Because an English font controls the built-in procedure window, Igor6.3x thinks that the text encoding for the procedure window is western (MacRoman or Windows-1252) and records this information in the experiment.

When Igor7 or later opens this experiment, it must convert the procedure window text to UTF-8. Since the Igor6.3x recorded the file's text encoding as western (MacRoman or Windows-1252), Igor attempts to convert the text from western to UTF-8. You will wind up with gibberish western characters where the Japanese text should be.

In this example Igor mistook Japanese text for western and the result was gibberish. If Igor mistakes western text for Japanese, you can either wind up with gibberish, or you may get an error, or you may see the Unicode replacement character (a white question mark on a black background) where the misidentified text was.

Fortunately this kind of problem is relatively rare. To fix it you need to manually repair the gibberish text.

The Experiment File Text Encoding

Experiments saved by Igor6.3x or later record the "experiment file text encoding". This is the text encoding used by the built-in procedure window at the time the experiment was saved. As explained below, Igor uses the experiment file text encoding as the source text encoding when converting a wave element to UTF-8 if the element's text encoding is unknown.

Prior to version 6.30 Igor did not record the experiment file text encoding so it defaults to unknown when a pre-Igor6.3x experiment is loaded into Igor7 or later. It also defaults to unknown when you first launch Igor and when you create a new experiment.

You can display the experiment file text encoding for the currently open experiment by right-clicking the status bar and choosing Show Experiment Info. Igor will display something like "Unknown / 6.22" or "Mac Roman / 6.36". The first item is the experiment file text encoding while the second is the version of Igor that saved the experiment file. This information is usually of interest only to experts investigating text encoding issues.

You can also see the experiment file text encoding by choosing File→Experiment Info.

The Default Text Encoding

Because it is not always possible for Igor to correctly determine a file's text encoding, it sometimes needs additional information. You supply this information through the Default Text Encoding submenu in the Text Encoding submenu in the Misc menu. Igor uses your selected default text encoding when it can not otherwise determine the text encoding of a file or wave.

You can display the default text encoding for the currently open experiment by right-clicking the status bar and choosing Show Default Text Encoding. Displaying this information in the status bar is usually of interest only to experts investigating text encoding issues.

Igor experiment files record the platform (Macintosh or Windows) on which they were last saved. In Igor6.3x and later, Igor records text encoding information for most of the items stored in an experiment file. Neither platform information nor text encoding information is stored in standalone plain text files. Consequently determining the text encoding of an experiment file is different from determining the text encoding of a standalone file. This makes Igor's handling of text encodings and the meaning of the default text encoding setting more complicated than we would like.

The Default Text Encoding submenu contains the following items:

```
UTF-8
Western
MacRoman
Windows-1252
Japanese
Simplified Chinese
```