Chapter 3.2
How to Do Maps in SPSS 10.0 to 13.0
(Authors: Douglas R. White and Andrey Korotayev © 2004)

You may want to use the latest two-week demo version of SPSS 13.0 for some of the options discussed in this chapter. It can be downloaded from http://www.spss.com/spss/

Section 2: Making Maps

Using the "Scatter" option you can also do maps. This makes much sense, as before studying correlations between cultural traits it is very helpful to study the geographic distribution of traits in question. Let us, for example, make a map specifying the geographic distribution of postmarital residence patterns. To do this map (and other maps) use file S-DATMAPnew.sav. After opening it choose the "Scatter" option. Move "Latitude" to Y Axis; move "Longitude" to X Axis. Move "Marital Residence" (v69) to "Set Markers by" box.
Press "OK". You will see the following:

In fact, it is possible to get to know much using even this map. However, such maps produced directly by SPSS are not really user-friendly. So we would advise you to edit it. To do this double click on the map. Imagine that we would like to study the patterns of geographic distribution of matrilocal vs. patrilocal residence. So click on a matrolocal residence marker (within the map itself, or in its margin), then choose in the SPSS Chart Editor menu line:

*FORMAT → MARKER*
You will see the following:
Chapter 3.2

We would advise you to choose the dark circle and the large size by clicking at the respective options:

Now click "Apply". As a result the map will experience the following change:
Now do the same with the patrilocality markers. The map will now look as follows:

Next, we would advise you to change a bit the colours. To do this choose in the SPSS Chart Editor menu line:

**FORMAT → COLOR**

Click on the markers whose colors you would like to change, select color you prefer and click "Apply". Some general advice. If you are going to use the map in your essay, thesis etc., which will be printed out with a black-and-white printer, it would make sense to observe the following points. Avoid light colors – printers frequently fail to print them out (sometimes they are not visible even in Powerpoint presentations). We would advise you the following colors which could look satisfactorily both in multicolor and black-and-white formats: dark-blue for continent contours, red for one marker, dark-grey for the alternative marker. After changing the map this way it will look as follows:
In fact, we would still advise you to make some further amendments to this map. One of the points is that in our case the marker labels are too long. It would make sense, for example, to shorten the first label from "Neolocal – separate from kin" to just "Neolocal". To do this double-click on any marker legend and you will see the following:
Scatterplots and Maps in Spss

Using this menu you could make any changes you like of both legend title and marker labels. Just do not forget after making changes to any label click the "Change" button (otherwise your changes will be lost). Finally click OK. Now the map will look as follows:
Finally, it might make sense to delete the axis titles ("Longitude in Degrees" and "Latitude in Degrees") – we do not really need them (to do this just double-click on the respective axis title, delete it in the opened window and press OK). The final version of the map will look as follows:
Now we can easily interpret the map. We see immediately that in the world of traditional cultures the dominant postmarital pattern was patrilocal. The matrilocal residence occurred much more rare, and most matrilocal cases concentrate in South-East Asia and adjacent part of Oceania, and eastern parts of both North America and South America. Note that this immediately suggests that the observed distribution of these cultural traits might be to a considerable extent a result of diffusion processes (and hence, we are confronting here what cross-cultural anthropologists call "Galton Problem" [on which see below in Chapter *]).

Now make a map of geographical distribution of matrilineal vs. patrilineal descent. To do this use variable DESCENT - MEMBERSHIP IN CORPORATE KINSHIP GROUPS (v70). If you follow correctly the algorithm specified above, you will get the following map:
Now try to interpret this map (Suggestion: a meaningful interpretation of this map could be done most easily if you compare it with the map of geographic distribution of postmarital residence patterns above).

For further examples of maps for SCCS variables you may consult the White-Veit EthnoAtlas at http://eclectic.ss.uci.edu/~drwhite/ethnoatlas/nindex.html. There the maps were made by the pre-windows MAPTAB program (White 1985, published on diskette; see http://eclectic.ss.uci.edu/~drwhite/worldcul/wldvol11.htm).

After this let us move further.

To test a correlation we would advise you to use a cross-tab option.

Thus, let us move to our next chapter.