Research Essay

A Seminal Model to Describe the Dynamics of the Peace Propagation Process within a Community

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Abstract

In this essay, we make an initial exploration about the process of peace propagation in a small community by describing the dynamics of people existing in different states of consciousness and interacting in a set of encounters that are conjectured to provide the necessary elements in order to make a transition from one state of consciousness to another. This process describes ways of existing and acting in the world which human beings traverse in order to achieve inner peace and affect others to support the propagation of such peace within the community [1, 2] towards the development of a large-scale, trans-generational Peace Propagation Model for the Exploration and Understanding of Global Peace [3].

Keywords: Seminal model, dynamics, peace propogation, community.

Introduction

In previous work [1], complementary to this essay, entitled "A System Dynamics Approach to Modelling Individual Peace towards the Creation of a Social Peace Propagation Model", it is written:

> The dream of Global Peace is alive today in the hearts and minds of many people. To attain this dream requires that each part of the whole, each person within humanity, finds ways to live in peace and harmony. This is a personal challenge and each person is responsible for fulfilling their own state of peace, whether it be in personal connection with the Creator or in an impersonal interaction within the field of Universal Values…we are convinced and therefore we conjecture that as more people attain inner peace, human communities of inter-associations of peaceful people will also contribute to the tendency of greater social harmony and, by extension (interaction between communities), humanity will follow the same tendency [1, pp. 289-290].

This essay is an exploration of how peace can propagate within communities. Initially, we have conceived the idea of a model to describe a trans-generational peace propagation process for

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communities, where encounters with people existing in more advanced states of being[1] are considered to be the main catalyst for a person to transition from a lower state of consciousness to a higher one. The more meaningful encounters people have with others in more advanced and peaceful states of consciousness, the greater the probability for them to transition to a higher state, and thereby support the community as a whole to become more peaceful. This larger system encompasses the genetic propensities for peace and the environments that support this gene pool expression from one generation to the next [4, 5a, 5b].

This undertaking is accomplished with a systemic approach that relies on systems thinking, system dynamics, stochastic and agent-based simulation which have been successfully used for complex systems like the one we aim to understand [6, 7, 8, 9, 10a, 10b, 11, 12, 13].

Here we describe a model that considers four (4) distinct States of Consciousness: Survival Consciousness, Sharing Consciousness, Student of Higher Spiritual Laws, and God's Consciousness (States Zero (0), One (1), Two (2) and Three (3) respectively), to be defined later. In our model, meaningful and valuable interactions with people spiritually developed and existing in peaceful states of consciousness are considered to be the main catalyst for a person to transition from chaotic, stressful and violent states to more coherent and peaceful ones.

Here we define a person existing in a higher state of consciousness as someone who has attained peace understood as a state of being or existence, while a person living in continuous reactive mode as a consequence of being conditioned to survival, we define he or she as one existing in a lower state of consciousness.

The model also considers other complexities, as for example: **(1)** the number of encounters (interactions) over time with people in different states of consciousness and how those interactions affect the probability of transition between states of consciousness, **(2)** the transition from State Two (2) to State Three (3) is based on a time delay rather than the number of encounters, **(3)** transitions where a person can regress to lower states of consciousness based on their level of commitment for spiritual growth, and **(4)** the level of commitment is modulated by the number of encounters with people in different states of consciousness in combination with the person's own state of consciousness.

This conceptual model may serve as a framework to further develop mathematical and simulation models with the aid of semi-Markovian transition probability matrices [14, 15, 16] representing the different functions that describe the probabilistic behaviour of the transitions between one state and another.

It is important to note that this is a seminal model that ought to be refined over time in order to reflect additional and more complex dynamics that more likely would facilitate the development

[1] Individuals who are more masterful in embodying inner peace for long periods of time, with the capacity to restore relatively quick when tired, and to affect others more efficiently in the attainment of individual peace.

of an integral model for Planetary Peace Propagation (PPP) within and between communities. This kind of model would aim to a better understanding of what is required, and within which time horizon, to see peaceful and harmonious communities emerging around the globe.

For this essay however, we will focus only on the exploration of a single community, in a single generation, with the aim to expand the model for future papers allowing us to describe interactions between communities and the planetary trans-generational process towards Global Peace.

I. Description of the Model

Following we introduce the reader to a general description of a simplified version of the PPP Model that represents some relevant aspects of the complex system to be explored. Initially we devote our attention to the understanding of the different states, probability functions and rules to represent the system via a simplified general conceptual model, to lay the foundations for the development of simulation models, geared towards the investigation of the behaviour of this system under different scenarios and conditions. Next, the reader is presented with a description of the states in which a person may exist and the transitions between them as he or she interacts with others, as similarly described by different authors in an attempt towards a synthesis between science and spiritual wisdom [17, 18, 19].

The four (4) distinct states of consciousness are described as follows:

- **State Zero (0)**, '**Survival Consciousness**' represented by the ✖ in our diagrams and tables; a person who is habituated to receive for self alone (selfish), with a cognitive map strongly conditioned to exist in survival, territorial and reactive mode.

- **State One (1)**, '**Sharing Consciousness**' represented by the ■ in our diagrams and tables; a person who receives for the sake of sharing without an expectation of receiving in return, showing good character and kindness towards others, while still attending to his or her own personal desires, aspirations and dreams.

- **State Two (2)**, '**Student of Higher Spiritual Law**', a *Talmid Or Ain Soph,* or simply *Talmid Or,* represented by the ● in our diagrams and tables; a person who is learning to connect with the Light of the Creator in order to listen to the still small voice within his or her own garden of consciousness, aiming to do the Will of the Most High and eventually attain God's Consciousness or alternatively, to live in peace, in tune with the Universe and the flow of meaningful events that lead to meaningful actions of goodness and kindness.

- **State Three (3)**, '**God's Consciousness**', a *Tzadik* or *Tzadikah*, represented by the ▲ in our diagrams and tables; a Righteous Being, Ambassador or Ambassadress of

Peace, existing with a cognitive map geared to altruistic actions and the Will of God [19, 20, 21, 22, 23, 24, 25, 26, 27, 28a, 28b, 29, 30].

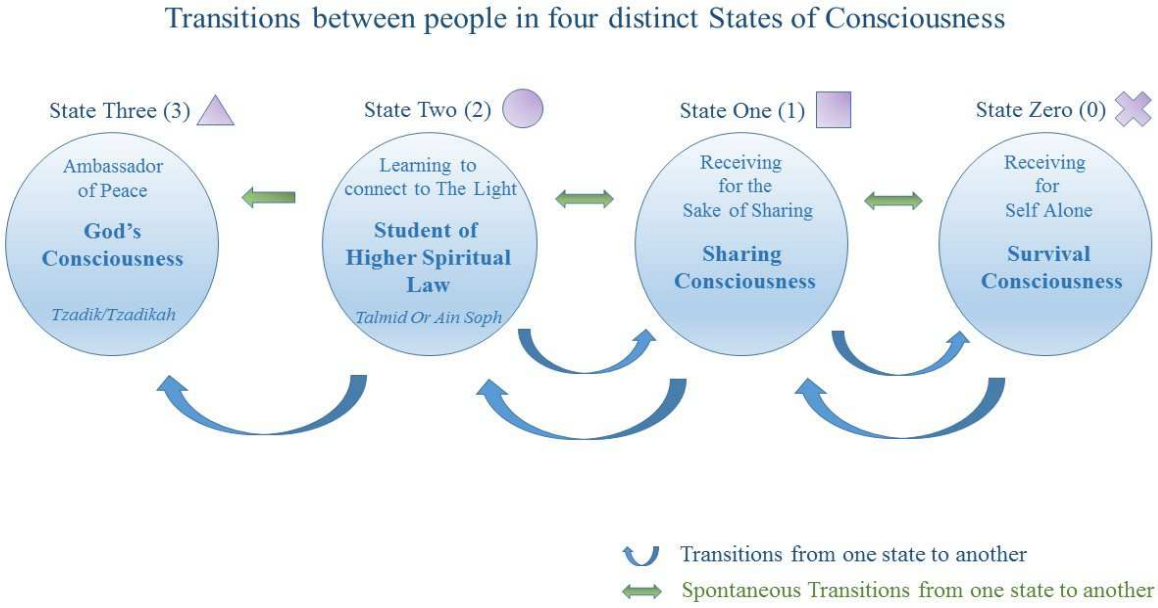

Diagram I represents different flows between states of consciousness where the mixture of people in the four (4) distinct states of consciousness interact with one another and in so doing, the possible transitions from one state to another occur within the community.

The following three (3) figures portray different functions that describe the probabilistic behaviour that influence the transitions between states of consciousness (as represented in **Diagram I**). We define '*progression*' as a transition from a lower to a higher state and '*regression*' as a transition between states in the opposite direction. Spontaneous transitions from one state to another (as represented by the green arrows in **Diagram I**) may occur for any person existing in any state, apart from State Three (3). These are events, visitations or revelations, that cause or initiate sudden changes at a particular point in time, which shortcut the need for encounters with people in higher states of consciousness for '*progression*' or a drop in level of commitment to growth for '*regression*'.

Let us now explore the *'progression'* dynamics between states more deeply, where we describe the transition from State **i** to State **j**, where i < j, by the probability $\mathbf{P(T_{ij}/Ne=n)_t = p}$ or equivalently, $\mathbf{P_{ij}^t\{Ne - n\} - p}$ where i, j = 0,1,2 or 3 and $0 \leq p \leq 1$ and where **n** is an integer, n=0,1,2… The reader must note that this model describes transitions between states in discrete steps of time, from t to t+1, where **t** is a time index, t=0,1,2,3…, representing monthly transition times. Another important feature of this model to describe the system of PPP, is that the number

of encounters[2] (**Ne**) is a dynamical and cumulative probabilistic variable that resets to zero (0) once the transition has taken place.

For example, let's say that a person existing in State Zero (0) during the first month meets four (4) times with a person existing in State Two (2). Such a situation would be described by $\mathbf{P_{01}^1\{Ne_B = 4\} = 0.3}$, which represents the probability of transition for that person, from State Zero (0) to State One (1) given that this person had four (4) encounters during month one (1) with a person existing in State Two (2). This number of encounters is represented by $\mathbf{Ne_B}$, where Ne is the number of encounters accumulated so far and where the subscript (**B** in our example) represents the transition probability function associated with the different interactions between people in different states that encounter a person, in our example, existing in State Two (2). Furthermore, $\mathbf{P_{01}^1}$ represents the probability of making a transition from State Zero (0) to State One (1) where the superscript t=1 represents the first month or month one (1). Finally, we observe that this probability of transition has a value of 0.3.

Figure 1: Transition probability as a function of a number of encounters. The probability of transition A, from State Zero (0) to One (1), starts to rise until it reaches a maximum, as for example, when we observe in the figure that the $P^t_{ij}\{Ne > 29\} \approx 1$.

If the person never made a transition in month one (1), then at the end of month two (2), when we actualise the computations, where for example, if the person existing in State Zero (0) had seven (7) new encounters with people existing in State Two (2), then the total number of encounters Ne_B accumulated so far would equal eleven (11), since during month one (1) he or

[2] Note that an encounter should be taken or defined only as one that carries meaning and a certain quality capable of adding or taking value from the people who participate in this encounter. Therefore, the random variable '*number of encounters*' (*Ne*) will only account for these types of quality encounters.

she had four (4) encounters and during month two (2) he or she had seven (7) encounters. The probability of transition for month two (2) would be as follows: $P_{01}^{2}\{Ne_B = 11\} = 0.7$.

Figure 1 (above) depicts the probability of transition from State Zero (0) to State One (1) as a function of the number of encounters between a person existing in State Zero (0) and a person existing in State One (1).

Figure 2 depicts the probability of transition from State Zero (0) to State One (1) as a function of the number of encounters (Ne) with people existing in State Two (2). The same probability function applies for people existing in State One (1) to make a transition to State Two (2) according to the number of encounters with people in State Two (2).

Figure 2: Transition probability as a function of a number of encounters. The probability of transition B, from State Zero (0) to One (1) or State One (1) to Two (2) starts to rise at around the 11th encounter and reaches a maximum of 1 at the 20th encounter where $P^{t}_{ij}\{Ne > 19\} \approx 1$.

Figure 3 depicts the probability of transition from State Zero (0) to State One (1) as a function of the number of encounters with people existing in State Three (3). The same probability function applies for people existing in State One (1) to make a transition to State Two (2) according to the number of encounters with people in State Three (3).

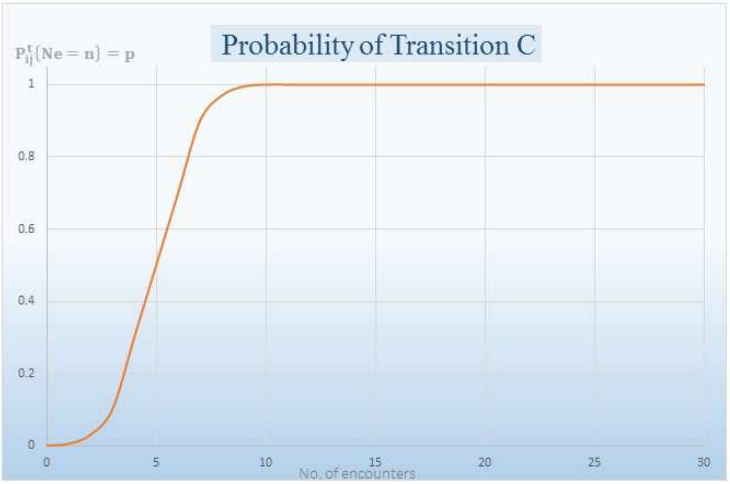

Figure 3: Transition probability as a function of a number of encounters. The probability of transition C, from State Zero (0) to One (1) or State One (1) to Two (2) starts to rise from the 1st encounter and reaches a maximum of one (1) at the 10th encounter where $P^t_{ij}\{Ne > 9\} \approx 1$.

Let us now have a closer look at some of the complexities of the model.

In **Figures 1**, **2** and **3** we can see that the greater the number of encounters (Ne) a person existing in State Zero (0) has with a person existing in State One (1), Two (2) or Three (3), the higher the probability of making a transition to State One (1). However, there is an important difference to note concerning the three (3) probability of transition functions A, B and C, which is that the maximum probability that a person existing in State Zero (0) will make a transition to State One (1) is reached with less number of encounters, conditional to the State of Consciousness, (State One (1), Two (2) or Three (3) respectively), the person in State Zero (0) interacts with, as can be appreciated below in **Figure 4**.

The reader should also note that a person existing in State Zero (0) will have different numbers of encounters with a combination of people existing in the three (3) different States (number of encounters Ne_A, Ne_B and Ne_C for State One (1), Two (2) and Three (3) respectively), where the maximum probability of transition can be computed as:

$$P^* = \max\{P^t_{ij}(Ne_A=n), P^t_{ij}(Ne_B=n), P^t_{ij}(Ne_C=n)\}.^3$$

[3] This way of computing P* is one amongst many possible criteria, which for our purpose, we determined as the most appropriate.

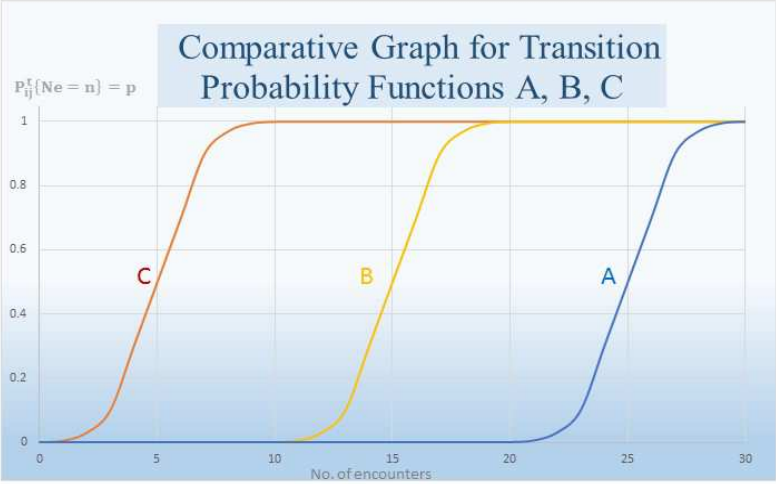

Figure 4: Comparative graph for transition probability functions A (blue), B (yellow) and C (orange).

Note that ten (10) encounters (Ne_C=10) are necessary to guarantee that the probability, $P^t_{01}\{Ne_C=10\}$= 1, for a person existing in State Zero (0) to make a transition to State One (1) when meeting a person existing in State Three (3) in any particular moment 't', whereas, twenty (20) encounters (Ne_B=20) are required to ensure that the probability, $P^t_{01}\{Ne_B=20\}$=1, when a person existing in State Zero (0) interacts with a person existing in State Two (2) in any particular moment 't', while thirty (30) encounters (Ne_A=30) are required to guarantee that the probability, $P^t_{01}\{Ne_A=30\}$=1, when interacting with a person existing in State One (1) in any particular moment 't'. It is important to note that any of these transitions could also happen with less encounters, however with an associated lower probability.

Note that one of the simplifications of the model is that it assumes that the quality encounters which people have with others include the fact that people in lower states are always receptive of people in higher states when interacting with them. This condition is violated in many different types of environments (in the large sense of the word: homes, coffee shops, nature, cultures or nations) where the encounters happen. However, this could also be reflected in the probabilistic elements of the model.

Now let us look at how a person existing in State One (1) makes a transition to State Two (2) given a certain number of encounters: Ne_B, Ne_C.

The probability, $P^t_{ij}\{Ne_B = n\} = p$, described in **Figure 2** also applies to the above case[4] where, the more encounters that a person existing in State One (1) has with a person existing in State Two (2), the higher the probability of making a transition to State Two (2).

[4] Note this condition could also be defined with a probability of transition function different to the one in **Figure 2**.

From here on, for the purpose of simplification, we will refer to the **T**ransition **P**robability **F**unction given a certain number of **E**ncounters for time t, $P_{ij}^{t}[Ne = n] = p$, as **TPFE**.

The TPFE in **Figure 3** also applies[5] to the above mentioned case, where the more encounters a person existing in State One (1) has with a person existing in State Three (3), the higher the probability of them making a transition to State Two (2).

Based on the above we can say that the probability that a person existing in State One (1) will make a transition to State Two (2) is also determined by the state of consciousness of the person he or she interacts with, as with the previous cases we have described.

Now let us consider another case, where a person existing in State Two (2) makes a transition to State Three (3) now based on a time delay with its associated probability function, as represented in **Figure 5**:

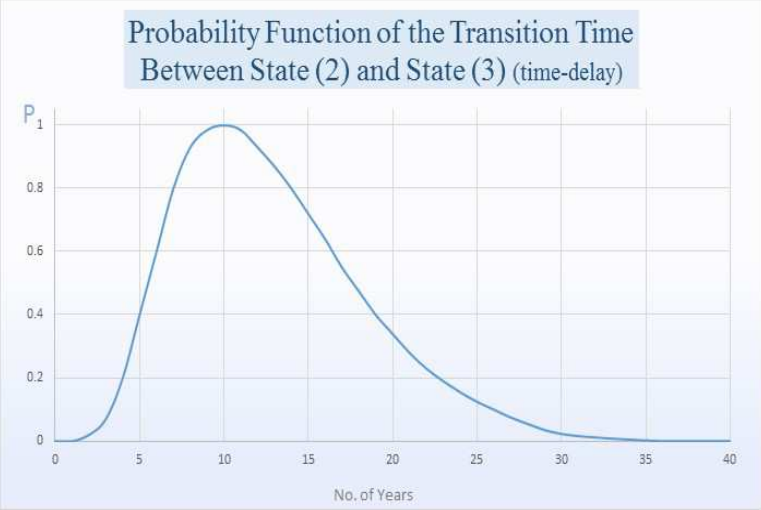

Figure 5: Probability function for the transition time from State Two (2) to State Three (3).

In **Figure 5** we observe that the **T**ransition **P**robability is a **F**unction of the number of **Y**ears (**TPFY**), rather than the one based on the number of encounters (**TPFE**) as in prior cases. This is due to the fact that other aspects and elements [1, 17] will determine how long this process takes. From anecdotal evidence based on subjective experiences gathered from a peace propagation questionnaire where a question was posed via email to a database of 161 people and by personal interviews [21], it appears to be likely that most people will make the transition at around a ten (10) year threshold, however some people may make this transition earlier or later in time, as reflected in **Figure 5**.

[5] Ibid.

We have looked at some examples of the **TPFE** associated with people whom from State Zero (0) or One (1), will make a transition to State One (1) or Two (2) respectively. Now let us look at the probabilities of a person regressing from one state of consciousness to a lower state. Here we introduce a soft variable which we call '**L**evel of **C**ommitment' (**LC**). This variable is a determining factor as to whether a person regresses from one state to another, remains the same, or progresses. In our model, Level of Commitment is defined as the dedication and devotion one displays to anything they do; the state of being, the quality, time and effort given to sustain and nurture one's state of consciousness.

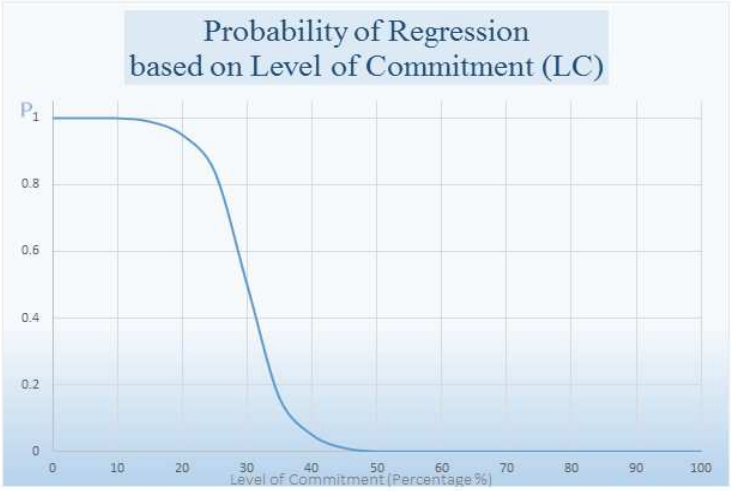

Figure 6: Transition probability function of regression to a lower state of consciousness associated with level of commitment (between level 0 and 100%). The probability of regression, $P^{t}_{ij}\{LC = level\} = p$, from State One (1) to State Zero (0) or State Two (2) to State One (1) starts to rise from a level of commitment smaller or equal to 45% and reaches a maximum of one (1) around a level of commitment smaller than 10% (for example, $P^{t}_{10}\{LC \leq 10\%\} = 1$).

As we have already seen in **Diagram I** there are two (2) possible regression scenarios, the first being a person existing in State Two (2) regressing to State One (1) and the other being a person existing in State One (1) regressing to State Zero (0). It is assumed in our model that once you have reached the state of a *Tzadik* or *Tzadikah*, State Three (3), you will remain in that state of consciousness (once a *Tzadik*, always a *Tzadik*).

Figure 6 shows us that, as the Level of Commitment increases the probability of regression decreases, where for example, the probability of regression ($P^{t}_{ij}\{LC = level\} = p$) from State One (1) to State Zero (0) or State Two (2) to State One (1) at any given time 't', starts to rise from a level of commitment smaller or equal to 45% and reaches a maximum of one (1) around a level of commitment smaller than 10%. It is important to note that the level of commitment (**LC**) has been scaled arbritarily between level 0 and 100%.

It is important to remember that spontaneous transitions from one state to another (as represented by the green arrows in **Diagram I**) may occur for any person existing in any state, apart from State Three (3). As mentioned previously, these are events, visitations or revelations, that cause or initiate sudden changes (a *'progression'* or *'regression'*) at a particular point in time, which shortcut the need for an encounter with another person to influence such transitions, as well as being independent of the level of commitment, and hence outside the parameters and functions set above in **Figures 1-6**.

We must note at this stage that the Level of Commitment is expected to rise as one progresses further on the journey towards becoming an Ambassador or Ambassadress of Peace (*Tzadik* or *Tzadikah*) and therefore we should expect that this would affect the **TPFE** and **TPFY** which in turn could influence the dynamics of the system. This could be easily reflected in the model by making the TPFE and TPFY a function of Level of Commitment, to be described in general form as TPFE (LC) and TPFY (LC), $P^{t}_{ij}\{Ne=n, LC = l_c\} = p$ where i, j = 0,1,2 or 3 and $0 \leq p \leq 1$.

We should note that in general we can say that a *'regression'*, as we have conceived it in the model, would never be attributed to encounters with people of lower states of consciousness, rather *'regressions'* should only be attributed to the level of commitment, which squares back the responsibility of each individual to learn how to be peace and govern themselves.

II. Community Model

In Section I, we looked at interactions between people existing in the four (4) distinct States of Consciousness and the probabilities of a person existing in each state transitioning from one state to another. Now let us explore a model of Community Interactions.

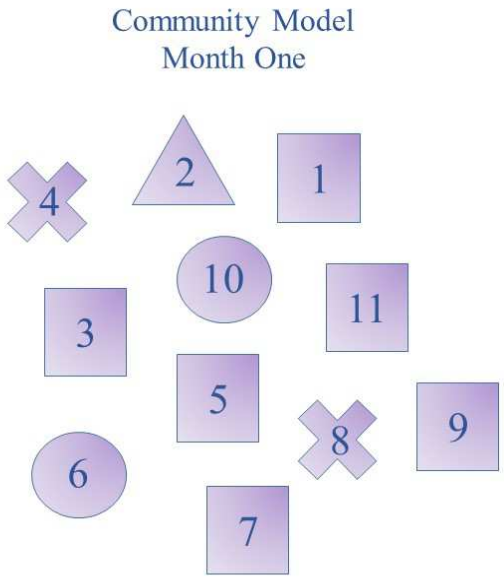

Diagram II: Community diagram representing the state of consciousness of each member symbolised by crosses, squares, circles and triangles, associated

to people existing in State Zero (0), State One (1), State Two (2) and State Three (3) respectively, at the very beginning of the first month (t=1).

Above in **Diagram II** we have graphically modelled the interaction of a community of eleven (11) people over a one (1) month period, where each person exists in one (1) of the four (4) States of Consciousness.

As we can see, there is one (1) *Tzadik*, a person existing in State Three (3) Consciousness, represented by the triangle (▲, Person No. 2). There are two (2) people existing in State Two (2), represented by circles (●, Persons No. 6 and 10). There are six (6) people existing in State One (1), represented by squares (■, Persons No. 1, 3, 5, 7, 9 and 11), and two (2) people existing in State Zero (0) represented by crosses (✖, Persons No. 4 and 8).

Throughout the month a different number of encounters occur between the people existing in the different states of consciousness. In **Table I** we see for example, that Person No. 2, has three (3) encounters with Person No. 1. This same person also has ten (10) encounters with Person No. 9, and so on. It is very easy to derive an approximation of the probabilities of transition for each of these interactions from **Figures 1-3**. This exercise is left to the reader.

First Person's ID	Second Person's ID	No. of Encounters
No. 2	No. 1	3
No. 2	No. 4	6
No. 2	No. 3	4
No. 2	No.10	5
No. 2	No.11	1
No. 2	No. 9	10
No. 2	No. 8	3
No. 2	No. 6	7
No. 2	No. 5	4
No. 2	No. 7	1

Table I: Simulation of the number of encounters that Person No. 2 had with different people within the community in the first month.

Each of the encounters that occur within the community affect and change the dynamics of the community, with the potential to transform the state of consciousness in which each person exists, where either a '*progressive transition'* or a '*regressive transition'* may occur for each person in each time step in the model, as previously mentioned. For this initial model we take a quality encounter to be, as defined previously in this document, with an extra assumption that their duration should be between one (1) and eight (8) hours. In **Figure 4**, as depicted in the $TPFE_C$, we have also set a threshold of ten (10) encounters with a *Tzadik*, showing how *'progressive transitions'* would occur based on number of encounters (*x* axis) with different

probability associated to them, $P^{t}_{ij}\{Ne_C = n\} = p$, until the threshold is met, in which case a *'progressive transition'* will occur with absolute certainty or probability $P^{t}_{ij}\{Ne_C \geq 10\} = 1$. The above Table shows that only Person No. 9 had enough encounters with the *Tzadik*, Person No. 2, which meant that Person No. 9, who was in State One (1), would make a transition to State Two (2) at the end of that month (t=1) with absolute certainty.

The following **Diagram III** further depicts the interactions that Person No. 2 had with each member of the community and gives a graphical geometrical impression (a graph or mandala) of the network that these interactions form. We conjecture that as each person connects and interacts with every other person in quality encounters, the more the structure and strength of the community will grow and become stable, making greater the possibility and probability of the community as a whole transitioning to higher states of consciousness and Peace, together as one!

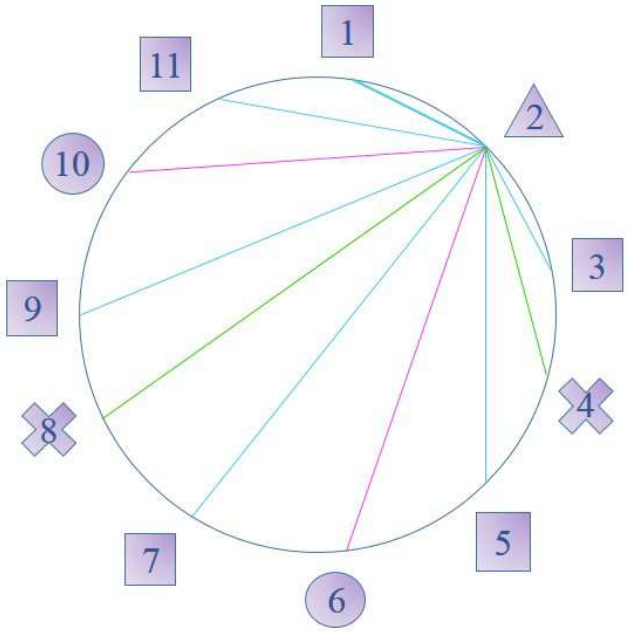

Diagram III: Graph or mandala of Person No. 2's interactions with people within the community during the first month.

Now let us look further at the dynamics of where the transitions in consciousness occurred within the community during the first month.

Table II depicts four (4) different scenarios of interaction where transitions occurred with probability equal to one (1) and the reader is encouraged to verify that in **Figures 1-4**.

In **Table II** we can see that:

- Person No. 9 had ten (10) encounters with Person No. 2.

- Person No. 8 had thirty (30) encounters with Person No. 5.

- Person No. 4 and Person No. 11 had twenty one (21) encounters with Person No. 6.

The reader should note that these are very large numbers of encounters to have in a month in the context of this model and the probabilities associated to such large numbers of encounters are consequently the maximum of one (1) as depicted in **Figure 4**.

	Month One	
First Person's ID	Second Person's ID	No. of Encounters
No. 2	No. 9	No. 10
No. 5	No. 8	No. 30
No. 6	No. 4	No. 21
No. 6	No.11	No. 21

Table II shows the interactions between people who display a large number of encounters with their associated TPFE=1, which means that Persons No. 9, 8, 4 and 11, existing in lower states of consciousness relative to the people they encountered, made a transition to the immediate higher state.

Based on the parameters of our model and the different interactions that occur from the first month (t=1) to the second month (t=2), we can appreciate the contribution of each transition within the community to an improvement in the state of consciousness of the community as a whole, perhaps based on average or mean field computations.

We have shown in **Diagram IV** one of many possible outcomes for the transitions from the first to the second month which only take into consideration those encounters represented in **Table II** (encounters with maximum probability of transition, TPFE=1), while we have left all other people in the same state described by the interactions in **Table I**. Since they display lower probabilities of transition, we assumed that between the first and the second month no change of state occurred for these people.

In **Diagram IV**, we observe that the encounters between Person No. 2 and Person No. 9 have brought about a progression for Person No. 9, who by the second month has transitioned from State One (1) to State Two (2). The encounters between Person No. 5 and Person No. 8 have provided Person No. 8 with the possibility to transition from State Zero (0) to State One (1), and as a result of the encounters that Person No. 6 had with Person No. 4 and Person No. 11, Person No. 4 transitioned from State Zero (0) to State One (1) and Person No. 11 from State One (1) to State Two (2).

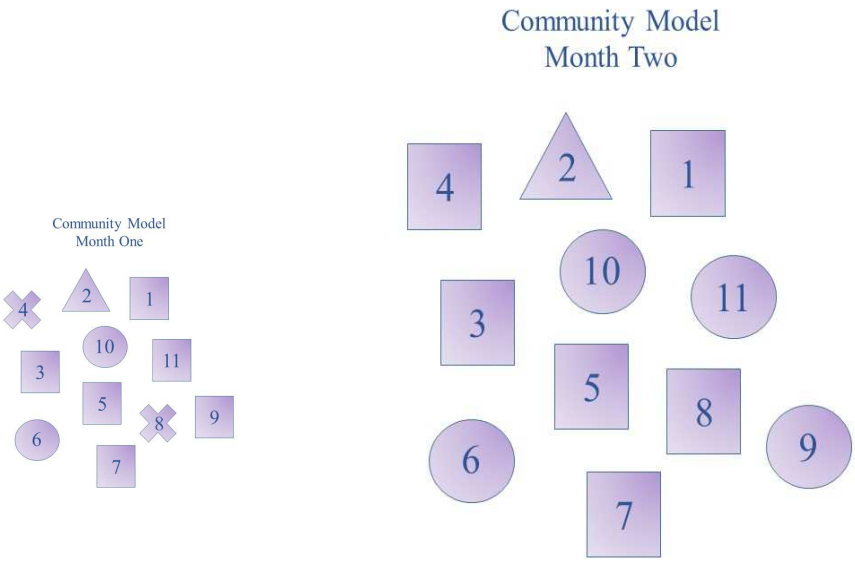

Diagram IV, alongside **Diagram III** shows the new states for each person according to each person's random transitions from the first to the second month. Note that some people remained in the same state.

We can therefore tell that the consciousness of the Community has also made a *'progressive transition'* in average. For example, Persons No. 4 and No. 8 who were people existing in State Zero (0) consciousness in the first month both made transitions to State One (1) in the second month. Note that in the second month there are no longer any people existing in State Zero (0) - Survival Consciousness, however there is still just one *Tzadik*, a person existing in State Three (3), God's Consciousness.

III. Conclusion

We have explored the possibility for modelling a Peace Propagation Process and dealt with some of the very complex features of such a system of relationships. We point to many factors and the different stages of consciousness that people exist in and that need to be taken into consideration in such a way that the system becomes tractable. One of the most important questions we should address and reflect in the parameters of the model would be, what activities and environments [1] would support people to transform to more enlightened states of being in order to eventually attain the level of a *Tzadik* or *Tzadikah* as described in the many bodies of ancient wisdom associated with teachings, like the Vedas, Bhagavad-Gita, the Tao Te Ching and ancient and modern Israelite revelations or Kabbalah, amongst others.

Some of the keys that should also be reflected in the model are associated with the difficulties and requirements of self-acquired commitments to balance spiritual growth with immediate needs for survival, which somehow we propose could be reflected in both: Level of Commitment and social interactions conditional to number of quality encounters.

This initial model we foresee will become a great tool where, with the aid of Applied Mathematics, Systems Analysis, Operations Research and Simulation, it will allow the study of different scenarios and to inquire and gain insight about means to support the Peace Propagation Process. With these tools at hand we could also address the complexities associated with the harmonisation between subjective and objective experiences and perceptions of reality, to improve collective and individual decision making that are both complementary aspects of the process of the propagation of peace, since the system highly depends on the kind of spaces and environment that foster this kind of process and those systems or learning organisations, like communities, rely on sound management science based on values and utility based decision analysis for policy planning, together with creativity, spontaneity, flexibility and adaptability.

Also, in future analysis we could also consider the immigration-emigration and birth-death trans-generational behaviour within a community.

Though the model presented so far is limited to a small community between ten (10) and sixty (60) people living together in a remote rural area or similar setting, we still can intuitively grasp how interdependent and highly interconnected these kinds of systems are in terms of the interactions between people in different stages of consciousness, the level of commitment that they display towards growth and quality social interactions and particularly, how important it is for saints to mingle with communities and societies and for the community, to value and support them.

This initial model can also serve as a seminal one to expand the analysis and these kinds of studies to larger communities with more complex social issues, like towns, regions, cities, countries and humanity as a whole. Every one of these levels of complexity will surely introduce more variables and parameters, like the ones that come to mind when we consider the immigration-emigration and birth-death processes that perpetuate trans-generational behaviour within a community, however, we conjecture that this undertaking can be accomplished successfully.

These kinds of studies and models, we also conjecture, will allow us to incorporate the complexities of a transgenerational Peace Propagation Process.

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