In this fragment, we present a brief account of how nouns in Kayardild are assigned standard case and verbal case. There is one noun lexical entry in this fragment (malaa ‘sea’). In order to illustrate how the appropriate TAM forms can be inherited via the verb lexical entry for the verb which served as the original source of the verbal case marker, we have included the verbs marutha ‘put’, mariija ‘be put’, waalutha ‘drive away’ and janija ‘look for’. These are also the markers for the verbal cases, and we can determine the form of the associated TAM marking on the noun according to the conjugation class that these items belong to. This information is inherited from the verb. Because of the differences in the verbal case forms -kiiwa-, -wula- and -wu-, we have specified these directly in the noun paradigm. For our purposes, it is important to show how the path from free verb to nominal affix can be represented in an inheritance network.

Below we comment on each node in the network. Comments precede the nodes to which they refer.

The node UNDEFINED outputs ‘undefined’ in the absence of anything more specific. For our purposes, if the result of a query is undefined, this means that the system does not provide a form or the that the query is not a sensible one.

UNDEFINED:
< > == undefined.

In this fragment the WORD node just defaults to UNDEFINED. So if any information is not available at the NOUN or VERB node, then the system will output 'undefined'. In a further elaborated fragment there would a number of other facts about Kayardild located at the WORD node.

WORD:
< > == UNDEFINED.

The NOUN node defaults to the WORD node. The syntactic category of nouns is 'noun'. The morphology of nouns, is inherited via the path beginning <mor> from the node MOR_NOUN.

NOUN:
< > == WORD
<syn cat> == noun
<mor> == MOR_NOUN.

The VERB node defaults to the WORD node. The syntactic category of verbs is 'verb'. We have not specified a default inflectional class for verbs, as verbs specify their inflectional class in the lexical entry (see <mor>
% in the lexical entries for verbs).

VERB:

<> == WORD
<syn cat> == verb.

% MOR_WORD is the top node in a morphological hierarchy. It defaults to % UNDEFINED. The next DATR equation requires the evaluation of syntactic % category to determine the form of a morphological word. The equation % beginning <mor tact> defines the morphotactics. If the system is queried % for the TAM of nouns (<mor noun tam>) or the case of verbs % (<mor verb case>) then the output will be undefined. % Otherwise, a well formed noun or verb will have the form defined by % <mor tact>. Of course, it is possible for a noun to realize TAM, as this % is what happens with verbal case. But the equation beginning with % <mor noun case> rules this out for the ordinary cases.(We have not % included modal case in this fragment.)

MOR_WORD:

<> == UNDEFINED
<mor word> == "<mor "<syn cat"> ">
<mor tact> == "<root>-" "<mor>
<mor noun tam> == UNDEFINED
<mor verb case> == UNDEFINED
<mor noun> == <mor tact>
<mor verb> == <mor tact>.

% MOR_NOUN inherits from MOR_WORD and defines case endings, as well as % verbal case endings. The correspondence with the ordinary cases is clear. % With the verbal allative, we take the form -kiiwa and inherit the relevant % TAM inflection from the dental conjugation. With the verbal dative we % inherit the inflected word forms of the verb marutha and do not need % to specify the conjugation, because this will be inherited from that verb. % Note the use of the quotes around "Marutha:<mor word>". The effect of % these is to state that the value of <mor word> is whatever that may be % for Marutha. Recall from MOR_WORD that <mor word> involves evaluation % of syntactic category. As "Marutha:<mor word>" is quoted this will be % the value for the verb Marutha (i.e. <syn cat> == verb, inherited from % VERB). This suggests that the quoted node construct may meet some of the % descriptive requirements for representing a situation in which a fully % fledged word is becoming an affix but still has some of the original % properties of the class from which it originates. We have not modelled % the correspondence between the ordinary cases and verb inflections as % discussed in Evans (1995:254-55). To do this we would replace the values % in the RHS with reference to separate nodes for the individual forms. % These would then be associated with different features for nouns and % verbs. We have not done this, as we wish to focus on the key issue for % deponency of the verbal cases.

MOR_NOUN:

<> == MOR_WORD
<mor case nom> == -a
<mor case loc> == -ya
<mor case abl> == -na
<mor case prop> == -wuru
<mor case obl> == -ntha
<mor case all> == -r
<mor case gen> == -karra
<mor case assoc> == -nurru
<mor case orig> == -wan-
<mor case priv> == -warri
<mor case cons> == -ngarrba
<mor case ins> == -nguni
<mor case util> == -marra
<mor case verbal all> == -kiiwa "V_DENTAL:<mor>"
<mor case verbal dat> == - "Marutha:<mor word>"
<mor case verbal trans> == - "Mariija:<mor word>"
<mor case verbal abl> == -wula "V_DENTAL:<mor>"
<mor case verbal evit> == - "Waalutha:<mor word>"
<mor case verbal don> == -wu "V_PALATAL:<mor>"
<mor case verbal purp> == - "Janija:<mor word>".

% MOR_VERB inherits from MOR_WORD and defines the verb inflections separately from the thematic marking in the dental and palatal conjugations. The element <mor theme> is defined by the inflection class. We use one example inflection, the actual.

MOR_VERB:
<> == MOR_WORD
<mor tam act> == "<mor theme>" -a.

% The node V_DENTAL inherits from MOR_VERB and specifies the theme consonant -th.

V_DENTAL:
<> == MOR_VERB
<mor theme> == -th.

% The node V_PALATAL inherits from MOR_VERB and specifies the theme consonant -j.

V_PALATAL:
<> == MOR_VERB
<mor theme> == -j.

% Lexical entries.

Malaa:
<> == NOUN
<root> == mala
<gloss> == sea.

Marutha:
<> == VERB
<mor> == V_DENTAL
<root> == maru
<gloss> == put.

Mariija:
<> == VERB
<mor> == V_PALATAL
<root> == marii
<gloss> == be put.

Waalutha:
<> == VERB
<mor> == V_DENTAL
<root> == waalu
<gloss> == drive away.
Janija:
<> == VERB
<mor> == V_PALATAL
<root> == jani
<gloss> == look for.

#hide
UNDEFINED
NOUN
VERB
WORD
MOR_WORD
MOR_NOUN
MOR_VERB
V_DENTAL
V_PALATAL
MOR_CAT.

#show
<syn cat>
<gloss>
<mor word case nom>
<mor word case loc>
<mor word case abl>
<mor word case prop>
<mor word case obl>
<mor word case all>
<mor word case gen>
<mor word case assoc>
<mor word case orig>
<mor word case priv>
<mor word case cons>
<mor word case ins>
<mor word case util>
<mor word case verbal all tam act>
<mor word case verbal dat tam act>
<mor word case verbal trans tam act>
<mor word case verbal abl tam act>
<mor word case verbal evit tam act>
<mor word case verbal don tam act>
<mor word case verbal purp tam act>
<mor word tam act>.