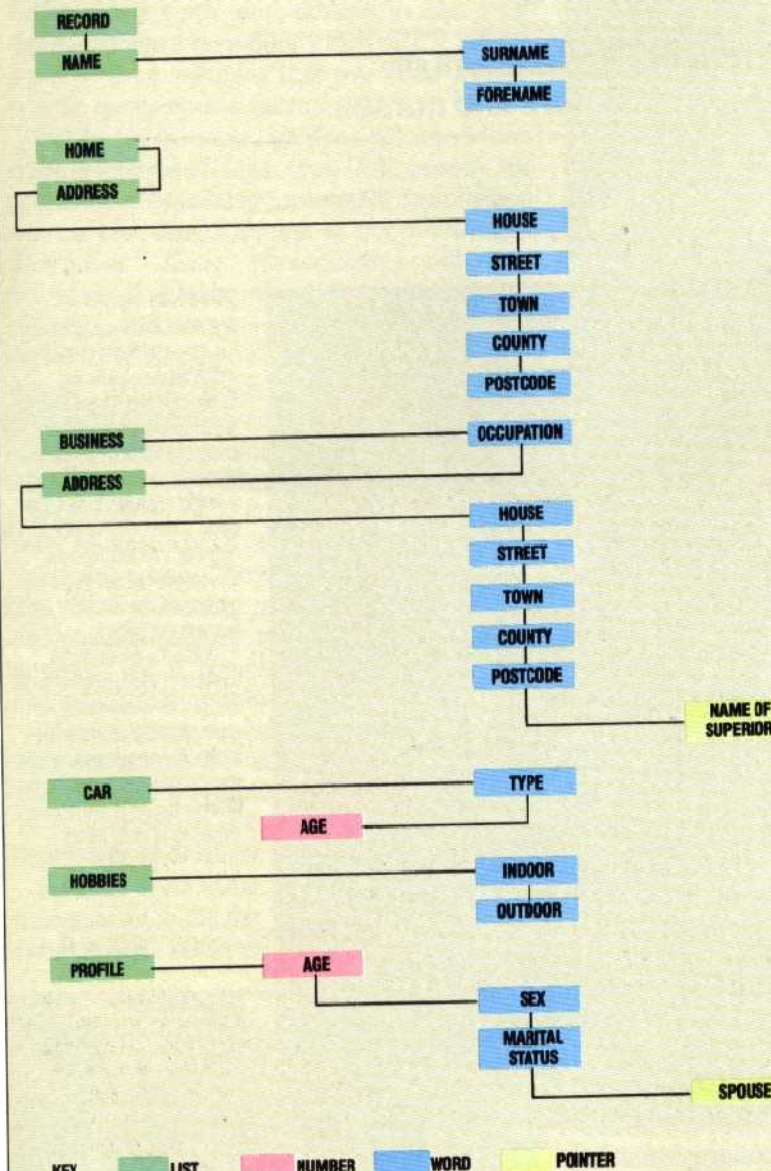




Record



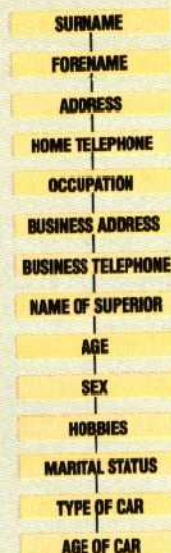
Today's Encyclopædia

Services like Prestel are an attempt to make huge databases available to the general public by means of services that they already have in their own homes. Viewdata systems use the domestic TV as the monitor screen, and a specially devised keypad, connected to the central computer over an ordinary telephone line, as the keyboard. Access to the database is by means of a 'menu' of available services. The choices are displayed on the screen, and the user arrives at the desired 'page' of information by working his way through the hierarchical tree. By entering a Credit Card code, purchases can even be made from home



COURTESY OF PRESTELL TO

Personal Index



Organised Information

An hierarchical database leads the user from one piece of information to another, offering choices at every turn. No knowledge of the contents is assumed

could just be a single word, but since this refers to a person, and the file is about people, it would be useful if we could somehow refer to another record instead.

Since each record is in a particular place in the file, it has a number. So we can use the number of the record that describes this person, instead of the person's name, to establish a cross reference.

Such an item of data is called a 'pointer' record. If we use this technique to refer to the person's business superior, the result is a structure that looks like the one called Record.

The difference between a card index and a computerised database is that the former can have only one ordering, usually alphabetical.

The card index is adequate if we want to find out – for example – what company employs a specific person. But what do we do if we want the names of all the employees of a particular company?

Using a card index, we would have to look through all of it, extracting each card for the required data. To do so is not only time-consuming, but is likely to result in errors.

With a computerised system, however, we can ask the machine to look at each record in turn, and to print out the name of every person who works for the company in which we are interested.

Alternatively, we could have the machine re-order the file, with the company field being the most important item. This will result in the same database with the same data, but with a completely different 'shape'. The reordering will place all occurrences of a given company in one group, and that section will give us the names of all employees. In a card index, there is only one primary item, the surname. But in a computerised system, any item can be primary.

Using this principle, we can 'reshape' the database. For example, the cars owned by people could be primary, or the names of towns in which the people live. This is the great advantage of the computerised database system.