

# The Logic of Mutual Generation

Among the works I have written so far, I have gathered the logic I used in the descriptions from my writings on natural philosophy, practical philosophy, ontology, and epistemology, and have named it the Logic of Mutual Generation. "Mutual Generation" refers to self-formation through interaction.

## 1 Relation

Mutual relation   Event   Time and Space   Individuality   Network   One and Many  
Whole and Part   Field and Individual   Contradiction   Mutual opposition and  
connection   Interaction

## 2 Recognition

Mutual reflection   Mutual recognition   Subject and Object   Practical recognition  
Recognition within the world

## 3 Action

Action and Relation   Action within the world   Self-reference   Passivity and Activity

## 4 Mutual Generation

Mutual generation   Emergence and Complexity   chaos and Order   Form   Information,  
Branching   Contingency and Encounter   Indeterminacy   Irreversibility   Freedom

## 5 Generation

Being and Relation   Subject and Predicate   Generation and Existence

# 1 Relation

## **Mutual Relation**

The world is made up of the relation of all things. Everything in the world is intertwined with each other. Elements and components are connected in various ways, influencing each other.

In a world of mutual relations, every element is defined in relation to other elements, so no event can be understood outside of its mutual relations with other events. Here, an element does not exist in isolation, but is part of a network of connections with all other elements. The world of mutual relations is one that cannot be separated, a world where many elements are mutually permeating each other.

In a mutually interrelated world, nothing can exist independently; everything is interrelated, so the existence of one thing involves the participation of all things. The self and the other cannot be separated. Here, each event reflects the other, creating a structure where the self exists within the other, and the other exists within the self. For one thing to exist as itself, it also exists under all other things simultaneously. Each exists within all, and all exist within each.

If you imagine a diagram where countless lines converge on countless points, you can see that, in this diagram, the countless lines are not only converging at a single point, but at the same time, they also spread out in many other directions. The fact that a single event actually exists means that it has the dual nature of both concentrating other events at a single point and radiating outward from there. Here, one event encompasses all other events and is contained within all other events. In other words, one event reflects all other events, and all other events are reflected in it.

The world of mutual relations is one where many things are related to many others and is always in motion. In this world, each event is determined by its connections with all other events, so there are countless causes for the formation of any one thing, and it is impossible to pinpoint a single cause. Since the world of mutual relations is made up of complex interactions, its movement cannot be explained by a single cause.

In a world of mutual relation, a simple causal relationship where one cause leads to one effect does not hold. The world of mutual relation is one of multiple causes and multiple effects, where countless causes give rise to countless outcomes. Therefore, the same cause can produce completely opposite effects, and entirely different causes can produce the same result. Additionally, a single cause can lead to many effects, and many causes can result in one effect. As a result, even if the same cause is at work under the same conditions, the outcome may vary. Modern science, which was based on simple causal relationships, overlooked this point.

## **Event**

If everything arises through correlation, then everything is something that has come into being and is an event. To exist means to appear as an event. We must grasp things as events, as phenomena.

Events arise; they are not simply existing. Moreover, there is no such thing as an isolated event. Events are interconnected with one another. From this interrelationship of events, we understand the emergence of one event that encapsulates all events as the generation of things.

To exist means to manifest as an event. An occurrence emerges as an event here and now from the intricate web of interrelated connections. It is a one-time event, and it cannot be repeated.

The events emerge as knots in relationships. The integration of various relationships at each moment is the event itself. What exists in this world appears as an event at the nodes of relationships between various phenomena. The relationships between these phenomena gather together to generate a single event, and they disappear when they disperse.

Since no event occurs independently, and every event is caused by something else, it is impossible to isolate a single event from the mutual related world of events. Every event has meaning in the context of other events, and it cannot be defined by what it is in isolation from that context. All phenomena are interconnected and continuous.

In the world of mutual relations, one event encompasses all other events and is generated while being included in all other events. Therefore, within any given event, all other events are flowing in. The mutual immanence of phenomena is the essence of the world of mutual relations.

In order for a single event to occur, all the events that have happened before it, as well as all the events happening in the present, are intricately connected in both horizontal and vertical ways. The existence of a single plum blossom, as well as my own existence as I gaze at it, arises as a culmination of all the events in the world. Therefore, even in the smallest things of this world, the entire world is contained. The whole world is encompassed within a single point.

The world consists of a series of events. Moreover, these events are mutual related and constantly undergo generation and transformation. An event is generated in an instant, encompassing all the events related to its creation, while also being connected to all future events.

The thing itself is not something that cannot be recognized, nor is there any need to recognize it; it does not exist from the very beginning. Even if all of its characteristics and attributes are removed, the thing itself does not remain. Things arise from events as points of connection in relationships, and in those events themselves, there is still no size, volume, mass, or anything else. Things are reduced to events. The world is not made up of things, but is formed by events.

### **Time and Space**

In the beginning of the universe, there was no time or space. Time and space were created from the timeless world, emerging with the event of the birth of the universe. From the silent, timeless world, motion and creation awaken time and space.

The events of the universe that we experience from within, in the "here and now," give rise to time and space. It is not that events exist within time and space, but rather that time and space emerge from these events. In this sense, moments do not exist within spacetime; rather, spacetime is created from moments.

Things moving through time and space should not be understood merely as motion or change. On the contrary, we must understand that it is the very motion and change that generate time and space. The motion and change in the midst of things weave time and space into existence. Before recognizing spacetime, it is essential to first recognize motion and change.

With the acceleration and deceleration, changes and fluctuations that accompany motion,

both time and space become more sparse or more dense. The concept of a uniform and homogeneous spacetime is merely an abstraction created from this non-uniform spacetime.

The perception of space is accompanied by the perception of time, and the perception of time is accompanied by the perception of space. As the observer moves, things that were hidden appear, and things that were visible disappear, which not only leads to the perception of space but also to the perception of time. Spatial coexistence is a temporal succession. Spatial movement and temporal change are continuous.

Time is a process, a change, and a creation. It is a flow, a transition, and a succession of heterogeneous elements, like a melody in music. The perception of time is the recognition of succession.

The recognition of succession is the recognition of identity and difference. Change is perceived through the difference of the identical, and continuity is perceived through the identity of the different. Through this recognition of identity and difference, it becomes possible to distinguish and connect two events. This recognition of identity and difference makes it possible to perceive the discontinuous continuity of events, the discontinuous continuity between what comes next and what came before, in other words, the recognition of time as succession.

Time moves from the past to the present and from the present to the future, with a sequence of events, and we believe that there is no way to go back. This irreversible time, which never repeats itself, must be said to arise from the motion and changes that allow succession to occur.

### **Individuality**

When we refer to an individual object, we understand it as an entity with individuality and identity, both spatially and temporally. Spatially, an individual object can only occupy one location at a time and cannot appear in multiple places simultaneously. Temporally, the object persists as the same entity over time. This guarantees the substantiality of the object. However, such objects are, in reality, subject to generation and extinction. The matter and form of an individual constantly undergo generation and change. Therefore, no substantiality can be acknowledged in such an object.

It is possible to think that individual objects can be divided down to the smallest possible

unit that cannot be further divided, and this smallest unit is considered to be an eternal, indestructible entity. The generation and destruction of individual objects would then arise from the combination and separation of these smallest units. However, if this smallest unit itself is something that can be divided infinitely, then it is impossible to seek an eternal, unchanging entity within it. Even if a seemingly solid and substantial individual object exists on the surface, it is merely the result of the interaction of countless constituent elements.

There is no individual entity that serves as the foundation for all attributes. Instead, an individual should be regarded as non-substantial. The individuality of an object must be understood not as a substance but as an event. An event merely temporarily forms the individuality of an object.

When we investigate what an individual is, we find a connection to others. An individual is not originally an entity that exists independently with self-identity; it is a non-substantial being that only arises in dependence on others. To see the individual as an entity existing there is an abstraction and a fiction.

The individual exists within relationships. Outside of relationships, there is no individual. The individual, while relating to itself, is simultaneously in relation to other individuals. The individual can only be understood through the relationships between individuals.

The nature of things is known in relation to other things. The relationships between things constitute the very nature of those things. Things do not exist as independent entities apart from these relations, but only as points of connection within a network of relations with others.

The individual is rather just an item in a relation. As an item in a relation, the individual determines itself according to the relation and changes through its relationship with others. The item in the relation changes itself through its correlation with other items in the relation and the entire relation, thereby also changing the relation itself.

The individual is like a nodal point in the web of mutual relations and is not an independent entity. The individual always involves relationships with others, and all individuals are interconnected. Individuals are both discontinuous and continuous at the same time.

Individuality should be understood not as the persistence of a self-same entity, but as something that emerges as an event. There is no independent individual that neither changes

nor moves. What exists is only the correlation between events, and there is no substantiality. The world is composed and driven by countless events. What truly exists is something that is in the process of becoming, something that is constantly emerging.

## **Network**

The world is a dynamic network formed by the mutual connections and relations between events. Here, individuals are closely connected and inseparable. In such a network, individuals interact with each other, while also reading the environment, and gradually changing its functions, characteristics, and expressions.

In a network of mutual relations, each event fluctuates through the network. Since all other events participate within a single event, it is impossible to separate the self from others. However, it is precisely for this reason that this network of interpenetrating events possesses flexibility. By forming a network, the events alter their internal states and adapt flexibly to changes in the environment.

The world is a network of relationships where elements are interconnected both vertically and horizontally, interacting with each other and permeating one another. In this system, a change in one element cascades to all other elements, altering the entire structure of the network. Moreover, the change in the overall structure of the network also affects the elements themselves, leading them to change. The world is a dynamic network that forms itself through such recursive cyclical structures.

From the interactions within this network, new breakthroughs emerge. Here, when new mutations arise within the network or when sudden mutations from the external environment occur, even slight mutations are amplified through the mutual related web, leading to the formation of a new order. This then grows into a new network.

## **One and Many**

In an mutual related world, reality appears as many, and at the same time, these many are connected and linked together to form one. It is many while being one, and one while being many. The many within the one, and the one within the many—that is the principle of reality.

In an mutual related world, the holistic one and the individual many are mutually inseparable.

At the same time, the individual reflects the whole, and the whole reflects the individual. The many exist within the one, and the one exists within the many.

### **Whole and Part**

In a world of mutual relations, there is no whole without the parts, and no parts without the whole. The whole and the parts mutually depend on each other, and through this relationship, the world is generated. Since the whole depends on the parts, if the parts are lost, the whole collapses. However, at the same time, the parts depend on the whole, so if the whole collapses, the parts lose their meaning. The whole includes the parts, while the parts include the whole, and through this interplay, the world forms itself.

Here, an entire system is formed from the interaction of parts, which creates a whole greater than the sum of its parts. Each part interacts with the others, shaping a constantly fluctuating whole, and at the same time, the parts also change in response to the fluctuations of the whole, and this fluctuation never ceases. The whole and the parts mutually limit each other and undergo generative changes. In particular, the parts transcend the conditions set by the whole, and it is through this that the whole undergoes fluctuation.

### **Field and Individual**

In a world where individual entities are distinct yet interconnected, each entity is related to others and placed within a field that is created by these relationships. As a result, an individual in this field both influences other entities and is influenced by them, changing along with the vibrations of the field.

The individual begins to act within the field, and the field begins to act within the individual. In the interaction between the field and the individual, both the field and the individual fluctuate. Reflecting the field, the individual constantly changes, and through this change, the individual transforms the field itself. Influenced by the changed field, the individual also continues to change.

### **Contradiction**

If we define contradiction as the coexistence of opposing elements, then the world of mutual relations is constituted by contradiction. The world of mutual relations is one where opposing



elements, such as affirmation and negation, identity and difference, continuity and discontinuity, inside and outside, active and passive, cause and effect, self and other, coexist and permeate each other.

The occurrence of all events happens within the mutual relations of all other events, so every event contains all other events. Here, the law of non-contradiction can be transcended. A is A and, at the same time, non-A. The self-identity of A as A exists because A is not A.  $A = A$  must imply  $A = \text{non-A}$ . In a world of interconnection, opposing elements such as A and non-A, affirmation and negation, coexist, and it is through this that generation occurs. The logic of mutual relations is the logic of contradiction.

The self-identity of phenomena implies mutual differences. A proposition that expresses the self-identity  $A = A$  already presupposes the distinction between A and non-A behind it. Self-identity contains distinctions within itself, and it is through this distinction that it becomes self-identity. Self-identity and distinction are complementary.

In order for A to be A, it must be in contact with non-A. In order for non-A to be non-A, it must be in contact with A. Identity can only be identity when it includes difference. Front and back, shadow and light, inside and outside—these opposing elements can only exist as such when they become one. The two are intertwined, and together, they bear the creation of all things.

In order for mutual relatedness to be established, events must be distinguished from each other and must be different. However, since every event is simultaneously related to others, for that relationship to hold, identity must be found between the distinct events.

The concepts of inside and outside are not fixed. An individual is flexible, allowing other things to enter and exit. What is inside can move outward, and what is outside can come inside. The opposing elements of inside and outside can interchange with each other.

The self is not something that exists in a static state, but rather a self that continuously forms itself. The self generates a non-self from within itself, connects it to itself, and in doing so, the self transcends itself. The self is both itself and not itself. This is the logic when the self is understood as a self that generates change and transformation, as a self that forms itself.

Without symmetry, the recognition of mutually opposing things is impossible. It is only

through symmetry that both can be recognized. The world, where mutually opposing things are in mutual connection and interwoven, exists as a world of generation and flux.

The mutually opposing elements are interdependent, while the mutually different elements penetrate each other. It is the complementarity of the mutually opposing elements that establishes the mutual immanence of all things.

The boundary of mutual opposition both distinguishes and shares the opposing elements. The boundary that distinguishes the opposing elements is, at the same time, the point where they become one and the point where they cease to be either. The boundary is both the origin from which all things emerge and the endpoint to which all things vanish.

### **Interaction**

In the world of mutual relations, countless elements interact with each other, constantly creating new forms and structures. Here, the movement of one element affects the movements of all other elements, and this influence in turn affects the original element, causing it to change as well. Since everything influences everything else, the occurrence of any single event is influenced by all other events, and even the smallest movement in any part has an impact that extends across all areas.

The world is made up of events. These events are interconnected and interact with each other, carrying the process of the universe's creation and transformation. The world of continuous change and flux, where everything is fluid and ever-changing, reveals itself through the mutual relations and interactions of all things.

## **2 Recognition**

### **Mutual reflection**

In a world of mutual relations, every event is placed within a web of relationships, so within a single event, countless other events are reflected. The world is one where countless events reflect upon one another. Perception is constituted within the situation of mutual reflection between events and events, and between events and the world. The act of each event reflecting

the world and other events from its own perspective is what constitutes perception.

The world is a place where countless events reflect and generate one another like a kaleidoscope, a world where events continually create themselves through their interactions. The various phenomena in the world dynamically change and evolve in an ongoing process, driven by their connections with other phenomena.

In a world of mutual relations where all phenomena mutually contain one another, one and many reflect each other. Moreover, the inclusion of the many within the one, and the inclusion of the one within the many, is none other than recognition. All things are generating while recognizing and perceiving one another.

In the world of mutual relations as a reflection of all things, the many reflect the one. Therefore, even the exact same one thing can manifest in different aspects depending on the perspective from which it is viewed.

Each event reflects the world from its own distinct perspective, while simultaneously reflecting each other, thereby shaping the world. Each event exists within the world, and the world exists within each event. The world is formed through the mutual reflections of countless images of the world drawn by each event within the world.

The world always appears within a specific perspective. To me, the world only shows the aspects of the world from my point of view. Therefore, we cannot grasp the world in its entirety. This is precisely why the impulse to understand life never ceases, as it evolves towards the wholeness of the world.

We see objects from only one perspective, and due to the differences in these perspectives, the appearance of the object varies. In this sense, the object appears relatively to each observer. Only a relative world exists; an absolute, unchanging world does not exist.

### **Mutual Recognition**

In a world where various elements are mutual related, just like fish in the sea that emit sound waves and communicate with each other while engaging in collective behavior, each element recognizes and connects with one another. Through this process, the world is constantly being newly created, moment by moment.

Perception is not based on a subjective-objective framework, but rather on the mutual relations between events. Reality only emerges within relationships. Perception is one such aspect of this. Both the subject who perceives and the object being perceived are part of the mutual related world and are events themselves.

If we reduce the various phenomena of the world to events, then the world emerges from the mutual relations between events. Therefore, our perception must be considered as participating in the generation of the world through the mutual relations of those events.

In a world self-forming through mutual relation, each element perceives, senses, and recognizes one another. Without this mutual recognition, self-formation is impossible. Here, to recognize is to be recognized, and to be recognized is to recognize.

### **Subject and Object**

Ultimately, what arises is an event, which in itself is neither an object nor a mind. Events arise through a series of occurrences, and through this, they become both subjective and objective. From the events that emerge at the juncture of relationships between phenomena, both subjectivity and objectivity emerge. The event comes first, and it then becomes both the one who sees and the one who is seen.

Therefore, events that occurred before the separation of subjectivity and objectivity are neither merely subjective nor objective. They are events where subjectivity and objectivity are unified.

If we deconstruct subjectivity and objectivity and view them as functions of events, then in the world, only the mutual relations of events occur.

Recognition is neither the projection of the objective onto the subjective nor the constitution of the objective by the subjective. Recognition is the relationship between events. Events are neither subjective nor objective. We must return to the events themselves, prior to the mind-body dualism, and avoid the reification of both the seen objects and the seeing self. Through correlationalism, both subjectivism, objectivism, and the subject-object dualism must be transcended.

The true reality is an objective that includes subjectivity, so subjectivity and objectivity cannot be separated. Therefore, we must acknowledge that even what is called objective must have sensory functions, perceptual functions, cognitive abilities, and judgment abilities, according to the level of organizational hierarchy.

The phenomenon is something where the subject of cognition and the object of cognition are unified. Therefore, the object of cognition, detached from the subject of cognition, cannot be perceived. The perceiving subject and the perceived object, the subjective and the objective, are deeply intertwined. It is not possible to posit an entity that exists entirely independent of the perceiving subject.

Since we can only reach the object through relationships, the phenomenon does not appear without the observer. The recognition of the phenomenon is a correlation between subjectivity and objectivity, so objectivity appears in accordance with subjectivity. Rather, it would be more accurate to say that objectivity recognizes objectivity, and subjectivity recognizes subjectivity.

The existence must not be separated from recognition. By recognizing, existence is generated. Knowing is one with being, and this will lead to generation.

### **Practical Recognition**

Recognition is an act, and an act is recognition. We live in the midst of the whirlwind and know within it. We act within the whirlwind and recognize within it.

We recognize by acting, and we act by recognizing. Action is not born from recognition, but rather recognition is born from action. To do is to know, and to know is to do. We know while doing, and we do while knowing.

To be is to know. To know is to do. To do is to become. By doing, one comes to know. This is what makes being becoming. Without knowing, there is no being. Without doing, there is no becoming.

### **Recognition within the World**

We do not stand outside the world to observe it; rather, we are within the world, observing it

from within. Furthermore, since we observe through our bodies and instruments, our observations influence the observed facts. As a result, what is observed always contains the observer. The observer and the observed cannot be separated.

The perceiver is a perceiver within the world who recognizes the world. Therefore, this perceiver, through the act of recognition, disturbs the world and participates in the self-formation of the world.

The worldview of modern science was based on the hypothesis that there exists an ego that views the world from outside of it, and that this ego does not influence the world in any way. However, it is impossible to view the world from outside of it. To truly grasp the world, one must see it from within, as there is no understanding of the world without the recognition within the World

To observe the world within the world is recognition. In this case, the self is within the world, reflecting the world, and within the reflected world, the self is again reflected. Thus, recognition within the World leads to infinite regress and undecidable problems. This is because the self that recognizes is included within the world that is to be recognized. Recognition within the World is eternally incomplete.

This world is a world that includes the perceiver. A world that includes the perceiver is in a constant state of movement and never reaches completion. This is because the perceiver themselves disturbs the world and participates in the self-formation of the world. This world is a creative world that continuously forms itself. The reason the world is like this, is that in the world itself there exists the recognizer within the World.

## 3 Action

### **Action and Relation**

Our actions are both determined by mutual relations and, conversely, they also determine this very mutual relation. Therefore, when actions are thrown into the mutual relations, the mutual relation itself is changed. Just as the world generates actions, actions also generate the world. While actions exist within the world, the world also exists within actions.

The field where actions are thrown is constituted by the mutual relations of various elements. Then even the slightest movement of a single action ripples through the whole, triggering changes in the entire system. In this way, the situation continuously changes. The meaning and value of the actions thrown into this environment also fluctuate in response to the changes in the field.

### **Action within the World"**

Since we are actors within the world, we disturb the world. By acting within the world, we are participating in the creation of the world.

From the standpoint of an actor within the world, the principle of modern science, which seeks to eliminate the subjectivity that recognizes and acts, in order to objectify the knowledge of the world, cannot be established.

Living beings, through their actions, reshape the world they inhabit. Moreover, it is the world itself that has created those capable of such transformation. What has been created by the world continues to create the world. A living world is thus a self-generating world.

All beings, from subatomic particles to humans, are not merely entities within the world but, above all, they are observers and actors within the world. No one can remain outside the world. This world is one that, within itself, contains the subject that recognizes and transforms the world itself.

The force that moves the world exists within that very world. Moreover, the world itself produces such agents of change. In such a world, as the world changes, the self also changes, and conversely, the world changes as the self changes. Here, the self both envelops and is enveloped by the world, and it integrates the world while being integrated into it.

We live while acting within generation. Moreover, without this action, generation would not be possible. We are performing generation through our actions. Just as there is action within generation, there is generation within action.

To do is to become. Without doing, nothing can become. Becoming something is always achieved through doing something. Being must be reduced to becoming, and becoming must

be reduced to action.

### **Self-reference**

If scientific theories must be complete, then the actions of the scientists conducting scientific inquiry must also be included in the description. However, if we try to describe the actions of the agents themselves, the system will become incomplete. Since we are a part of this world, our actions within the world will influence its future direction, and the world will become open. An open world cannot be described in a closed form.

Due to self-reference, our recognition within the world is incomplete, and even though the scientific recognition of the world may never be fully realized, this does not necessarily indicate a limitation of science. On the contrary, it should be seen as something that drives the generation and development of science. The paradox of the recognition within the world worldly arising from self-reference is an essential element in the generation and development of science.

Through self-reference, the deterministic static logic is undermined, and a non-deterministic dynamic logic emerges. For generative development, the paradox of self-reference is necessary. The infinite regress of self-reference evokes an infinite progression. The fundamental incompleteness and groundlessness of a system lead to its destabilization, which contributes to the formation of a new system. The paradox of self-reference arises from attempting to capture dynamic logic from static logic, and generation from existence.

The process of generation transcends the principles of contradiction and identity in formal logic. A self-forming world changes itself, so it must be described as a set that includes itself as an element. From the perspective of formal logic, this leads to a self-referential paradox, resulting in contradiction or circularity. However, it is this very contradiction and circularity that gives rise to generation. The act of the self recognizing itself always involves contradiction and is inevitably bound to infinite regress, but we should not fear this infinite regress.

### **Passivity and Activity**

The bodily organs are tools through which the subject performs both passive and active actions towards the environment, and within these tools, the passivity and activity of the living subject become one. In the body as a tool, the internal and external aspects of the living subject



are unified, and subject and object become one.

The organism extracts what is necessary from the environment, transforms the environment, and actively engages with it to sustain its life. The organism is an active subject, a force that organizes matter into complex orders.

Perception is not merely passive but also active. The body senses that it is being touched by touching, and knows that it is made an effort by making an effort. Perception is an act, and through acts, the self is also perceived.

The perception of the self appears simultaneously with the perception of the object. To see an object is to see the self, and to touch something is to know about the self that is touching it. Through actions, we acquire information about both the environment and the self. To know the environment is to know the self.

The self is not a unity of thought (I think) but a bodily unity, and it must be a bodily awareness. Moreover, from the awareness of this bodily unity, the awareness of the unity of things also arises. The recognition of the self and the recognition of things emerge in response to each other. The self and the object are, in essence, inseparable.

Before "I think," there is "the making of things or tools." Behind "thinking," there must be "making." The ability to create things with the hands is the source of the self-awareness

## 4 Mutual Generation

### **Mutual Generation**

The essence of the world generated is the self-formation through interaction and mutual relation. In an mutual related world, new organizations and forms emerge from the interaction between elements and between elements and the whole. The world is constantly creating itself, never being the same at any moment, always new. The world is a dynamic one that continuously reconfigures itself without pause. It is a world that is constantly being created anew, moment by moment.

The world we live in is a system that naturally forms and constantly creates new things through the interaction of countless elements. It is the mutual generation itself that triggers the evolution of structures.

In a world where diverse forms are created through the interaction of various elements, there is no such thing as a lasting entity. Nothing is stable here; all that exists is constant change. In this realm, elements repeatedly interact with each other, either repelling, attracting, exerting influence, or undergoing reactions, in an ongoing cycle. Therefore, in this field of interaction, being active is being passive. Causes become results, and results become causes.

The world, formed by the interaction of various elements, reflects those very elements, and the world continues to fluctuate endlessly. We are a part of this constantly changing world.

Existence is multiple, and while each encompasses the others, they interact with each other and generate. The world is a self-forming world that dynamically creates new things from many-to-many encounters.

Classical physics ignored the complex interactions in nature and aimed to eliminate them as much as possible. In order to simplify and idealize nature, classical physics disregarded the interactions between elements and with the environment, attempting to eliminate the associated errors. However, these interactions between elements and with the environment, along with the resulting errors, are what drive significant changes in nature.

### **Emergence and Complexity**

In a world of the mutual relations, many elements interact in a field formed by various relationships, giving rise to more complex relationships. The phenomenon where individual entities come together, interact, and create new behaviors or structures is called emergence. This can be observed in the universe, matter, and life itself.

The source of new structures that emerge in living systems lies in the close relations between the elements that constitute them and their interactions. Even when the interactions between elements are based on simple principles, astonishingly complex outcomes arise from these interactions. This is the phenomenon of emergence.

The leap from matter to life lies in the way each subordinate system collaborates with others

to form an organic mechanism. However, this tendency to create more complex mechanisms is deeply rooted within matter itself.

## **Chaos and Order**

Order refers to a state where many events are organically integrated and maintained in a unified condition. In this state, many events function systematically and maintain a stable equilibrium. In contrast, disorder refers to a state where many events are scattered. In this state, instability and disunity dominate. In a state of disorder, there are no rules to control the events, and the course of things is left to contingency and arbitrariness.

Order and disorder are opposing states; however, within order, there is always some degree of disorder, and within disorder, the seeds of order lie hidden. It is through the interplay of these opposing forces that new creation emerges.

Fluctuations occur in a state of order, and as they are amplified, disorder arises. However, from this disorder, order can also emerge. Fluctuations are the chaos within order, but at the same time, they also create order from chaos.

The world is changing as it repeatedly goes through cycles of creation and collapse, caught in the intersection between chaos and order. Chaos and order intertwine in a spiral, and the world moves forward.

There is chaos within order, and there is order within chaos. Chaos is necessary for order to be formed. Rather, order must be contained within chaos itself. Even a state of order eventually becomes disordered and returns to an unlimited chaotic state, but this unlimited state is also the source from which new order emerges.

## **Form**

Nature generates diverse forms at the boundary between chaos and order, ranging from symmetry to asymmetry, and from regularity to irregularity. Through the struggle between chaos and order, nature has created a variety of forms.

However, all things with form will perish. At this moment, order is disrupted, and symmetry is broken. As long as the form is fluid, it gradually loses its symmetry. And it returns to chaos.

Form is born from formlessness and perishes into formlessness.

Therefore, form changes with each moment and is temporary. Form constantly fluctuates between chaos and order. When it leans too far towards order, it becomes a defined shape, like a regular tetrahedron or a cube, as seen in crystals. When it leans too far towards chaos, it becomes amorphous, like gas, dust, or plasma.

### **Information**

Whether it's the universe, matter, life, or society, at a certain stage, there are times when they make a sudden leap to an entirely different level. This creative evolution, known as phase transition, requires the dynamics of recognition and interaction through information.

In a self-forming world, information and its perception interact with each other, serving as a driving force that creates order. This interaction is constituted by the sensory, perceptual, and cognitive effects between elements.

The new order cannot be created without information. Information is a function that connects simpler units into more complex systems. When this function is given, relationships can be altered, and a new order is created.

The new order is created not only by matter and energy but also through the input of information. Information provides order and forms shape. Moreover, the order that is created contains information itself and has the ability to transmit and communicate it. This information, in turn, forms new patterns. Information creates information. By introducing the concept of information, it would be possible to revive the classical notions of formal and final causes within modern science.

Being is relation. Information plays a role in this relation. Where there is relation, there is interaction, and where there is interaction, things come into being. It is information that makes this interaction possible, and the act of interpreting this information is recognition. Without recognition, there is no being.

Without information and its recognition, organization does not occur. A system that forms its own order is both an information system and a cognitive system. Nature has the ability to form its own order, but this is drawn out through the mutual recognition of the countless

elements that make up nature.

Observation is identification, and identification generates action. Action creates experience, experience generates information, and information draws out work. Moreover, the work that is drawn out, in turn, generates new observations, experiences, and information. In this way, the world continuously generates and develops toward new creation.

### **Branching**

In the process of self-formation of the world, there are turning points, and at these turning points, there are many possibilities. Regarding which path to choose among these possibilities, there is uncertainty not only in human society and the world of life but also in the material world and the universe.

In any system, at a bifurcation point, it is sometimes impossible to predict the direction in which the entire system will proceed, and deterministic descriptions become unattainable. At this point, multiple options emerge, and randomness plays a role, leading to self-organization in a particular direction. The sudden change in the overall structure, known as a phase transition, arises from the breaking of symmetry at such bifurcation points.

The world has become more complex due to the breaking of symmetry, which leads to infinite branching. Many of these branching phenomena are accompanied by spontaneous symmetry breaking. Nature has been governed by a tendency to form itself in a certain direction. There is always a bias in nature. Therefore, this world cannot be reduced to a single fundamental principle with symmetry.

Symmetry breaking arises from complex interactions, such as those within a system or between the system and its surroundings. Whether it is an object or a celestial body, there are always complex interactions occurring, and it is impossible to eliminate these interactions from the object or celestial body.

If the word "action" is allowed to encompass not only human intentional actions but also natural movements and processes, it can be said that, everywhere in the universe—whether in the universe, matter, life, or society—actions that involve a choice between two alternatives limit and shape the world. To act is to break symmetry, to make a choice, and through this, it creates the newness of the world.

Action is a choice. A choice creates a breaking of symmetry, and that break in turn generates another breaking of symmetry. In this way, the world possesses an irreversible history and forms a record that cannot be erased. Therefore, the events of this world are one-time occurrences and cannot be repeated. The world is an irreversible drama, and nothing can be reproduced exactly as it was.

### **Contingency and Encounter**

Contingency refers to something that happens without sufficient reason, where another possibility could have occurred, but by chance, this particular outcome came to pass. In terms of cause and effect, when a certain cause leads to an unexpected result that differs from what should have naturally occurred, it is said to happen by contingency. In terms of means and purpose, if a specific means is used to achieve a certain goal, but an unintended outcome different from the original goal occurs, this too is referred to as contingency.

Contingency is an encounter. It is when two or more causal chains meet without a necessary relationship of causality, and this is called a contingency. A contingent event arises when several causal sequences converge at a particular point without causal connection. The moment and location of the encounter of these causal chains cannot be predicted by any of the chains.

Mutual generation is an encounter. At the moment of this encounter, there is no time. In this space, neither the past, nor the future, nor even the present has yet been born. From this moment, time itself emerges. It is only this moment that marks the occurrence of time itself.

Contingent encounter is both creative and destructive. A contingent event feels as though it comes out of nowhere, with its cause not found within the self but in something external. When the self meets another by chance, things begin to unfold in new ways. Countless causal chains intersect at a specific moment. At that moment, a new event is generated.

Contingency brings about both collapse and downfall, but also new creation. From the contingent encounters that happen in the present moment, something new is born. Just as an invention or discovery by chance can transform society, contingency is a catalyst for creativity. Moreover, creativity cannot be predicted. Humans cannot foresee what new things will emerge.

If the world is formed by symmetry breaking at bifurcation points, the role of contingency in that process is significant. Whether it's the universe, matter, life, or society, the generation and transformation of each arises from the contingent encounters of the elements that constitute them. Contingent encounters create many bifurcation points, giving rise to complexity. The world is an impromptu play created from contingency. Like life itself, contingency influences the fate of the world.

Contingency is the possibility of something that might not exist. This universe, too, could have not existed. Therefore, existence itself—just being here—is contingent. The fact that events occur, and that things are as they are, is contingent.

### **Indeterminacy**

It is impossible to describe things that constantly evolve from the past to the present, and from the present to the future, in a deterministic manner based solely on simple causal laws. Causality involves the belief that the past determines the present, and the present determines the future. However, in reality, the universe, matter, life, and society are all striving to transcend past experiences, establish the present, and surpass current experiences in order to acquire a new future. Such a world cannot be captured by simple mechanistic causality.

In theories such as self-organization and chaos theory, even when initial conditions are defined in a self-forming nature, it is not possible to deduce a singular result, and the future of the system cannot be predicted precisely. While science has traditionally aimed to establish laws, here, the limits of such law-making are exposed. Much of nature must instead be understood as developing and emerging in an indeterministic manner.

Just like how the path of a billiard ball cannot be predicted, slight errors in initial conditions get amplified, leading to the emergence of global uncertainty. Generally, the behavior of complex systems, composed of many interacting elements, cannot be predicted with precision. Moreover, the direction that the system takes depends on the history it has followed. Here too, non-deterministic time appears.

### **Irreversibility**

If this world were governed by deterministic and reversible laws, nothing unpredictable or

unexpected would happen, and new things would never emerge. However, the world is constantly changing. New events continue to accumulate in the world. With each new event added, there are leaps and discontinuities between the past and the present. What has occurred in the past will never occur again, and what is happening now will never happen again in the future. Eternal newness—that is the truth of the irreversible world, which is always forming itself.

The process of continuous evolution in the world is irreversible. The world will never return to where it was. In this world, even if we were to set the same conditions in the past, the same things would not necessarily occur. In fact, the universe has evolved, matter has become more complex, and life has evolved. Societies have developed, and our minds have grown through accumulated experiences. This process is irreversible and constantly produces something new. Not only life and society but also the universe and matter have a unique history.

Evolutionary theory holds that, over time, the diversity and complexity of life forms increase, and this principle applies to the universe itself. Irreversible time is the time that applies to the world of life, the world of matter, and the universe. The present carries the past, embraces the future, and has always created something new. It is this living time, this creative time, that we must grasp.

## **Freedom**

The idea that things are constantly changing and that new things are continually being created is the very essence of reality, and it is inherently unpredictable. In fact, nature is in constant change. Nature is continuously differentiating itself. Nature creates new things and evolves. It is here that the leap of nature lies. The source of freedom must also be sought in this.

Freedom exists in a world where new things are constantly being created. From the moment of creation in the present, new things are born. The moment always contains novelty. The creativity that generates these new things cannot be predicted. It is in this unpredictable creativity that freedom resides.

The classical law of causality attempts to capture the present from the past and the future from the present. However, in a world of generation and change, it is not always certain whether the unfolding events themselves will follow this causality. The present is not only



bound by the past. The future is not only bound by the present. Freedom arises from contingency, discovering new directions and creating new things.

In classical laws of nature, it is said that if the initial conditions are fixed, all subsequent events can be predicted. The events that follow are simply the unfolding of what was contained in the initial conditions. However, this deterministic view of nature cannot capture the moment of creation in the present. In the moment of creation, there is freedom. Therefore, even if the initial conditions are fixed, the results are not uniquely determined.

Indeed, the movements of our solar system and the falling of objects on Earth seem to follow deterministic laws with necessity. It seems that there is no freedom in these phenomena. However, this only holds true within a limited range of approximation. In the broader universe, it is not necessarily true that predictable, deterministic laws apply. Rather, it is through free actions that break these laws that the world renews itself and forms anew.

In the complex, real nature, rather than the simplified nature of classical physics, it is impossible to predict what will happen. Just as we cannot accurately predict weather or earthquakes based on laws, in systems where many variables interact, the longer time passes, the less predictable their behavior becomes. Moreover, when it comes to the evolution of life, it is impossible to predict what form will emerge. This unpredictability and freedom are interconnected.

## 5 Generation

### **Being and Relation**

All things in the world exist in relation, and the world is made up of items that relate to each other. The relations of various phenomena come together, and a single event is generated.

In the context of relation, no independent substance exist. Even things that appear to be permanent substances are, in fact, only temporary collections of various relations of phenomena. What appears to be an substance is merely a snapshot of a process that is generating and changing through the coming together and dispersing of relations.

Everything exists only in correlation. Things that exist solely in a correlated manner cannot exist independently. No being exists as an independent, self-sustaining entity.

Being is nothing but relation, and the gathering and dispersing of relations is generation. What makes things what they are is the work of collecting the events that arise from relations. If this work ceases, the events disperse, and things vanish. The combination of relations at any given moment changes into another combination at the next. This is the generation and disappearance of things. Only generation exists.

Every thing determines itself within its connections with others, so no thing is substantial; it is relational. Things should not be understood as entities, but must be understood as fluctuating states within correlation, forever changing.

To clarify the ontological basis of the world that forms itself through the mutual relation of many elements, we must ground it not in the ontology of substance but in the ontology of non-substance. Being must be reduced to relation, and relation must be reduced to generation.

All things arise and change through relation. The world is, at its core, dynamic, existing within continuous generation, always moving toward new creation. Being arises and generates. Generation is the true reality.

The world of the mutual relations of all things is a world of infinitely changing generation. The mutual relation of the world in this here-and-now immediately calls forth the mutual relation of the next here-and-now, and the world generates and changes.

To exist means to exist through relation. And since these relations are in flux, to "be" is to "become," and to exist is to generate.

### **Subject and Predicate**

The classical subject-predicate relationship is that substances, as subjects, constitute the fundamental elements of the world, to which properties and relations are attached as predicates. However, when we treat things as separate entities in terms of substances and attributes, something disappears. The state of affairs is not that there is a subject and is a predicate, but rather that there is a predicate and is a subject. Something exists only in relation to everything else, and something contains in it the relation to everything else. It must be said

that everything is the predicate of everything. Everything is mediated.

The fact that a thing exists simply means that various predicates happen to be concentrated there to become a thing. If this is the case, then we must think that being includes existence. Existence is reduced to being, and being is reduced to relation.

If there is a subject and is a predicate, and if there is a predicate and is a subject, then the predicate cannot exist without the subject, and the subject cannot exist without the predicate. Subject and predicate are in a relationship of mutual dependence. Anything that is in a relationship of mutual dependence cannot exist independently by itself. Thus, both subject and predicate are non-substances, and the copula that expresses the relationship between subject and predicate is also non-substance. However, this non-substance expresses itself as a copula, and thus splits into subject and predicate, developing a rich and diverse relationship of existence. Subject and predicate must also be seen as things that emerge through a relationship.

The fact that existence can be spoken of in various ways also comes from the fact that an entity can be an entity in relation to various other entities. An entity has ambiguity in relation to others. The one is one in relation to the many. Things do not possess their meaning from the beginning, but acquire it from the relationships between things.

Whether the subject-predicate relation means the relation between individuals and universals, that is, the inclusion of the subject in the predicate, or the relation between individuals and attributes, that is, the inclusion of the predicate in the subject, it expresses a relation. In the subject-predicate relation, the subject and the predicate exist only correlatively. Thus the copula (is) in the proposition A is B is an expression of a relation. Being is a relation.

### **Generation and Existence**

This universe is a constant state of change, an eternal state of generation. Everything changes and never remains the same. Nothing remains unchanged from moment to moment, and change is the norm. In the midst of ceaseless change, everything waxes and wanes.

Reality is activity. Everything is constantly moving and changing. The world is a constant flux and change. There is no such thing as an immortal substance.

We must see what is generated as something that is generated. Nature is a creative nature that generates itself. Nature is a system that produces itself, a creative system that produces new things and generates itself. To understand this self-generating nature, we must understand existence as generation..

This world is a world of generation, a world of flow. Like the flow of a river, this world is constantly changing without stopping for even a moment. The world is not a motionless entity, but a constant state of activity, constantly becoming and changing from moment to moment. Movement is reality.

Nothing in existence remains static. The essence of existence is becoming and changing. The meaning of existence, the existence of what exists, must be grasped as generation. Existence must be reduced to generation.

All existence is in flux, constantly being created and destroyed. Reality is something that is created anew day by day, something dynamic that changes from moment to moment. The old passes away and the new appears. Nothing that exists lasts forever. Creation is reality.

Existence is the trajectory of the moment of generation. It only appears as existence when we stop and observe the ceaselessly moving reality for a moment. Existence is a cross-section cut out from the process of generation.

This world is a never-ending flow of change from moment to moment. We exist and at the same time do not exist. Generation transcends the law of contradiction that states that something cannot be one and not one at the same time. Everything changes like a never-ending river. Without change, nothing can be.

The change from nothing to being, from being to nothing, is the essence of becoming. In the process of becoming, something is here and now, and at the same time is not here and now. Something disappears and appears at the same time here and now. In the field of becoming, being and nothingness are contradictory yet identical.

The world does not be but becomes. To be is to become, and to exist is to generate. To exist is to participate in the momentary trajectory of the world's generation.