This study has three main aims:

1. to develop software for an indigenous kinship database and genealogy using a cross-platform Java engine;
2. to contribute to a kinship study, which will serve as a fieldwork support tool for anthropologists; and
3. to assess the importance and potential of the kinship database and genealogy in IT-based indigenous knowledge management.

Regarding the third aim, we would like to emphasize the importance of kinship data in the post-colonial era, and the need for kinship data in land rights issues and the recognition of indigenous identity, as well as the possibility of the autonomous use of this visualized kinship database by indigenous peoples in the future.

The Alliance Project, which is named after the alliance theory by C. Levi-Strauss (1969), started as the management of a kinship study for the Yolngu people of Eastern Arnhem Land, Northern Territory, Australia, and was later extended to the study of kinship in general. Alliance software is downloadable from the following website: http://study.hs.sugiyama-u.ac.jp/alliance/

**ALLIANCE PROJECT**

The main purpose of commercial genealogy software is to record a person’s genealogy and display his/her relationship in one family tree. This means a database is basically managed as one data set per family and is based on a monolineal concept, reflecting a Eurocentric image of kinship. In contrast, Alliance’s original dataset is for the
Yolngu kinship, composed of a genealogy of 3,700 people. The Yolngu have traditionally had a very complicated marriage system and great social importance is placed on affinal relationships, that is, relationships by marriage. Commercial genealogy software has never been appropriate to this kind of genealogy because their kinship system is not isolated but complexly interconnected. In other words, the number of kinship relationships is too numerous for the commercial genealogy software. Complex data management has, therefore, been necessary for these kinds of genealogies and databases.

The Alliance Project has chosen to develop a new kinship database and genealogy which can display the large genealogies and affinal relationships using a multiple window system. The system can also switch between patrilineal or matrilineal lines, according to one’s analytical focus. As a result, this system is suited to other kinship systems as well as the Yolngu system.

Records of kinship and genealogy are fundamental for anthropologists in the field, and immediate crosschecking of kinship data will provide a valuable tool for these fieldworkers. Laptop computer technology provides easy access to the records and is an ideal means for crosschecking the kinship database and genealogy. Initially, the Alliance Project invested a lot into the development of a standalone type of software for multiple platforms, called Alliance. Subsequently, a Web version of Alliance, known as WebAlliance, was developed. WebAlliance does not need to be installed into your computer, but can be used on the Internet as a server-side Java operation.

Alliance Database

The database is composed of a card-like image for each personal entry (Figure 1). The personal relationship allocates linkages with parents and spouses in a particular personal entry. Alliance will immediately draw the desired genealogy. Users can also input personal details for specific entries, thereby increasing the power of the database.

Genealogy: Standalone Alliance

Alliance allows its multi-window system to draw kinship genealogies. The number of windows that are available depends on your CPU and physical memory size. Patrilineal (Figure 2) or matrilineal (Figure 3) images are colour coded to indicate personal details, such as their clan affiliation and so on. The “trace route” function (Figure 4) is convenient for searching the relationship between two specified people.

Genealogy: WebAlliance

WebAlliance is a simplified software for Alliance. Although its servicing functions are more limited, it has been developed as an educational tool for genealogy. The system allows multi-user entry to the system at the discretion of the registered users. This function can be productively operated in a classroom setting.

DISCUSSION

The Alliance Project has developed Alliance for building kinship databases and genealogies, and a simplified Web version tool for the same purpose, WebAlliance. The project still has minor technical problems and an upgrade will be necessary in order to allow cognatic (any combination of matrilineal and patrilineal) kinship analysis.

Moving away from technical-related issues, we would like to offer some final thoughts and suggestions:

1. Protection of personal information is an important issue in any country, and a kinship database is no exception. This bank of personal information, however, is of high cultural and political value, especially as
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