A Radical approach to learning the Japanese *Kanji*

Mark Christie

September 2016

Dissertation submitted in partial fulfillment for the degree of

Master of Science in Information Technology

Computing Science and Mathematics

University of Stirling

Abstract

Learning a language is a difficult thing to do, and Japanese is no different. One of the most challenging aspects of Japanese is the written language, claimed to be the most difficult in the world, and the *kanji* in particular. From a western point of view, they are arcane glyphs that have meanings that seem to be assigned arbitrarily by some medieval samurai-scholar. The question is, then, how do we make these seemingly indecipherable characters into something that can be more easily understood?

In order to achieve this goal, an Android application will be created in order to allow the user to break the various characters down into their constituent parts (*radicals*) to let the user discover the logic that lies behind each kanji. It will then prompt the user to create a mnemonic story including the elements of the character, to allow them to remember it more easily. This is the system that will make the characters more decipherable.

This will be done by making use of a database that will hold data on the characters and all 214 radicals, and map each character to the radicals that make it up. The user will be able to see information on the radicals by touching the specific parts of the character in an Android Activity within the application. Given the size of this endeavour, it will not be published to the Play Store until all the kanji and radicals have been added to the database.