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**Inconsistent Systems of Axioms  
and Contradictory Theory**

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## INCONSISTENT SYSTEMS OF AXIOMS and CONTRADICTORY THEORY.

5 Let  $(a_1), (a_2), \dots, (a_n), (b)$  be  $n+1$  independent axioms, with  $n \geq 1$ ; and let  $b'$  be another

axiom contradictory to  $(b)$ . We construct the system of  $n+2$  axioms:

$$[I] \quad (a_1), (a_2), \dots, (a_n), (b), (b')$$

which is inconsistent. But this system may be shared into two consistent systems of independent axioms

$$[C] \quad (a_1), (a_2), \dots, (a_n), (b),$$

and

$$[C'] \quad (a_1), (a_2), \dots, (a_n), (b').$$

We also consider the partial system of independent axioms

$$[P] \quad (a_1), (a_2), \dots, (a_n).$$

Developing [P], we find many propositions (theorems, lemmas)  $(p_1), (p_2), \dots, (p_m)$ , by combinations of its axioms.

Developing [C], we find all propositions of [P]  $(p_1), (p_2), \dots, (p_m)$ , resulted by combinations of  $(a_1), (a_2), \dots, (a_n)$ , plus other propositions  $(r_1), (r_2), \dots, (r_t)$ , results by combination of  $(b)$  with any of  $(a_1), (a_2), \dots, (a_n)$ .

Similarly for  $[C']$ , we find the propositions of  $[P]$   $(p_1), (p_2), \dots, (p_m)$ , plus other propositions  $(r'_1), (r'_2), \dots, (r'_t)$ , resulted by combinations of  $(b')$  with any of  $(a_1), (a_2), \dots, (a_n)$ , where  $(r'_1)$  is an axiom contradictory to  $(r_1)$ , and so on.

Now, developing  $[I]$ , we'll find all the previous resulted propositions:

$$\begin{aligned} &(p_1), (p_2), \dots, (p_m), \\ &(r_1), (r_2), \dots, (r_t), \\ &(r'_1), (r'_2), \dots, (r'_t). \end{aligned}$$

Therefore,  $[I]$  is equivalent to  $[C]$  reunited to  $[C']$ . From one pair of contradictory propositions  $\{(b) \text{ and } (b')\}$  in its beginning,  $[I]$  adds  $t$  more such pairs, where  $t \geq 1$ ,  $\{(r_1) \text{ and } (r'_1), \dots, (r_t) \text{ and } (r'_t)\}$ , after a complete step. The further we go, the more pairs of contradictory propositions are accumulating in  $[I]$ .

**Question 25:**

Develop the study of an inconsistent system of axioms.

**Question 26:**

It is interesting to study the case when  $n = 0$ .

Why do people avoid thinking about the CONTRADICTORY THEORY ? As you know, nature is not perfect:

and opposite phenomena occur together,

and opposite ideas are simultaneously asserted and, ironically, proved that both of them are true! How is that possible ?...

A statement may be true in a referential system, but false in another one. The truth is subjective. The proof is relative. (In philosophy there is a theory: that "knowledge is relative to the mind, or things can be known only through their effects on the mind, and consequently there can be no knowlwdgw of reality as it is in itself", called "the Relativity of Knowledge"; <Webster's New World Dictionary of American English>, Third College Edition, Cleveland & New York, Simon & Schuster Inc., Editors: Victoria Neufeldt, David B. Guralnik, 1988, p. 1133.) You know? ... sometimes is good to be wrong!

**Question 27:**

Try to develop a particular contradictory theory.

I was attracted by Chaos Theory, deterministic behaviour which seems to be randomly: when initial conditions are verying little, the differential equation solutions are varying tremen-

dously much. Originated by Poincare, and studied by Lorenz, a meteorologist, in 1963, by computer help. These instabilities occurring in the numerical solutions of differential equations are thus connected to the phenomena of chaos. Look, I said, chaos in mathematics, like in life and world!

Somehow consequently are the following four concepts in the paradoxist mathematics, that may be altogether called, CHAOS (or MESS) GEOMETRIES!