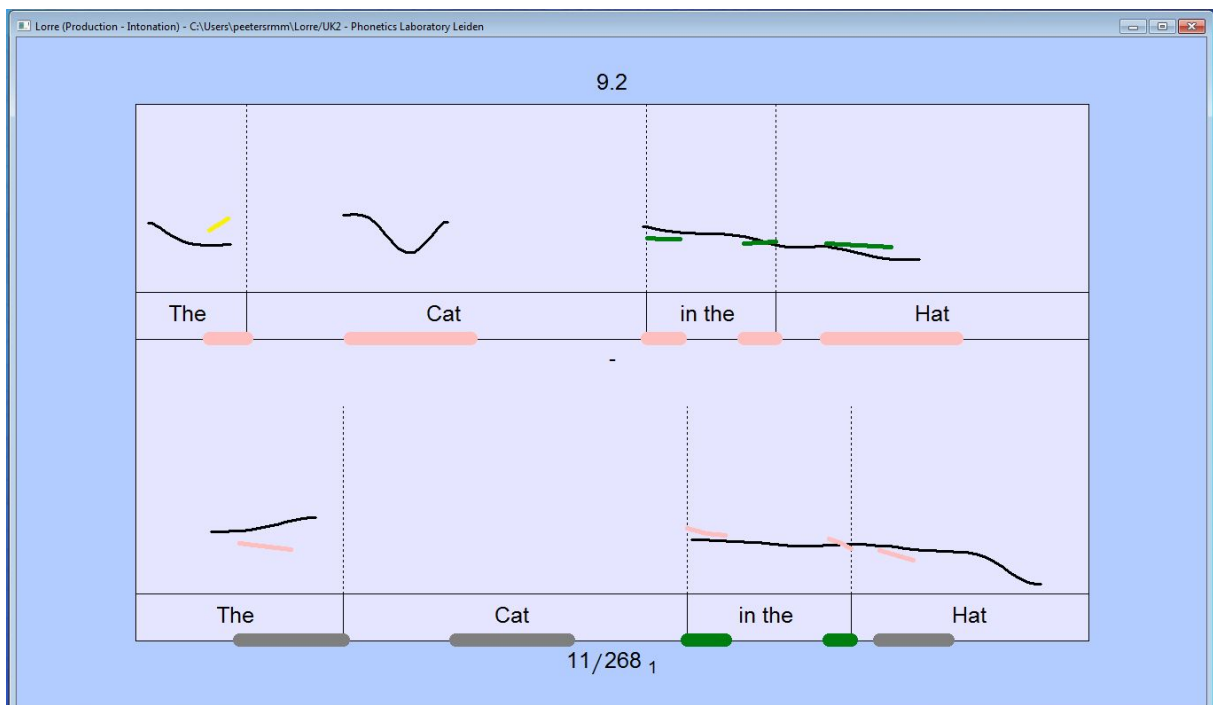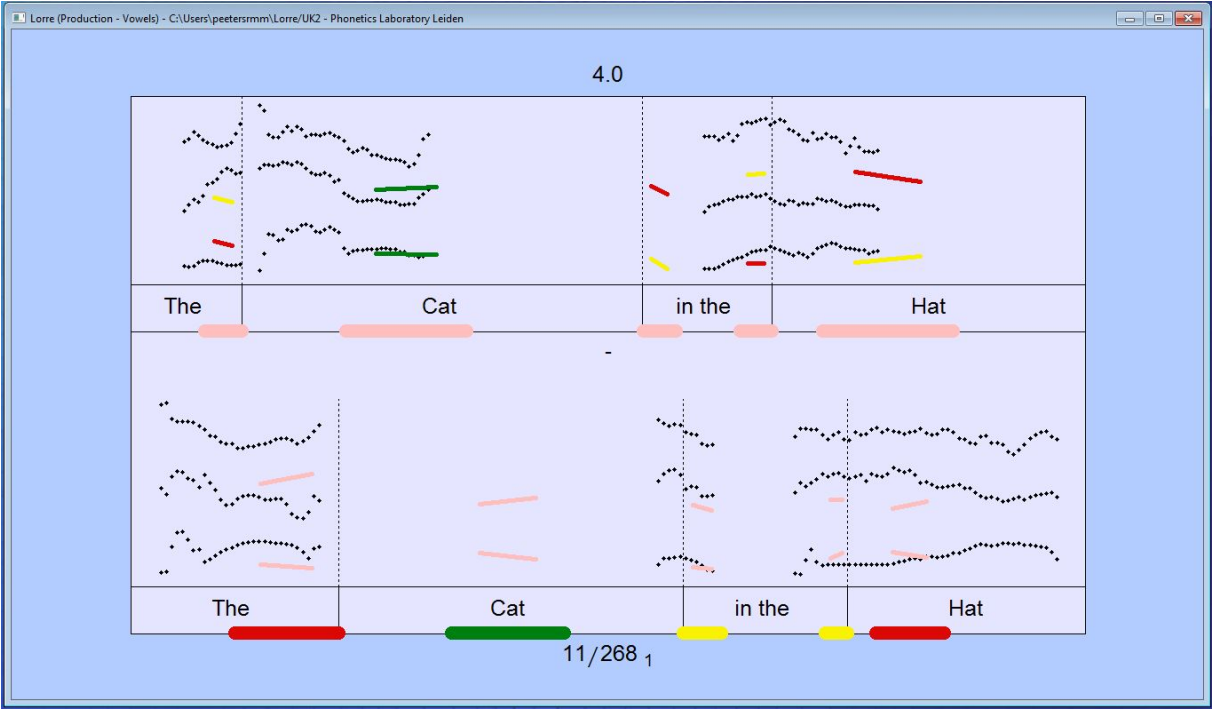
The third mode of assessment is *vowels* (figure 11), which can be accessed by pressing the **<3>** button on your keyboard. This mode will show you your articulation of vowels, compared with the model speaker. Pressing the **<3>** button a second time will overlap mode 3 with mode 4 (see below).
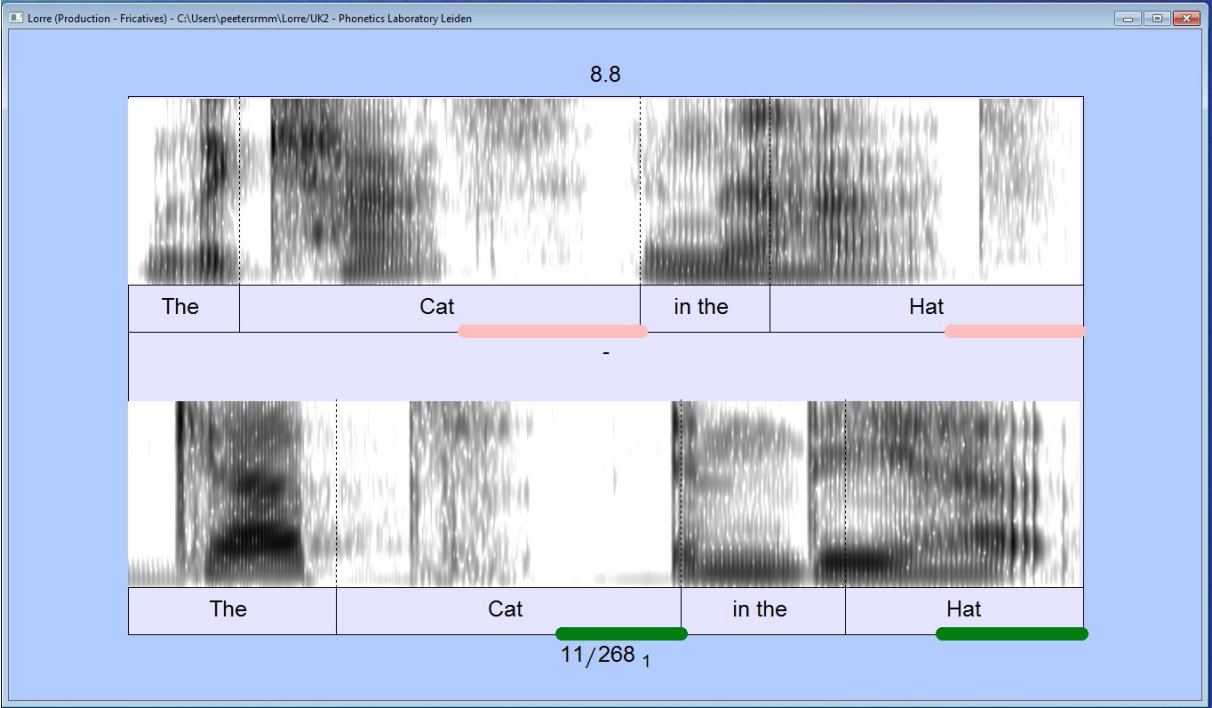
The fourth and final mode of assessment (figure 12) is a non-stylised reproduction of mode 3 (vowels), which can be accessed by pressing the **<4>** button on your keyboard. This mode will also show you your articulation of vowels, compared with the model speaker. You can overlap modes 3 and 4 by pressing the **<3>** button twice.

5. Finished?

With <u>perception exercises</u>, the pop-up pictured below (figure 13) will show once you finish the exercise. Choosing *Practise (all)* will allow you to repeat the entire exercise. You will hear the same words/sentences as with your first try. The option *Complete* will finish and re-start the exercise, allowing you to try again with the questions that you answered incorrectly on your first try. The option *Postpone* will finish and close the session, allowing you to return at a later time.
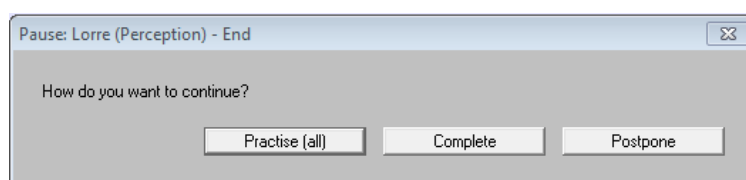
Figure 13

If you have not yet finished your perception exercise, but you wish to stop to return at a later time, you can use the **<CTRL>** + **<C>** combination to exit *Lorre*. A window will pop up, asking if you wish to Continue or Postpone. Choosing the *Continue* option will let you return to the exercise. Choosing the *Postpone* option will close the exercise, while still allowing you to return at a later time to finish.

With <u>Production exercises</u>, there is no pop-up when you finish the exercise. Instead, you can tell by the numbers underneath the words/sentences if you have completed all questions. To close the exercise (or in case you wish to stop the exercise before finishing it) you can use the **<CTRL>** + **<C>** combination to exit. The window pictured below will pop up (figure 14), asking if you wish to Continue, Postpone or Purge.

Figure 14

Choosing the *Continue* option will let you return to the exercise. Choosing the *Postpone* option will close the exercise, while still allowing you to return at a later time to finish. Choosing the *Purge* option (in the case of production exercises) will clear all of your recordings except the last one for that specific exercise.

6. Shortcut keys

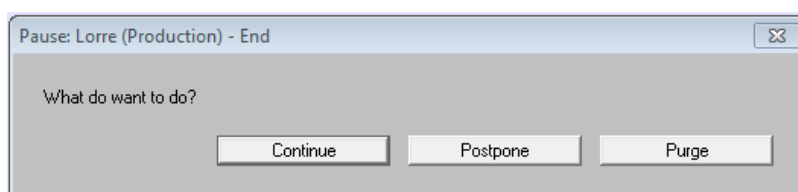You can use both your mouse and your keyboard in *Lorre*. For most actions you can use either one, depending on your preference. However, there are differences in control keys between the perception (figure 15) and production exercises (figure 16). The options are noted below.

For Mac OS: please note you need to use <SHIFT> + <Q> instead of <CTRL> + <C> to end the session.

Control keys *Lorre* (Perception)

keyboard	Mouse	Action
H	-	show this help text
→	right of box	goto next item
←	left of box	goto previous item
<tab>	over/under box	play item again
1 or ↑	upper/left area	select 1 / [THE SAME]
2 or ↓	lower/right area	select 2 / [DIFFERENT]
3	next lower area	select 3
4	etc.	etc.
E	-	edit table
shift/=	-	'toggle' *Auto Forward*
shift/_	-	'toggle' *Auto Play*
ctrl/C	-	end Session

Figure 15. Control keys for perception exercises

Control keys *Lorre* (Production)

keyboard	Mouse	Action
H	-	show this help text
→	right of box	goto next item
←	left of box	goto previous item
shift/<tab>	Upper panel	play Master
shift/<space>	shift/Upanel	show comment
<space>	(click to record)	record Student
<tab>	Lower panel	play Student
↓	under box	select earlier version
↑	over box	select later version
E	-	edit response
shift/D	-	delete response
shift/=	-	'toggle' *Auto Forward*
shift/_	-	'toggle' *Auto Play*
ctrl/C	-	end Session

Figure 16. Control keys for production exercises

7. How to install

In order to use *Lorre*, you need three things: *Praat*, *Lorre* and a headphone with microphone.

7.1 At the university

The program *Praat* can be installed on your computer in the following way: go to 'Start', 'All Programs' and 'Microsoft System Center'. Then choose 'Configuration Manager' and 'Software Center'. Here, search for *Universiteit Leiden Praat Shortcut 1.0 - Install*; select it and click on 'Install'. Please note that *Praat* has already been installed in all PC rooms at the faculty of Humanities (Lipsius building).

The program *Lorre* is not pre-installed, but will need to be added to your university profile (ULCN account). You can do so in computer room 1.14 in the Lipsius building. Once you login to your ULCN account there, you can find a 'Lorre setup' option in the Windows Start Menu. Alternatively, you can browse to the following folder: J:\Applications\Praat\Lorre\Setup.Windows7.cmd.

If you install *Lorre*, you effectively add the program to your personal ULCN account. This means that, if you go to another computer room in the Lipsius building and login using your ULCN account, *Lorre* will be available there as well. This has two advantages. The first one is that you only need to install it once and then you can access it from any computer at any computer room in the Lipsius building. The second advantage is that if Lorre is centrally updated, the exercises you're working on will not be affected by it. And by the time you need the new updates you can update it yourself. In the *Lorre* folder you will find an update entry, called 'Lorre setup' file. Click this to update your version of *Lorre*.

7.2 At home

Lorre can be used at home as well, but the instalment process is different between Windows and Mac OS. To download *Lorre* for Windows or Mac OS, browse to: http://fonetiek.ullet.net/smakman/.
Windows
Clicking on 'Download *Lorre* for Windows' will open a download or 'Save as' window (depending on your browser). Save the file at a convenient place (such as the 'Downloads' folder). Downloading may take a while, as the file contains the software for both *Praat* and *Lorre*. As *Lorre* runs in *Praat*, you need both to be able to use *Lorre*. Once the file has been fully downloaded, run it to install both *Praat* and *Lorre*. You can now access *Lorre*. To make sure everything keeps working smoothly, every month or so (or if you encounter problems) you need to uninstall the whole package. You can then download the newest version from the abovementioned website and install it in the same way. This way you make sure that you have the best and most complete versions of the exercises.

Mac OS

The software package for *Lorre* for Mac can be downloaded in the same way as the one for Windows. However, this package does not contain *Praat*, which you need to use *Lorre*. To download *Praat*, browse to: http://www.fon.hum.uva.nl/praat/download_mac.html. Make sure you download the correct version of *Praat* to use with your Mac OS version. Then, open the downloaded file and install it. You will likely receive a pop-up or notification that the program cannot be opened, because it is downloaded from the internet (or a variation on this). To install *Praat* anyway, go to 'Security & Privacy' in your 'System Preferences'. Choose the tab 'General'. You may need to click on the lock to be able to change the settings. You will then be asked if you wish to add *Praat* to your trusted sources. Do so and finalise by closing the system preferences. Once *Praat* is installed, you need to make sure that the application is added to your 'Applications' folder. If it is not, use your 'Finder' to look it up, copy it and then paste it into the 'Applications' folder. This will make it easier for you to find it later on.

Once *Praat* has been successfully installed, you can click on 'Mac OS' on the *Lorre* website to download. Since it is a zip-file, you will need to unpack to install *Lorre*. You will then see an icon that indicates that *Lorre* is not recognized as a valid program. Trying to open it directly will give you an error-message. Instead, you need to right click on the file and choose 'Show package contents'. This will show you a 'Lorre' folder and a text file with instalment instructions. Open the text file so you have the instructions at hand if necessary. Right click the 'Lorre' folder and copy it. Next, go to the *Praat* icon in the 'Applications' folder. Again, use right click and choose 'Show package contents'. Now, browse to the folder 'Contents' and then to 'Mac OS'. Here, you can paste the 'Lorre' folder that you copied before. Open the folder and then open 'Setup.Plugin.praat'. A screen will open with some text on the install process in it. Click on the 'Run' button at the top and then choose 'Run'. This will add the *Lorre* plugin to your *Praat* software. You can now close this screen, along with any *Praat* screens that you had opened. Then you can start it up again, but this time with the *Lorre* exercises included.

Finally, keep in mind that somethings may be different on Mac OS. For example, there are specific control keys for Mac, and you also need to access your exercises in a different way (see below at 7.3).

7.3 Easy access
Windows
Once *Lorre* has been properly installed, its folder will be added to your start menu. Click on the Windows start button and choose 'All programs'. Go to the *Lorre* folder, select it using right-click, and then choose the option 'Copy'. Go to your desktop, use right-click, and then 'Paste'. This will create a

shortcut to the Lorre folders. You can now use the shortcut to open the *Lorre* folder permanently. This will allow you to easily start a new exercise, without going through the entire start menu.

Mac OS

Whereas in Windows the Lorre exercises can be accessed through the Start Menu, an Apple product does not have a start menu. The exercises therefore need to be accessed through *Praat* itself. You can start up *Praat* via the icon in the applications folder. Then, you can click on the applications menu in the menu bar at the top of your screen. If you open 'Praat' you will see that a 'Lorre' option has been added. Clicking 'Lorre' will bring you to the various exercises that are available (see figure 17).

15

8. Q&A

I installed *Lorre* but no it doesn't work. What do I do?

- Make sure that *Praat* is also installed. Without *Praat*, *Lorre* will not work. See part 7 for instructions on how to install it.

- Make sure your version of *Lorre* has been updated recently. Go via Programmes to your *Lorre* folder and click on the Update folder. Then choose and run '*Lorre* setup' to update your version of *Lorre*.

I am trying to start a new exercise but I keep getting an error message. What do I do?

- Make sure your version of *Lorre* has been updated recently. Go via Programmes to your *Lorre* folder and click on the Update folder. Then choose and run 'Lorre setup' to update your version of *Lorre*.

Every time I finish and close an exercise, I get an error message. What am I doing wrong?

- You are probably closing the *Lorre* exercise by clicking on the red X (close window) button. To finish and close the exercise properly, you need to use the **<CTRL>** + **<C>** combination (or **<SHIFT> + <Q>** in Mac OS).

I (accidentally) pressed **<CTRL>** + **<C>** but want to continue the exercise. Now Lorre is no longer working. What do I do?

- If you have used **<CTRL>** + **<C>** and clicked 'Continue', *Lorre* is indeed no longer responsive. To continue with your exercise, you will need to first click elsewhere on your computer screen (for example a different folder) and then return to *Lorre*. This should solve the issue and allow you to continue your exercise.

I am working on Production exercises, but my microphone did not work (properly) and now I failed the question. What do I do?

- You can retry the production exercises as many times as you want. Just press **<space>** to start a new recording. Make sure you select your best answer by going through your recordings using the ↑ and ↓buttons before you finish and close the exercise. This way, your best answer is saved.

I want to <u>use *Lorre* at home</u>. Is that possible?

- That is indeed possible, but keep in mind that the installation process at home is different compared to the computer rooms at the university. Please see [part 7](#) for instructions on how to install. Make sure you regularly update your version of *Lorre* to keep it working properly.

I have questions that are not answered in this manual. What do I do?

- Please contact your teacher for any questions you might have on *Lorre*. If they are unable to help you, they can always contact the appropriate person instead.