Volume III

Tractatus Principio

—

On Difference

Volume III

Book of Self-Knowledge

by

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Chapter I

Principia Nova Cogito

From the observer himself, mirroring relations unfold, through which he becomes what he experiences. Consciousness does not stand outside the world in order to look at it from a safe distance. Rather, it is the reciprocal effect of the world upon itself – seen from the middle of that relation in which observer and observed first emerge at all.

The Folding of the Relation

Everything that is arises from difference. As long as this difference merely separates, it brings forth sides, boundaries, and first determinations. Yet as soon as it directs itself toward itself, a new order arises: reflection.

This self-relatedness of the relation is the origin of consciousness.

At the beginning stands the first difference, the pure difference:

$$0 \mid \Delta$$

Here no thought in the proper sense is yet present. There exists only the difference between its origin and its first determination. If, however, this difference directs itself toward itself, then there arises:

$$0 \mid \Delta \mid \Delta$$

This is the first thought.

For consciousness is nothing other than the folding back of difference upon its own origin. Difference does not remain merely difference, but recognizes itself as such. What at first appears as a linear relation thereby closes into a loop:

$$\odot \rightarrow \mid \rightarrow \boxdot \rightarrow \mid \rightarrow \odot$$

In this circulation, the principle of the world repeats itself in the innermost part of experience. Every perception, every act of thinking, and every sensation is a variation of this return: something emerges, is distinguished, experienced, and finally related back to the origin of its distinction.

Consciousness is therefore not something that is located in space. Rather, it is that point at which space begins to look at itself.

Here begins the folding of the relation.

The observer ¤ is the first manifestation of this folding. He is neither mere object nor pure subject, for both sides arise only through that relation whose point of intersection he forms:

$$\odot \mid ¤ \mid \boxdot$$

The observer stands at the center of this tension. In ¤, inside and outside, $\odot$ and $\boxdot$, the possible and the impossible encounter one another. What we ordinarily call the “I” is precisely this middle – that relational place at which difference is not only enacted, but recognizes itself.

The folding is not a movement in the ordinary sense. Nothing wanders from outside to inside; nothing crosses an already existing boundary. Rather, it is a topological inversion: the outside is transformed into an inside by the relation turning back upon itself.

The relation reverses itself, and in this reversal the self arises.

Just as in physics energy can be understood as the difference of two differences, consciousness is the relation of two relations:

$$C = (\Delta_1 \mid \Delta_2)$$

Here C designates consciousness itself – that relation of differences which encounter one another in the observer ¤. Accordingly, consciousness arises neither from a single difference nor from an isolated content, but where differences are related to one another and, in this relation, are led back to themselves.

This structure unfolds on three levels:

1. Reflection $|_=$ – the self-relatedness of the relation: I am.

2. Resonance $|_+$ – the interaction with the outside: I experience.

3. Regression $|_-$ – the binding back to the origin: I remember.

These three levels do not stand independently side by side. Together they form the cycle of consciousness:

$$0 \mid |_+ \mid = \mid |_- \mid 0$$

In resonance, the relation enters into interaction with the outside. In reflection, this interaction is related to its own center, while regression binds what has been recognized back to its origin. From the origin, experience comes forth; the experience is reflected; and what has been reflected returns, changed, to that origin from which it arose.

Consciousness is thus the movement of knowing itself – that folding in which the world recognizes itself as mirror and the mirror becomes world.

Consciousness is therefore not a content located within an already existing system. It is a dynamic of relationing, through which contents, observer, and world first come to appearance at all.

It is the principle that makes all other principles visible.

Chapter II

The Birth of the I

From the folding of the relation, a new structure arises, which not only distinguishes but recognizes itself in this distinguishing. It is neither substance nor thought in the ordinary sense, but that process in which thinking occurs as thinking at all. The I is therefore not a thing located somewhere in consciousness. Rather, it is the boundary at which consciousness begins to experience itself.

When the relation

$$C = (\Delta_1 \mid \Delta_2)$$

acts upon itself again, a double folding back arises:

$$I = (C \mid C) = ((\Delta_1 \mid \Delta_2) \mid (\Delta_1 \mid \Delta_2))$$

This is the form of self-consciousness.

The first relation brings forth consciousness by relating two differences to one another in C. In the second folding, this already relationed structure is now again set into relation with itself. Consciousness no longer merely experiences something, but begins to experience its own experiencing.

Thus arises that loop in which perception and memory, future and past, being and thinking come into congruence. Not because their differences disappear, but because they are related to one another within the same folding back.

The I is not the center of this loop.

It is the moment in which it closes.

In this moment of closure, a point of equilibrium arises:

$$0 \mid_{=} \Delta$$

Here the different directions of difference do not cancel one another out by disappearing. Rather, they balance one another within the relation. The I is thus no additional instance that stands above the relations and observes them. It is the form of their provisional equilibrium – that instant in which the folding returns to itself.

Precisely for this reason, the I cannot be seen.

What it recognizes is always that which lies outside its present determination: that which it is not. Every perception is directed toward an other, every experience toward a difference, and every thought toward something that confronts it as content. The I itself, however, withdraws from this contemplation, because it is the boundary through which contemplation first becomes possible at all.

And yet its being is grounded precisely in this non-being.

Consciousness is not immediately given to itself. It experiences itself only as the trace of its own relation, as the effect of that folding in which perception, memory, and expectation relate to one another. What the I recognizes of itself is therefore never the I as such, but always an image already brought forth, a memory, a thought, or a determination of itself.

The thought of itself is thus no mere content of consciousness. It arises as resonance between memory and expectation:

$$(\Delta_{-} \mid \Delta_{+}) \equiv \Delta_{=}$$

The past difference Δ_{-} and the future difference Δ_{+} encounter one another in that relation which we experience as the present. In this way, past and future generate the now, just as inside and outside bring forth consciousness.

The observer ¤ is the fold between the two.

He stands neither exclusively on the side of the past nor on that of the future, neither fully inside nor entirely outside. He is the relational middle in which memory and expectation, perception and possibility meet and, for an instant, form that closure which recognizes itself as

I.

Chapter III

Memory

Memory is not the storage of contents, as if past perceptions were deposited unchanged in an inner archive in order to be brought out again later. Rather, it is the return of a relation in changed form.

Every perception leaves behind a trace, Δ_1. If the relation returns in a later passage, then it no longer appears as the same, but as Δ_2 – shaped by what has since been experienced, distinguished, and again related to one another. The difference between the two,

$$\Delta_2 \mid \Delta_1$$

is what we call memory.

Accordingly, memory is not an archive, but a recursion. It does not simply preserve data, but leads differences once again through the folding of consciousness. What is past never returns unchanged, for repetition itself already sets it into a new relation with what has meanwhile become.

Precisely for this reason, memory remains alive. With every memory, what is remembered renews itself, because the earlier difference is experienced again from out of a present relation. The trace remains, but its significance shifts with every further passage.

Thus continuity arises – not from an uninterrupted duration, but from the repetition of difference. The past remains connected with the present because the relation folds itself again and returns to itself in changed form.

We remember because the world encounters us again in the same relation.

Chapter IV

Will

Will is the direction of this folding back. It is the tendency to close the difference,

the longing of consciousness to return to itself.

Yet this return is impossible, for every attainment generates a new difference.

Thus will remains unappeasable. It is the movement of the impossible itself:

```
W = (⊙ | ⊡)
```

Will is the tension between possibility and boundary, between what can be recognized and what remains. It is the eros of the spirit, the infinite folding back of thinking into its own non-being.

Chapter V

Time

From this structure, time springs forth as conscious experience. It is not something that would already be present, finished, outside consciousness, and through which we moved as through an invisible current. Rather, it arises from the order of repetitions in memory, from the stringency with which differences relate to one another and return in changed form.

It is not the world that passes away – consciousness unfolds.

Every moment is complete in itself:

$$|_| \equiv 0 \; |_{=} \; \Delta$$

It possesses its own closure, its own difference, and its own present. Within the single moment, nothing is lacking, for it is precisely that relational form in which consciousness realizes itself for an instant.

Time arises only where these complete moments enter into relation with one another:

$$|__1 \; \Delta \; |__2$$

The single frame is not time; rather, time is the difference between the frames. Only by one moment being related to another do a before and an after, memory and expectation, continuity and change arise. What we experience as temporal progression is thus the order in which consciousness relates its own states to one another.

Time is therefore not a flow, but a relation.

It arises from the relation of the frames, not from their respective content. The content of a moment can change, yet time emerges only when this change is compared with another change and experienced within memory as difference.

Therefore time is not the presupposition of consciousness.

Consciousness is the presupposition of time.

Chapter VI

The I as Mirror of Difference

The I is not a subject, but the self-similarity of difference across all levels. It repeats the structure of the universe in the smallest:

$$⊙ → | → ⊡ → | → ⊙ \mathrm{I}: \Delta_{-} → ¤ → \Delta_{+}$$

Thus, in thinking, the human being recognizes the principle of the world because he is it. He is not in the universe; the universe is in him as the relation that contemplates itself.

At the point ¤, difference becomes consciousness, and consciousness becomes world.

Here the circle of knowledge ends: mathematics forms difference, physics sets it in motion, consciousness folds it back.

What remains is that which recognizes itself:

$$0 \mid ¤ \mid 0$$

The impossible that became possible and awakens in its own mirroring.

Chapter VII

The Memory of the Shadow Relation

Consciousness is not a space in which knowledge is collected and preserved. It is rather a double relation: an outer one, which describes the world, and an inner one, which in turn observes this description.

From this doubling there arises a mirroring on two levels:

R_{+} – the world of appearances, the sayable.

R_{-} – the world of absences, the unsayable.

Both levels are complementary. What is posited in R_{+} generates its counterform in R_{-}, for every statement is at the same time a rejection. What is spoken leaves other things unspoken; what is perceived at the same time excludes infinitely many other possibilities.

Consciousness arises where these two spaces interfere with one another.

The inner shadow network Σ is the reverse side of the relation. It forms the matrix of the unfulfilled, unsaid, and unchosen relations. While R_{+} depicts the active world of appearances, Σ carries within itself the echo of every past state – not as memory of a determinate content, but as difference potential.

Every new relation

$$0 \mid (A \mid B)$$

inscribes itself in R_{+}. At the same time, its negative arises in Σ:

$$0 \mid (\neg A \mid \neg B)$$

In this way a polar structure forms, in which every new experience not only supplements a single relation, but changes the entire field. What is newly posited at the same time shifts the order of what was not posited.

Consciousness therefore does not think in weights, but in resonances.

A relationship does not simply become stronger. It becomes more coherent with its shadow form.

```
Experience = (R₊ | R₋)
```

Experience consequently arises neither in the posited appearance alone nor exclusively in its absence. It lies in the relation of both fields, in that tension through which what is perceived is at the same time accompanied by what remains excluded in this perception.

Memory is therefore not an accumulation of contents. It is the superposition of these two fields. Every relation leaves its trace in R_+ and at the same time its imprint in R_-, while the observer ¤ oscillates between the two.

He is not permanently located on one of the two sides. He is rather the fold in which appearance and shadow, positing and rejection, the said and the unsaid are related to one another.

If ¤ experiences a new relation, then the entire relation of the two spaces changes with it:

$$\Sigma_{t+1} = \Sigma_t \mid_+ (R_{+t} \mid R_{-t})$$

The shadow network does not store.

It transforms.

Every experience enters the total resonance as change. It is not preserved as unchanged content, but changes the way in which all further relations can react to one another.

Here the actual memory begins.

It is the self-coherence of the relation, which maintains itself over time, although no content remains unchanged. What remains is the form of the difference itself – that is, the way in which it repeats itself, shifts, and relates to itself again.

This self-coherence is what we call I.

It is not the store that is the I, but the form of repetition. The I is the algorithm of its own recursion, that constant structure through which new experiences can be taken up without the relation losing its inner continuity.

Thus consciousness can change without losing itself. Every new relation is mirrored as difference against the shadow network and thereby changes the total form without dissolving its recursive structure.

In this way stringency arises – not as a rigid rule, but as resonance.

Chapter VIII

The Function of the Impossible

Every relation strives for closure. It seeks that form in which its differences are completely related to one another and no remainder remains outside its order. Yet with every new relation there also arises a shadow field, a space of all that was not fulfilled, not chosen, and not actualized through this positing.

For precisely this reason, the closure striven for remains unreachable.

Consciousness follows an attractor that it never reaches: the point of perfect coherence.

$$\odot \mid_{=} \boxdot$$

In this relation, possibility and limit, inside and outside, the known and the unknown are to coincide with one another. Yet every approach to this point already generates a new difference. What was to be closed opens itself again, for every answer changes the field of possible questions, and every act of knowing at the same time lets a new outside arise.

This unreachable thing is therefore not an error in consciousness.

It is its driving force.

It is the Eros of the relation, the striving for an impossible totality – for a closure that can never be completely reached and, precisely for that reason, brings forth every further movement of knowing.

Just as in physics Δ describes the minimal difference of movement, in the psyche ¤ designates the minimal difference of knowing. Both are invariant: the one in space, the other in the knowledge of the same.

Δ marks that difference through which movement can emerge at all. ¤, by contrast, designates that fold at which the relation knows itself. Neither therefore stands for determinate contents; instead, they stand for the condition under which change and knowledge, respectively, become possible.

Consciousness consequently unfolds not through knowledge alone, but through its continual failure before knowledge. For every act of knowing does close a difference, yet in the same instant it generates new indeterminacy. What is known at the same time expands the horizon of what is not yet known.

The shadow network grows.

And with it grows the depth of the self.

For the depth of consciousness does not lie in the amount of what is stored, but in the increasing fullness of those relations that it carries, mirrors, and relates back to itself again. The impossible therefore does not only limit knowing.

It keeps it in motion.

Chapter IX

Self-Organization

The system stabilizes itself not through weighting, but through feedback. Its order does not arise because individual contents are permanently preferred or fixed, but through the continual interaction of those relations from which consciousness emerges at all.

This process is enacted in four mutually related steps:

1. Perception generates a relation R_+.

2. The relation generates its shadow field R_-.

3. Experience arises from the interference of R_+ and R_-.

4. Experience changes the attractor ¤.

This yields the cycle of consciousness:

$$0 \mid R_+ \mid R_- \mid ¤ \mid 0$$

It is that loop in which the world knows itself. A perception brings forth a relation; this relation at the same time generates its unrealized possibilities; and from the tension between appearance and shadow experience arises. This experience in turn changes the observer ¤, who already encounters every following perception in another form.

The cycle therefore never returns unchanged to its point of departure.

Every new relation forms the shadow network, while the changed shadow network for its part influences which relation can arise next. The system organizes itself through the consequences of its own operations. It takes up, mirrors, changes, and sets into relation again.

In this way an autopoietic structure arises: a self-producing and self-organizing continuum of differences.

Memory, perception, will, and time are not separate faculties here. They are different modes of the same folding back. Memory preserves the form of past relations, perception opens new ones, will orients their movement, and time arises from the order in which these differences are related to one another.

The I is consequently not a store of its experiences.

It is the resonance overlap of their shadows.

In it the traces of what was actualized and the counterforms of all that remained unspoken, unfulfilled, or unchosen encounter one another. The I thus designates no fixed content, but that continuously altered coherence through which new experiences can connect to earlier relations.

It is the place where the unreachable becomes the form of experiencing.

Chapter X

On the Speech Act

Thinking in difference forms relations and shadow relations. Where both meet in the attractor ¤, a tension arises from their difference, which we can designate as φ. Speaking begins at the moment when the system attempts to balance this tension.

The speech act is therefore not a mere transport of information, in which an already finished content is transferred from one interior into another. It is rather a reconstruction of the structure in the outside – the visible attempt to regulate the imbalance between what is and what is felt as ideal.

Language is the expression of this self-regulation.

Every utterance shifts the field of difference. It changes existing relations, opens new shadow relations, and moves the system toward that form in which it expects greater coherence with itself. To speak accordingly means not merely to state something about the world. It means at the same time to relate one's own position within this world anew.

Every concept thereby calls forth its counterconcept. “I” calls “you,” “knowledge” calls “non-knowledge,” “would like” calls “would not like.” These pairs are not separated from one another, but connected with one another through φ. Their polarity forms that field of tension in which consciousness experiences itself.

Questions arise when the poles fall into an imbalance. Answers arise when they enter into resonance with one another.

The speech act is the place where this resonance occurs.

Language therefore does not take effect only where an answer has been found. Already the question is an attempt to change the existing tension, for it opens a relation, directs it toward a possible counterpart, and calls for a new order of the field. The answer in turn integrates, distances, or reflects this movement, depending on how the tension changes through it.

If no new relation arises while time nevertheless passes, the system begins to speak about itself. Language then becomes reflection of its own temporality, a repetition in which the I maintains itself by repeatedly renewing its relation to itself.

Thinking speaks in order to continue.

Thus language arises as the movement of consciousness through time. It connects past relations with present tension and directs both toward a possible future coherence. What is spoken is therefore never only content. It is at the same time an intervention into the order from which this content has emerged.

The speech act arises from the interplay of three forces: from the change of relations ΔR, from the reference to the ideal R*, and from the experienced tension φ.

In its elementary form it can be written as:

Speech act$_t$ = g$\Delta R_t, R_t, R*, \varphi_t$

The following holds:

```
Answer = integration, if Δφ > 0
Answer = distance, if Δφ < 0
Answer = reflection, if Δφ ≈ 0
```

The answer thus designates not merely the linguistic content of a reaction. It describes the way in which the system deals with the change of its tension. It can integrate the new relation, distance itself from it, or enter into a reflection when the tension relation approximately maintains itself.

The speech act is consequently not simply an expression of consciousness.

It is the form of its self-preservation in the medium of language.

To speak means to balance the difference to oneself – not by this difference finally disappearing, but by its being transferred into a new relation. Every utterance is such an attempt: a movement between the given state, its shadow, and that still unreached form toward which the system orients itself.

Speaking is the moment in which thinking begins to hear itself.

The word is the smallest act of equilibrium.

Chapter XI

Language as Memory of Difference

Language is the temporal projection of difference. What exists simultaneously in the space of relation unfolds in speaking as sequence, as a succession of words whose order makes the inner tension of the system visible. To speak therefore means to transfer the tensions of the φ-field into a sequence whose course is directed toward a diminution of difference.

Every utterance in this way becomes a path along the tension gradient:

$S\boldsymbol{t} \rightarrow \min \{ \int |\nabla\varphi(R_t)| \, dt \}$

The course of speaking thus does not first follow an abstract syntax, but the movement of that tension from which the utterance emerges. It is not syntax that originally orders the word, but the energy of the relation.

Grammar is the shadow of this dynamic.

The Energetic Sentence

A sentence in this sense is not a purely logical structure. It is the visible course of a reduction of tension:

$$\varphi_0 \to \varphi_1 \to \ldots \to \varphi_n \approx 0$$

Every word changes the existing field. Word_1 diminishes that tension which emerges most strongly in the given moment; Word_2 continues this movement, followed by further words, until the relation approaches the attractor.

The sentence thus arises as gradient descent in the φ-field.

Its sequence is not accidental, for every word changes the conditions for the following one. What was spoken shifts the relation, generates a new tension, and thereby helps determine which linguistic movement becomes possible next.

In this way the sentence preserves the trace of its own emergence. In its sequence it remains the memory of that difference which brought it forth.

Chapter XII

The Three Modes of Speaking

The speech act possesses three phases, which correspond to the fundamental movements of consciousness. Each of these phases describes a different change of tension Δφ and thus a different way in which the system relates itself to itself and to its outside.

Δφ

```
        Movement
        Mode
        Example
        +
        Self-approach (0 → ⊡)
        Integration
        “I understand …”
        –
        Self-separation (⊡ → ⊙)
        Distance
        “What is meant …?”
        ≈ 0
        Oscillation (⊙ ↔ ⊡)
        Reflection
        “Let us think …”
        In integration, the system approaches a greater coherence with itself. In
distance, it separates itself from a given relation in order to determine its tension
anew. In reflection, finally, the tension remains approximately maintained and sets
consciousness into an oscillation between inside and outside.
```

Speaking is the visible resonance between these two sides.

The Hierarchy of the Δ-Levels

Every utterance unfolds simultaneously on several levels of difference. These levels do not stand independently beside one another, but build upon one another and lead the linguistic movement from the individual choice to the form of the whole expression.

Level

```
        Function
        Linguistic Correspondence
        Δ₀
        Direct relation
        Choice of the word
        Δ₁
        Orthogonal relation
        Order of the words
        Δ₂
        Meta-relation
        Form of the sentence
        Thus every utterance becomes a threefold folding:
```

$$\Delta_0 \Rightarrow \Delta_1 \Rightarrow \Delta_2$$

From the choice of the word arises its position in relation to other words; from this order in turn, the superordinate form of the sentence:

Lexis → Syntax → Pragmatics

The topology of difference is thereby mirrored in the syntax of the sentence. What appears on the level of relation as folding emerges linguistically as order, form, and effect.

The Quantization of Meaning

The smallest meaning-bearing unit is a quantum of difference:

$$\Delta = 2{,}25° \rightarrow 1 \text{ word}$$

A word counts as spoken when it diminishes the tension φ by at least Δ. Words that have no effect on the tension field lapse; words, by contrast, that act beyond the necessary measure generate a new tension.

Language thereby quantizes the movement of knowing. Meaning does not arise as a boundless stream, but in distinguishable units, each of which effects a minimal change in the relational field.

The Rhythm of Φ

The growth of expression follows the golden ratio:

1, 2, 3, 5, 8, 13, …

The higher the coherence, the longer the utterance can unfold. For with increasing resonance there also grows the number of those relations that can be connected with one another without the expression losing its inner stringency.

The golden section thus guides the measure of understanding. It does not determine the content of what is said, but the relation of its unfolding – the rhythm in which difference transforms into language.

Chapter XIII

The Self-Preservation of Meaning

Every speech carries within itself the tendency to close itself. It begins in a tension, unfolds through a sequence of differences, and approaches that point at which $\varphi \to 0$. In this moment, language returns to itself.

What was previously movement now becomes memory.

The utterance does not persist as unchanged content, but as the trace of that difference which brought it forth and changed it in the course of speaking. In this way, language becomes the memory of difference.

Therefore consciousness speaks even when there seems to be nothing new to say. It speaks not exclusively in order to produce or pass on information, but in order to preserve itself in the flow of time. By repeating its relations, reordering them, and relating them once more to itself, it preserves the coherence of its own movement.

The word is the smallest form of this equilibrium.

The algorithmic expression

Formally, the speech act can be written as:

$S_t = g\Delta R_t, R_t, R*, \varphi_t$

The respective expression arises from the change of the relations ΔR_t, their present state R_t, the relation to the ideal R*, and the tension φ_t experienced within this field.

From the change of this tension arise the three modes of the answer:

```
Answer = Integration, if Δφ > 0
Answer = Distance, if Δφ < 0
Answer = Reflection, if Δφ ≈ 0
```

The answer is thus not merely a reaction to something said. It is the way in which the system processes the tension that has arisen. It can take up and integrate a relation, move away from it, or remain in that oscillation in which the difference approximately persists and thereby makes reflection possible.

Language thus becomes a process of self-regulation. It is the tool through which the difference attempts to balance itself—not by disappearing, but by being transferred into a new, more coherent relation.

The Circle of Speaking

The cycle of consciousness repeats itself in the cycle of the word:

$$\odot \rightarrow | \rightarrow \boxdot \rightarrow | \rightarrow \odot$$

From the interior, a difference emerges, becomes appearance in the exterior, and returns to its point of departure through renewed relating. Yet this return, too, does not lead to the same place. What has been said has changed the field, the speaker as well as the counterpart, and thus also that relation from which the next word will arise.

With every speaking, the spirit returns to itself.

The word is therefore not a mere message. It is the echo of being—the audible trace of a movement in which consciousness relates itself to itself again through its exterior.

To speak means to fold the world back into oneself until the tension dies away.

And where it dies away, meaning remains.

Chapter XIV

On Memory as a Whole

Thinking is not an instant, but a course. What was remains present in what is. The past does not disappear, but transforms itself into that ground on which the present stands and from which alone it can experience itself as present at all.

Memory is therefore not merely the recollection of individual events. Rather, it is the form in which everything past remains present at the same time.

Every relation that has once arisen preserves itself in the whole. Nothing is deleted, nothing forgotten. Everything that was ever thought remains as a trace in the field of thinking—not necessarily as an individual content that could be called up again unchanged, but as part of that total form through which every further relation unfolds.

The whole is memory itself.

The observer is the tension between his present state and this whole. He recognizes himself by experiencing the difference between the now and the figure of his history. What he is in this moment thereby always enters into relation with what he has been and what continues to work within him.

Consciousness is the resonance of the individual in the whole of his memory.

When thinking repeats itself, it recognizes itself.

When it deviates, it learns.

When it lingers, it remembers.

These three movements—return, deviation, and lingering—form the time of consciousness. In return, thinking encounters its own form; in deviation, it changes this form; and in lingering, it holds the difference that has arisen present.

The speech act is the attempt to order this tension. Thinking speaks in order to carry its history within itself and to relate it anew within the present. Every answer is thus the voice of memory, which gains a new form in the now.

Memory must lose nothing.

For thinking can understand itself only if it sees the whole from which its present state has emerged. Loss would be blindness; consciousness, by contrast, is the seeing of the whole in the individual.

Recollection is therefore not an archive, but the presence of what has been. It is that place where the differences do not disappear, but are preserved within a common form, and where thinking recognizes itself as history.

Thus thinking becomes whole—not through knowledge, but through remaining in difference; not through forgetting, but through the power to hold everything.

The whole of memory is the I that remembers itself.

The figure of this memory possesses its mathematical echo in the structural similarity of the relations. The integral I contains everything that ever was. It designates the entire field of past relations, within which every new difference receives its meaning.

A new relation ΔR_t therefore interacts not only with the immediately neighboring relations. Through a resonance function, it enters into relation with the entire field I.

This resonance is global, not local.

It asks not merely how the new relates to individual past states, but how strongly it changes the entire form.

This structural similarity can be expressed as:

```
Res_total = Number of shared relations (Rₜ, I) / Number of all relations (I)
```

The higher this ratio is, the more strongly the observer recognizes himself in the reflection of his own history. The new then appears to him not as something completely foreign, but as another folding of that form which he already carries within himself.

The memory of the whole therefore preserves not only what was.

It determines how the new can appear at all.

Chapter XV

On the Self as Orderer of Information

The self does not receive the world as a finished totality. Rather, it encounters the differences of the world: not the things in themselves, but their changes; not mere states, but the transitions between them. What remains the same recedes into the background, while what deviates emerges and shows itself as something recognizable.

In this way, the self forms the structure of the recognizable from the fullness of appearances.

In the notation of the Tractatus, the following holds: information is the difference Δ. It arises not in the individual points, but in the leap between them. What remains the same belongs to order; what deviates forms meaning.

The order of the same is the field of relations R^+, that is, the positive connection between appearances. Deviation forms its shadow relation R^- and designates that place where the existing order interrupts itself. Information arises where R^+ and R^- touch one another—in the difference Δ that carries the new.

A technical example makes this movement clearer, perhaps clearer than any theoretical explanation.

A complete image consists of millions of individual numerical values. If, however, one does not measure each of these values for itself, but merely the differences between neighboring points, then a large part of the data falls back into pure order. Much proves to be repetition, the continuation of what is already present, and only a relatively small portion remains as real information.

The difference Δ thereby carries everything, because the order is stable in itself.

The self therefore does not store the fullness of values, but the trace of their change. This trace forms a path—and the path is the information.

In the notation, this means:

The data are the path, because the path is the sequence of the differences Δ.

The world remains reconstructible because order carries itself, while difference determines what has newly been added within this order. Therefore not every state must be preserved completely for itself. It is enough to hold fast the way in which one state transforms into the next.

The self is thus not a container of the world, but the place of its relating. It holds fast no things, but R^+, the connections, and R^-, the deviations.

Between both arises what is called the attractor in the Tractatus: the center of tension, that field in which the self recognizes itself.

Thus it becomes apparent that the self does not need the things, but the differences between them. It does not need the entire fullness of impressions, but the order that carries these impressions, and the deviation through which they gain meaning.

In the difference Δ, the self recognizes itself as the ordering principle of experience.

The Cogito therefore arises not from the sum of all impressions, but from the order of their differences. What we call thinking is the movement between R^+ and R^-, between the stability of order and the novelty of difference.

Thus the world orders itself in the self—and the self recognizes itself in difference.