eclipse), at which point the cooling curve appears to drop off sharply (which is expected behavior for lambda-type transitions) and then resumes with "normal" heat-loss characteristics. Thus, even if the thermal arrests are not as prolonged as observed (*1*, *4*) or due entirely to magnetic ordering, detailed temperature-time curves are likely to yield new information on mineralogical and compositional variations of the lunar surface.

The temperatures of the heat capacity maxima related to magnetic transitions in lunar materials can be expected to vary widely because of the known variations in the bulk compositions of minerals (*6*) and from the effect of particle size on the ordering temperatures of very finely divided substances (*7*). It is not reasonable at this time, therefore, to attempt a correlation of Allen and Ney's (*1*) data with a specific mineral or mineral assemblage, inasmuch as detailed low-temperature heat capacity data are not yet available for basalt, ferrosilite ($Fe_2Si_2O_6$) or for any Fe-Mg-Mn-silicate solutions. Some theoretical consideration has been given to the effects of simple variations in C_p with temperature (*8*), but the present lack of empirical data on the above substances and on samples of lunar surface material precludes further theoretical analysis.

Large discontinuities in thermal expansion are also associated with some ordering transitions, as for example, in magnetite (*9*) and quartz. If such is the case for magnetic ordering in lunar materials, repeated cycling through one or more phase transition of this type would be an effective mechanism for fracture and erosion of the lunar surface.

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Age of Bed V, Olduvai Gorge, Tanzania

It is becoming increasingly clear that the various deposits which have up until now been bracketed together as bed V are not all of the same age or origin. The date obtained from the fossil bone in bed V at the fifth fault is not in question, but it cannot be regarded as indicative of the age of all that has been called bed V. For example, a date of 30,000 B.P. has been recorded (*1*) for a caliche overlying bed V in one part of the gorge. The age of the so-called bed V overlying the Capsian site at the second fault cannot be inferred from the fifth fault evidence at present.

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Lead Poisoning in Children: Detection by Ion-Selective Electrode

In an account (*1*) dealing with lead poisoning in children caused by the ingestion of lead-based paints, attention was called to the need for more rapid and sensitive detection methods suitable for the diagnostic screening of large numbers of children.

A new analytical device which might be of some help in this connection (*2*) is a solid-state ion-selective membrane electrode selective for lead ions in solution. This electrode seems to have the appropriate characteristics of sensitivity (to as low as $10^{-7}M$ Pb^{2+}) and selectivity (normal ionic constituents of body fluids should not interfere) to warrant further exploration of its use as a diagnostic tool. Similar electrodes, selective for Cl^-, are being used for the detection of cystic fibrosis in children (*3*).

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