THE ORIGIN OF TERMITES

VINCENT A. ETTARI*

Received 29 July 1976

New discoveries concerning this dreaded insect confirm the opinion which creationists have always held: that it is a special creation of God, not the result of evolution.

Distribution of Termites in Space and Time

Termites are well known around the globe; for indeed there is no place with a suitable climate which has escaped their influence. These animals form a highly knit society which literally eats millions of dollars worth of wood each year. Termites span every continent except the Arctic regions, and multiply in such numbers that if any group of animals should be able to provide evidence of evolution having occurred in the past or occurring today, this group should. It is therefore worthwhile to examine the evidences this group presents concerning its origin.

Termites have been around an amazingly long time on the evolutionary time scale. One authority (whose book will be used throughout this entire essay) comments:

The oldest fossil termite known is from the mid-Permian deposits in the Ural mountains. It is a wing just three-quarters of an inch long (*Uralotermes permianum*) and is almost two hundred million years old.¹

What is amazing about this discovery is that termite wings decay within two days.² Here is evidence of the fact that fossil material was formed extremely rapidly.

No Evidence that Termites Evolved

The origin of termites can only be speculated about as a consequence of the paucity of evidence concerning their appearance. Many authorities have admitted the termite group is not the only group in the insect world which is known to be without any preexisting transformations. For example:

The evolutionary origin of the arthropods is hidden in remote Pre-Cambrian times \dots^3

There is, however, no fossil evidence bearing on the question of insect origin; the oldest known insects show no transition to other arthropods.⁴

Of course, much speculation about their origin can be found in orthodox scientific literature, but naught is based on factual evidence. Not surprisingly, in this order the so called "biogenic law" does not apply. Instead, "The immature stages generally resemble the adults except that they do not possess wings."⁵

Termites always live in communities. They may be complex and may number several million individuals or may be relatively simple, the community consisting of a few dozen individuals only.

Social communities of anything like the same order of complexity as in the termites are found only in the *Hymenoptera* (ants, bees and wasps) and man himself, and it is of interest to note that something like a hundred million years separates each type of social organization in its development.⁶

According to the fossil record the oldest known individuals had the full capacity to maintain the complex social communities they do today. No individual of this class has ever been found without some type of society, one might say civilization, which other animal groups never seem to possess. Like the above cited animals, when the termites first appear they are already grouped in communities which possess a high degree of complexity. Yet, evolutionists support the belief that such communities arose naturally and separately, divided by a gap of hundreds of millions of years! Needless to say, the odds against such an occurance would cause the most complex computer to jam.

Termite Nests Air Conditioned

Consider a few of the accomplishments of these "primitive" animals. Termites possess a system by which they can regulate the very environment in which they live.

Termites live under conditions of static humidity controlled by the use of closed tubes or closed compartments, in which the termites live. In this way, they are able to allow either more or less water vapour from the atmosphere to enter the living space.⁷

Men finally gained the ability to do such as this only after many years of experimentation, and with the aid of highly complex machines at that. Yet here are organisms which have possessed the ability to control the climate of their living chambers from the first time they appear in the fossil record. And even more amazing is the supposition that they are derivatives of animals who possess naught of this ability whatsoever! By what means could termites have gained the ability to accomplish such a feat it they were not originally created with it?

How Termites Start New Colonies

The method by which termites start new colonies is also a feat which cannot be accounted for by a slow, naturalistic process such as evolution.

At certain seasons of the year the termites swarm by producing a large number of fully sexual individuals, males and females . . . This period of flying in the light, if only for a minute or so, is normally essential to the life cycle, but exceptionally it can be by-passed. The swarm of sexuals is often released at dusk, perhaps a defensive mechanism directed against the high degree of predation by birds,lizards, frogs, other insects . . ., and a host of other animals, including man himself.⁸

This mechanism must be perfect. If some termites were released while others were not (i.e. others from different nests), then the few termites who did swarm would be

^{*}Vincent A. Ettari receives mail at 106 S. Washington Avenue, Hartsdale, New York 10530.

CREATION RESEARCH SOCIETY QUARTERLY

quickly consumed, leaving very few to colonize other areas. If the termites did not swarm at night they would fall easy prey to other animals which could easily pick them off during daylight hours. How do they know when to swarm? And equally interesting is the question how the termite workers know when the sun has set since they are blind.⁹ Yet it is this caste of termites which drives the reproductive termites to flight.¹⁰

Special Defense Mechanisms

Termite soldiers have defense mechanisms which are unparalleled in the insect world.

In some species "nasutes" are produced. These have large horny heads but the front is attenuated into a rostrum, from a terminal pore of which they are able to eject a fine stream of toxic material at an enemy.¹¹

The process by which this ability developed still eludes scientists who subscribe to the evolutionary theory.

Evolution within the insect world still remains a problem. For instance, one source presents a chart which illustrates the "probable" evolutionary order; but the evidence is still absent, of course.

In the accompanying chart the insect orders are numbered and shown in their *probable* development series . . .¹² (Emphasis added.)

Communication Among Termites

Termites appear to have a high degree of communication which does not depend on sight. Instead, it appears that the termites communicate by touch.

All termite species exist in social communities of a greater or lesser degree of complexity and it is now well known that such social organizations can only exist when there is a behavioural response between individuals which can be likened to language. This has brought about a co-ordination of activity and a task specialization in the termites of remarkable order, paralleled only in the *Hymen*optera, and by man himself . . . the communication between termites during feeding, defence, nestconstruction, foraging, etc., must be of a high order, especially when it is considered that these phenomena almost always take place in total darkness, so that visual signals are denied to them.¹³

It has also been discovered that termites of the same species are able to communicate with each other in a primitive manner by the laying of scent trails which attract other termites to follow along the same trail.¹⁴

(Referring to an accompanying picture) A worker termite meeting a nymph using the antennae for recognition sense.¹⁵

Termites as Gardeners

Termites also cultivate gardens of fungus, with which they form what amounts to a symbiotic union.

Amongst the termites of the subfamily *Macrotermitinae* the extraordinary phenomenon of fungus cultivation is practised . . . In the nests of these termites globular or ovoid cavities are found . . . These are the fungus gardens or "combs". They are perforated . . . by innumerable galleries of a size that termites can move about inside them . . . The genus of *basidiomycete* fungi found growing in the termite fungus gardens, *Termitomyces*, . . . are not known to grow wild, that is, away from the termite combs . . .

It now appears that the termites are constantly nibbling at the undersurface of the comb whilst at the same time renewing it. The substance which the termites are consuming is then wood substance which has passed through the gut, had a substantial part of the cellulose removed and is thus rich in lignin. This latter has passed through a stage of fungal degradation which has obviously led to the lignin having been rendered into a state in which it is more acceptable as a nutrient.¹⁶

This interesting state of affairs causes several problems with the evolutionary interpretation of life. First; How did the termites know that this substance would make lignin more acceptable to them? Always living in their sheltered world would make it impossible for them to discover such properties in this species of fungus. Second; How did this fungus, which can only grow in termite colonies, survive millions of years while the termites had not yet evolved? Once again, when put to the test the theory of biological evolution fails miserably.

Termites in Conflict with Ants

Defense against predators, especially ants, is amazing. For instance, many different types of soldier termites have been found each with its own specific military tactic.

When the colony is disturbed by . . . breakage of the nest . . . The soldiers . . . react by rushing immediately to the breach and . . . without actually leaving the nest, form a defensive guard with their heads all pointing outwards in the direction from which the aggressive act is presumed to have originated. Here they assume an attitude of counteraggression when they raise themselves on their legs arch their antennae forwards and open their mandibles. In some species . . . the soldiers immediately swarm to the outside of the nest which they cover Those species which forage above in masses. ground in the open maintain the outwardly directed soldiers on each flank ... The wide diversity of manibulate structure, however, gives rise to individual combat methods . . . Special methods of attack have been developed by those species with bizarre mandibulate forms; thus, Pericapritermes, with strongly asymmetrical jaws in which the left is very long, will attack only when the aggressor is on the right. As an auxiliary weapon the contents of the salivary gland are sometimes voided over the adversary . . . This then coagulates and binds the combatants together . . . The head of this "nasute" soldier is pear-shaped and a large proportion of the volume of the head is taken up by the frontal gland. The opening of the gland is . . . directed forwards and through . . . (it) . . . sticky . . . secretion can be expelled with such force as to reach several centimetres. Although blind, the nasute solider, by using some unspecified sense, can aim at the aggressor with fair precision. 17

Even more amazing about these specialized defense mechanisms which are employed against the strategy of the ants is that these groups are separated by a hundred million years on the evolutionary time scale.

The behavioural implications of these warlike manoeuvres between these two social communities, separated by upwards of a hundred million years in evolutionary time, would well repay study.¹⁸

By subscribing to the evolutionary theory scientists will never to able to explain these enigmas. To date, the only plausible theory which offers any solution to such insurmountable problems is the theory of special creation.

Termites Have Not Evolved Resistance to Pesticides

Lastly, it is worthwhile to consider the effect of pesticides on termites. Evolutionists commonly point to certain strains of bacteria which have become resistant to antibiotics and claim that this demonstrates evolution by means of gene mutations and survival of the fittest. On the other hand, creationists maintain that some bacteria always were resistant because of immunities which were incorporated into the genes at their creation; and these show up when others are exterminated. Observation in the termite world seems to indicate that the latter is true.

ALDRIN . . . has now been under test for 14 years and is still 100 per cent effective.

CHLORDANE... has now been under test for 15 years and is still 100 per cent effective.

DIELDRIN . . . has now been under test for 14 years and is still 100 per cent effective.

HEPTACHLOR . . . has now been under test for 11 years and is still 100 per cent effective.¹⁹

Termites, not having the ability to build up resistance against pesticides, have been unable to do so. Bacteria, on the other hand, created with such an ability, have either been able to become resistant, or have always been so. In summary, it can be said that termites provide a great amount of evidence against both the godless theory of evolution and the attempted compromise of theistic evolution. Moreover, in-depth studies of all types of animal will yield evidence of comparable importance in favor of special creation.

References

¹Hickin, N. E. 1971. Termites—a world problem. Hutchinson and Co., Publishers, p. 14.

²Ibid., p. 17

³Snodgrass, R. E. 1956. (in) The Smithsonian miscellaneous collections 131:10:6. Cited by Davidheiser, B., Evolution and Christian

Faith. 1969. Presbyterian and Reformed, Nutley, N. J., p. 304.

*Carpenter, F. M. 1952. (in) The yearbook of agriculture, p. 18. Cited by Davidheiser, B., *Loc. cit.*

⁵Hickin, Op. cit., p. 14.

'Ibid., p. 15.

'Ibid., p. 16.

- ⁸Ibid., pp. 16-18.
- "Ibid., pp. 90, 99, and 102.

¹⁰*Ibid*., p. 96.

"Ibid., p. 19.

¹²*Ibid.*, p. 66. ¹³*Ibid.*, p. 96.

151d., p. 99. 1⁴Ibid., p. 99.

¹⁵*Ibid.*, p. 101.

¹⁶*Ibid.*, pp. 106-108.

''Ibid., pp. 108-109.

¹⁸*Ibid.*, p. 116.

¹⁹*Ibid.*, pp. 210-211.

Note Added: It appears that termites have another special feature: they are able somehow to sense magnetic fields. See the 1976 article, What leads a termite through a magnetic field?, New Scientist 71(1014):391. The author has suggested that there might be a clue here to a way of making buildings termite-proof. A suitable arrangement of magnets might cause the termites to avoid the building entirely. It is about as hard to see how the ability to sense magnetic fields could have evolved as it is to see how the power of sight could have evolved. —Editor.

THE FIRST RECORDED DISCUSSION OF SPACE-TIME?

Objection 3: "... as a man can be distant in space, so also in time. But temporal distance impedes the knowledge of the separated soul—for they do not know the future. Therefore it would seem that distance in space would also impede the knowledge of the separated soul."

Reply to Objection 3: "Future things, distant in time, are not actual beings. And so they are not knowable in themselves, since a thing lacks knowability to the degree that it lacks being. Things that are distant in space, on the other hand, are actual beings, knowable in themselves. Thus the reasoning is not the same with respect to spatial and temporal distance."

From St. Thomas Aquinas, Summa Theologiae, Question 89, Article 7. (The knowledge of the soul separated from the body.)

(Is it not still a valid point, for use in Physics or Philosophy of Science, that the difference between past and future is of a different order from that between east and west?—Editor.)