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Popular Comparison - Molecular Community of Cells
as Man's Community of Future

Belt #2

Man recently has begun to communicate with another world, a world with a very ancient and an extraordinarily organized civilization, quite different from the civilization that he is accustomed to. The customs, strategies, and basic principles of the society are, for the largely most part, unknown. This civilization is a very ancient one, probably one to three billion years old. It is a highly organized, ^{complex} civilization.

~~Their societies are remarkably complex.~~ Every individual uses essentially the same language. Man now understands this language; he has found libraries which contain a truly vast amount of information, and has begun, but only barely, to translate the text. Millions ~~and millions~~ of texts are available which contain the ~~precise~~ precise instructions for the ~~construction~~ ^{construction} of very complicated and remarkably ingenious microscopic machines which ~~were~~ ^{are} required to build a wide variety of materials which are used by each individual. Each text is rewritten in a slightly different form by a scribe and the new text then is ~~taken~~ taken by robots who follow each instruction blindly ;and with the aid of ancillary machinery, fabricate machines which are needed to ~~fabricate~~ ^{create} the things that are needed by every individual. In short, the texts describe a ~~chemistry~~ ^{chemistry} and ~~the~~ ^{an} associated industrial technology which is quite different and far more advanced than that of man's.

Man now understands the language of the civilization, ^{has written} quite elementary messages in the form that robots understand, and ^{via} such texts has communicated directly with the robots, ~~and found that~~ the robots read and faithfully carry out the instructions.

~~Thus far,~~ ^{Man} man has obtained many millions of texts from this civilization but, thus far, has translated only a handful of them. ^{He} ~~The~~ understands and can use some of the machinery of the civilizations. He has not yet had time to inventory the immense libraries at his disposal, much less translate the texts. He understands the construction of only a few machines but has ^{obtained} ~~captured~~ hundreds of kinds of machines and can use, to some extent, many of the machines. For example, man can use a machine which rewrite the texts in the form that the robots understand. The major problem is sorting out the machinery, the texts, and, of course, learning how to use the machines. However, man is rapidly learning how to write texts with the relatively primitive tools which are at his disposal. He probably will be able to write meaningful texts within five years. It probably will be much easier to do this than to separate one text from another, ~~in the libraries which we have obtained from the civilization.~~

~~The reason is,~~ it is difficult to separate one text from another in
the libraries that are available ^{because} ~~for~~ the instructions for millions of
machines may be encoded on a single tape. Therefore, the problem of
separating instructions for one machine or the other seems extremely
difficult.