

e and r are not implicative in the same direction. To stem the confusion which must now be arising in the reader's mind, we may consider for illustrative purposes the 11 state model:

In this model, the following are examples of subsets of states of Implicative type with the implications going in the directions indicated to the properties indicated:

<u>Properties</u>	<u>Subsets</u>
Word Space	<====> (10)
Vowel	==== (2,5,9)
Initial letter	==== (2,3,4,8,9)
Final Letter	==== (5,6,7,11)
Vowel Preceder	<==== (4,9)
Vowel Successor	==== (7)
Consonant Successor	<==== (1)
j	==== (8)
Non-final silent h or i before e or o	==== (1)

This list is not meant to be exhaustive, but it contains the most obvious set of properties we have been able to isolate. Except for the last, the associations listed

may be verified by examining the matrices for the 11 state model. Other implications, such as the last may be verified by computing the probability of being in each state at each text position [7], and then examining particular text configurations. We have asserted implications whenever they are true roughly 95% of the time. In Table II are displayed lists for each of the 11 models constructed.

We may look at the manner in which new states are utilized as we increase the size of our model. The very first division which appears is the vowel-consonant one, (with # favored 9 to 2 as a vowel), and this division persists through the largest model. Eventually four states are required for the vowels and this allows different distributions for initial and final vowels as we shall see in a moment.

The second property extracted by this technique is the word space, and following this, word beginnings and word endings appear in the list of implicative properties. Since the latter two each include several states we can note that the intersection of the initial (or final) states with the vowel states gives states properly interpreted as initial and final vowel states, although these are not implicative properties since initial and final letters are implicative in one direction, while vowels are implicative in the other.