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War between Russia and Ukraine and Hope to the Peace by Takeo R.M. Nakagawa



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#### Abstract

This paper is concerned with how the struggle for existence between Russia and Ukraine would be end, for the result must be vain for the both countries as well as all the rest world. The theoretical outcome by the present study infers that either Russia or Ukraine must be beaten out by the opponent completely, and being governed by the country for the time being only in keeping the high possibility of the outbreak another struggle soon: The relation between Russia and Ukraine is always unstable over the generation by generation. It is therefore necessary for us all to seek for the way to eternal peace to avoid such a foolish war. It is inferred that there exists some hope to peace if the unification theory is applied to the war between Russia and Ukraine to overcomes the mysteriousness and irrationality of the both presidents, though the full discussion on the way how to apply the unification theory to settle down any conflict is left for the future.

Key words: War, Unification Theory, Peace, Struggle for Existence, Differential Equation.

## 1. Introduction

The unification theory (Moon 2006) is a powerful key capable of solving any conflict in our society, no matter how difficult it may be. When this theory is applied to society, various social problems can be settled down and realistically solved in the straight forward manner. In particular, when it is applied to criticizing communist theory (Lee 1997) together with the theory of evolution, all the contradictions of communist theory and Darwin's evolution theory are shed light brightly, and the necessary counter proposals can be established rationally.

The unification theory presents a completely novel view of our life, the world, the universe, and even God's work in history. It presents a holistic and comprehensive view of nature as a counterproposal to modern biology. The unification theory is also a principle of integration that can bring different religious doctrines and various philosophies into unity, while in keeping each of the diverse characteristics. This article is an extension of our recent paper entitled 'Origin of war and way to eternal peace' (Nakagawa 2022), so refer the relevant literatures that are useful for the mathematical modelling the war at the end of this forgoing paper.

The main purpose of the present paper is to model the war using the differential equations

and solve the war between Russia and Ukraine analytically, together with to infer how to settle down the war in terms of the unification theory.

### 2. Mathematical Modelling the War

The ongoing war between Russia and Ukraine is modelled in terms of one set of two differential equations. Let us assume that this war may be represented by so-called logistic model: At first, introducing the war potentials for Russia and Ukraine as x and y, respectively, we obtain that

when y=0, 
$$dx/dt=x(a-bx)$$
, (1)  
while  
when x=0,  $dy/dt=y(c-dy)$ . (2)

Moreover, assume that the progress speed of the war potential for Russia dx/dt is retarded by the Ukraine's war potential y. Because the progress speed of the war potential for Ukraine dy/dt must be followed similarly to dx/dt, we have a set of the two differential equations governing the war between Russia and Ukraine,

$$dx/dt=x(a-bx-my), \qquad (3)$$
$$dy/dt=y(c-dy-nx), \qquad (4)$$

where a, b, c, d, m, and n are positive constants. It may be immediately evident that the set of the two differential equations (3) and (4) have no analytical solution. It is, therefore, necessary that at this stage a novel approach must be adopted for the deeper understanding the war. Thus, alternatively let us obtain the critical points that would shed some light for us. In order to get critical points, set dx/dt=dy/dt=0, and as the results we have the following four points;

$$(0,0)$$
,  $(0, c/d)$ ,  $(a/b,0)$  and  $[(ad-cm)/(bd-mn)$ ,  $(cb-an)/(bd-mn)]$ .

Note that the second point is obtained with (2) by putting x=0 and dy/dt=0, the third point is obtained with (1) by putting y=0 and dx/dt=0, and the fourth point is obtained by putting dx/dt=0 and dy/dt=0.

It may be already evident that these points can be located at any quadrant on the phase plane, for the choice of these values have no limitation.

At this stage, for simplicity in the analyses, confine the following limited case as a=c, b=d as well as n > m, (5)

which corresponds to the case that the war potential for Russia x takes the advantage against the war potential for Ukraine y. Under these conditions, (3) and (4) can be simplified significantly as

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