

Primer for GoogleEarth

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This document is meant as a little primer for GoogleEarth (GE) and for its current usage by the MPI. For further information, please refer to the GE website: <http://www.google.com/earth/index.html>.

1. Current Usage

Currently, we simply want to show the usage of geographically-based information to access language resources. Therefore, the current GE overlay file that is distributed should only be seen as a starting point to exploit the possibilities of such systems. We have entered some of the spots where MPI and DOBES researchers are active and added some texts and pictures (when this was possible). Also, as shown in the “Yélf Dnye” site, links have been added to demonstrate possible interactions between GE and other applications such as the browsable Corpus, Lexus and ANNEX. Please be aware that the current version is at an early stage of development and certainly has drawbacks, for example some locations may not be chosen correctly and the information presented may not be what we “finally” intend to do. Any comment is welcome; if you have any, please contact Alex.Dukers@mpi.nl.

As mentioned above, to demonstrate the possibilities of GE, we have added some more options for the place where Steven Levinson works (i.e. Rossell Island, east of PNG mainland, Yélf Dnye language):

- you can select the personal site of the researcher
- you can select the entry to the node in the browsable corpus
- you can immediately look at three selected annotated video files with ANNEX¹
- you can immediately look at the lexicon of the language with LEXUS²

This is just to give you an idea of the application and of its features. Within both the MPI and the DOBES program, we will ask for comments and suggestions about how to modify and change things. However, using such a GIS system should certainly lead to show some interesting material about a given community and/or its corresponding language.

2. Is Google Earth ok?

We can anticipate that people will ask whether GE is the appropriate platform to use. We see it in a pragmatic way: the information that we add is minimal and in XML format, which means that we can transfer our application to another GIS system in a very short time. At the moment, GE seems to be a useful platform for us to test things and to offer first versions of applications.

It was an easy choice to opt for GE, since it allows us to add information very easily, and to preconfigure such information in layers which can be then turned on and off. Google is, for sure, one of the big players from which we can expect a continuous upgrade of maps, a certain continuity for some years, and a broad user community. Currently, there are several versions of GE available, ranging from a basic free version to a full-blown Enterprise edition. For Mac OS X a beta-version is available.

We are aware of the fact that with Google another monopolist might emerge, and we certainly want to remain independent. As mentioned above we see no big problems in turning over to another provider of geographic information.

3. How to get GE working

GE has two components: (1) a GE server somewhere on the net that provides geographical (and other) information; (2) a client program on your notebook or PC that allows the visualization of both geographical information and of your own stuff. These two components interact, which means that to get high-resolution maps you have to be hooked up to the Internet, as the images will continuously stream from the server to the client installed on your PC. However, the client program caches also low resolution maps, i.e. when you are working without Internet you can still run the application, you will just miss high resolution rendering [the landscape images are in fact photographs taken by satellites and aircraft, and they are being updated on a rolling basis].

¹ For ANNEX check <http://tla.mpi.nl/tools/tla-tools/annex/>

² For LEXUS check <http://tla.mpi.nl/tools/tla-tools/lexus/>

The client program has to be downloaded from the GE website and installed on your computer. To install the free GE version, just follow these steps:

- In your web browser, go to <http://www.google.com/earth/index.html>. A pop-up window will appear with the download confirmation. On Windows 7 you need administrator rights to be able to install GE (on Windows XP, by contrast, you do not need it anymore). For the MPI, by contrast, a central package is installed so that all people can make use of it and do not have to download further programs from the web. If you have questions about this, contact your system administrators.
- Once you have downloaded and installed the client program you should be able to start it. To get used to GE just play around with the various options and buttons, grab the 3D globe with the mouse in order to rotate the view and navigate to interesting spots. When your Internet connection is overloaded, or of low capacity, the interaction between the GE streaming server and your client program may be slow resulting in low-resolution textures and in slow updating of the maps.

5. How to get our demo working

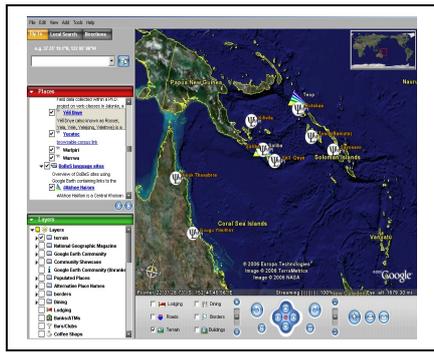
Copy the KMZ file to your disk and double click on it. This file can be obtained by going to http://www.mpi.nl/DOBES/dobesmap/language_sites.kmz. Download the file or open it in GE straight away by clicking on it in the browser. If all settings are implemented correctly, GE will start up with all the sites and the information needed. By clicking on one of the landmarks (which are listed on the left of the screen or on the 3D globe itself) the corresponding information will be shown in a pop-up window.

Our demo consists of a KMZ file (mentioned above). This file format is the usual saving option for GE files. It contains the coordinates to the sites, the displayed information for such sites, and also the links to accompanying pictures (hosted by an MPI web server). This file cannot be read with normal text tools; in case you want to alter things manually you can open and change the KMZ file into a (text) editor. To do so, first of all change the extension of the file from *.kmz* to *.zip*. Then extract this file in Winzip, a text editor (such as Oxygen for example) should be able to properly read its content. You will discover that the KMZ file actually uses XML formatting. Section 6 below shows some more information about editing.

As mentioned above, we have played a little bit with what can be done with this application. Most of the landmarks are already associated with some texts, with links to project/data example pages on the DoBes website, with a picture and with a link to the corpus entry (when possible and/or available). Please, have a look at the "Tofa" entry and in particular at the "Yéî Dnye" entry, a language spoken on Rossel Island, east of the PNG mainland. To show some of the possible options available between GE and other applications, the "Yéî Dnye" entry contains links to a personal website, to a browsable corpus, to LEXUS and to some ANNEX examples. Please, do not forget that the annotation and lexicon demos can include streaming videos, which implies that when your Internet connection is of low capacity things may get slow and/or choppy. Of course, there are solutions to this problem, e.g. importing data from GPS devices (such as Google Earth Plus and Pro), or using links to web pages not hosted by the MPI.

To visualize and play with the annotated videos using the ANNEX tool, you have to enter your user name and password, which are spread by separate e-mails. It goes without saying that you should not give this information to others. User name and password are also required when you want to access the lexicon; they can be different from the previous ones, but they are spread by email in the same way.

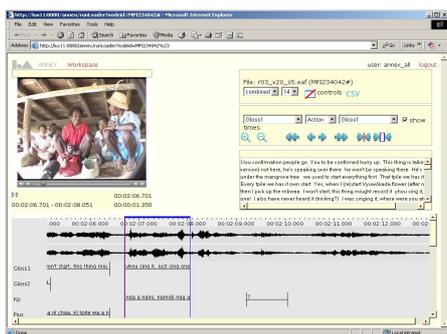
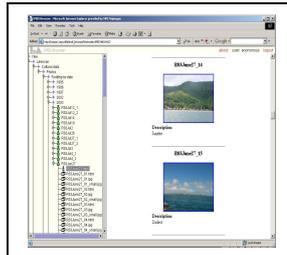
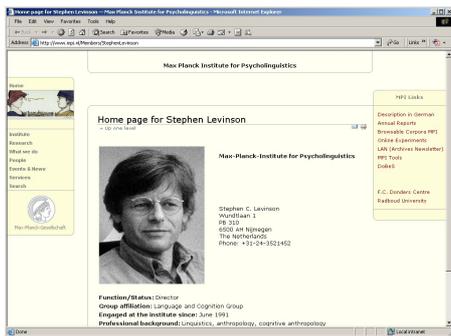
When playing with GE you should get screen layouts as follows:



Select the “Yélf Dnye” entry from the “Places” list on the left, or navigate to the site using the 3D globe.



A new window will open, showing information about the selected entry. Click on the links to open them in a separate window as shown below. To be able to view resources in this particular corpus you need to have access rights.



6. How to make changes

Now you can go ahead by right clicking the selected icon. A number of options will then appear, but here we will only explain the up-most function: **edit**. By selecting it you will see a window with an HTML-like code, which shows how the information will be rendered. For people with HTML knowledge, this is simple code where you can easily make changes and have a look at what will then happen. We include two examples of such editable files: one for the "Tofa" entry and one for the "Yélf Dnye" entry which is slightly more complex (see below).

To change the location of the entry you just have to right click again. When the information for the chosen mark is editable, you can also shift the location with the mouse by just clicking on the yellow blinking rectangular and dragging it to the desired location.

When you want to create a new mark, you simply go to a high enough resolution representation and click on the marker button (below right). At that moment a mark is created which you can shift to the right location. The edit field appears as well so that you can enter some information.

Tofa Entry

Tofa: A Turkic language of south central Siberia, Tofa is spoken by about 35 to 40 persons out of a total ethnic community of about 500 persons. Tofa is severely endangered and moribund. Given their small numbers of speakers, their isolation and their position on the extreme periphery of the Tuvan culture area, the Tsengel Tuvans may represent an exemplary case of linguistic and cultural survival.

project information

data examples

browsable corpus link

Sven Grawunder interviews Marta Kongaraeva.

By comparing the text in the edit field with the way it is rendered you can easily grasp what you have to change. As you can see in the example above the text links are created as normal references in HTML (red parts). Complex links can be entered by copying and pasting. Links to images (blue parts) are also included as in HTML. In the Tofa HTML example shown above, the image is linked from a web page on the Internet.

“Yélf Dnye” Entry

The following “Yélf Dnye” entry contains slightly more complex information. Due to the 2-column structure an HTML table construction was applied. The simple links are indicated in red. The image link is in blue; the references to LEXUS and ANNEX are in green. Adding links can be done simply by copying and pasting URLs from open web sites.

Yélf Dnye (also known as Rossel, Yela, Yele, Yelejong, Yeletnye) is a Papuan language spoken Rossel Island, Louisiade Archipelago, Papua New Guinea. Although surrounded by Austronesian languages, Yélf Dnye shows little evidence of influence by them, making this language is an isolate. Yélf Dnye is known as the language with the world's most complex phonemic inventory.

Project leader is Stephen Levinson.

<p>

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<tbody>

<tr>

<td>

browsable corpus link

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ANNEX

example 1

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<td>

<a href="http://lux15:8082/mpi/lexus/lexiconOverview.htm?

ID=2c9090c10af56b27010af5774a7e07df">LEXUS example<!--//192.87.79.53:8080/--

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ANNEX

example 2

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ANNEX

example 3

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Village on Rossel Island.

7. Procedure

We think you should play around with the application and make comments and suggestions. Where information is missing, please, send us material so that we can update the program. Needless to say, we will distribute these KMZ files at a certain moment and make them publicly available. The Volkswagen Foundation and other archives have already indicated their great interest to get and/or distribute copies of such files.

If you have any questions, remarks or suggestions don't hesitate to send an e-mail to Alex.Dukers@mpi.nl.