understanding the Tungus behaviour in respect to the vast regions one must not build up a reasoning based upon the impression produced by the primitive forest, or wilderness on one self, when one is not familiar with it. Indeed, the Tungus have also their fears but these are not produced by the wilderness, but are produced by the psychic instability of the Tungus themselves, which will be later dealt with.

The same knowledge of conditions and the same considerations of practical utility and economy is characteristic of the Tungus when they use rivers as a means of communication. The Tungus are very careful in this respect. Before using a river they carefully investigate its course. Before approaching a dangerous waterfall, or dangerous sinuosities, they learn the course and they would go about to see the degree of danger. They know perfectly well the effect of flood, when rivers become dangerous for navigation because of floating trees of the size of mast pines which are carried down by the rivers, danger of swift current, and other conditions. Under such circumstances the Tungus must know in every particular case degree of real danger for navigation. Indeed, some of these rivers are not dangerous at all when in flood: only some of them become so. If the Tungus do not know a river they will not use it. In this case the surest way of travelling is that of following Tungus advice*.

Owing to these conditions the Tungus do not use all rivers which may be used. In fact if the river may be used at a short distance or its direction does not correspond to that of the Tungus migratory tendencies it is very likely that the river will not be used and even the art of navigating it will be forgotten. In the eyes of a superficial observer this may wrongly appear as "primitiveness", "conservatism" and adherence to the custom.

* Most of the accidents with travellers,—and in the history of the scientific exploration of the region occupied by the Tungus these cases were very frequent,—were caused by the travellers' lack of knowledge of the conditions of rivers and underestimation of the Tungus ability of orientation and their knowledge. Many of these travellers believed that the Tungus were frightened by "nature" and did not know the degree of actual danger. Indeed, in a single case one may sucessfully pass a dangerous place, but the Tungus who have to do it every day cannot naturally take risks. The daring of such a traveller in the eyes of the Tungus would appear as due to the lack of experience.

CHAPTER VI

THE PRIMARY MILIEU (*continued*)

24. CLASSIFICATION OF ANIMALS. A Tungus when meeting animals first of all observes them and either classifies them according to the existing classification or makes of the newly observed animal a special group. We have already seen that a Tungus finds himself in difficulty when he traces the line of demarcation between the mineral realm and plants, and when he traces it between the plants and animals.

Both plants and animals possess "life",—*erga*,—for they first of all grow and die, and react on seasonal changes. But since the animals *move*, they also possess what may be called a "soul". From this point of view the Tungus will be misled in classifying animals which do not move and show no striking features of the living organism. They will surely be put together with plants with an explanation that they are like some given plant, but still different.

Similar to plants the animals are classified in groups according to their appearance. There is no general term, in so far as I know, for all animals, which does not mean that the Tungus have no such a conception. They do have it which may be seen on different occasions.

The animals like mollusks, especially those supplied with shells and living in the water, where their movement is not well understood by the Tungus, are regarded as a special kind of "living" matter naturally possessing "animus" and even perhaps *erga*—"life", but the physiological functions of these animals remain unknown to the Tungus. This class is called in different dialects, by different terms, e.g. *takʲira* (Bir. Kum.), *taxura* (Manchu Writ.), *kētta* (Khin.)—the "river bivalves". But there are also special terms for special kinds of mollusks, e.g. *čukʲita* (Bir.)—the "snail"; *kaikari* (Manchu Writ.)—the "ammonite"; *kākta* (Tung. Sch.), *kʲaxta* (Oročí, Goldí, Olca, Sch.)—the "shell fish". The Manchu terminology in this respect is very rich for the Manchus had to give Manchu names to the animals known to them from the Chinese zoological treatises and encyclopaedias. However, the mollusks do not interest the Tungus very much for they are not much as food.

The insects also have no general name,but the Tungus distinguish many genera, and even species. However, there is a special name for all small insects, particularly harmful for the Tungus, like midges, and mosquitoes, different kinds of which they also distinguish by special names, e.g. in Ner. *unmʲikta, monmaktá, nànmakta, munmʲikta*, etc. in Bir. *čokomukta, manmakta* etc. not to mention terms borrowed from Mongol as *bargosun, buγutuna*, etc. The same is true, for instance, for the names of tick and related insects which are in Bir. *daktá, uγilivla*—one moving forward with its back; one which deeply penetrates the skin—*tiγirʲifki;* also in the gadflies Bir. distinguishes one with white head—*nʲaigda;* small black—*komčoki;* large brown-yellow—*ōmulə;* white hairy—*gèdènèkta;* with a general name *irgaktá*. The same may hold good for the insects which are not very harmful for man and animals e.g. the grass-hoppers, different kinds of bugs, etc. The Tungus observe insects, especially those of large size, with all possible details as to their habits and as far as possible their anatomy. The Tungus spend much time in observing the life of ants, amongst which they distinguish several species. They observe among them wars, relation with other insects, migrations etc. Also, they try to distinguish whether ants can hear and see, by experiments similar to those of the behaviourists etc. In