Morgan had two extraordinary disciples in Lorimer Fison and Alfred Howitt in Australia. They were inspired by Morgan’s kinship schedule and were profoundly engaged in the method and theory of the collection of kinship data and its interpretation. Fison began using the schedule in Fiji in 1869. Soon after his first contact with Howitt, in 1873, they changed the method of collection of kinship terminologies. This paper traces the shift from tabulated kinship lists to family trees and the use of sticks to represent relationships (nearly twenty years before Rivers’ celebrated ‘genealogical method’), as well as efforts to find new means of representing kinship through experimentation with ‘graphic formulae’ inspired by chemical equations. These innovations first occurred through the gathering of kinship data about the Kŭnai of Gippsland, Victoria, and crucially involved close collaboration between Howitt and his Kŭnai consultant Tulaba. What was revealed in this process was an indigenous kinship system quite different from that found in other parts of colonial Australia known at the time. Fison and Howitt explained this system as transitional between two stages in terms of Morgan’s evolutionary scheme, but at the same time challenged the assumption that the general scheme could be applied to Australia. While the details of Morgan’s evolutionary stages have faded from view, the methods of collection, representation, transmission, comparison and interpretation of kinship data are still live issues in anthropology today. The kind of kinship system discovered in Gippsland involved neutralisation of the cross-parallel distinctions, distinctions that are otherwise typical of Australia. Such neutralisation can now be shown to occur elsewhere in Australia. There does indeed seem to have been a transition from a Dravidianate system with cross-parallel distinctions to ‘overlays’ of cross-parallel neutralisation, and finally a complete loss in some generations of such distinctions in the terminology. These discoveries open up possibilities of rebuilding a diachronic theory of kinship change and evolution, incorporating some of the insights of Fison and Howitt, though without their specific hypotheses, either of local developments in Gippsland or the grand scheme of Morgan.

Lewis Henry Morgan and the Kinship Schedule

Lewis Henry Morgan, who is credited with the ‘invention of kinship’ in the mid-nineteenth century (Trautmann 1987), moulded much of the early study of Australian Aboriginal kinship through the work of intellectual descendants Lorimer Fison and Al-
Fred William Howitt, whose partnership is best known in anthropology for their book *Kamilaroi and Kurnai* (1880) on the systems of social organisation of Australian Aborigines.

While most nineteenth century anthropology is considered to be profoundly Eurocentric, reflecting theories of evolutionist progress and showing little concern for rigorous methods of collecting and interpreting data, Lewis Henry Morgan’s kinship schedule, circulated around the world during the 1860s and ‘70s, was exceptional in its clarity of method in data gathering and comparison. The schedule was long, complex, required close collaboration between collector and cultural expert and crucially, was completed in the language of the expert rather than the observer. This article examines first the strengths and weaknesses of Morgan’s kinship schedule from the viewpoint of the standards of contemporary anthropology, then the use of the schedule by Fison and Howitt in the Australian colonies. The article also traces the modifications to the schedule made by Howitt and Tulaba, a Kūnai expert in Gippsland Victoria, who together devised an early genealogical method of kinship collection.

As Morgan presided over a network of correspondents who filled out his kinship schedule, he calls up the classic image of the ‘armchair anthropologist’ who collected poor quality material through ill-conceived questionnaires augmented with traveller’s tales and titbits of observation that characterised the anthropology of the nineteenth century (Urry 1972). This article argues however that Morgan and his schedule differed from other questionnaires circulating at the time for a number of reasons. Firstly, as Trautmann has shown, Morgan’s kinship schedule was developed through close collaboration with the Iroquois and then the Ojibwa people of North America; therefore he recognised the need for fine delineations in kinship terms and the importance of collecting terms in the language used if he was to determine the complexities of social organization (Trautmann 1987:93).

Secondly, Morgan’s schedule could be readily circulated: many data points were filled in all over the world by correspondents recruited to the task. As a result, he is justly hailed by his anthropological descendants for recognizing systematic typological patterns in the data that was collected, and the discovery of similar patterns in different parts of the world—such as between southern India and indigenous North America. Such studies are eschewed by many contemporary anthropologists, for whom cultural relativity outweighs universals. But it is the universality of the basic language of kinship (mother, father etc.) and its familiarity to all humans that enabled the questions in the schedule to be understood everywhere—at least in theory. In practice there were problems, as we shall see. Less revered today is Morgan’s attempt to fit these patterns together with other cultural institutions into a unilinear scheme of evolution (Morgan 1877) At the time, however, his evolutionary scheme influenced social theorists such as Marx and Engels, whose analysis of the development of human society and interpretation of the place of indigenous peoples in the ‘modern’ world was based on Morgan’s schema (Spriggs 1997).

Thirdly, unlike other questionnaires driven by the evolutionism of 19th century anthropology, Morgan’s schedule required hours of close collaboration for successful
completion. Around the world, investigators struggled with Morgan’s long, tabulated schedule and Morgan himself recognised the difficulties in the introduction to Systems of Consanguinity and Affinity (Morgan 1871:6). In contrast, the first edition of Notes and Queries on Anthropology (1874), edited by E. B. Tylor, could be filled out by missionaries and settlers with a moderate knowledge of an indigenous culture and with minimal input from cultural experts (Gardner 2006:111-114; Urry 1972; Kuklick 2011). Particularly unusual for the period was Morgan’s insistence that the material be collected in the language of the society under investigation. He admonished those who provided only literal translations of the English terms, as he was aware that such answers merely reproduced the questions and did not identify systemic kinship distinctions (Morgan 1871:6).

The complex schedule encouraged a close partnership between investigator and cultural expert. As Sutton claims in his recent ode to friendships between anthropologists and knowledge experts, the shared effort of explaining and understanding points of culture encouraged the investigator to “not merely look through another lens, but [step] through it as much as possible” (Sutton 2011:163). The result of the prolonged effort over the kinship schedule was the collection of emic data virtually unprecedented in this period, and a high level of reflexivity on the part of the investigator, which Morgan anticipated and encouraged:

Every system of relationship is intrinsically difficult until it has been carefully studied. The classificatory form is complicated in addition to being difficult and totally unlike our own. It is easy, therefore, to perceive that when a person was requested to work out, in detail, the system of a foreign people he would find it necessary, in the first instance, to master his own, and after that to meet and overcome the difficulties of another, and perhaps, radically different form. (Morgan 1871:7).

No other investigation of the period demanded this deep linguistic engagement that confirmed the alterity of the culture under investigation, yet challenged any simplistic analysis of it.

Finally, the schedule was rigorous and provided, to some extent, self-checking mechanisms for internal coherence of the terms. Those expert in reading the responses could identify apparent mistakes and demand that they be corrected or explained. Morgan recognised that it was more likely that the investigator would be wrong than the indigenous cultural expert (Morgan 1871:6), due in part to the investigator’s expectations based on their own kinship system. Morgan warned of the dangers:

As our own system is descriptive essentially, a correct answer to most of the questions would describe a person very much in the form of the question itself, if the system of the nation was descriptive. But, on the contrary, if it was classificatory, such answers would not only be incorrect in fact, but would fail to show the true system. The utmost care was taken to guard against this misapprehension, but notwithstanding, the system of several important nations was thus imperfectly procured, was useless from the difficulty, not to say impossibility, of repeating the attempt in remote parts of the earth, where it required two years and sometimes
three for the schedule to be received and returned. In some cases, where the corre-
respondent was even as accessible as India, it required that length of time, and the
exchange of several letters, to correct and perfect the details of a single schedule.
(Morgan 1871:7).

Morgan’s schedule demanded close collaboration between local agents (officials,
missionaries etc.) who puzzled over the questions and the presentation of the everyday
knowledge of the kinship relationships in their communities among local indigenous
people. The respondents became partners in the inquiry and were thus deeply involved in
the world-wide network of anthropological enquiry.

Problems with the schedule
Despite the length and rigor of the schedule (pages reproduced in Trautmann
1987:100-101) it had serious methodological deficiencies which were to cause problems
later, both in North America and Australia. The first page has ‘grandson’ and ‘grand-
daughter’ without distinguishing between the four possible kinds. Male’s DC, male’s SC,
female’s DC, and female’s SC, along with the corresponding reciprocal grandparent
terms, are distinguished in many Australian and at least some North American systems.
The echoes of this problem can be heard in the discussion below of Morgan’s North
American research, but we cannot go into detail about this in this paper.

Yet, some kinship terms–the siblings–were differentiated in the Schedule for
whether it is a man or woman ‘speaking’, that is to say a male or female propositus. The
term ‘speaking’ has been used because the Schedule assumed that the required term to be
inserted is ‘my x’. This restriction of this feature of gender of propositus to siblings is an
oddity that Fison recognised and modified in the schedule, as discussed below.

While Morgan has been acknowledged as the pioneer of kinship  studies, not all
have recognised the innovative nature of his schedule. Barnes, for example, (1984:129-
130) acknowledges the enormous pioneering contribution of Morgan while pointing out,
perhaps too harshly, some of the difficulties inherent in the method of collection of data
by means of the circulated schedule:

Morgan worked from inflexible standard schedules and generally in ignorance of
the language, culture and social organizations of his subjects, and his results con-
tain mistakes and gaps as well as often being marred by phonetic blunders. With-
out his efforts, however, for many decades there would have been little basis for
comparative studies [of kinship] … Even today his work has not been in every
respect superseded.

Kronenfeld (1998) has also shown that Morgan, in the schedule and in Systems,
made mistakes in attributing ‘Iroquois style’ equations in the kinship term sets of the
Omaha, whereas the system was, with little doubt, Dravidian, as recorded by Dorsey
(1884) with his method of using genealogies developed a few years later than, and inde-
pendently of, that of Fison and Howitt in Australia (for other problems with Dorsey’s ge-
nealogies, see Barnes 1990). Similar errors may have also occurred with most of the
other North American schedules prepared by Morgan. Having exonerated Morgan from
the charge of deliberate juggling of the results to fit a preconceived idea, Kronenfeld
(1998:92) suggests that Morgan introduced unintended bias by the way he administered the schedule questions. Specifically, he took the response to ‘paternal grandparent’s brother’s son’, which would have been the term for FFBS, and then also copied that term as FMBS, which, however, has a different term in a Dravidian system. Further ‘carelessness’ in specifying important kintypes is documented through using English terms such as ‘grandchild’ used to cover male’s daughter’s child, male’s son’s child, female’s daughter’s child and female’s son’s child, a problem built into the schedule, as mentioned above.

Trautmann and Barnes (1998), following Kronenfeld, have also found that Morgan made mistakes in the recording of terminologies. Nonetheless, they conclude that the North American systems are largely Iroquois—as Morgan found—and that Crow-Omaha skewing systems developed from Iroquois systems. Nevertheless, they agree that there are instances of an “Iroquois bias imposed on his Dravidian entries” (Trautmann and Barnes 1998:33) as alleged by Kronenfeld, and “Morgan was extrapolating from data on hand and his understanding of other principles of the system” (1998:47).

When we turn to Howitt and Fison’s work, we will see they were able to identify a system not typical of Australia. But we also find likely examples of data reinterpreted by them as ‘errors’ by informants, based on their own presumptions about how systems ‘should’ behave. The system is one with cross-parallel neutralization—‘Malayan’ (‘Hawaiian’) elements in Morgan’s terms. Trautmann and Barnes (1998:33) note the existence of variations like this in North American systems where “all of Egos’ generation are ‘brothers’ and ‘sisters’ and there are no cousins.” In such cases there is “variation between Type B [Iroquois] and a Hawaiian generational pattern since the latter does not occur in a pure form in these North American groups.” Similarly, there are no ‘pure’ Hawaiian systems in Australia—see below for discussion of regional variants. However, the point of importance not adequately considered by Fison and Howitt is the usage of older and younger sibling terms in ways not familiar to them.

**Fison, Howitt and Morgan**

Lorimer Fison received his copy of Morgan’s schedule at his Methodist mission station in Fiji in 1869 in the final stages of the worldwide hunt for kinship data and as Morgan was turning from kinship studies to broader analyses of human change. Fison was excited by the congruence of the systems of Fiji and South India—“all that is said of the Tamil and Teluqu [sic] system may be said of the Fijian also. The systems are not merely similar they are positively identical” (emphasis in the original)¹—and returned schedules on Fiji and Tonga as Morgan was working on the proofs for *Systems of Consanguinity and Affinity of the Human Family* (1871). Fison then sent handwritten copies of Morgan’s schedule to colleagues throughout the islands of the Pacific and the southern colonies of Australia (Gardner 2008). While not all missionaries shared his enthusiasm, he was able to amass considerable information and was spurred on by results that replicated the ‘classificatory’ type of kinship outlined by Morgan, together with such features as cross-cousin marriage. Fison continued the work after he returned to Australia in 1871. His early studies showed that Aboriginal people also provided good examples of classificatory and
Dravidian/Iroquois systems like those in India, North America and Fiji, but with a very different background culture; this raised many questions about Morgan’s evolutionist ideas.

In 1873 Alfred William Howitt responded to Fison’s request for assistance and became his collaborator in the study, culminating in their joint publication, *Kamilaroi and Kurnai: Group Marriage and Relationship, and Marriage by Elopement* (1880). Howitt brought a strong scientific perspective and links with a number of Aboriginal groups to the partnership. In the previous twenty years he had led expeditions for the colonial government throughout south-eastern Australia and was a close reader of the scientific tracts of the 1860s and ‘70s. His early interest in geology–stratification and deep time–influenced his evolutionist analysis of the Aboriginal people who guided him through their country (Walker 1985; Keen 2000). As a reward for his efforts to find the lost explorers Robert Ohara Burke and William Wills in central Australia, he was made a magistrate in Gippsland, Victoria in 1862—a job which took him to many different bush locations and into close contact with the Kūnāi people who had already suffered through colonisation and were losing touch with some aspects of their traditional culture. He began to research these matters, though he lacked a systematic approach and was therefore excited by Fison’s call for help in filling out Morgan’s schedule. Immediately the two men formed a team armed with intellectual curiosity, direct links to the primary researcher in the world in these matters, and, in Howitt’s case, close ties with, and knowledge of, Aboriginal people.

Fison and Howitt were different from Morgan’s other correspondents. They were intermediaries in the hierarchy of research, but were also deeply involved in the intellectual questions raised by the study and shaped the results and ideas in their own right. They, in turn, were at the center of a system of correspondents through Australia and the South Pacific, and through them of a circle of indigenous experts. Their interaction with local indigenous people in Australia led them to disquiet about the method and to the development of new ways of recording and representing kinship terminologies. Ian Keen (2000:94) depicts their interaction with Morgan as follows:

> Like Lorimer Fison, Howitt can be seen in some ways as a satellite of Lewis Henry Morgan, both in being inspired and directed by his schemes, and in providing data for his theory and weaving their data into broad, regional syntheses.

Information and understandings circulated back to Morgan, through Fison and Howitt’s dogged correspondence with their mentor (Stern 1930a, b). Morgan undoubtedly had a fascination with Australia but found it puzzling. As his unilinear evolutionary scheme became further entrenched with the writing of *Ancient Society* (1877), cracks emerged in the façade, which his Australian colleagues pointed out to him. In the end, some key new information from Australia sources in the 1870’s was not incorporated into that work, although the subsequent publication of work by Fison and Howitt did influence other scholars.

In Australia, interpretations of the schedule forced Australian Aborigines onto the ‘lowest rung’ of Morgan’s evolutionary ladder of kinship development. They were ad-
judged to be at the stage of ‘group marriage’ and ‘primitive promiscuity’ simply by the presence of certain kinship equations. Yet Fison, and to a lesser extent Howitt, felt some disquiet about the simplistic correlation between the evolutionary indicators and the extraordinarily diverse Australian marriage patterns. Closer analysis revealed that they did not fit easily with Morgan’s schema (Fison and Howitt 1880; Gardner 2008, 2009). The case we examine in this article, the Kūnai (also Kūrnai, Ganai, or Gunnai [Keen 2004:8]) of Gippsland, Victoria, makes this evident. In their book, Fison and Howitt did support Morgan’s evolutionary scheme with its lowest rung involving ‘group marriage’, but in order to do so they claimed that the Kūnai were an exceptionally ‘advanced’ group who had moved into the ‘syndasmanian’ (pairing marriage) stage as a result of the movement of another group of people into the area—for which there was very little evidence.

As others around the world had already discovered, Morgan’s long tabulated schedule was very difficult to complete. Further problems were encountered in Australia. The rigor and comprehensiveness of the schedule proved to be a problem when it came to finding able correspondents. The schedule was extremely long: Fison’s version, printed in Sydney in 1871 with some modifications to Morgan’s, was 11 pages with nearly 200 terms. It required careful and exhaustive investigation for successful completion. Fison found that even those happy to assist in the gathering of material were worn down by the difficulty of the task. Many sent back incomplete schedules and had to be coaxed to provide missing terms. Fison worked through colonial networks to identify administrators, police and settlers who had an interest in local cultures. Many of the most important contacts were other missionaries who were professionally engaged with reconciling different cultures and social customs with Christianity while struggling with scientific efforts to claim the big ontological issues in the latter part of the nineteenth century, such as Darwin’s question in the Descent of Man (1872): “Are humans one or many species?” (Kenny 2008; Gardner 2011). Missionaries were drawn to Morgan’s study through his argument that kinship similarities across vast differences were proof of the single origin of humankind.

Problems with the schedules were experienced around the Pacific—for example the Hawaiian schedule was filled out with strong influence from English by King Kamehameha IV. The situation in the Australian colonies was more complicated and demanded innovative responses. Aboriginal people in south eastern Australia were being overwhelmed by the rapid spread of settlers and suffered high mortality rates from disease and violence. The population of the five related Kūnai groups, Howitt noted, dropped from approximately 1000 to 1500 in the 1840s to 140 in a census taken in 1879. Under these circumstances, the Kūnai were forced to speak the language of their colonisers. Howitt reported he had a “slight knowledge of their language” and that many of the Kūnai people had a “fair” grasp of English, thus explanations and discussions were almost certainly in English (Fison and Howitt 1880:181-6).

At first Fison tried to make the schedule more amenable to the kinds of kinship terminologies encountered, while not changing its basic method. By 1873, however, frustration with the schedule on the part of the local collectors and local indigenous consultants reached such a point that Kūnai cultural expert Tulaba (also Toolabar), working
jointly with Howitt, came up with a completely new method based on genealogies of actual people, preceding Rivers’ “genealogical method” (1900, 1910) by nearly 20 years.

Changes in the ‘Gender of Propositus’ Dimension in the Schedule

The Morgan schedule required people to fill in terms for ‘my [relation]’. In actuality that was not literally followed in all cases. But in many of the Victorian languages (as in a number of Northern Australian languages and many American Indian languages) there is no form for ‘father’ alone, so one has to say ‘my father’ or ‘your father’ etc. In the revised version of the instrument for collecting kinship terms (1874), which will be discussed below, what is being asked is no longer ‘my [relation]’ since terms used by people other than the person being consulted are required. The new method required all pairs of people on an elicited genealogy to have the kinship terms used between them recorded. Somewhat anomalously, the term for ‘my’ in the local language is still required, once only, not conjoined with a kinship term. In any case, this would not work with those languages in which the possessive pronoun is part of the kinship term itself and the term for ‘my’ used for other nouns may not be used with kinship terms.

One oddity which emerged from this, and is with us in anthropology to this day, is the use of the phrase ‘man speaking’ or ‘woman speaking’ to refer to what actually should be referred to as male or female propositus. This is due to Morgan’s usage in the early forms of the schedule where the question asked is a translation of ‘my relation’—so in this case alone ‘man speaking’ and ‘woman speaking’ are appropriate. Otherwise it is misleading. For instance, some languages may have different terms in men’s and women’s speech and describing this would be the correct use of the term ‘man vs. woman speaking’.

Aside from that, though, there is another oddity in Morgan’s schedule. Only some of the terms have options for so-called ‘man vs. woman speaking’ (i.e., male vs. female propositus), as noted earlier. Presumably the selection of the terms for which this feature was required related to those terms for which this distinction was significant in the languages that Morgan first encountered. With Australian languages, however, Fison and Howitt realised that more terms required this distinction to be made than those allowed for by Morgan and a revision of the schedule produced in 1872 extended this to all terms.

This considerably lengthened the schedule, which was a further problem for those who were already having problems with it. However, one advantage of this innovation was that some reciprocals that were not properly catered for in the original Morgan schedule could be properly recorded. For instance, in many Australian languages there is a lexical distinction between grandparents on the basis of paternal/maternal (cross/parallel); for example, MM and FM are different. Also their reciprocals, female’s daughter’s child and male’s daughter’s child, must be distinguished. Lack of attention to these important distinctions also caused problems with Morgan’s schedule in North America as noted above.

Fison’s first schedule, copied from Morgan, was used by some correspondents, including George Taplin for the Ngarrindjeri in 1872. Schedules revised by Fison in 1872 to incorporate male vs. female propositus (‘speaking’) were filled out by Vogelsang
for Dieri in 1874. The ‘male speaking’ condition can be seen on the left in Figure 1 and
is represented by dittos; ‘female speaking’ occurs on later pages (not shown).

The above examples also illustrate a kinship system in which, unlike that of the
Kūnai, cross-cousins are rigorously distinguished from siblings. This will become impor-
tant in the discussion of the Kūnai system below. Parallel cousins in Dieri (Diyari) are
equated with siblings: MZD = FBD = eZ (kaku) or yZ (ngathata). These are distin-
guished from cross-cousins, who are all called kami, which also means FM(B).5

![Figure 1: 1872 Schedule filled in by Vogelsang for Dieri (Diyari), Cooper’s Creek, South Australia.](image)

The Move to the Use of Genealogies in Kinship Terminology Collection

Mulvaney (1970:206) describes Howitt's modification of the Morgan kinship question-
naire through eliciting genealogies by using sticks as a “landmark in the history of Aus-
tralian anthropology.” but does not go into detail in that paper. Instead, he refers to his
contribution included in Come Wind, Come Weather–Howitt's biography by Walker
(1971) that appeared the following year. As far as we can tell, neither Fison, Howitt nor
anyone else in any publication referred to this change in method until Mulvaney. Fison
and Howitt’s Kambiloi and Kurnai included details of the Kūnai terminology but not the
methods of elicitation (1880:236-242). Stocking, recognizing the significance of this,
also refers to Howitt’s use of sticks in the collection of genealogies in his insightful vi-

In May 1873 Howitt posted to Fison a short list of kinship terms from his Kūnai
friend Tulaba (spelled Toolabar in the Fison and Howitt papers), from the Brabroloong
people in the remote region of Gippsland.6 In response, Fison sent his version of Mor-
gan’s schedule to Howitt7 and included a paper on Aboriginal kinship by Morgan that was
presented to the American Academy of Arts and Sciences in 1872.8
As with others before them, Howitt and Tulaba found the schedule immensely difficult. Fison’s schedule included questions such as the term for “my mother’s mother’s sister’s daughter’s husband (male speaking)” and the term for the “son of son of a brother to son of son of brother’s sister.” As Fison had already discovered to his immense annoyance, few filled in more than a few terms per page. Where a group worked together in filling out the pages and discussed and debated the terms amongst themselves, the results were more successful. For example, the missionary couple Mr. and Mrs. Fuller, working with the Queensland Fraser Island people, filled out a relatively complete schedule but noted that they gave up afternoon school “day after day” to do so. Crucially, Fuller noted that to keep track of the discussions on kinship, he represented them with “pieces of wood on the ground,” the earliest example of kinship representation beyond the tabulated schedule.  

The Returns should be forwarded by post to
THE REVEREND LORIMER FISON,
Care of R. Brough Smyth, Esq.,
Collins street east,
Melbourne.

INSTRUCTIONS FOR ASCERTAINING THE TERMS OF
CONSANGUINITY AND AFFINITY IN USE AMONG THE
AUSTRALIAN ABORIGINES

1. Ascertain the family relations of some one aborigine.
2. Construct a Family Tree with the names of his father, mother, all his relations, and his connections by marriage, as in the annexed Genealogical Table (or Family Tree), taken from one of the Gippsland tribes.
3. Affix a number to each name.
4. After the figure preceding each name, insert M or F, as the person named is male or female.
5. In any case where the name of a person cannot be ascertained, it will be sufficient simply to distinguish the sex, and to affix a number. Thus, if in annexed table the names of Nos. 14 and 15 had been unknown, the entry would have been—14. Daughter; 15. Son—and would have answered every purpose.
6. In all cases, arrange brothers and sisters in order of seniority. Thus, in the table annexed, Sophy being placed before Edward, it is taken for granted that she is his elder sister. So also it is taken for granted that Bemblers is older than Bruther. This is a point of the greatest importance. Inaccuracy here would seriously impair the value of the information supplied, and cause endless difficulty.
7. Having completed the Family Tree, enquire by what term of relationship each person named therein addresses each one of the others. Take them in order, and write down the native word for each term as explained in the Table annexed.
8. In like manner, construct and work out a Genealogical Table of the wife (if any) of the informant.
9. Write down, once for all, the native word for ‘My’. It will not be necessary to repeat it in connection with each term of relationship. But if (as is the case in certain dialects) it be incorporated with any term, add a note, giving the term first by itself and then with the addition of the possessive pronoun.

Figure 2: Instructions for use of genealogical method of eliciting terminology sent out by Fison (1874) (Mulvaney).

Tulaba and Howitt were working alone and made little headway at first. However, as Fison related to Morgan in a 16 page letter sent on the 17th of June, Howitt did not give up and instead sought a more straightforward means of obtaining the information. In his letter to Morgan accompanying the Kūnai material, Fison described Howitt’s response to the problems:
He found it impossible to make any headway in my schedule. Toolabar soon grew hopelessly bewildered, utterly failing to take in the idea conveyed by a term such as ‘my father’s, father’s sister’s son’s daughter.’ But Mr Howitt, after getting as many terms as he would give, did not abandon the attempt in despair after the manner of but too many of my correspondents. He hit upon a simple yet ingenious plan which produced admirable results. On the plan, he constructed a sort of family tree representing his own family with which Toolabar was well acquainted. Each individual was represented by a piece of stick, and Toolabar gave the words by which each stick would address another. The results you have in the accompanying memoranda which I have made on the various families (no fewer than four) whose degrees have been ascertained by means of Toolabar’s sticks.¹¹

What followed were four memoranda similar in some respects to those Fison had been posting to Morgan from 1869 when their correspondence had begun. Where they differed was in the use of detailed genealogical information combined with a modified version of the kinship tabulations. The memoranda included numbered genealogies, each followed by a tabulated list of relationships according to the speaker and addressee. Fison and Howitt quickly developed this into a new method of collecting kinship terms through collections of genealogies, which was published and circulated in 1874 (see Figures 2 and 3).

In the memoranda sent by Fison to Morgan, there were several genealogies on the basis of which schedules had been filled out, such as in Figure 4, Howitt’s Genealogy of Tulaba’s family, and the resultant partial Kūnai schedule in Figure 5 (memorandum c).

The part of the schedule shown in Figure 5 contains crucial information about the Kūnai system. This was of great interest to Fison and Howitt, since it differed in an important respect from the systems of other groups in the south-east of Australia that they were aware of and, as we know now, from the bulk of systems in Australia as a whole. These other systems distinguish between terms for cross-cousins and siblings, although sibling terms are used for parallel cousins—such a system was illustrated for Dieri above.

In the Kūnai system, on the contrary, cross-cousins are also equated with siblings and parallel cousins in a kind of polysemy called cross-parallel neutralisation. Note in Figure 5 that FyBS (parallel cousin) and FyZS (cross cousin) are assigned the same term bramung (‘younger brother’).

There is an apparent contradiction here in the choice between ‘elder’ and ‘younger’ sibling terms. The principle often encountered is that the juniority/seniority of the parent’s sibling in relation to the parent is what determines the juniority/seniority of the cousin/sibling term. In the data here, however, this only works in some cases. In
other cases, the opposite result is found. For instance, the senior sibling term is chosen although the relationship of the parent’s sibling to the parent is junior. Similar usages are found elsewhere and attributed to ‘errors’ by the informant Tulaba. This is discussed further below.

Once he had begun to modify the tabulated system, Howitt attempted other modes of kinship representation. He was particularly alert to the implications of moving from tabulations to diagrams. Howitt’s scientific interests cross-pollinated his anthropological investigations; like Fison, he was drawn to kinship for its laws: fixed, and prescriptive, changing only slightly and measurably from one group to another. He believed that the rules of kinship could be investigated scientifically and represented using the new techniques of chemical notation then being developed in England by the famed chemist Edward Frankland. Experiments with the representation of chemical reactions were undertaken throughout the 1850s and ‘60s. Frankland’s notations rendered the three dimensional chemical world into two and became a heuristic device both for experimenting and for the mass teaching of chemistry. This deviation from tabulation required modifications at the printery. Frankland’s chemical textbook published in 1867 was printed by an Edinburgh firm that rendered the new notations into type through circle castings with the chemical symbol set within them (Russell 1996:281-6).

**Figure 3:** Genealogy of Toolabar accompanying the instructions in Figure 2.
For Howitt, the Frankland chemical notation, transferred onto Aboriginal kinship, offered a means of illustrating both the terms of the relationship with the relationship itself in a simple and straightforward way that was also self-correcting. As Howitt noted, the “graphic formulae” both clarified the complex relationships of the Gippsland Aborigines and formulated a symmetry that allowed the simple checking of responses, even the conjecture of possible relationships through the application of the formula: “occasionally after drawing a diagram of the relationship,” noted Howitt, “the proper term to be applied has suggested itself from a mere inspection of the sketch.”

Figure 6 is a rough “graphic formula” used by Howitt in his workings with the Omeo people of the Victorian Highlands some 120 kms from his home in Bairnsdale where Tulaba lived, but still within the huge range of his magistrate circuit. He later refined this type of diagram, but space does not permit further discussion of this here.

“Graphic formulae” were in part designed to ensure comprehensive coverage of kintypes once the overall schedule was not the primary method. However, collecting genealogies is a time consuming task and there is no guarantee that all kin types will occur even if multiple genealogies are taken. This is evidently one of the problems that plagued Dorsey, who also used genealogies to establish the Omaha kinship system. He invited Omaha consultants to Washington to plug gaps in the system after his book on the subject was published in 1884 (Barnes 1990).
Kūnai as a Transitional System

Howitt and Fison, using the new method and comparing the results, discovered that the Kūnai kinship system had features attributed to two types of systems in Morgan’s typol-
ogy. In the parental generation there was a bifurcate merging terminology familiar from most other Australian Aboriginal systems and classified by Morgan as part of the Turanian or Ganowanian system (Dravidian/Iroquois). However, in the 0 generation there was only one set of terms for older and younger siblings and these covered cross-cousins, which in most other systems are referred to by a different term. This cross-parallel neutralisation is classified as part of the Malayan system by Morgan (later called Hawaiian or generational). This type of pattern is supposed to occur in all generations, not just 0, but this ‘pure Hawaiian’ system occurs neither in Australia nor North America, where cross-parallel neutralization is limited to some generations and only in some groups.

In the Kūnai genealogies, the cross-parallel neutralisation is found in complex kin types, as well as equations between siblings and cross-cousins. For instance, cross-cousin’s husband (13 calls 20) is called *brar* ‘husband’. Dravidianate/Kariera systems with a strict parallel/cross distinction usually call cross-cousin’s husband ‘brother’.

In Fison’s Memorandum D to Morgan there is a clear statement that parallel cousins and cross-cousins are all called siblings. Fison also states that the principle for assigning junior or senior sibling terms is the relative age of the parents of the cousins, which he says is the same as in Tonga and among the Ngarrinyeri of South Australia. However, in their book, Fison and Howitt (1880:237) state for Kūnai that “the fraternal terms [which also refer to parallel and cross-cousins] are always used according to the respective ages of the persons concerned.”

There are exceptions to either of these (apparently contradictory) principles in the data recorded, which Fison and Howitt attribute to mistakes by Tulaba due to kinship elicitation fatigue. We should bear in mind Morgan’s opinion, however, that the collectors are more likely to make mistakes than the informants, especially, as in this case, when Tulaba was dealing with a concrete genealogy of his own family rather than an abstract questionnaire about kin terminologies.

Moreover, it seems that the terms said to be in ‘error’ have a systematic character. In Tulaba’s use of the ‘elder sister’ term for FyZD in the genealogy shown in Figure 4 (Fison’s Memorandum C) can be related to the female gender of the referent in contrast to the other examples cited as regular. If the husband of FyZ is conventionally described as MeB because of matrilateral junior marriage, and the seniority comes from the father, then this would yield eZ for FyZD.

On the same page is the idea of the mixture of ‘Malayan’ and ‘Turanian’—the latter illustrated by the term *mamang* ‘FZ’, which is different from MZ and F, indicating that cross and parallel are differentiated in the +1 generation. In fact, while cross-parallel neutralisation of the 0 generation is not common in Australia as a whole, it has a significant distribution across the continent, as shown in Figure 7.

Dousset (2012) discusses the probable reasons behind this type of system in the Western Desert. The Western Desert system differs from Kūnai in a number of respects, including having cross-parallel neutralization in the +2 and -2 generations as well as the 0
McConvell and Keen (2011) show, using linguistic evidence, that the Western Desert (generic, but in particular, from north to south: Kukatja, Martu Wangka-Mardu, Mandjildjara, Ngaatjatjarra, Ngaanyatjarra, Pitjantjatjara, Yankunytjatjara, Spini-fex people, Kokatha)

1 Kija (McConvell 1997)
2 Goonyandi (McGregor 1990)
3 Arrernte (Aranda) (Henderson and Dobson 1994)
4 Gubbi Gubbi (Mathew 1887)
5 Dunghutti (Holmer 1967)
6 Kattang (Holmer 1967)
7 Gunnai (Kurnai) (Fison and Howitt 1991 [1880], Keen pers. comm.)

Figure 7: Areas of cross-parallel neutralization in the 0 generation (cross-cousins = parallel cousins = siblings) [Dousset 2012].

generation. McConvell and Keen (2011) show, using linguistic evidence, that the West-
ern Desert terminologies represent broadening of meaning and a reduction in the number of terms found in the earlier forbear languages, which were Dravidianate/Kariera both in the +/-2 and 0 generations.

Explanation of how this system evolved in Australia is an important matter. While we cannot support the explanation that Fison and Howitt inherited from Morgan, it still remains a key question. Fison and Howitt’s discussion of Kūnai in Kamilaroi and Kurnai explains the cross-parallel neutralisation rule in ego’s generation alone as a product of a mixture of the two types of system, Malayan and Turanian, which according to Morgan’s scheme belong to different stages of social evolution. They then indulge in an elaborate ‘just so’ story about movement of different groups in Gippsland to try to prop up the Morgan scheme, but with little credibility.

Nevertheless, ‘overlay’ and ‘overlap’ of one type of system on another are still live issues in the explanation of kinship terminologies today, so it is worth attending to what these early pioneers had to say. Although evidence is not strong for Kūnai, it is possible that cross-parallel neutralisation is an ‘overlay’ in Kūnai as it is in Western Desert—that is, used contextually to emphasise group membership or (un)marriageability (McConvell 2012). The consignment of some of Tulaba’s responses into the category of ‘mistake’ by Fison and Howitt could well point to imperfect understanding on their part.

In the cross-parallel neutralisation systems of south-eastern Queensland, for instance, ‘senior’ sibling conveys unmarriageability of a woman or her brother rather than actual relative age of either the sibling or linking aunt or uncle (Jefferies 2008, 2011). This kind of system may also have existed in the nineteenth century in Gippsland, but evidence is not decisive for this usage of terminologies in the available Kūnai genealogies. We should be thankful, though, that Fison raised this as an issue and did not just ‘correct’ the results obtained in terms of a preconceived notion. Later researchers should always be vigilant for such data that do not fit the models and be ready to reanalyse it.

**Indigenous Agency in the Turn to Genealogy**

One intriguing question is whether the Indigenous people who were part of – and the prime providers of data for – the complex circulation of the Morgan schedules project, in fact instigated changes to it. We are particularly interested here in the figure of Tulaba, Howitt’s Kūnai consultant. Unfortunately, we have not yet been able to find Howitt’s own description of the events that led to the change to the use of genealogies as the lead method in collecting kinship terminologies in 1873. Fison’s account is ambiguous, but implies that Tulaba had a hand in it, not only because of his frustration with the previous method, but more actively by prompting Howitt to use sticks to construct the Tulaba genealogy (which Fison calls “‘Toolabar’s sticks’”) and then obtain the terms that each person on it called each other.

Mulvaney’s (2005) account of this turning point attributes the introduction of ‘sticks’ to Howitt (Mulvaney refers to them as “matchsticks,” a specification not in the Fison-Howitt or Fison-Morgan correspondence):

Tulaba supplied the key enabling Howitt’s comprehension of the kinship system: following difficulty with abstractions, Howitt imaginatively asked him to arrange
matchsticks to indicate the generational relationships and terminology of named individuals centred around him. This mode of interrogation became Howitt's standard.

The question that is most pertinent to Tulaba’s role in the instigation of the method is whether Howitt’s efforts found some fit with Kunai practices. Howitt provides some evidence of the use of short sticks for the representation of specific people in Kunai tradition in the description of how Kunai sent messages to distant kin:

The sender in giving his message to his Baiara, or messenger, would, if he used anything to aid his memory, break off a number of short pieces of stick, equal in number to the people he asks to meet him (Howitt 1904/1996:706).

Howitt’s use of sticks, perhaps inspired by Tulaba, may therefore relate a graphic means of representing genealogy already in use by Aboriginal people. While we have not yet found reports of precisely such practices among Victorian Aborigines, various methods of drawing genealogical representations on sand, on wooden ‘message sticks’ (including in Gippsland), on trees, and in caves are found and deserve further investigation. Use of graphic representations of family relationships by people elsewhere in the Pacific is also reported (e.g., Rio 2005; cf. Ingold 2007 on the role of lines in genealogy).

Dousset (2003) reports on graphics produced by his Ngaanyatjarra (Western Desert) consultants. While the representations differ from the western tradition of a ‘family tree’, they share a number of formal characteristics. The illustrations in that article show the use of short lines to represent individuals as well as longer lines as connectors between people.

Conclusions

Morgan’s circulation of the kinship schedule was a profoundly constitutive event for ethnology and anthropology, laying the foundations for a scientific approach. This process created further circles within the regions of the world contacted by Morgan, including colonial Australia, where two figures, Lorimer Fison and Alfred Howitt, came to the fore as leaders of a group in touch with local correspondents and local Aboriginal people.

As well as being intellectual descendants of Morgan and in many ways dutiful followers, Fison and Howitt also began to develop their own theories and methods. With regard to method, Fison changed the schedule in 1872, but made a much more significant change in 1873 when Howitt’s efforts with Tulaba caused all three men to reconsider the way to administer the schedule. Within a year, the idea of compiling and presenting a genealogy (initially with sticks) and then eliciting kinship terms used between each pair of relatives on the genealogy took root. A new circular incorporating this method was sent out in 1874.

The importance of genealogy in kinship came under heavy attack by Schneider (1984) and his followers in the ‘cultural critique of kinship studies’ or the ‘new kinship’ movement. As well as, in effect, dismantling the theory and methods built by Morgan and his descendants, this approach is at odds with the primary way in which indigenous people, certainly Aboriginal people in Australia, conceptualise kinship in terms of genealogical reckoning. The role of Tulaba in emphasising genealogical reckoning about spe-
cific kin to arrive at the kinship terms used is significant in this light. The new method was also more concrete, and got better results than the earlier Schedule method, because it invited people to say which terms specific, named people used to refer to, or address, certain other specific, named people. It also involved informants not only naming their own kin in this way, but also saying which terms are used by other named kin to refer to their kin. The result is a network of kin designations used between people on a genealogy which can be interrogated for its consistency. Where there is apparent inconsistency, this may result from mistakes by informants or researchers, but also may point to flaws in the preliminary analysis of how the system works, and lead to new, more nuanced, understanding of the system.

In terms of theory, Fison and Howitt were already questioning some aspects of Morgan’s unilinear evolutionist scheme, especially as it applied to Australia. Encountering the Kũnai system, which was quite different from other Australian kinship systems in classifying cross-cousins along with siblings, led them to propose that it was a system in transition between Dravidian and Hawaiian. Today we know that this kind of system is found in a number of regions of Australia. The question of whether it is a hybrid or transitional system is, however, still relevant. Based on substantive evidence rather than pre-conceived notions of evolutionary stages, it is likely that the Dravidianate/Kariera system is original and basic, and cross-parallel neutralisation an ‘overlay’.

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1 Lorimer Fison to Goldwin Smith 18 December 1869, Letterbook; No. 2 10 Aug 1869 - 25 Oct 1870; Pacific Manuscripts Bureau 1039–Reel 2.

2 A good selection of the Morgan correspondence with Fison and Howitt was published in the 1930s (Stern: 1930 a, b). The correspondence from Fison to Howitt can be found in Fison’s extensive Letterbooks, held in a number of locations, but copied onto microfilm by the Pacific Manuscripts Bureau. Howitt’s letters to Fison are held in the Tippett Collection at St Marks National Theological Centre Library, Canberra.

Trautmann and Barnes (1998:41), in a discussion of various versions of Morgan’s circulars and schedules, point out that Morgan was also adding ‘sex of ego’ to new kin-types; e.g., in late 1859.

These forms have the spelling altered to a modern orthography in the text. As recorded by Vogelsang, parallel sibling terms consist of a sibling term with a suffix. All the cross-cousins are kami. This is a cognate of Proto-Pama-Nyungan *kami ‘mother’s mother’. How MM comes to be FM and cross-cousin is discussed in McConvell (2013). Brother’s wife is nhuwa and sister’s husband kari, with linguistically related terms also recorded as general spouse terms elsewhere. This system is not of the Dravidianate/Kariera subtype where the term for cross-cousin is the same as for spouse.

Howitt to Fison, 15 May 1873 The Fison Correspondence The Tippet Collection, St Marks National Theological Centre, Canberra: TIP 70/10 33/3.


Fison to Howitt, 19 May 1873, Letterbook No. 4, 16 April 1873-26 Feb. 1876. PMB 1039–Reel 3.

Howitt to Fison, 4 March 1874. Tip 70/10/33/8.

Fison to Morgan, 17 June 1873 Letterbook No.4. 16 April 1873-26 Feb. 1876. PMB 1039–Reel 3.

There is another, possibly related, ‘error’ in Memorandum B to which Fison draws attention and says Howitt is investigating. In this case, 9 calls 11 his WeZH bramung ‘younger brother’, which Howitt says “should be tundung” ‘elder brother’ because the woman to whom 11 is married (10) is Ego’s wife’s elder sister.
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