the open beaker; in the closed system at least 53 µg, but possibly 91 µg, was converted to CH_3HgCH_3.

To study the formation of CH_3HgCH_3 from Hg^{2+} an entire *Xiphophorus helleri* (about 5 g) was homogenized together with about 10 g of fillet from *Gadus colja*. The homogenate was transferred to two 50 ml. flasks. Water containing 60 µg of $HgCl_2$ was added and the volume adjusted to 25 ml. The flasks were flushed with nitrogen, made airtight with a membrane of silicone rubber and shaken for four days at 20° C. Aliquots of the gas in the flasks were analysed as described. The gas-chromatographic analysis of the benzene gave no value for CH_3Hg^+ before treating with $HgBr_2$ and KBr, indicating that the mercury was originally present as CH_3HgCH_3; the mass spectrogram of the ether solution supported this. Quantitation by comparison with synthetic CH_3HgCH_3 yielded a total value of 10 µg (calculated as Hg) in the head-space gas.

In conclusion, the sediment from the aquarium has a higher background value for CH_3Hg^+, but also a higher biological activity than the sediment from Lake Långsjön. This may be the reason for the larger amount of CH_3Hg^+ after ten days in sediments from aquaria. The biological methylation of mercury compounds provides an explanation for the fact that CH_3Hg^+ is found in fish, even if all known sources of mercury in the environment are in the form of inorganic mercury or phenyl mercury. The formation of the volatile CH_3HgCH_3 (b.p. 94° C) may be a factor in the redistribution of mercury from aqueous industrial wastes. In Sweden emphasis has been placed on the study of the turnover of mercury in the aquatic environment. The process of methylation is fundamental to a knowledge of the turnover of mercury; it may be significant in the uptake and distribution of mercury in fish and in the mobilization of mercury from deposits in bottom sediments into the general environment.

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Presumed Super-foetation in an *Erythrocebus patas* Monkey

On November 22, 1964, a female specimen of *Erythrocebus patas* monkey was received at Tigoni Primate Research Centre (now the National Primate Research Centre). Her exact provenance was unknown, as she had been rescued from some peasant farmers and brought in by her rescuer. At the time of her arrival at the centre, her second milk molars were just erupting. In 1968, after reaching adult status, she shared a cage with an adult male of the same species for several months, but mating was not actually observed.

On January 17, 1969, the male was removed from her cage. On March 8, 1969, she gave birth to a stillborn male, which was, however, "full term". Three months later on June 8, 1969, she gave birth to another stillborn baby, this time a female, which was also "full term".

Because the average gestation period for *Erythrocebus patas* is 170 days[1] this would appear to be a case of super-foetation; the first infant was sired around the end of September 1968, and the second sometime in December.

I have not been able to trace any similar record of super-foetation in this or allied species of monkey, but our literature here is very incomplete. Super-foetation in women is, of course, a well recognized phenomenon[2].

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Evidence for Extraterrestrial Life: Identity of Sporopollenin with the Insoluble Organic Matter present in the Orgueil and Murray Meteorites and also in some Terrestrial Microfossils

With very few exceptions[1] the insoluble organic matter present in both Pre-Cambrian sediments and carbonaceous chondrites has been neglected and organo-geochemical studies of these materials have been largely devoted to the readily solvent extractable soluble organic substances[2]. This is in some ways unfortunate, for by far the greater proportion of carbonaceous matter in both Pre-Cambrian sediments (up to 95 per cent)[3] and in carbonaceous chondrites (up to 70 per cent)[4] is insoluble and the soluble matter is frequently of a very minor nature. In addition, the soluble, and so potentially more mobile, organic chemicals are more likely to have moved in total or in part from their point of origin, and problems of rock contamination with such substances, either over long periods through seepage or, in the case of meteorites, at impact[5], are especially acute.

We have shown[6] that sporopollenin which forms a major part of pollen and spore exines is an oxidative polymer of carotenoids and carotenoid esters, and have suggested[7] that it is identical with older kerogen derived from terrestrial, especially Pre-Cambrian, sediments. We now present briefly some results of experiments carried out on the Orgueil and Murray meteorites which in our opinion clearly establish that the insoluble matter they contain is identical with sporopollenin.

The insoluble organic matter was isolated from samples of the Orgueil (0·1 g) and Murray (0·9 g) meteorites as brown amorphous solids by repeated digestion with hydrofluoric and nitric acids and potassium hydroxide in the usual manner, taking maximum care in manipulation. The relatively large amounts of organic matter (Orgueil 3·5 per cent, Murray 4·4 per cent) would make trace contamination of little or no consequence to our subsequent chemical studies. The solids were examined by infrared spectroscopy, pyrolysis gas chromatography, potash fusion followed by thin-layer chromatography of the products and by some elemental analyses[8], and results compared with similar examinations of sporopollenins from many modern pollen and spore exines, some synthetic analogues, some microfossils and artificially metamorphosed (by heating with sand) spore exines.