DATING METHODS: Major archaeological dating methods are charted with the time-spans they gauge, ranging from the present back to the birth of the planet. Those that depend on atomic processes are shown with solid lines; those relying on other phenomena are shown with dots. Each method has limitations as to what it can date directly. Carbon 14, for example, is generally used to date once-living organic matter, while thermoluminescence can date only inorganic clay. (From a pre-1970 Saturday Evening Post article: "Thirteen Ways to Tell Time Backwards").