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**Trucefully Yours: Hatred and the Prospects of
Genuine and Stable Peace**

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by

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Abstract

This paper highlights the role of hatred and its evolution in determining the course of conflicts between nations following their signing of an agreement for truce. It analytically demonstrates that weak inertia, diminishing memory of hatred and a low propensity to reciprocate aversion are essential for reaching a genuine and stable peace. These propositions are employed to assess the prospects of genuine and stable peace between Israel and Palestine. It is argued that due to inertia, strong memory of collective hatred and high propensity to reciprocate collective aversion, the inherent course of the Israeli-Palestinian conflict does not lead to a genuine and stable peace.

Keywords: Conflict, truce, hatred evolution, genuine and stable peace

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Trucefully Yours:

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1. Introduction

While the literature on conflicts between nations focuses on political and economic factors that may lead to a breakout of hostility,¹ the present paper highlights the role of an emotional factor, hatred, in shaping the course of conflicts between nations following a signing of an agreement for cessation of violence. As violent interaction between nations is likely to be propagated by their mutual levels of hatred, each nation's hatred toward its rival is taken to be a destructive, collective mental state. This mental state is strengthened by the nation's collective impression of the opponent's violence, habitual (or inertial) propensity to hate and propensity to reciprocate aversion. This state is weakened by the nation's fading memory of past hostility. The paper argues that cessation of violence is a necessary, but not sufficient, condition for reaching a stable, genuine peace between nations. In addition to formal agreements, genuine and stable peace requires the dissolution of the hatred between the nations. Inertia, persistent memories of hatred and high propensities to reciprocate aversion prevent nations from reaching a genuine and stable peace.

¹ For example, Grafinkel (1994) studies the interactions between domestic politics and international conflicts and shows that political party competition associated with electoral uncertainty leads to a decline in military spending. She argues that democratic institutions can be thought of as a possible "pre-commitment" mechanism that reduces the severity of conflict between nations. Hess and Orphanides (2001), however, dispute the idea that democracy and democratic institutions reduce conflict and frequency of wars among nations. Bearce and Fisher (2002) argue that there is an inverse relationship between trade and war. Nafziger and Auvinen (2002) show how other socio-economic factors such as income inequality and pervasive rent-seeking by a ruling elite are linked to war and state violence. Hess and Orphanides (1995) stress the role of recessions as triggering external conflict. Blomberg and Hess (2002) argue that a recession combined with external conflict increases the probability of internal conflict.

In particular, the paper deals with the question whether following cessation of violence between antagonistic nations there will be a convergence to a stable, genuine peace. The evolution of mutual hatred between two nations is presented by a system of two motion equations. The inherent course of their conflict is diagnosed by identifying the asymptotic properties of the system's steady state and summarised in two propositions. These propositions may be useful for shedding light on the prospects of genuinely peaceful resolution, after signing an agreement for truce, of conflicts in dual-population lands such as the Indian Sub-Continent, Sri-Lanka, Fiji, Sudan, Rwanda, South-Africa, North-Ireland, Bosnia-Herzegovina, Cyprus, Lebanon and Israel-Palestine. The propositions are used for assessing the prospects of a genuine and stable peaceful resolution to the Israeli-Palestinian conflict.

The paper is structured as follows. Section 2 formally presents the evolution of hatred between two nations and the conditions for diffusing hatred and reaching a stable, genuine peace. Section 3 argues that these conditions are not satisfied in the Israeli-Palestinian case. A strict separation, which is based on complete withdrawal of Israel from the Palestinian populated territories conquered in June 1967, can reduce the friction between the two nations but at the costs of forgone Israeli access to sacred sites and strategic areas. Section 4 analyses the prospects of complete Israeli withdrawal. Section 5 concludes.

2. A Formal Analysis of the Evolution of Hatred and the Conditions for Genuine and Stable Peace

Consider a conflict between two nations—A and B. The evolution of the hatred level of A toward B (denoted by H^A with negative values representing affection of A toward B) and the evolution of the hatred level of B toward A (denoted by H^B with negative values representing affection of B toward A) are parsimoniously displayed by the following motion (first-order, linear, differential)-equation system:

$$\frac{dH_t^A}{dt} = \mathbf{a}_{11}H_t^A + \mathbf{a}_{12}H_t^B + \mathbf{b}_1V_t^B \quad (1)$$

$$\frac{dH_t^B}{dt} = \mathbf{a}_{21}H_t^A + \mathbf{a}_{22}H_t^B + \mathbf{b}_2V_t^A \quad (2)$$

where t is a continuous time index,² V_t^A is the intensity of A's violence against B at t , V_t^B is the intensity of B's violence against A at t , \mathbf{b}_1 and \mathbf{b}_2 are parameters reflecting the effects of each nation's violence on the evolution of its counterpart's level of hatred, and \mathbf{a}_{11} , \mathbf{a}_{12} , \mathbf{a}_{21} , and \mathbf{a}_{22} are the elements of the equation-system's state-transition matrix.

In this framework, the parameters \mathbf{a}_{11} and \mathbf{a}_{22} reflect the effects of the current hatred level of each nation on the evolution of its hatred toward the counterpart. The sign and size of each of these parameters depend on two opposite factors associated with the current level of this destructive mental state: the nation's collective habitual propensity to hate its counterpart—inertia hereafter—and the nation's instantaneous weakening of this state caused by fading collective memory of hatred toward the opponent. Therefore, \mathbf{a}_{11} and \mathbf{a}_{22} are, positive if the respective nation's hatred-

² Alternatively, time can be taken to be discrete and the evolution of hatred can be depicted by a system of difference equations.

inertia dominates the nation's diminishing memory of hatred toward its counterpart. They are zero, or even negative, otherwise.

The parameter \mathbf{a}_{12} indicates the effect of nation B's level of hatred toward nation A on the evolution of nation A's hatred toward nation B. Similarly, \mathbf{a}_{21} indicates the effect of nation A's level of hatred toward nation B on the evolution of nation B's hatred toward nation A. That is, \mathbf{a}_{12} reflects the collective propensity of the people of nation A to reciprocate hatred toward nation B and \mathbf{a}_{21} reflects the collective propensity of the people of nation B to reciprocate hatred toward nation A. Though not compatible with benevolent moral values, these propensities are assumed to be non-negative, which is most likely compatible with the common, natural inclination.

DEFINITION: *Genuine peace is a course of affair between nation A and nation B that is free of violence ($V^A = 0 = V^B$) and reflecting diminishing trend of mutual hatred from initial positive levels ($H_0^A, H_0^B > 0$).*

Cessation of violence is a necessary, but not sufficient, condition for genuine peace. That is, although the steady state (SS) of the differential equation-system (1) and (2) associated with $V^A = 0 = V^B$ is hatred-free ($H_{ss}^A = 0 = H_{ss}^B$), there is not necessarily a convergence to this steady state.³

The inherent course of the A-B conflict, subject to mutual refraining from violence, is identified by the characteristic roots of the state-transition matrix of the homogeneous part of the aforementioned linear differential equation system:

³ A stable and genuine peace with mutual affection ($H_{ss}^A, H_{ss}^B < 0$) can be analytically displayed by adding scalars to the right-hand-sides of equation (1) and equation (2).

$$\mathbf{l}_{1,2} = 0.5\{(\mathbf{a}_{11} + \mathbf{a}_{22}) \pm \sqrt{\underbrace{(\mathbf{a}_{11} + \mathbf{a}_{22})^2 - 4(\mathbf{a}_{11}\mathbf{a}_{22} - \mathbf{a}_{12}\mathbf{a}_{21})}_{\Delta}}\}. \quad (3)$$

When these characteristic roots are negative, or conjugate-complex pair with a negative real part, the hatred-free steady-state, $H_{ss}^A = 0 = H_{ss}^B$, is asymptotically stable—cessation of violence starts genuine peace between A and B.

PROPOSITION 1: *When nation A and nation B mutually refrain from violence, genuine peace prevails if, and only if,*

- i. *A and B have sufficiently weak inertia and strongly diminishing memories of hatred so that $\mathbf{a}_{11}, \mathbf{a}_{22} < 0$, and*
- ii. *A's and B's propensities to reciprocate aversion ($\mathbf{a}_{12}, \mathbf{a}_{21} \geq 0$) are sufficiently low so that $\mathbf{a}_{11}\mathbf{a}_{22} > \mathbf{a}_{12}\mathbf{a}_{21}$.*

PROOF: Conditions *i* and *ii* ensure that the characteristic roots are either negative or constituting a conjugate-complex pair with a negative real part. In the first case, the hatred-free steady state is a proper node, whereas in the second case, it is approached by a spiral.

Note that when the propensities to reciprocate aversion are such that $\mathbf{a}_{11}\mathbf{a}_{22} - 0.25(\mathbf{a}_{11} + \mathbf{a}_{22})^2 < \mathbf{a}_{12}\mathbf{a}_{21} < \mathbf{a}_{11}\mathbf{a}_{22}$, there is convergence to a hatred-free steady state between nation A and nation B from any initial level of mutual hatred. If the propensities to reciprocate aversion are sufficiently low, so that $\mathbf{a}_{12}\mathbf{a}_{21} < \mathbf{a}_{11}\mathbf{a}_{22} - 0.25(\mathbf{a}_{11} + \mathbf{a}_{22})^2$ (i.e., $\Delta < 0$), the convergence to the hatred-free steady between A and B from any initial level of mutual hatred is along a spiral

displaying alternating periods of mutual hatred, one-sided hatred, and mutual affection.

PROPOSITION 2: *When nation A and nation B mutually refrain from violence, there exists a single trajectory of genuine peace along which their levels of hatred continually decrease if, and only if, one of the nations has a weak inertia and strongly diminishing memory of hatred so that, despite the inertia-dominated generation of hatred by the other nation, $\mathbf{a}_{11} + \mathbf{a}_{22} < 0$.*

PROOF: When only one of the nations has a dominant, strongly diminishing collective memory (i.e., either $\mathbf{a}_{11} < 0$ and $\mathbf{a}_{22} > 0$, or vice versa), and recalling the assumption that $\mathbf{a}_{12}, \mathbf{a}_{21} \geq 0$, then $\mathbf{a}_{11}\mathbf{a}_{22} - \mathbf{a}_{12}\mathbf{a}_{21} < 0$ and consequently $\sqrt{\Delta} > |\mathbf{a}_{11} + \mathbf{a}_{22}|$. Given that $\mathbf{a}_{11} + \mathbf{a}_{22} < 0$, $I_1 > 0$ whereas $I_2 < 0$. In this case, the hatred-free steady state is a saddle point. That is, there exists a single convergent arm to $H_{ss}^A = 0 = H_{ss}^B$ from a positive mutual (not necessarily the initial) level of hatred.

3. Implications for the Israeli -Palestinian Conflict

The Israeli-Palestinian conflict is one of the longest and most contagious disputes in the recorded human history. Due to chronically weak Palestinian governance and a vicious circle of provocations and retaliations, it has been difficult for Israelis and Palestinians to cease violence. It is proposed in this section that even if this problem is overcome, genuine peace between Israel and Palestine will not prevail. The underlying rationale for this proposition is that the conditions identified in Proposition 1 and Proposition 2 are not fulfilled.

CLAIM 1: *The Israeli people and the Palestinian people have strong inertia and memory of their mutual hatred.*

Though this claim is not necessarily valid for every Israeli and Palestinian, it is a plausible qualitative assessment of the collective Israeli and the collective Palestinian inertia and memory for the following reasons.

i. Long history of hostility: The hostility between the people of Israel and the people of Palestine prevailed during the Biblical (Judges and Kings) period and was resumed with the first wave of modern Jewish immigration in 1884.

ii. Severe scarcity of natural resources: There has been a fierce competition on essential natural resources—arable land and fresh water in particular—between the people of Israel and the people of Palestine.

iii. Israeli anxiety stemming from topographical sensitivity: The narrow coastal plain, which hosts the vast majority of the (Jewish) Israeli population, is topographically dominated by the densely Palestinian-populated mountain ranges of the West Bank.

iv. Palestinian anxiety stemming from territorial discontinuity and Israeli anxiety stemming from territorial fragility: The Palestinian territories, West Bank and Gaza Strip, are physically separated by Israeli territories. The Israeli southern region (*Negev*) and northern region (*Gallile*) are linked by a narrow, hard to defend, coastal plain. Similarly, Jerusalem is linked to the Israeli coastal plain by a narrow corridor.

v. Israeli anxiety stemming from internal demographic composition: About twenty percent of the citizens of Israel are Palestinians, many of whom are concentrated in strategically sensitive districts of Israel and are perceived to have different national aspirations than their Jewish counterparts.

vi. Unsettled refugees' problems: About fifty percent of the Palestinian population of the West Bank and Gaza Strip is 1948 Palestinian refugees, and their descendants, from villages and towns embedded in present-day Israel. Likewise, about fifty percent of the Israeli population is pre-1948, 1948, and post-1948, Jewish refugees, and their descendants, from Middle-Eastern and North-African countries.

vii. Long Israeli occupation: The West Bank and Gaza Strip have been under Israeli occupation since June 1967.

viii. Israel's expansionary actions: Israel has annexed East Jerusalem, which is sacred for Palestinians and regarded by them as their capital. Israel has also founded a large number of settlements in strategic areas and in friction-wise sensitive places (Hebron, most notably) in the West Bank and Gaza Strip.

ix. Israeli anxiety stemming from Palestinian expansionary aspirations and intentions: The West Bank and Gaza Strip are small, densely populated, disconnected and poor in natural resources. These conditions render a state in these areas *per se* unviable. These conditions perpetuate aspirations of expanded Palestinian control over Palestinian-populated Israeli districts and other pre-1948 Palestinian-dominated Israeli districts and of establishing territorial corridor between the separated parts.

x. Israeli anxiety and Palestinian incitement stemming from external, regional demography: Israel and the Palestinian territories are surrounded by Arab and Muslim countries, many of which perceive the Jewish state as a foreign entity and a fortress of a recent Judeo-Christian-Western crusade and prefer a Palestinian guardianship of the holy sites.

CLAIM 2: *The Israeli people and the Palestinian people have high propensity to reciprocate aversion toward one another.*

The large, multidimensional differences between the Israeli society and the Palestinian society lend support to this claim. The Israeli society is democratic, modern, technologically advanced, affluent, and predominantly Jewish, whereas the Palestinian society is non-democratic, traditional, relatively poor, and predominantly Muslim. These fundamental differences propagate the mistrust, fear, envy and intolerance, which are embedded in, and mutually reflected by, large segments of the Israeli and Palestinian societies.

Since both Israelis and Palestinians have strong inertia and vivid memories of their collective hatred as well as high propensities to reciprocate aversion toward one another, it is unlikely that their conflict will be transformed into a genuine and stable peace after signing an agreement for cessation of violence. The popular and continued support on both sides of hard-line, militant approach suggests that this is also the common view among Israelis and Palestinians. The premature optimism during the 1990s about the prospects of genuine peace between Israelis and Palestinians was, perhaps, a mere reflection of the interaction between the Israeli and Palestinian negotiating teams and their mediators following the disintegration of the Soviet Union (which earlier played a significant role in the region and militarily and politically supported some of the radical Arab countries), the demise of the Iraq's expansionary attempts and regional aspirations (which had been widely supported by the Palestinians), the outcomes of the U.S. led military campaign in the Gulf, and the subsequent belief in a "New World Order". Since 2000 this optimism has faded with the Palestinian rejection of the most generous offer ever made by an Israeli prime minister, with the Palestinian suicide bombings and Intifada, and with Israel's retaliatory excursions and erosion of The Palestinian Authority. A wall is presently

being built by Israel. The construction of the wall in its one-sided chosen path is not perceived by Palestinians as a barrier between Israelis and Palestinians but an Israeli attempt to draw in concrete new borders, fence and segregate Palestinian neighbourhoods, limit their political interaction and render any centralized Palestinian governance impossible. The wall does not separate Israelis from Palestinians. It is a memorial for the collective hatred between the two peoples. It is also a cause for them for reciprocating hatred. From the Palestinian perspective, a meaningful separation is attainable through a complete Israeli withdrawal to the pre-June 1967 borders.

4. The Prospects of Complete Israeli Withdrawal

As a genuine and stable peace is not attainable, the costs of complete Israeli withdrawal to the pre-June 1967 borders are the strategic exposure of the densely populated Israeli narrow central coastal plain and the loss of Israelis' access to sacred sites. A complete Israeli withdrawal will probably be support by the large minority group of Palestinian Israelis. The critical issue is, however, whether Jewish Israelis are inclined to give consent to a complete withdrawal in the absence of genuine and stable peace. The analysis of this issue involves *ex-ante* assessment of the unobserved levels of lifetime satisfaction of Jewish Israelis from living with and, alternatively, without East Jerusalem, The West Bank and Gaza Strip (Territories, hereafter).

The Territories are predominantly, very densely, populated by Palestinians. Hosting major historical and religious Jewish sites (sacred sites, hereafter, mainly in East Jerusalem and the West bank), much of their value for Israelis is sentimental and spiritual. The Territories, the mountainous West Bank in particular, also have a strategic value. As there is not convergence toward a stable and genuine peace between Israel and Palestine, a complete withdrawal denies Israel access to the sacred

sites and strategic areas in the Territories. While a total withdrawal reduces the friction between Jewish Israelis and Palestinians and thereby increases the life-expectancy and lifetime utility of some Jewish Israelis, the depression from losing access to the sacred sites and the anxiety from losing strategic areas might decrease the life-expectancy and lifetime utility of other Jewish Israelis—strongly sentimental, religious and risk averse ones, in particular. A qualitative, formal analysis of these aspects is as follows.

Let T_i be the remaining life-expectancy of an i -th Jewish Israeli endowed with access to the Territories and g_i the rate of change of her remaining life-expectancy caused by a full withdrawal, which is positive (negative) when the reduced-friction effect dominates (is dominated by) the combined adverse effects (depression and anxiety) stemming from the loss of access to sacred sites and strategic areas, and zero otherwise. Suppose, for tractability, that the lifetime-utility (LTU) functions of Jewish Israelis are additively separable and that each Jewish Israeli has a time-invariant instantaneous utility: namely, $u_{it} = u_i^w > 0$ with access to the Territories and $u_{it} = u_i^{wo} > 0$ without access to the Territories, for every instance t . Suppose also that each Jewish Israeli has a time-invariant rate of time preference ($r_i \geq 0$), and that some Jewish Israelis, those residing in the Territories, face immediate pecuniary and non-pecuniary costs of relocation ($C_i \geq 0$, expressed in *utile*).

PROPOSITION 3: *If the ratio of instantaneous utilities in the mutually exclusive states (with and without the Territories) satisfies*

$$\frac{u_i^{wo}}{u_i^w} > \frac{\mathbf{r}_i C_i / u_i^w + (1 - e^{-r_i T_i})}{1 - e^{-r_i(1+g_i)T_i}}, \text{ a rational Jewish Israeli prefers complete withdrawal}$$

from the Territories to retained access.

PROOF: A rational Jewish Israeli prefers total withdrawal from the Territories to retained access if

$$LTU_i^{wo} \equiv \int_0^{(1+g_i)T_i} e^{-r_i t} u_i^{wo} dt - C_i > \int_0^{T_i} e^{-r_i t} u_i^w dt \equiv LTU_i^w$$

which, by integration and rearrangement of terms, is equivalently rendered as

$$\frac{u_i^{wo}}{u_i^w} > \frac{\mathbf{r}_i C_i / u_i^w + (1 - e^{-r_i T_i})}{1 - e^{-r_i(1+g_i)T_i}}.$$

Proposition 3 stresses that $u_i^{wo} > u_i^w$ is not a necessary condition for a Jewish-Israeli to prefer complete withdrawal from the Territories to retained access. The group preferring withdrawal to retained access also includes people for whom the instantaneous utility without such access is lower than the instantaneous utility with access ($u_i^{wo} < u_i^w$) so long that they are endowed with a sufficiently low rate of time preference and expect the rate of increase in their remaining life-expectancy to be significant ($g_i \gg 0$) and compensating for the loss of instantaneous utilities and the costs of relocation. Israelis who prefer the retaining of access to the Territories are characterised by $\frac{u_i^{wo}}{u_i^w} < \frac{\mathbf{r}_i C_i / u_i^{wo} + (1 - e^{-r_i T_i})}{1 - e^{-r_i(1+g_i)T_i}}$ due to a large decline in their instantaneous utility from losing access to sacred sites, large non-pecuniary (mental) costs of relocation, and, possibly, an adverse effect of the anxiety stemming from loss of strategic areas and the depression stemming from the loss of access to the sacred sites on their remaining life-expectancy.

About three quarters of the Jewish-Israeli population, predominantly secular, reside in the narrow Mediterranean coastal plain encompassing Greater Tel Aviv and Greater Haifa, which constitutes about fifteen percent of the area of the State of Israel and is topographically dominated by the neighbouring mountainous West Bank. Despite climatic and environmental advantages, only a small portion of the Jewish-Israeli population resides in the hinterland—in and around Jerusalem and other major historical Jewish sites in the Negev and the Gallile. This revealed residential preference lends support to the following claim.

CLAIM 3: A majority of the Jewish Israelis is homo-Mediterranean.

Claim 3 implies, on the one hand, that it is possible that the decline in the instantaneous utility from losing access to the sacred Jewish sites in the Territories is small for the majority of Jewish Israelis. On the other hand, a complete withdrawal from the Territories renders the majority of Jewish Israelis topographically exposed and strategically vulnerable to Palestinians, in particular, and Arabs, in general, and hence significantly reduces their instantaneous utilities and life expectancies. In other words, claim 3 suggests that, in the absence of stable and genuine peace, the main factor for most Jewish Israelis in considering a withdrawal from the Territories is security rather than sacred sites. If the positive effect of the reduced Israeli-Palestinian friction on their life expectancy dominates the negative effect of losing strategic areas, if the added lifetime utility during the extended life period more than compensates for the aforementioned depreciation in the instantaneous utility, and if most Jewish Israelis are rational, then there is a Jewish Israeli majority in favour of complete withdrawal from the West Bank and Gaza Strip.

5. Conclusion

The paper analysed the role of hatred in the course of a conflict between two nations. By analysing the dynamic properties of a hatred motion-equation-system it was demonstrated that when the nations mutually refrain from violence a genuine peace prevails if, and only if, both nations have sufficiently weak inertia, strongly diminishing memories and low propensities to reciprocate aversion. It is possible that the convergence to a hatred-free peace from any combination of initial levels of mutual hatred displays alternating periods of mutual hatred, one-sided hatred, and mutual affection. When one of the nations does not have weak inertia and strongly diminishing memory of hatred, there exists a single convergent arm to a hatred-free peace if the other nation's does possess these virtues.

The co-existence of the Israeli people and the Palestinian people in the south-eastern corner of the Mediterranean basin has been hostile, frequently violent, and hindering global security. It was argued that both Israel and Palestine have strong inertia and vivid memories of their collective hatred as well as high propensities to reciprocate aversion toward one another. Therefore, it is unlikely that the course of their conflict, even under mutual refraining from violence, leads to a stable and genuine peace. A strict territorial separation, which is facilitated by a complete Israeli withdrawal, can reduce friction between Israelis and Palestinians but at the costs of strategically exposing the densely populated Israeli, narrow central coastal plain.

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