

Primer for GoogleEarth

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This document is meant as a little primer for GoogleEarth (GE) and its current usage by the MPI. For more detailed information we refer to the GE web site: <http://earth.google.com/>.

1. Current Usage

Currently, we simply want to demonstrate the usage of geographically based information to access language resources. The current GE overlay file that is distributed therefore 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 where this was possible. Also, as shown in the “Yélf Dnye” site, links are made 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 in an early stage and has certainly drawbacks in so far that some locations may not be chosen correctly and that the information presented may not be what we “finally” intend to do. Any comment is welcome, contact Alex.Dukers@mpi.nl.

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

- 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 some ideas what could be possible. Within the MPI and within the DOBES programme we will ask for comments and suggestions how to modify and change things. But certainly using such a GIS system should lead to showing some interesting material of the community or the language.

2. Google Earth ok?

We can anticipate that people will ask whether GE is the appropriate platform. We see it in a pragmatic way. The information that we add is minimal and in XML, i.e. we can port our application in very short time to another GIS system. At this moment GE seems to be a useful platform for us to test things and to offer first versions.

It was an easy choice to opt for GE since information can be added very easily and can nicely be configured in layers that can be turned on and off. Google certainly is one of the big players where we can expect a continuous upgrade of maps, a continuity for some years and a broad user community. Currently there are several version 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 perhaps with Google another monopolist can emerge and certainly we want to remain independent. As mentioned above we see no big problem for us to turn over to another provider of geographic information.

3. Future Potential

From recent meetings it is obvious that many researchers, projects and archives will invest efforts to exploit the geographic paradigm. It makes sense since it has many options for the researcher him/herself, but also to bring content together from various archives and even to bring content together from various disciplines. We will not elaborate on these issues here, since these advantages have been described already extensively.

¹ For ANNEX check <http://www.mpi.nl/annex>

² For LEXUS check <http://www.mpi.nl/lexus>

4. How to get GE working

GE has two components: (1) There is a GE server somewhere on the net that provides geographical and other information. (2) On your notebook or PC there has to be a client program that does the visualization of geographic and your own information. These two components interact, i.e. 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 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 aircrafts and they are being updated on a rolling basis.

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

In your web browser, go to <http://earth.google.com/tour/thanks.html>. A popup window will appear with the download confirmation. On Windows 2000 you normally need administrator rights to be able to install GE (not on XP anymore). For the MPI a central package is installed so that all people can make use of it and don't have to download things from the web. Make sure you have a recent version of DirectX or OpenGL installed. If you have questions about this, contact your system administrators.

Once you have downloaded and installed the client 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 to rotate the view and navigate to interesting spots. When your network connection is overloaded or of low capacity the interaction between the GE streaming server and your client may be slow resulting in low-resolution textures and 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/dobes_language_sites.kmz. Download the file or open in GE straight away by clicking on it in the browser. If all settings are done well, GE will start up with all sites and information. By clicking on a landmark (listed on the left of the screen or on the 3d globe itself) the corresponding information will be shown in a popup window.

Our demo consists of in a KHZ file mentioned above. This file format is the normal save option for GE files. It contains all coordinates to the sites, the displayed information for these places as well as links to accompanying pictures. A MPI web server hosts the pictures themselves. This file can't be read with normal text tools, in case you manually want to alter things you can open and change the KMZ in a (text) editor after first renaming the .kmz extension to .zip. Extract this file in Winzip and a text editor should be able to properly read the contents. You'll discover that the KHZ actually uses XML formatting. Chapter 6 shows some more information about editing information.

As said we have played a little bit with what can be done. Most of the landmarks are already associated with some texts, links to project/data example pages on the DoBes web site, a picture and a link to the corpus entry where possible/available. Please, have a look to the "Tofa" entry and in particular for the "Yélî Dnye" entry which is spoken on Rossel Island east of the PNG mainland. To demonstrate some of the possible options between GE and other applications, the "Yélî Dnye" entry contains links to a personal website, browsable corpus, LEXUS and some ANNEX examples. Please, don't forget that the annotation and lexicon demos can include streaming videos, i.e. when your network connection is of low capacity things will go slowly or get choppy. Of course other situations can be thought of, e.g., importing data from GPS devices (Google Earth Plus and Pro), 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 username and password that are spread by separate emails. It is obvious that you should not give this information to others etc. Also when you want to access the lexicon you have to enter your username and password. These can be different and will also be spread by email.

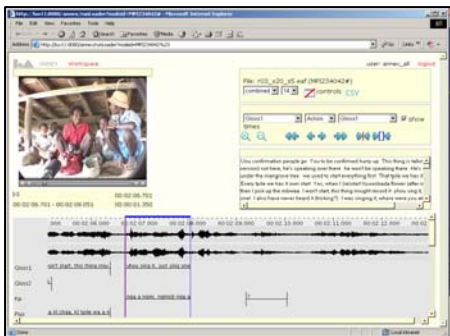
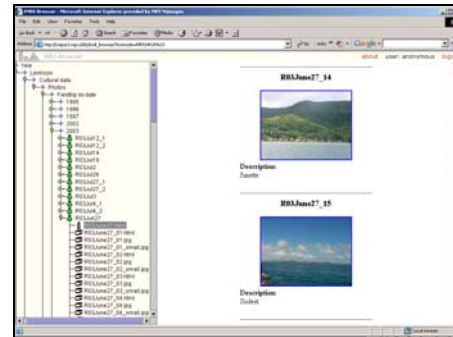
When playing with GE you should get screen layouts as follows:



Select the “Yélí 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. For viewing resources in this particular corpus you need to have access rights.



6. How to make changes

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

To change the location of the entry you just have to use the right mouse button 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

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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.
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<a href="http://www.mpi.nl/DOBES/projects/tofa/project">
project information</a>
<br>
<a href="http://www.mpi.nl/DOBES/projects/tofa/data">data examples</a>
<br>
<a href="http://corpus1.mpi.nl/ds/imdi_browser?rootnode=MPI81772%23">browsable corpus link</a>
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Sven Grawunder interviews Marta Kongaraeva.
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By comparing the text in the edit field and the way it is rendered you can easily grasp what you have to change. As you can see in the example the text links are created as normal references in HTML (red parts). Complex links can best be entered by copy&paste. Also the inclusion of links to images (blue parts) is done as in HTML. In the Tofa HTML example shown above, the image is linked from a webpage on the Internet.

“Yéli Dnye” Entry

The following “Yéli Dnye” entry contains slightly more complex information. Due to the 2-column structure a HTML table construction was applied. The simple links are indicated in red color. The image link is in blue; the calls of LEXUS and ANNEX are in green. Adding links can be made simple by just using copy&paste URLs from open web sites.

Yéli 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, Yéli Dnye shows little evidence of influence by them, making this language is an isolate. Yéli Dnye is known as the language with the world's most complex phonemic inventory.

Project leader is Stephen Levinson.

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<table style="text-align: left; width: 100%;" border="0" cellpadding="2" cellspacing="2">

<tbody>

<tr>

<td>

browsable corpus link

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ANNEX example 1

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LEXUS example<!--/192.87.79.53:8080/--></td><td><a

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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 suggest that you play with this and make comments and suggestions. Where information is missing, please, send us material so that we can update things. It is obvious that we will distribute these KMZ files at a certain moment and make them publicly available. Also VolkswagenFoundation and the other archives have already indicated their great interest to get and/or distribute copies.

In case of questions, remarks or suggestions don't hesitate to send an email to Alex.Dukers@mpi.nl.