FRAGMENTS OF
EXISTENTIAL MATHEMATICS
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Fragments of Existential Mathematics

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– DELIRIUM –
Ask one to draw a line, and you’ll end up with a maze…
CHAPTER I

Mazes

Let us define maze as the weighted sum of the distances between the real, experienced and ideal beings that make up a person, and the real, experienced and ideal worlds that the person inhabits. The maze will be represented by the symbol $\Lambda$ and expressed through the following formula:

$$\Lambda = k_1 \left[ \alpha_1 (\hat{i}, \tilde{i}) + \beta_1 (\hat{i}, \tilde{i}) + \gamma_1 (\hat{i}, \tilde{i}) \right] + k_2 \left[ \alpha_2 (\hat{L}, \tilde{L}) + \beta_2 (\hat{L}, \tilde{L}) + \gamma_2 (\hat{L}, \tilde{L}) \right]$$

DEFINITIONS

The following premises and hypotheses are the axioms for the model of minimization of mazes.

Beings and worlds

Let $l$ be a subject and $L$ a world:

$$l = \begin{pmatrix} \hat{i} \\ \tilde{i} \\ \hat{i} \end{pmatrix} \quad L = \begin{pmatrix} \hat{L} \\ \tilde{L} \\ \hat{L} \end{pmatrix}$$

Beings and worlds: real, experienced, and ideal
The subject, \( l \), is a vector of the three beings that define its identity.

\( \hat{l} \): the real being – \( l \) as one is objectively.
\( \tilde{l} \): the experienced being – \( l \) as one experiences oneself.
\( \hat{L} \): the ideal being – \( l \) as one would like to be.

The world, \( L \), is the matrix of external beings important to the subject.

\( \hat{L} \): the real world – \( L \) as it is according to the subject.
\( \tilde{L} \): the experienced world – \( L \) as experienced by the subject.
\( \hat{L} \): the ideal world – \( L \) as the subject would like it to be.

Existential metric

The distances between beings and between worlds are indicated by putting them in brackets as follows:

\[
\left( \hat{l} , \tilde{l} \right)
\]

Distance between the experienced being and the ideal being

\[
\left( \hat{L} , \tilde{L} \right)
\]

Distance between the ideal world and the real world

Only the subject has the relevant information to evaluate these distances.

System of values

The combination of the values for the distances of the maze represent the subject’s system of values.

\[
\Lambda = k_1 \left[ \alpha_1 \left( \hat{l} , \tilde{l} \right) + \beta_1 \left( \hat{l} , \tilde{L} \right) + \gamma_1 \left( \tilde{l} , \tilde{L} \right) \right] + k_2 \left[ \alpha_2 \left( \hat{L} , \tilde{L} \right) + \beta_2 \left( \hat{L} , \tilde{L} \right) + \gamma_2 \left( \tilde{L} , \tilde{L} \right) \right]
\]

\[
\begin{align*}
|k_1| + |k_2| &= 1 \\
|\alpha_1| + |\beta_1| + |\gamma_1| &= 1 \\
|\alpha_2| + |\beta_2| + |\gamma_2| &= 1
\end{align*}
\]

System of values of a maze

\( k_1 \): importance given to the self (coefficient of egoism).
\( k_2 \): importance given to the world (coefficient of altruism).

\( \alpha \): importance given to pleasure relative to the self (\( \alpha_1 \)) or to the world (\( \alpha_2 \)).
\( \beta \): importance given to virtue relative to the self (\( \beta_1 \)) or to the world (\( \beta_2 \)).
\( \gamma \): importance given to knowledge relative to the self (\( \gamma_1 \)) or to the world (\( \gamma_2 \)).

The proximity between the ‘experienced’ and the ‘ideal’ is hypothetically correlated with the feeling of pleasure, that between the ‘ideal’ and the ‘real’ with virtue, and that between the ‘real’ and the ‘experienced’ with knowledge.

Together the ethical coefficients \( \Phi = \{ k_1, k_2, \alpha_1, \beta_1, \gamma_1, \alpha_2, \beta_2, \gamma_2 \} \) represent the system of values of a subject at a given moment.
MINIMIZATION OF THE MAZE

The maze indicates the subject’s torment and the principle of the model is to minimize this.

\[ \text{Min } \Lambda \]

Minimization principle of the maze

To minimize one’s maze means to sculpt oneself, one’s values, and one’s worlds so as to reduce as much as possible the bitter distances between one’s beings and worlds.

Maze reduction

Only a minute maze can be serene: a minimal maze is a necessary condition for happiness but not a sufficient one.

Remark 1. There are two complementary procedures for resolving a maze: reduce the distances between beings or reduce the values that affect them. If \( \Delta \) symbolizes all variation we have:

\[ \text{Min } \Lambda ; \ \Delta \Phi = 0 \]

Resolution by changing beings and worlds

\[ \text{Min } \Lambda ; \ \Delta l = \Delta L = 0 \]

Resolution by revising values

Remark 2. There are two complementary procedures for reducing the distance between two beings: bring the first closer to the second or the second closer to the first. For example:

\[ \text{Min } \left( \hat{l}, \bar{l} \right) ; \ \Delta \hat{l} = 0 \]

Resolution by evolution of the real being

\[ \text{Min } \left( \hat{l}, \bar{l} \right) ; \ \Delta \bar{l} = 0 \]

Resolution by evolution of the ideal being

Remark 3. To minimize is not to nullify but to reduce as much as possible. The objective is more to reconcile the beings than to merge them, to find harmonious distances rather than to eliminate them: to reduce the maze while retaining a living dynamic.

Negativity of ethical coefficients

\( k_2 \) (coefficient of altruism) is usually thought of as a positive. However it can also be negative. Sadists for instance, reduce their mazes while increasing the mazes of others.

\[ \Lambda = k_1 \left[ \alpha_1 \left( \hat{l}, \bar{l} \right) + \beta_1 \left( \hat{l}, \bar{l} \right) + \gamma_1 \left( \hat{l}, \bar{l} \right) \right] + k_2 \left[ \alpha_2 \left( \bar{l}, \bar{l} \right) + \beta_2 \left( \bar{l}, \bar{l} \right) + \gamma_2 \left( \bar{l}, \bar{l} \right) \right] \]

\[ k_2 < 0 ; \ |k_1| + |k_2| = 1 \]

Sade’s maze
We can also imagine the coefficient of egoism being negative:

\[ \Lambda = k_1 \left[ \alpha_1 (\hat{l}, \hat{i}) + \beta_1 (\hat{l}, \hat{i}) + \gamma_1 (\hat{l}, \hat{i}) \right] + k_2 \left[ \alpha_2 (\bar{l}, \bar{L}) + \beta_2 (\bar{l}, \bar{L}) + \gamma_2 (\bar{l}, \bar{L}) \right] \]

\[ k_1 < 0 ; |k_1| + |k_2| = 1 \]

_Masoch's maze_

The negativity of other ethical coefficients – pleasure, knowledge, virtue – is equally conceivable. It could be that the Γνωρίσομαι, the maxim of Thales commanding us to seek self-knowledge might provoke anxiety. In this case, \( \gamma_1 \) is negative and increasing the distance between the experienced and real beings contributes to the reduction of the maze.

\[ \Lambda = k_1 \left[ \alpha_1 (\hat{l}, \hat{i}) + \beta_1 (\hat{l}, \hat{i}) + \gamma_1 (\hat{l}, \hat{i}) \right] + k_2 \left[ \alpha_2 (\bar{l}, \bar{L}) + \beta_2 (\bar{l}, \bar{L}) + \gamma_2 (\bar{l}, \bar{L}) \right] \]

\[ \gamma_1 < 0 ; \gamma_2 < 0 \]

_Maze of a subject in denial_

**Icarus’ deviations and Tantalus’ distances**

Attempting to reduce a maze is not a guarantee of success. The subject can try to reduce a distance and instead increase it through ineptitude or misfortune.

\[ \min \Delta(\hat{l}, \hat{i}) > 0 \]

_Standard deviation of Icarus_

Thus we have the maze of Icarus’ fall. Another example of this deviation would be Oedipus committing the patricide he was trying to avoid:

\[ \min \Lambda \text{ and } \Delta \Lambda > 0 \]

_Icarian expansion of a maze_

There are other biases in the reduction of mazes that we shall call Tantalus’ distances. Let \( \bar{E} \) be the domain of definition for the real beings of a subject. That is, all the possible real beings that the subject could hope for.

\[ \hat{i}_x \notin \bar{E} \lim_{\hat{l} \to \hat{i}_x} (\hat{i}_x, \hat{l}) = \infty \]

_Tantalus’ distance_

The proximity of some unreachable ideal is anxiogenous for the one who aspires to it.
Vestals

Sometimes at the threshold of expected happiness a person blows apart the beings and worlds they have spent their life bringing together. How can these existential dislocations at the point of attaining a minimal maze be explained? To answer this we must add a theory of catastrophe to the model of minimization of mazes and introduce the principle of mobility.

To do this, let us define vestal as the weighted sum of transformational speeds of the beings and worlds of a subject. The vestal will be represented by the symbol $V$ and expressed by the following formula:

$$V = k_1 \left[ \frac{\partial \hat{I}}{\partial t} + \hat{\psi}_1 \frac{\partial \hat{I}}{\partial t} + \hat{\psi}_1 \frac{\partial \hat{I}}{\partial t} \right] + k_2 \left[ \frac{\partial L}{\partial t} + \hat{\psi}_2 \frac{\partial L}{\partial t} + \hat{\psi}_2 \frac{\partial L}{\partial t} \right]$$

\textbf{Vestal, convex combination of the speeds of transformation of beings and worlds}

\textbf{DEFINITIONS}

The following premises and hypotheses are the axioms for the optimization of vestals.
Mobility of beings and worlds

The mobility of a subject is assessed by recording the speed at which their beings and worlds are modified. This is done quite simply by dividing the distances that separate beings by the time of separation:

\[ \frac{\partial l}{\partial t} = \lim_{h \to 0} \frac{(l_{t}, l_{t+h})}{h} \]

**Speed of conversion of the ideal being**

\[ \frac{\partial L}{\partial t} = \lim_{h \to 0} \frac{(L_{t}, L_{t+h})}{h} \]

**Speed of mutation of the real world**

**REMARK 1.** The concepts of speed defined above are only relevant if the beings move apart or together in continuous motion. On this basis we will use Bacon’s hypothesis, “natura non facit saltus”: the movement of beings and worlds will be assumed to be always and everywhere continuous.

**REMARK 2.** We must distinguish two kinds of motion of beings and worlds: ‘inter’ and ‘intra’. To illustrate this, imagine the satellite relationship between real and ideal beings revolving around each other. The separation between them is maintained while both are in constant evolution.

\[ \frac{\partial (\hat{l}, \hat{l})}{\partial t} = 0 \quad \frac{\partial \hat{l}}{\partial t} > 0 \]

**Real and ideal beings as satellites of each other**

**REMARK 3.** The acceleration of a being is the second derivative of its trajectory with respect to time:

\[ \omega_{\hat{l}} = \frac{\partial^2 \hat{l}}{\partial t^2} \]

**Acceleration of the movements of the experienced being**

**REMARK 4.** We can imagine a translation of Newton’s second law:

\[ F_{\hat{l}} = \frac{\partial^2 \hat{l}}{\partial t^2} \hat{\psi} \]

**Attraction of the ideal being**

The force of attraction of the ideal being is proportional to its acceleration and to the ascendant of the ideal (\(\hat{\psi}\)).
Ascendents of beings and worlds

The set of weighted speeds of the vestal represent the system of ascendents of the subject.

\[ v = |k_1| \left[ \bar{\psi}_1 \frac{\partial l}{\partial t} + \bar{\psi}_1 \frac{\partial l}{\partial t} + \bar{\psi}_1 \frac{\partial l}{\partial t} \right] + |k_2| \left[ \bar{\psi}_2 \frac{\partial l}{\partial t} + \bar{\psi}_2 \frac{\partial l}{\partial t} + \bar{\psi}_2 \frac{\partial l}{\partial t} \right] \]

\[
\begin{align*}
|k_1| + |k_2| &= 1 \\
\bar{\psi}_1 + \bar{\psi}_1 + \bar{\psi}_1 &= 1 \\
\bar{\psi}_2 + \bar{\psi}_2 + \bar{\psi}_2 &= 1
\end{align*}
\]

System of ascendents of a vestal

\(\bar{\psi}:\) ascendent of the real, shows the importance the subject gives to materiality and objectivity, concerning either themselves (\(\bar{\psi}_1\)) or the world (\(\bar{\psi}_2\)).

\(\psi:\) ascendent of the experienced, shows the importance the subject gives to perceptions and subjectivity, concerning either themselves (\(\psi_1\)) or the world (\(\psi_2\)).

\(\hat{\psi}:\) ascendent of the ideal, shows the importance the subject gives to dreams and fantasies, concerning either themselves (\(\hat{\psi}_1\)) or the world (\(\hat{\psi}_2\)).

Terence’s theorem

The values of the maze and the ascendents of the vestal are interdependent.
For example, the ascendant of the ‘experienced’ in the vestal is the average weight of the values that place the experienced being in the maze, namely pleasure and knowledge.

\[ \bar{\psi} = \frac{\alpha + \gamma}{2}; \quad \hat{\psi} = \frac{\alpha + \beta}{2}; \quad \psi = \frac{\beta + \gamma}{2} \]

Because of this interdependence it is necessary to balance the ascendents. Anything that disproportionately favours the ideal (\(\bar{\psi}\)), the experienced (\(\hat{\psi}\)) or the real (\(\psi\)) fatally undermines knowledge (\(\gamma\)), virtue (\(\beta\)) or pleasure (\(\alpha\)).

Thus Terence’s theorem:

\[ \alpha, \beta, \gamma > 0 \Rightarrow \bar{\psi}, \hat{\psi}, \psi < \frac{1}{2} \]

Μηδὲν Ἀγαν – Ne quid nimis

The positivity of classical values
implies the moderation of the ascendents¹

1. Demonstration:

\[ \alpha + \beta + \gamma = 1 \Rightarrow \bar{\psi} = \frac{\beta + \gamma}{2} = \frac{1 - \alpha}{2} \text{ hence } \alpha > 0 \Rightarrow \bar{\psi} = \frac{1 - \alpha}{2} < \frac{1}{2} \]
OPTIMIZATION OF THE VESTAL

As previously mentioned, not all existential shocks come from external sources. Sometimes the subject decides suddenly, in contradiction to their lifelong efforts, to blow apart the beings that they had patiently tried to bring together. This is the case where the mobility of the subject is either extinguished or over-developed.

Verlaine’s conjecture

The immobility of beings and worlds is a cause of catastrophe.

\[ V_t < \dot{\nu} \Rightarrow p \left( \Lambda_{r+1} \gg \Lambda_r \right) = 1 \]

When the vestal falls below a critical level known as Verlaine’s threshold (\(\dot{\nu}\)), an explosion of the maze is highly probable.

REMARK. Constant motion of the subject is not necessarily the way to attain a consequential vestal. If the subject is particularly altruistic then the movements of the worlds alone will be sufficient.

\[ \{ k_2 \Psi_2 = 1 \} \Rightarrow \left\{ V_t > \dot{\nu} \iff \frac{\partial L}{\partial t} \gg 0 \right\} \]

The dynamic of the ideal worlds can sustain that of the idealistic altruist.

Rimbaud’s lemma

Hyper-mobility of beings and worlds can provoke catastrophe.

\[ V_t > \dot{r} \Rightarrow p \left( \Lambda_{r+1} \gg \Lambda_r \right) = 1 \]

When the vestal rises above a critical level known as Rimbaud’s ceiling (\(\dot{r}\)), an explosion of the maze is almost certain.

REMARK. The hyper-mobility of the subject is not inevitably catastrophic. In the case of extreme altruism, only the movement of the world can cause instability.

\[ \{ k_2 \Psi_2 = 1 \} \Rightarrow \left\{ V_t < \dot{r} \iff \frac{\partial L}{\partial t} = 0 \right\} \]

The serenity of the real world moderates the vestal of the reality obsessed altruist.

Thus the reduction of mazes is only stable when the vestals are maintained between a vital minimum and a fatal maximum of mobility.

\[ \text{Min} \Lambda \]

sc. \( \dot{v} < V < \dot{r} \)

Minimizing the maze while keeping the vestal between Verlaine’s threshold and Rimbaud’s ceiling.
**Remark 1.** The Ophelia uncertainty principle prevents us from prejudging the causes of the expansion of a maze. Excessive vestals of the type Verlaine or Rimbaud, Icarian deviations, external shocks, and Tantalian dead ends are equiprobable causes.

**Remark 2.** Mobility is not only quantitative; it is possible to add qualitative constraints to the movement of beings. For example, we can avoid cyclic trajectories for which the torture of Sisyphus is the archetype:

\[
\exists \sigma > 0 : \begin{pmatrix}
\hat{t}_t \\
\hat{\hat{t}}_t \\
\hat{\hat{t}}_{t+\sigma}
\end{pmatrix} = \begin{pmatrix}
\hat{t}_{t+\sigma} \\
\hat{\hat{t}}_{t+\sigma} \\
\hat{\hat{t}}_{t+\sigma}
\end{pmatrix} \quad \forall t \in T
\]

*Cycle of Sisyphus*

We can keep the choreography of beings as a component of the optimization model. And thus, from the millions of formulas, the ideal being draws an ellipse around the experienced and real beings:

\[
\bigg\{ \frac{\partial (\tilde{t}, \tilde{\hat{t}})}{\partial t} = 0 ; \quad \frac{\partial \tilde{\hat{t}}}{\partial t} \neq 0 \bigg\} \\
(\tilde{t}, \tilde{\hat{t}}) + (\tilde{\hat{t}}, \tilde{t}) = R
\]

*Elliptical carousel of the ideal being*

---

**Jekyll and Hyde modeling**

The dynamic of the model, in particular the integration of speeds of transformation of beings and worlds, permits us to account for cases of schizophrenia that until now had been difficult to analyze. In effect, schizophrenia could be comparable with a fraction of the beings, worlds, and values that characterize a person. Dr. Jekyll and Mr. Hyde each have their own value systems, beings and worlds both experienced and ideal. The issue is their cohabitation of a single objective individual.

We might think that the minimization of the schizophrenic's maze is futile, since reducing Jekyll's maze would only cause Hyde's to grow, and vice versa. It is necessary, however, to take into account the sudden mutation of one and the other and their non-coexistence at the same time. At night, Hyde is the lone surveyor of his maze while by day Jekyll returns to harmonize his daytime beings. The vectors of the two entities do not exist simultaneously. The maze of Stevenson's character can be expressed thus:

\[
\Lambda = k_j \lambda(l_j) + k_h \lambda(l_h) + k_j \lambda(L_j) + k_h \lambda(L_h)
\]

*Schizophrenic maze*

\[
\lambda(l_j) = \text{Jekyll's ego-maze} \quad \lambda(l_h) = \text{Hyde's ego-maze} \\
\lambda(L_j) = \text{Jekyll's alter-maze} \quad \lambda(L_h) = \text{Hyde's alter-maze} \\
k_j = \text{Jekyll's coefficient of egoism} \quad k_h = \text{Hyde's coefficient of egoism} \\
k_f = \text{Jekyll's coefficient of altruism} \quad k_h = \text{Hyde's coefficient of altruism}
\]

\[
|k_j| + |k_h| + |k_f| - |k_h| = 1
\]
Schizophrenia is characterized in the model by frequent hyper-accelerations in the transformation of beings and worlds and by a strong elasticity of values.

CHAPTER III

Indices of Inconstancy

The indices of inconstancy are the analytical tools that allow us to plot the wanderings of a person and map out the contours of their intellectual and emotional life.

VARIABILITY OF MAZES AND VESTALS

The coefficients of variation of the mazes and vestals are the primary indicators of the life dynamic of a subject, giving information on the abundance of existential shocks and their absorption.

Stability of a maze

To calculate the standard deviation of the maze we use the classical method of calculating its variance. First we establish the maze’s mean value (with $T$ as the time of life):

$$\Lambda_{maz} = \frac{1}{T} \int_{0}^{T} \Lambda(t) \, dt$$
When the carousel of the mind turns at a constant speed, \( \zeta_v \) is 0; when it constantly accelerates and decelerates \( \zeta_v \) approaches 1.

\[
\text{Inf } \zeta_v = 0
\]

Minimal inconstancy of the vestal of analogous lives

OSCILLATION OF VALUES

The oscillation of values shows the ethical inconstancies of a person during the course of their life. It should be noted that the revision of a value system \( \Phi = [k_1, k_2, \alpha_1, \beta_1, \gamma_1, \alpha_2, \beta_2, \gamma_2] \) – is often the quickest way to block the expansion of a maze.

Vacillation of values

Let \( \varphi \in \Phi \) be a value, and \( \varphi(t) \) its importance relative to the moment \( t \). We denote \( M_\varphi \) as the mean subjective importance of \( \varphi \):

\[
M_\varphi = \frac{1}{T} \int_0^T \varphi(t) \, dt
\]

And \( I_\varphi \) as the inconstancy of this value in the life of the subject:

\[
I_\varphi = \frac{1}{T} \int_0^T |\varphi(t) - M_\varphi| \, dt
\]

Mean vacillation of the value \( \varphi \)
Ethical rigidity

The inconstancy of beings and worlds is formally more delicate to analyze than the elasticity of values and the variability of mazes. We will introduce several complementary indices that suggest the volatility of beings and the course of their movements.

Existential volatility

The instability of beings and worlds can be located with the help of four indices. We will use as an example the ideal being.

A. AVERAGE SPEED.

We assume that the quicker a being moves, the greater the inconstancy. The average speed is the integral of the instantaneous speeds of its variations in relation to its age.

\[ I_{k_2} = \frac{1}{T} \int_0^T \left| k_2(t) - M_{k_2} \right| \, dt \]

*Inconstancy of altruism*

Ethical elasticity

It is possible to calculate the coefficient of variation for each of the values by relating the standard deviation to the mean weight. For example:

\[ \zeta_{k_1} = \frac{I_{k_1}}{M_{k_1}} \]

*Degree of inconstancy of egoism*

The rigidity of the system of values of a subject can be estimated by taking the average of all the coefficients of variations of the n values weighted in the maze.

\[ Z = \frac{\sum_i \zeta_i}{n} \]

*Index of ethical elasticity*

The value of Z will always be between 0 and 1. The closer Z is to 0, the more constant the value system \( \Phi \).

\[
\text{Inf } Z = 0
\]

Ethical rigidity

PHANTASMAGORIA
OF BEINGS AND WORLDS

The inconstancy of beings and worlds is formally more delicate to analyze than the elasticity of values and the variability of mazes. We will introduce several complementary indices that suggest the volatility of beings and the course of their movements.

Existential volatility

The instability of beings and worlds can be located with the help of four indices. We will use as an example the ideal being.

A. AVERAGE SPEED. We assume that the quicker a being moves, the greater the inconstancy. The average speed is the integral of the instantaneous speeds of its variations in relation to its age.

\[ \dot{y}_{\text{moy}} = \frac{1}{T} \int_0^T \left( \frac{dy}{dt} \right)_i \, dt \]

*Average speed of evaporation of the ideal being*
Existential path

It is necessary to distinguish between the constancy of a being and the constancy of its evolution, that is to say, the extent of its wanderings and the rectitude of its movements. This can be measured by relating the distances between beings to the course that unites them.

$$\Gamma_i = \frac{(l_0, l_T)}{N_i}$$

*Index of the rectitude of the movements of a being*

We will verify that this index is between 0 and 1, where 1 denotes the perfect rectitude of movement.

**REMARK 1.** The shortest path, particularly in a maze, is not necessarily the straightest. The index does not designate the rectilinear path but the optimal one.

**REMARK 2.** There can only be perfect rectitude if the movement is one way. The index $\Gamma$ designates the shortest route with no return.

**REMARK 3.** The articulation of the preceding indices allows us to categorize subjects according to the degree and the nature of their inconstancy. An example would be a life that was nomadic within a limited area:

$$N_i \gg 0 \text{ and } G_i, \Theta_i, \Gamma_i = 0$$

*Typical indices of the butterfly ideal*
CHAPTER IV

Models of Passion

Radical and exclusive passion is expressed in the model by the coefficient of altruism taking wing \((\Delta k_2 > 0)\) while the world is restricted to the beloved: in formal terms \(l^*\) is substituted for \(L\).

\[
l^* = \begin{pmatrix}
\bar{l}^* \\
\tilde{l}^* \\
\hat{l}^*
\end{pmatrix}
\]

- \(\bar{l}^*\) = real being of the beloved
- \(\tilde{l}^*\) = experienced being of the beloved
- \(\hat{l}^*\) = ideal being of the beloved

MAZES AND VESTALS OF PASSION

Consequently, the mazes and vestals of the passionate subject are written as:

\[
\Lambda = k_1 \left[ \alpha_1 (\bar{l}, \bar{i}) + \beta_1 (\tilde{l}, \tilde{i}) + \gamma_1 (\hat{l}, \hat{i}) \right] + k_2 \left[ \alpha_1^* (\bar{l}^*, \bar{i}) + \beta_1^* (\tilde{l}^*, \tilde{i}) + \gamma_1^* (\hat{l}^*, \hat{i}) \right]
\]

\[
V = k_1 \left[ \bar{\psi}_1 \frac{\partial \bar{l}}{\partial t} + \bar{\psi}_1 \frac{\partial \bar{i}}{\partial t} + \hat{\psi}_1 \frac{\partial \hat{l}}{\partial t} \right] + k_2 \left[ \bar{\psi}_2 \frac{\partial \bar{l}^*}{\partial t} + \bar{\psi}_2 \frac{\partial \bar{i}^*}{\partial t} + \hat{\psi}_2 \frac{\partial \hat{l}^*}{\partial t} \right]
\]
Taking this further, to love somebody is to take part in the world in which they believe. The maze of the person that is loved is integrated into that of the lover.

\[ \Lambda = k_1 \lambda(l) + k_2 \Lambda^* \]

Passionate maze

The same model applies to vestals:

\[ V = k_1 \upsilon(l) + k_2 V^* \]

Romantic vestal

where \( \lambda(l) \) is the ego-maze of \( l \), \( \Lambda^* \) the complete maze of \( l^* \), and \( \upsilon(l) \) is the ego-vestal of \( l \), \( V^* \) the complete vestal of \( l^* \).

Interlocking mazes of lovers

If two subjects are impassioned with each other, the following system of interdependence results.

For \( l \):

- \( k_1 \): degree of egoism \textit{a priori}
- \( k_2 \): degree of altruism \textit{a priori}, for \( l^* \) and \( L^* \)
- \( K_1 \): degree of egoism \textit{a posteriori}
- \( K_2 \): degree of altruism \textit{a posteriori}, for \( l^* \) only

And reciprocally for \( l^* \):

- \( k_1^* \): degree of egoism \textit{a priori}
- \( k_2^* \): degree of altruism \textit{a priori}, for \( l \) and \( L \)
- \( K_1^* \): degree of egoism \textit{a posteriori}
- \( K_2^* \): degree of altruism \textit{a posteriori}, for \( l \) only

\[ \Lambda = k_1 \lambda(l) + k_2 \Lambda^* \]
\[ \Lambda^* = k_1^* \lambda(l^*) + k_2 \Lambda \]

Confusion of passionate mazes

Thus the interlocking of passionate mazes increases the consideration each lover accords to themselves. Your love \( (k_2^*) \) increases the interest I accord to myself \( (K_1 > k_1) \). Reciprocally, the more I love you \( (k_2) \), the more you cherish yourself \( (K_1^*) \).

Among other corollaries of these mixes, we have:

\[ \frac{\partial k_2}{\partial K_2^*} < 0 \quad \text{and} \quad \frac{\partial K_1}{\partial k_2^*} < 0 \]

*The more I love you the less you cherish me*  
*The less I cherish you the more you love me*

---

1. Demonstration: \( \Lambda = k_1 \lambda(l) + k_2 \Lambda^* \) and \( \Lambda^* = k_1^* \lambda(l^*) + k_2 \Lambda \)

\[ \Lambda = k_1 \lambda(l) + k_2 \Lambda^* \]
\[ \Lambda^* = k_1^* \lambda(l^*) + k_2 \Lambda \]

Thus \( \Lambda = \frac{k_1}{1 - k_2 k_2^*} \lambda(l) + \frac{k_2 k_1^*}{1 - k_2 k_2^*} \lambda(l^*) \) when \( k_2 k_2^* \neq 1 \)
The interdependence of vestals amplifies the vital energy that each lover invests in themselves. Thus, as with a couple dancing, each partner will give increased consideration to the vigor of their steps in order to better lead the other. Among other corollaries of the mixture of vestals, we have:

\[
\frac{\partial k^*}{\partial K_1} > 0 \quad \frac{\partial k^*}{\partial K_2} < 0
\]

**Remark 1.** These remarks are valid in the case where the two lovers are positively passionate about each other. The results change when one of the two has a coefficient of negative altruism (cf. jealous love).

**Remark 2.** These remarks are pertinent only in the closed circuit of a passionate relationship: one’s world is fundamentally the other person. Here again the results change if the passion of one of the lovers opens to other people or objects (cf. plural loves).

**Remark 3.** Finally, the affective coefficients here are not absolute but relative to the quantum of attention and affection that is given, of which the lovers are the vectors. The results change if this quantum changes over time (cf. modulations Acqua Alta).

**Correlation of romantic vestals**

Equally for the vestals, the romanticism unites the vitality of the lovers.

\[
V = k_1\nu(l) + k_2V^*
\]
\[
V^* = k_2\nu(l^*) + k_2V
\]

Mixture of passionate vestals
PASSIONATE TWISTS AND TURNS

The above blueprint is valid for an absolute and ethereal love. Yet passion provokes tensions of obsessive desire to transform the other: the fantasies each lover projects onto the other must thus be included in our understanding of the maze.

Let \( f_1^* \) and \( f_2^* \) be the following fantasized beings:

\[
\begin{align*}
&f_1^* = \begin{cases} 
\bar{f}_1^* : l^* \text{ seen by } l \\
\bar{f}_1^* : l^* \text{ dreamed by } l
\end{cases} \\
&f_2^* = \begin{cases} 
\bar{f}_2^* : l^* \text{ seen by } l^* \\
\bar{f}_2^* : l^* \text{ dreamed by } l^*
\end{cases}
\end{align*}
\]

Let \( \Lambda \) be:

\[
\begin{align*}
\Lambda &= \begin{cases} 
k_1 \left[ \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) + \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) + \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) + \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) \\
+ k_2 \left[ \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) + \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) + \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) + \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) \\
+ k_3 \left[ \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) + \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) + \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) + \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) \\
+ k_4 \left[ \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) + \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) + \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) + \frac{\partial}{\partial t} (\bar{f}_1^* \cdot \bar{f}_2^*) \\
\end{cases}
\end{align*}
\]

with \( k_1 + k_2 + k_3 + k_4 = 1 \)

Passionate maze informed by the lovers' fantasies

\( k_1 \): degree of pure egoism

\( k_2 \): degree of pure altruism

\( k_3 \): degree of ego-altruism (oneself through another)

\( k_4 \): degree of alter-egoism (another through oneself)

Lovers try to bring together their beings and fantasies by acting as both Pygmalion and Galatea, both sculptor and sculpture. Each of the lines of the preceding formula will be known as 'twists and turns'. For example:

\[
\lambda (f_1^*) = \begin{cases} 
\eta_1 (\bar{f}_1^* \cdot \bar{f}_2^*) + \eta_2 (\bar{f}_1^* \cdot \bar{f}_2^*) + \eta_3 (\bar{f}_1^* \cdot \bar{f}_2^*) + \eta_4 (\bar{f}_1^* \cdot \bar{f}_2^*) \\
+ \eta_5 (\bar{f}_1^* \cdot \bar{f}_2^*) + \eta_6 (\bar{f}_1^* \cdot \bar{f}_2^*) + \eta_7 (\bar{f}_1^* \cdot \bar{f}_2^*)
\end{cases}
\]

Twist and turn of the lover's fantasy

\[
\lambda (f_2^*) = \begin{cases} 
\mu_1 (\bar{f}_1^* \cdot \bar{f}_2^*) + \mu_2 (\bar{f}_1^* \cdot \bar{f}_2^*) + \mu_3 (\bar{f}_1^* \cdot \bar{f}_2^*) + \mu_4 (\bar{f}_1^* \cdot \bar{f}_2^*) \\
+ \mu_5 (\bar{f}_1^* \cdot \bar{f}_2^*) + \mu_6 (\bar{f}_1^* \cdot \bar{f}_2^*) + \mu_7 (\bar{f}_1^* \cdot \bar{f}_2^*)
\end{cases}
\]

Twist and turn of the beloved's fantasy

At this point it is necessary to refine the definitions of the coefficients of egoism and altruism. Let the synthetic formula of the phantasmagoric maze be:

\[
\Lambda = k_1 \lambda (l) + k_2 \lambda (l^*) + k_3 \lambda (f_1^*) + k_4 \lambda (f_2^*)
\]

Abridged form of the passionate maze
$k_n$ is the part of attention and affection a subject accords to themselves whether through their beings or through their worlds ($k_3$). For Narcissus the world is simply a mirror.

\[ k_n = k_1 + k_3 \]

*Narcissus’ degree*

Inversely $k_e$ is the part of attention and affection directed at the world whether through its matrix ($k_2$) or through the self ($k_4$). The voice of Echo is simply a reflection.

\[ k_e = k_2 + k_4 \]

*Echo’s degree*

By definition the maze is the sum of its twists and turns. We could also characterize it succinctly according to its \( k \) values. Thus the general form of narcissistic altruism:

\[ k_3 = 1 \quad \Lambda = \lambda(f^*_1) \]

*Maze of a narco-altruist or Pygmalion subject*

or that of altruistic egoism:

\[ k_4 = 1 \quad \Lambda = \lambda(f^*_1) \]

*Maze of a echo-egoist or Galatea subject*

### Pygmalion and Galatea mazes

The woman I loved - I wanted her to fulfill my vision of the world and to share my ideal of an Italian princess. Of course I wanted her to be happy, but I passionately wished her to fit these insane archetypes, ignoring the true identity she scarcely dared to reveal. The ending is obvious. Nonetheless I’ll translate it into a mathematical law: when fantasy becomes obsessively inflexible the Galatea and Pygmalion mazes are destined for catastrophe.

The probability that a Pygmalion with inflexible fantasies will desolate his lover is close to 1.

\[ \forall (t_1, t_2) \in T, \ t_1 < t_2 \]
\[ T = \text{time of passion} \]
\[ f^*_{t_2} = f^*_{t_1} \]
\[ \Rightarrow P(\Lambda^*_t > \Lambda^*_s) \approx 1 \]

*If you try too hard to sculpt another*

*you risk losing them*

The Galatean reciprocal is equally verifiable.

\[ \forall (t_1, t_2) \in T, \ t_1 < t_2 \]
\[ T = \text{time of passion} \]
\[ f^*_{t_2} = f^*_{t_1} \]
\[ \Rightarrow P(\Lambda^*_t > \Lambda^*_s) \approx 1 \]

*If you allow another to sculpt you too much*

*you risk losing yourself*
INDEX OF CORTO AND ARIADNE’S VARIABLE

To be loved by those we love divides the maze; inversely, unhappy love multiplies it.
Ariadne’s variable, A, is infused with the sentiment of loving and being loved. And Corto’s index, Ω, is the supreme index of anguish represented by the following formula:

$$\Omega = \frac{A}{A}$$

Corto’s equation

Corto’s index

The Corto increases with the maze and diminishes with the sentiment of shared love.

$$\Omega = \frac{A}{A} \frac{\partial \Omega}{\partial A} < 0$$

Anguish is inversely proportional to the sentiment of being loved by those we love

The ultimate point is that well-being is attained through the resolution of the Corto. To do this either we reduce the numerator or increase the denominator, minimizing the maze and/or elevating the Ariadne (relieving anxiety and learning to love).

$$\text{Min} \left[ \Omega = \frac{A}{A} \right]$$

Minimization of the Corto

Plural loves

When a subject has several loves, the form of the maze is of course more complicated. Let us begin with the model for two loves $l^*$ and $l^{**}$:

$$\Lambda = \left\{ \begin{array}{l}
\sum k_i = 1 \\
\begin{array}{l}
\begin{array}{l}
k_1 \left[ a_1 (\tilde{l}, \tilde{l}) + \beta_1 (\tilde{l}, \tilde{l}) + \gamma_1 (\tilde{l}, \tilde{l}) \right] \\
+k_2 \left[ a_2 (\tilde{l}^*, \tilde{l}^*) + \beta_2 (\tilde{l}^*, \tilde{l}^*) + \gamma_2 (\tilde{l}^*, \tilde{l}^*) \right] \\
-k_3 \left[ \eta_1 (\tilde{f}_1^*, \tilde{l}^*) + \eta_2 (\tilde{f}_1^*, \tilde{l}^*) + \eta_3 (\tilde{f}_1^*, \tilde{l}^*) + \eta_4 (\tilde{f}_1^*, \tilde{l}^*) \right] \\
-k_4 \left[ \eta_5 (\tilde{f}_1^*, \tilde{l}^*) + \eta_6 (\tilde{f}_1^*, \tilde{l}^*) + \eta_7 (\tilde{f}_1^*, \tilde{l}^*) \right]
\end{array}
\end{array}
\right.
\end{array} \right.$$

Twists and turns of the maze of plural loves

The above formula can be extended to n loves with the subsequent complications that we can imagine.
For those who are no longer able to reduce their mazes the only solution is to multiply love in order to ease their torments. But those who fear emotional instability frequently prefer to work on the reduction of their mazes. There are two ways to minimize anxiety: reducing its multipliers and augmenting its dividers.

**Ariadne’s variable**

Corto’s sensitivity to the notion of requited love, embodied by Ariadne’s variable, is difficult to model. For this sentiment is highly versatile: its impact differs according to each person and moment. We can nonetheless specify a set of properties that characterize Ariadne’s variable.

Let $k_2$ be the degree of affection for the beloved and let $k_2^*$ be its reciprocal.

**PROPERTY OF MONTAGUE**, also called “Nature Boy Property”. *The greatest thing, you’ll ever learn, is just to love and be loved in return.* The highest value of $A$ is obtained when the love is absolute and absolutely shared.

$$\sup A(k_2, k_2^*) = A_{(1,1)}$$

*Ariadne’s variable culminates in the reciprocity of consummate love*

**PROPERTY OF CAPULET**. The weakest value of $A$ is obtained from the feeling of utter abandonment.

$$\inf A(k_2, k_2^*) = A_{(1,0)}$$

*The indifference of those we love minimizes Ariadne’s variable*

**CONSTRAINT OF THESEUS**. To be loved by someone we don’t love or to abandon somebody that loves us increases the torment of the maze.

$$k_2^* - 1 \Rightarrow \lim_{k_2 \to 0} A(k_2, k_2^*) < 1 \quad (\Rightarrow \Omega = \frac{A}{A} > \Lambda)$$

*Eminent love increases the anxiety of those who don’t requite it*

This constraint of Theseus in conjunction with the property of Capulet forms a family of functions of Ariadne known as the Naxos ($\mathbb{N}$), in which relationships that are significantly asymmetrical are doomed.

$$A \in \mathbb{N} \Rightarrow \exists \tau < 1 : \left| k_2 - k_2^* \right| > \tau \Rightarrow A(k_2, k_2^*) < 1$$

*Family of Naxos*

**Hyper asymmetrical loves are condemned to anxiety**

We can identify another family of functions called Ithaca ($\mathbb{I}$) by specifying the limits of Ariadne in addition to the properties of Capulet and Montague.
Even the weightiest torments of the maze seem like a feather to the requited lover. *A contrario*, the sentiment of abandonment swells even the smallest of mazes.

The model of existential mathematics, reduced to its simplest form, can be expressed thus:

$$
\begin{align*}
\lim_{k_2^* \rightarrow 1} A(k_2^*, k_1^*) &= \infty \\
\lim_{k_2^* \rightarrow 0} A(k_2^*, k_1^*) &= 0
\end{align*}
$$

**Family of Ithaca**  
The limit of Ariadne is infinite or infinitesimal as the passion is symmetrical or asymmetrical

ILLUSTRATION. Imagine a lover whose function of Ariadne belongs to the family of Ithaca. Madly in love, he receives a letter assuring him of the reciprocity of his sentiments:

$$
k_2^* \approx 1; \quad k_2^* \Rightarrow A(k_2^*, k_1^*) = +\infty
$$

$$
\Rightarrow \Omega = \frac{A}{\Lambda} \approx 0 \quad \text{(infinitesimal anguish)}
$$

Then on checking the envelope he discovers that the letter is destined for another:

$$
k_2^* \approx 1; \quad k_2^* \Rightarrow A(k_2^*, k_1^*) = 0
$$

$$
\Rightarrow \Omega = \frac{A}{\Lambda} \approx +\infty \quad \text{(infinite anguish)}
$$
CHAPTER V

Appendices

All that is simple is false, all that is complex is unmanageable. This maxim will rule our amendments to the model.

COMPLEX BEINGS AND MAZES

The formulae condensed in the preceding pages outline the concepts of beings, worlds and mazes. We will now attempt to develop them in a complex universe.

Complexity of beings

The concept of real, experienced and ideal beings that constitute a person is founded on an ambiguity that needs to be addressed. Inspired by complex numbers which have one term that is real and another imaginary ($i$), here is a proposition for the expansion of the model:
\[ \vec{I} = \vec{I} + i\vec{I} \text{ the real being} \]
with
\[ \vec{I} \text{ the real part of the real being} \]
\[ \vec{I} \text{ the imaginary part of the real being} \]
\[ \vec{I} = \vec{I} + i\vec{I} \text{ the experienced being} \]
with
\[ \vec{I} \text{ the real part of the experienced being} \]
\[ \vec{I} \text{ the imaginary part of the experienced being} \]
\[ \vec{I} = \vec{I} + i\vec{I} \text{ the ideal being} \]
with
\[ \vec{I} \text{ the real part of the ideal being} \]
\[ \vec{I} \text{ the imaginary part of the ideal being} \]

The real being has two components, one objective, the other inter-subjective: the authentic being and the public being – the intrinsic properties of a subject as opposed to what other people see.

The same applies to the experienced being which has a purely subjective part and another which is trans-subjective: the subject as themselves as opposed to the role they have created for themselves.

The same again for the ideal being which has both heroic and dream-like dimensions, the first calling out to become reality and the second resisting it: the hero that a subject would like to become and the fantasies of their dream life.

Complications of the mazes
The doubling of beings to include real and imaginary parts leads to new combinations of distances among the beings that constitute the maze. Six distinct beings gives rise to fifteen distances in the system that need to be measured and weighed. The same goes for the worlds. We can now describe the complex formula for the maze of a subject:

\[
\Lambda = k_1 \begin{bmatrix}
\alpha_1 (\vec{I}, \vec{I}) + \beta_1 (\vec{I}, \vec{I}) + \gamma_1 (\vec{I}, \vec{I}) \\
\theta_1 (\vec{I}, \vec{I}) + \theta_2 (\vec{I}, \vec{I}) + \theta_3 (\vec{I}, \vec{I}) \\
k_1 (\vec{I}, \vec{I}) + \theta_4 (\vec{I}, \vec{I}) + \theta_5 (\vec{I}, \vec{I}) + \theta_6 (\vec{I}, \vec{I}) \\
\theta_7 (\vec{I}, \vec{I}) + \theta_8 (\vec{I}, \vec{I}) + \theta_9 (\vec{I}, \vec{I}) \\
\theta_{10} (\vec{I}, \vec{I}) + \theta_{11} (\vec{I}, \vec{I}) + \theta_{12} (\vec{I}, \vec{I})
\end{bmatrix}
\]

or further, in virtue of the properties of \( i \), the pure imaginary number \( i^2 = -1 \):

\[
\Lambda = \begin{bmatrix}
\alpha_1 \text{Re}(\vec{I}, \vec{I}) + \beta_1 \text{Re}(\vec{I}, \vec{I}) + \gamma_1 \text{Re}(\vec{I}, \vec{I}) \\
\theta_1 \text{Im}(\vec{I}, \vec{I}) + \theta_2 \text{Im}(\vec{I}, \vec{I}) + \theta_3 \text{Im}(\vec{I}, \vec{I}) \\
k_1 \theta_4 \text{Im}(\vec{I}, \vec{I}) + \theta_5 \text{Im}(\vec{I}, \vec{I}) + \theta_6 \text{Im}(\vec{I}, \vec{I}) \\
\theta_7 \text{Im}(\vec{I}, \vec{I}) + \theta_8 \text{Im}(\vec{I}, \vec{I}) + \theta_9 \text{Im}(\vec{I}, \vec{I}) \\
\theta_{10} \text{Im}(\vec{I}, \vec{I}) + \theta_{11} \text{Im}(\vec{I}, \vec{I}) + \theta_{12} \text{Im}(\vec{I}, \vec{I})
\end{bmatrix}
\]
TIME AND METAMAZES

As the architectural metaphor suggests, the detours are the essence of the maze. The labyrinth highlights the divorce between contiguity and proximity, that is, the geographical separation of two points as opposed to the length of travel necessary to pass from one point to the other.

These detours that oblige us at first to twist, turn and move away from our destination need to be integrated in the model. It is sometimes necessary to distance and reshape our beings to be better able to bring them together and harmonize them. A musician often practices his scales reluctantly, against his momentary aspirations, in the hope of excelling later on. At the instant ‘t’, the maze has grown, but only with the goal of reducing it at ‘t+1’. The temporal horizon is thus decisive in our modeling.

These observations invite us to establish two points: 1) the identity of the subject as the matrix of their beings over time; 2) a metamaze, or maze of mazes which overlaps the distances between beings with respect to time. This is the crux of minimization.

Identity matrices

It’s possible to think of the history of a subject as the set of their physical and psychical lives, that is to say, the aggregate of the vectors of their real, experienced and ideal beings at all moments of their life until the present (m).

\[
Y = \begin{pmatrix}
\tilde{l}_0 & \tilde{l}_1 & \ldots & \tilde{l}_{m-1} & \tilde{l}_m \\
\hat{l}_0 & \hat{l}_1 & \ldots & \hat{l}_{m-1} & \hat{l}_m \\
\end{pmatrix}
\]

*Identity matrix*

That said, to better map the identity of a subject we must add to their history the aggregate of their projections into their future \( \left( \tilde{l}_{1:m} \right) \). A person is not only what they have lived and now live but also what they think they will live.

\[
Y = \begin{pmatrix}
\tilde{l}_0 & \tilde{l}_1 & \ldots & \tilde{l}_{m-1} & \tilde{l}_m & \tilde{l}_{m+1} & \ldots & \tilde{l}_\omega \\
\hat{l}_0 & \hat{l}_1 & \ldots & \hat{l}_{m-1} & \hat{l}_m & \hat{l}_{m+1} & \ldots & \hat{l}_\omega \\
\end{pmatrix}
\]

*Matrix of beings past, present, and future of beings real, experienced, and ideal*

REMARK 1. A subject is the matrix of their past, present and future beings. Their identity is this combination orchestrated by their valuation of time.
SOME ARCHETYPAL ATTITUDES. Some individuals, like the Grasshopper, only deal with the now \((i=m)\). Their maze is only about the present.

\[
H = \begin{pmatrix}
h_0 \\
... \\
h_{m-1} \\
h_m \\
h_{m+1} \\
... \\
h_\omega
\end{pmatrix}
\quad \text{with } \sum_{i=0}^{\omega} h_i = 1
\]

\(\text{Vector of time valuation}\)

**Remark 2.** We could at this stage introduce a plurality of future beings weighted by probability, but we will restrict ourselves here to singular projections of the future.

**Metamazes**

Without the pressure of time, each labyrinth would be futile, because all difficulties would vanish and only skeptics would find any. The fundamental maze, or metamaze, is the overlapping of the mazes past, present, and future.

\[
[\Lambda] = \sum_{i=0}^{\omega} h_i \Lambda_i
\]

**Metamaze, linear combination of mazes past, present and future**

Others, like the Ant \((i>m)\), only think of the future. Their metamaze is a combination of mazes to come.

\[
\sum_{i>m} h_i \gg \sum_{i\leq m} h_i \quad \text{and} \quad [\Lambda] \approx \sum_{i>m} h_i \Lambda_i
\]

**Ascendance of future mazes**

Still others are haunted by their pasts \((i<m)\); their metamaze is the sum of past mazes.

\[
\sum_{i<m} h_i \gg \sum_{i\geq m} h_i \quad \text{and} \quad [\Lambda] \approx \sum_{i<m} h_i \Lambda_i
\]

**Prevalence of archaeo-mazes**

This last radical attitude, which consists in valuing only what has already happened in one’s life and in trying to solve only past mazes, is difficult to understand. Don’t past beings and worlds always remain as they are and the distances between them remain frozen?
It is probably one of the ambitions of psychoanalysis to question and model these past beings in order to untangle the mazes associated with them.

Certain magic rituals also disrupt the arrow of time in order to redraw past mazes. In fine, the past beings and worlds that structure our lives are not unchangeable. The profiles of ghosts and the curve of the labyrinths of our past are movable and our consciousness possesses keys to hidden doors in past mazes.

**REMARK 1.** Locked mazes. When we think a future maze cannot be resolved and it seems that its minimization in a given system will be insufficient no matter what we do, the only course of action is to blow up the maze in the hope of resolving it at a later date. Sometimes we run away from happiness that is too predictable, putting our beings at risk in order to avoid the greater peril of a gradual demise. Pirates were known to scuttle their own ships when faced with the possibility of conquering a better vessel in order to leave no choice but victory.

**REMARK 2.** The previous remark about the feeling of suffocation in a programmed happiness leads us to locate more precisely the concept of liberty in the model. Liberty fits into the experienced being and world, specifically within our capacity to minimize the Corto. But we can be more explicit: the locks that seal our mazes often serve to enclose possible beings in exclusive and narrow domains of definition.

\[ \tilde{E} \text{ and } \tilde{M} : \text{ domains of real beings and worlds that we can hope for.} \]
\[ \hat{E} \text{ and } \hat{M} : \text{ domains of experienced beings and worlds that we can feel.} \]
\[ \hat{\hat{E}} \text{ and } \hat{\hat{M}} : \text{ domains of ideal beings and worlds that we can imagine.} \]

The sentiment of liberty is proportional to the size of the domains of possible beings and worlds. Without doubt, we work as much on the extension of these domains as on their intersection.

---

1. A friend was unable to avoid bitter separations from the women he loved because of the ominous shadow of past relationships. His emotional maze was closed off by the spectral mazes of his former loves. He believed he had not sufficiently cherished these women and was thus cursed with the repetition of his sentimental failures. He decided to undertake a ritual to repair these unresolved break-ups. In his imagination he invited his first wife to a goodbye dinner. There alone with the specter of his love he told her of the passion he felt for her and thanked…

… her for the time they had spent together. He didn't beg her to stay but blessed her departure. He waved her off with gratitude then closed the door and opened it again to the second woman in his life. He repeated the ritual until every woman he had ever loved had passed through in the same way. At the end of the evening he collapsed from fatigue but woke the next day infinitely lighter and ready to love again. He had relived the key moments of his life. The goodbyes were accomplished and the twists and turns of his separations redrawn.
The program of research opened here consists in minimizing the Corto and maximizing the Chi. 

Min $\Omega$ : Max $\chi$

Reduce as much as possible the anguish while vitalizing as much as possible the beings

REMARK 5. Ultimate reflection – the interlocking of beings of a tribe in a transgenerational maze. The trouble of resolving within oneself the maze of beings passed away and those yet to come.

Spaces of real liberty

$\langle E \rangle = \bar{E} \cap \bar{E} \cap \bar{E}$

$\langle M \rangle = \bar{M} \cap \bar{M} \cap \bar{M}$

REMARK 3. Intertemporal mazes. The metamaze may not be a simple linear combination of our past, present and future mazes. The distances between beings and worlds of different times overrun consciousness. And so with prophetic words, oracles reduce the distance between the experienced world of today and the real world of tomorrow.

$[\Lambda] = (\bar{L}_m, \bar{L}_{d>m})$

Oracle metamaze

REMARK 4. Taking into account time raises the issue of the dynamic of vital energy of a subject. The fluctuation of this dynamic needs to be modeled. Let $Chi$, $\chi$, be the quantum of vital energy that animates a subject. Until now the theory has been limited to cases where $\chi$ is constant. The general theory will extend to all the possible levels of energy.

$[\Lambda]$

Transgenerational maze

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