this period and its nonconformity to currently proposed views of Mesoamerican culture development (*3, 7*) will be clear. The difficulty of accepting certain sculptured pieces from the Olmec area which bear initial series inscriptions—such as the Tuxtla statuette and stela C from Tres Zapotes—on the grounds of the improbably early dates indicated (*8*) would appear to be greatly diminished. The final report on the 1955 excavations at La Venta is nearing completion and will be published by the Bureau of American Ethnology.

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Probable Cause of Necrotic Spider Bite in the Midwest

Current medical references used by practising physicians list the black widow, *Latrodectus mactans,* and other species of *Latrodectus* as the only spiders occurring in the United States that may inflict bites serious enough to require medical treatment. Physicians practising in rural areas in the Midwest have realized for some time that other species occasionally bite and cause conditions, which, though less generally severe than those occasioned by the bite of *L. mactans,* are serious enough to require attention. In some cases the animal inflicting the bite has not been observed by the patient, and the attending physician has attributed the condition to "insect bite."

With the exception of certain species of Reduviidae, there are no midwestern Hexapoda known to inflict severe injury by bite to human beings. According to Herms (*1*) reduviid bites are characterized by intense local pain, swelling, intense itching, and, in a few cases, profuse urticaria over the body and a local cellulitis followed by necrosis in the immediate vicinity of the bite. In a few days the symptoms resulting from reduviid bite are usually gone.

Several clinical cases of spider bite in Missouri by a "brown spider" are available. Usually, the spider became entangled in the patient's clothing and bit when it was crushed or removed. First symptoms varied, presumably with the relative amount of venom injected, but a thick wheal usually forms with necrosis of tissues at the immediate site of the punctures made by the chelicerae. The necrotic area soon turns violaceous, then black and dry. This area sloughs in a few days or a week, leaving a deep, sharply-defined granular area surrounded by the raised edges of healthy tissue. The sloughed area, frequently quite large, may persist for several weeks, and healing takes place very slowly. In a few patients, systemic disturbance of a general nature has been indicated by a rash resembling that of scarlet fever.

In these cases, spiders inflicting such necrotizing venom have not been available for identification. In a single case a specimen of *Loxosceles reclusus* Gertsch and Mulaik has been circumstantially incriminated.

A striking similarity between these necrotic, spider-inflicted wounds in Missouri and the "gangrenous spot" or cutaneous arachnoidism of Chile, Uruguay, and other South American countries is evident. Macchiavello (*2*) first indicated *Loxosceles laeta* (Nicolet) as the causative agent of such gangrenous spot on human beings in Chile as early as 1937. Subsequent experimentation with the glandular poison of *L. laeta* by Macchiavello (*3*) and by MacKinnon and Witkind (*4*) has established firmly the role of *L. laeta* in cutaneous arachnoidism in South America. Symptoms in patients bitten by *L. laeta* are similar to those in patients observed in Missouri.

Since *Loxosceles reclusus* was circumstantially incriminated in human necrosis before the South American literature was reviewed, and since it belongs in the same genus, it is not unduly presumptive tentatively to assign to *L. reclusus* the same relationship with cutaneous arachnoidism in Missouri that *L. laeta* bears to that condition in South America. Experiments are currently underway involving *Loxosceles reclusus* and laboratory animals. Preliminary results indicate that the venom of *L. reclusus* is a powerful necrotizing agent capable of causing cutaneous necrosis in mammals.

Gertsch (*5*), in discussing spider venoms, states that the venom of a few spiders is fortified with toxins that cause severe local or general reactions. He reports that some venoms contain hematoxins that destroy cells in the vicinity of the wound and result in extensive sloughing and exposure of underlying tissues. *Loxosceles laeta* is the proved agent causing such conditions in South America. *Loxosceles reclusus* is probably responsible for the same conditions in the southern and southwestern United States as well as in the Midwest (*6*).

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6. A description of the results of experiments with *Loxosceles reclusus* venom and laboratory animals, together with complete documentation of human medical cases, is in preparation.

* Deceased December 1956.

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Influence of Prenatal Maternal Anxiety on Emotionality in Young Rats

W. R. Thompson [*Science* **125**, 698 (1957)] has reported results which are compatible with the hypothesis that "prenatal maternal anxiety does actually increase the emotionality of offspring." Five female rats were trained "first to expect strong shock at the sound of a buzzer, and then to avoid the shock by opening a door between the compartments and running through to the safe side." These rats, as well as a group of five control rats, were then mated.

During gestation, the experimental mothers were "exposed to the buzzer three times every day in the shock side of the shuttlebox, but with the shock turned off and the door to the safe side locked." The offspring of the experimental and control mothers were tested for differences in "emotionality," and the observed differences were traced to the stress situations which were imposed on the experimental mothers during gestation.

It is possible, however, that differences in prenatal environment may have resulted from maternal hormonal differences caused by systemic changes which were produced in response to the stress