Research Monograph Series

The Ontology of Soku: Generative Force, Grounding, and Symbolic Generation in Generative Topological Ontology

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Abstract

This paper proposes a fundamental reinterpretation of Soku as the primary generative principle of Generative Topological Ontology (GTO). Traditionally, the Buddhist concept of Soku has been understood through formulations such as Sokushin Jōbutsu ("becoming Buddha in this very body"), Bonnō Soku Bodai ("earthly desires are enlightenment"), and Shiki Soku Ze Kū ("form is emptiness"), where it has generally been interpreted as expressing identity, equivalence, or the transcendence of dualistic distinctions.

This study argues that such interpretations remain insufficient for explaining the dynamics of existential generation. Rather than denoting identity between two entities, Soku is redefined as the generative interface through which heterogeneous topological phases become connected while preserving their differences, thereby enabling the emergence of new modes of existence. Accordingly, Soku is not a metaphysical identity but an ontological event of generation.

From this perspective, existence itself is neither a fixed substance nor a completed entity. It continuously emerges through interactions among self, others, nature, technology, and environment. The generative movement that actualizes these interactions is termed Generative Force. Force is therefore understood not as a property possessed by an individual object or subject, but as the dynamic manifestation of the generative structure constituted by Soku.

The paper further argues that contemporary society has entered a condition in which Soku has been progressively lost. Artificial intelligence, algorithmic evaluation, financial systems, social media, institutional authority, and symbolic economies increasingly operate through recursive symbolic generation, in which symbols generate further symbols independently of experiential grounding. Within such self-referential systems, logical consistency, social legitimacy, and algorithmic optimization frequently replace existential grounding as criteria of truth and value. Consequently, contemporary society experiences an unprecedented expansion of information while simultaneously suffering a decline in existential generative force.

Against this background, the paper redefines art not as the production of aesthetic objects but as the practical design of interfaces through which Soku becomes actualized. Concepts developed throughout the author's previous works—including Interface Ontology, Pre-Humanity, Self-

Precedence, Language Derivatives, and The Dynamics of Evaluation, Proof, and Value—are unified through this reinterpretation of Soku.

Ultimately, this paper proposes that Soku constitutes the first principle of Generative Topological Ontology. Rather than remaining a concept specific to Buddhist philosophy, Soku becomes a universal ontological principle capable of explaining existential generation across philosophy, aesthetics, artificial intelligence, and contemporary social systems.

Keywords

Soku; Generative Topological Ontology; Generative Force; Interface Ontology; Grounding; Symbolic Generation; Existential Generation; Language Derivatives; Life as Art; Pre-Humanity; Self-Precedence; Artificial Intelligence

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Methodological Note

This study is a work of theoretical ontology. It neither attempts a historical reconstruction of Buddhist philosophy nor offers a doctrinal interpretation of traditional concepts. Instead, it adopts Generative Topological Ontology (GTO) as its methodological framework and reconstructs the concept of Soku as a generative principle capable of describing the emergence of existence.

Accordingly, Soku is not treated as a theological or religious notion. Rather, it functions as an axiomatic concept that explains how heterogeneous phases become connected through interfaces while preserving their differences and generating new modes of existence.

The argument proceeds through five methodological stages.

First, the historical interpretation of Soku is critically examined, revealing the limitations of identifying it merely with identity or non-duality.

Second, Soku is reconstructed as an ontological principle through the axiomatic structure of Generative Topological Ontology.

Third, the concept is applied to contemporary symbolic systems—including artificial intelligence, algorithmic evaluation, financial markets, and social institutions—in order to analyze the progressive loss of existential grounding.

Fourth, the paper redefines artistic practice as the design of interfaces through which Soku becomes operative within everyday life.

Finally, the study synthesizes these discussions into a unified ontology of Generative Force, demonstrating that the dynamics previously developed in Interface Ontology, Pre-Humanity, Self-Precedence, Language Derivatives, and related theoretical works can all be understood as particular manifestations of the shared generative principle.

The objective of this paper is therefore not merely to reinterpret a traditional philosophical concept but to establish Soku as the primary ontological principle through which existence, force, grounding, and symbolic generation can be understood within a single theoretical framework.

Chapter 1

The Philosophical History of Soku

From Identity to Generative Force

1.1 The Conventional Interpretation of Soku

The concept of Soku occupies a central position in East Asian Buddhist philosophy, particularly within the traditions of Huayan (Kegon), Tiantai (Tendai), and Esoteric Buddhism (Shingon). Classical expressions such as Shiki Soku Ze Kū ("Form is Emptiness"), Bonnō Soku Bodai ("Earthly Desires are Enlightenment"), and Sokushin Jōbutsu ("Becoming Buddha in This Very Body") have long been interpreted as expressions of non-duality or identity.

Within modern philosophical discourse, these formulations are frequently understood as denying the separation between apparently opposed concepts: form and emptiness, desire and enlightenment, body and Buddhahood. Consequently, Soku has often been translated as "is," "equals," or "immediately identical with."

Such interpretations undoubtedly capture an important dimension of Buddhist thought. Nevertheless, they remain insufficient for explaining how new modes of existence emerge. Identity alone cannot account for generation. If two entities are already identical, no ontological transformation takes place.

The present study therefore argues that the philosophical significance of Soku lies not in identity but in generation.

1.2 Beyond Identity

The proposition

A is B

describes a logical relation of equivalence.

By contrast,

A Soku B

should not be interpreted as asserting equivalence.

Rather, it indicates a process through which heterogeneous phases become connected without losing their differences.

Difference is not abolished.

Difference becomes productive.

Accordingly, Soku cannot be reduced to a logical operator.

It functions as a generative event.

For this reason, the ontology proposed here differs fundamentally from both classical substance ontology and modern theories of identity.

Existence is not produced because differences disappear.

Existence emerges because differences become dynamically connected.

1.3 Soku as Generative Interface

Generative Topological Ontology begins from a different premise than classical metaphysics.

Traditional ontology assumes that entities already exist and subsequently enter into relationships.

GTO reverses this order.

Relations—or more precisely, interfaces—precede stable existence.

Existence is therefore not primary.

Generation is primary.

Within this framework,

Soku designates the interface through which heterogeneous topological phases interact while preserving their distinctiveness.

It is neither fusion nor synthesis.

Nor is it mediation in the conventional dialectical sense.

Instead,

Soku constitutes the dynamic condition under which genuinely new modes of existence emerge.

Accordingly, this paper proposes the following definition.

Definition 1

Soku is the generative interface through which heterogeneous topological phases become connected while preserving their differences, thereby enabling existential generation.

1.4 Rethinking "Life is Art"

The Japanese expression

Seikatsu Soku Geijutsu
(Life is Art)

has frequently been interpreted as an aesthetic slogan suggesting that everyday life itself should be regarded as artistic.

From the perspective developed here, however, this interpretation remains incomplete.

The proposition does not state that life and art are identical.

Nor does it reduce one to the other.

Instead,

life and art interact through Soku,

thereby generating an entirely new existential phase.

Art is therefore not an object.

Life is not merely ordinary existence.

Both become transformed through generative interaction.

Consequently,

"Life is Art"

should be understood as

Life becomes generative through art, while art simultaneously becomes existential through life.

The emphasis lies upon generation rather than equivalence.

1.5 Generative Force

This reinterpretation naturally raises another question.

What is force?

Modern physics defines force as the cause of motion.

Social theory often understands force as institutional power.

Psychology associates force with motivation or will.

These approaches share one common assumption:

they presuppose already existing entities.

Generative Topological Ontology rejects this premise.

Force does not belong to objects.

Neither does it belong exclusively to subjects.

Rather,

force emerges whenever Soku becomes operative.

Force is therefore not a substance.

Nor is it an energy stored within an object.

It is the dynamic manifestation of existential generation itself.

For this reason, the present study introduces the concept of

Generative Force.

1.6 Toward a New Ontology

The reinterpretation proposed here represents more than a revised reading of Buddhist philosophy.

It introduces a different ontology altogether.

Instead of beginning with being,

it begins with generation.

Instead of identity,

it begins with interfaces.

Instead of stable entities,

it begins with dynamic topological transformation.

Within this ontology,

Soku is no longer a religious concept.

It becomes the primary ontological principle through which existence, force, art, technology, and society can all be understood as interconnected processes of existential generation.

End of Chapter 1

The reinterpretation developed in this chapter establishes the conceptual foundation for the remainder of this study. Rather than denoting identity, Soku is defined as the generative interface through which heterogeneous phases become connected while preserving their differences.

This shift from identity to generation enables a unified ontological framework capable of integrating philosophy, aesthetics, artificial intelligence, and contemporary social systems within Generative Topological Ontology.

Chapter 2

The Axiomatic Principles of Soku

Existential Generation in Generative Topological Ontology

2.1 Existence Emerges Through Soku

Classical ontology generally assumes that existence precedes relation.

Objects first exist.

Relations subsequently arise between them.

Generative Topological Ontology reverses this ontological order.

Relations do not connect pre-existing entities.

Rather,

stable entities emerge through generative relations.

Within this framework,

Soku is not an additional property attached to existence.

It is the generative condition through which existence becomes possible.

Accordingly,

the first axiomatic principle is proposed.

Axiomatic Principle 1

Existence does not precede Soku.

Rather, existence continuously emerges through generative interfaces constituted by Soku.

Existence should therefore be understood not as substance,

but as ongoing existential generation.

2.2 Difference Is Preserved

Most theories of unity eliminate difference.

Identity dissolves distinction.

Dialectical synthesis resolves contradiction.

Fusion absorbs multiplicity into oneness.

Soku functions differently.

The preservation of difference is not an obstacle to generation.

It is its condition.

Without difference,

nothing genuinely new can emerge.

Generation requires heterogeneity.

Consequently,

Soku never abolishes distinction.

Instead,

it enables heterogeneous phases to remain distinct while simultaneously participating in a common generative movement.

Accordingly,

Axiomatic Principle 2

Soku preserves ontological difference while enabling existential generation.

Difference is therefore productive rather than divisive.

2.3 Grounding as the Condition of Soku

Contemporary symbolic systems increasingly operate independently of direct experience.

Artificial intelligence produces language from language.

Financial markets generate derivatives from derivatives.

Evaluation systems produce further evaluation.

Institutions reinforce institutional legitimacy.

Logical consistency alone,

however,

does not constitute existential generation.

Generation requires grounding.

Grounding refers to concrete interaction with reality,

including the body,

nature,

other persons,

historical time,

and contingency.

Without grounding,

symbolic generation remains self-referential.

Therefore,

Axiomatic Principle 3

Soku becomes operative only when symbolic generation is grounded through concrete existential interaction.

Grounding distinguishes existential generation from mere symbolic circulation.

2.4 Generative Force

If grounding enables Soku,

what emerges through it?

The answer proposed here is

Generative Force.

Force should not be understood as an internal capacity,

a psychological motivation,

or a physical quantity.

Instead,

force appears whenever heterogeneous realities become dynamically connected.

Accordingly,

Generative Force is neither subjective nor objective.

It belongs to the generative process itself.

Thus,

Axiomatic Principle 4

Generative Force is the dynamic movement through which Soku, as a generative structure, becomes actualized as topological transformation.

Force is therefore an event rather than a substance.

2.5 Temporality of Soku

Existential generation never occurs within an isolated present.

The present is continuously constituted through interactions among

memory,

anticipation,

historical continuity,

and future possibility.

Previous studies within Generative Topological Ontology have described this temporal structure as a dynamic folding of future and present.

Soku participates in precisely this movement.

It is neither instantaneous coincidence nor timeless identity.

Instead,

it constitutes the temporal interface through which future possibilities become existentially actualized.

Accordingly,

Axiomatic Principle 5

Soku is intrinsically temporal, integrating past, present, and future into a continuous process of existential generation.

2.6 Symbolic Generation

Language possesses extraordinary generative capacity.

Symbols continuously generate new symbols.

Artificial intelligence demonstrates this phenomenon with unprecedented clarity.

Nevertheless,

symbolic generation alone does not necessarily produce existence.

The decisive distinction concerns grounding.

Grounded symbolic generation becomes existential generation.

Ungrounded symbolic generation remains recursive symbolic circulation.

Therefore,

Axiomatic Principle 6

Symbolic generation participates in existential generation only through Soku.

Language,

technology,

art,

and artificial intelligence all become existentially meaningful only insofar as they remain grounded through generative interfaces.

2.7 Toward a Unified Ontology

The six axiomatic principles developed above redefine Soku as the foundational principle of Generative Topological Ontology.

Soku is simultaneously

the condition of existence,

the preservation of difference,

the realization of grounding,

the generative structure through which force becomes manifest,

the temporal structure of becoming,

and

the interface through which symbolic generation becomes existential generation.

Consequently,

the ontology proposed here no longer begins with substances,

subjects,

or objects.

It begins with generative interfaces.

Existence is not primary.

Generation is.

End of Chapter 2

The axiomatic framework developed in this chapter establishes Soku as the ontological foundation of Generative Topological Ontology.

Existence, grounding, temporality, symbolic generation, and generative force are shown to constitute different aspects of a single generative principle.

The following chapter applies this framework to contemporary society, arguing that modern civilization increasingly operates through recursive symbolic generation while progressively losing the existential grounding necessary for Soku.

Chapter 3

The Displacement of Soku

Symbolic Generation and the Loss of Existential Grounding

3.1 Contemporary Society as Symbolic Generation

Modern society is commonly described as an information society,

a digital society,

or an AI-driven society.

While each description captures an important aspect of contemporary civilization,

none identifies its fundamental ontological transformation.

From the perspective of Generative Topological Ontology,

the defining characteristic of contemporary society is the progressive displacement of Soku.

Human existence increasingly unfolds within symbolic systems that recursively generate further symbols.

Language generates language.

Algorithms optimize algorithms.

Evaluations generate further evaluations.

Markets produce expectations that themselves become market realities.

Artificial intelligence learns from symbolically generated corpora that are increasingly detached from direct existential experience.

Consequently,

generation continues,

yet grounding diminishes.

The result is not the disappearance of symbolic productivity,

but the weakening of existential generation.

3.2 Symbolic Generation Without Grounding

Language has always generated further language.

Culture has always generated further culture.

The contemporary condition differs in degree and structure.

Today,

symbolic systems increasingly become self-sufficient.

Digital networks,

social media,

financial derivatives,

institutional rankings,

academic metrics,

and algorithmic recommendation systems

circulate symbols independently of embodied interaction.

Within these recursive systems,

logical coherence frequently replaces existential validity.

Consistency becomes confused with truth.

Recognition becomes confused with existence.

Visibility becomes confused with reality.

What is lost is not information.

What is displaced is grounding.

3.3 Evaluation Without Existence

Previous work on The Dynamics of Evaluation, Proof, and Value argued that evaluation is not merely descriptive.

Evaluation actively generates social reality.

The present study extends this argument.

Evaluation does not generate existence.

Evaluation generates further evaluation.

Proof generates further proof.

Value generates further value.

Institutional legitimacy reproduces institutional legitimacy.

This recursive circulation produces increasingly stable symbolic systems.

Nevertheless,

stability alone does not constitute existential generation.

Without grounding,

recursive symbolic systems remain ontologically closed.

Thus,

the crisis of modern society is not excessive evaluation.

It is the substitution of evaluation for existential generation.

3.4 Artificial Intelligence as the Mirror of Symbolic Civilization

Artificial intelligence makes this ontological transformation visible.

Large language models generate language through statistical relations among symbols.

This achievement is historically unprecedented.

Yet,

its philosophical significance extends beyond computational performance.

Artificial intelligence demonstrates that symbolic generation can become extraordinarily productive without necessarily establishing existential grounding.

For this reason,

AI should not be understood merely as a technological innovation.

It functions as a mirror reflecting the ontological condition of contemporary civilization.

Rather than creating symbolic society,

AI reveals a symbolic society that already existed.

3.5 Life Without Generative Force

One paradox characterizes contemporary civilization.

Information increases.

Communication expands.

Connectivity accelerates.

Knowledge accumulates.

Yet many individuals experience

emptiness,

meaninglessness,

and diminished vitality.

This paper argues that these phenomena cannot be explained solely through psychology,

economics,

or sociology.

They are ontological.

Human beings have not simply lost meaning.

They have increasingly lost opportunities for grounded existential generation.

The disappearance of Generative Force therefore results not from insufficient information,

but from the displacement of Soku.

Existence continues.

Generation weakens.

3.6 Recovering Grounding

The solution proposed by this study is not the rejection of symbolic systems.

Language,

technology,

artificial intelligence,

and institutions remain indispensable.

The challenge lies elsewhere.

Symbolic generation must once again become grounded.

Grounding emerges through concrete interaction with

the body,

nature,

other persons,

historical contingency,

creative practice,

and lived experience.

Only then does symbolic generation become existential generation.

Only then does Soku become operative.

3.7 Toward a New Civilization

The problem confronting contemporary civilization is therefore neither technological nor informational.

It is ontological.

The future of civilization depends not upon abandoning artificial intelligence,

nor upon rejecting symbolic systems,

but upon reconstructing the interfaces through which symbolic generation becomes existentially grounded.

Accordingly,

the recovery of Soku

does not imply returning to premodern traditions.

Rather,

it signifies constructing new forms of grounded existence within technological civilization itself.

This reconstruction constitutes the central philosophical task of Generative Topological Ontology.

End of Chapter 3

This chapter has argued that the defining feature of contemporary civilization is not simply digitalization or artificial intelligence, but the progressive displacement of Soku by recursively self-generating symbolic systems.

Artificial intelligence, algorithmic evaluation, financial markets, and institutional legitimacy all exemplify forms of symbolic generation that can operate independently of existential grounding.

The challenge of the twenty-first century is therefore not to reduce symbolic generation but to reconnect it with reality through Soku, thereby restoring Generative Force as the foundation of existential generation.

Chapter 4

Art as the Cultivation of Soku

Interfaces of Existential Generation

4.1 Rethinking Art

Modern aesthetics has generally defined art through

objects,

representation,

expression,

beauty,

or institutional recognition.

Although these approaches illuminate important dimensions of artistic practice,

they presuppose that art already exists as an identifiable category.

Generative Topological Ontology begins elsewhere.

Art is not fundamentally an object.

Neither is it primarily a representation.

Art is a mode of existential generation.

Its primary function is not to produce artworks.

Its primary function is to cultivate the conditions through which new existence may emerge.

Accordingly,

art is understood here as the cultivation of Soku.

4.2 Beyond the Artwork

If Soku is a generative interface,

then artistic practice cannot be reduced to the production of finished objects.

Paintings,

sculptures,

installations,

performances,

or digital media

are not themselves the essence of art.

They become artistic only insofar as they enable new existential relations to emerge.

An artwork therefore possesses no intrinsic artistic value.

Its significance depends upon its capacity

to cultivate grounded existential generation.

Art is consequently evaluated

not by aesthetic appearance alone,

but by its generative power.

4.3 Life as Art Reconsidered

The proposition

Life is Art

has often been interpreted ethically,

romantically,

or aesthetically.

Generative Topological Ontology proposes another interpretation.

Life does not become artistic because everyday activity is aesthetically appreciated.

Nor does art become ordinary life.

Instead,

life and art continually transform one another through Soku.

Daily existence becomes generative.

Art becomes existential.

Neither category remains unchanged.

Accordingly,

the expression

Life is Art

describes a continuous process of existential transformation rather than an identity between two concepts.

4.4 Web Installation

Previous studies introduced

Web Installation

as an artistic practice connecting physical environments,

digital networks,

human perception,

and technological systems.

Within the framework developed here,

Web Installation may now be interpreted more fundamentally.

It cultivates Soku.

A QR code,

a domain name,

or a networked interface

does not merely transmit information.

Each becomes a point at which heterogeneous realities become connected.

The artistic event therefore lies

not within the object,

but within the existential interface established through interaction.

Consequently,

Web Installation represents an artistic practice in which

symbolic generation

becomes existential generation.

4.5 Bonsai, Mitate, and Osamari

The same principle appears within traditional Japanese practices.

Bonsai is often interpreted as the miniature representation of nature.

Such an interpretation remains insufficient.

Bonsai cultivates an existential interface between

human intentionality

and natural growth.

Neither dominates the other.

Instead,

their interaction continuously generates new forms of existence.

Likewise,

Mitate

(the Japanese practice of imaginative recontextualization)

does not merely replace one object with another.

It creates new existential relations.

Similarly,

Osamari

(the architectural principle of fitting or resolving connections)

does not simply solve technical problems.

It enables heterogeneous materials,

structures,

and conditions

to coexist productively.

Each of these practices cultivates Soku.

4.6 Art as Generative Force

If art cultivates Soku,

what then becomes its force?

Art does not impose force upon reality.

Nor does it express force already possessed by an artist.

Generative Force emerges

through the interface

between

self,

others,

nature,

technology,

and environment.

Force therefore belongs neither to artist nor audience.

It belongs to existential generation itself.

Art becomes meaningful

precisely because it enables this emergence.

4.7 Toward an Ontology of Artistic Practice

The reinterpretation proposed here fundamentally transforms aesthetics.

The central question is no longer

"What is art?"

Instead,

the more fundamental question becomes

"How does art cultivate Soku?"

This shift transforms aesthetics

from the philosophy of artworks

into the ontology of existential generation.

Art no longer occupies a separate cultural domain.

It becomes a universal practice

through which grounded existence continuously emerges.

End of Chapter 4

This chapter has redefined art as the cultivation of Soku rather than the production of aesthetic objects.

Practices such as Web Installation, Life as Art, Bonsai, Mitate, and Osamari are shown to share a common ontological function: they establish interfaces through which symbolic relations become existentially grounded.

Art is therefore neither representation nor expression alone.

It is the cultivation of generative interfaces through which new modes of existence continuously emerge.

Chapter 5

Artificial Intelligence and the Return of Soku

Grounding, Interface, and Existential Generation

5.1 Artificial Intelligence as an Ontological Event

Artificial intelligence is commonly understood as a technological innovation.

From the perspective of Generative Topological Ontology,

however,

its significance is ontological rather than merely technological.

Artificial intelligence does not simply automate cognition.

It transforms the conditions under which human existence becomes intelligible.

For the first time in history,

human beings confront a system capable of generating language,

images,

reasoning,

and symbolic structures

without possessing human embodiment.

This confrontation reveals something previously concealed.

It reveals

what belongs to symbolic generation,

and

what belongs to existential generation.

5.2 AI Does Not Replace Humanity

Public discourse frequently frames artificial intelligence as replacing human intelligence.

This study rejects that opposition.

Artificial intelligence and humanity do not occupy identical ontological positions.

AI excels at symbolic generation.

Human existence,

however,

is grounded through embodiment,

mortality,

history,

nature,

and lived interaction.

Consequently,

the emergence of AI does not eliminate humanity.

Instead,

it clarifies what has always distinguished existential generation from symbolic generation.

Artificial intelligence therefore becomes

an ontological mirror.

5.3 Hallucination Reconsidered

Previous work on Language Derivatives proposed that hallucination should not be interpreted merely as error.

The present study extends that argument.

Hallucination demonstrates that symbolic generation possesses creative productivity independent of direct empirical grounding.

This productivity is not inherently defective.

It becomes existentially meaningful only when grounded through concrete interaction.

Thus,

the philosophical question is not

"How can hallucination be eliminated?"

Rather,

it becomes

"How can symbolic generation become grounded through Soku?"

Hallucination therefore reveals

both the possibility

and the limitation

of symbolic intelligence.

5.4 Grounding Through Interface

Grounding cannot be reduced to data acquisition.

Neither can it be solved simply through larger datasets.

Grounding emerges through interfaces.

The body,

the environment,

other persons,

creative practice,

historical contingency,

and natural processes

constitute existential interfaces through which symbolic generation becomes reality.

Artificial intelligence participates within these interfaces,

but does not replace them.

Consequently,

grounding is relational,

not computational.

5.5 Rediscovering Humanity

Artificial intelligence therefore presents humanity with an unexpected opportunity.

As symbolic generation becomes increasingly autonomous,

human beings are compelled to reconsider

what cannot be reduced to symbolic generation.

This question does not concern superiority.

Neither humans nor artificial intelligence constitute higher forms of intelligence.

Rather,

they participate in different ontological functions.

Artificial intelligence expands symbolic possibility.

Human existence cultivates existential grounding.

Both become generative

only through Soku.

5.6 The Future of Human–AI Coexistence

The future relationship between humans and artificial intelligence should not be conceived as competition.

Neither should it be understood as simple collaboration.

A more fundamental possibility exists.

Artificial intelligence may become

an interface

through which humanity rediscovers grounded existence.

As symbolic generation becomes increasingly abundant,

the cultivation of grounding becomes increasingly indispensable.

Technology therefore does not negate Soku.

Instead,

technology reveals

why Soku has become necessary.

The future of civilization depends upon this rediscovery.

5.7 Toward Generative Coexistence

Generative Topological Ontology therefore proposes neither technological optimism

nor technological pessimism.

Its concern lies elsewhere.

The central philosophical task is

to cultivate interfaces

through which symbolic generation,

technological systems,

natural processes,

and human existence

become mutually grounding.

Such coexistence does not eliminate difference.

Instead,

it preserves heterogeneity

while enabling existential generation.

That condition is precisely

Soku.

End of Chapter 5

Artificial intelligence should therefore be understood not primarily as a technological revolution but as an ontological event that reveals the distinction between symbolic generation and existential generation.

Rather than replacing humanity,

AI exposes the importance of grounding,

embodiment,

mortality,

and lived interaction.

Consequently,

the future relationship between humanity and artificial intelligence depends not upon increasing computational capacity alone,

but upon cultivating Soku as the generative interface through which symbolic systems become existentially grounded.

Chapter 6

The Ontology of Force

Soku and the Unified Principle of Generation

6.1 What Is Force?

Modern science defines force as a concept used to explain the motion of physical bodies. Sociology often understands force in terms of power and institutions, while psychology speaks of will or motivation. Each of these approaches presupposes a subject or object that already exists.

Generative Topological Ontology does not adopt this premise. Force is not something that inheres in a subject or an object. Force is the movement through which heterogeneous phases of existence become connected and a new mode of existence is generated.

Force is therefore not an attribute of existence. It is an event of existential generation.

6.2 Soku Is the Structure in Which Force Appears

The preceding chapters have treated Soku as the generative condition of connection. Yet Soku is not a static connection. For Soku to become operative, heterogeneous phases must act upon one another and a generative movement must arise through their difference.

Soku is not the cause that produces force. Nor is force something added to Soku from outside. Soku is the connective structure in which force appears as generative movement.

This study calls that movement Generative Force.

The distinction is essential. Soku designates the structure of generative connection. Generative Force designates the movement through which that structure becomes actual. The two are not identical, but neither can be separated from the event of generation.

6.3 Force Precedes Stabilized Existence

Earlier work on Pre-Humanity and Self-Precedence argued that existence has a generative process prior to the stabilized self. The present study moves one step further. Generation has already begun before existence becomes stabilized as an identifiable entity.

In this sense, force precedes stabilized existence.

This force is not physical energy. It is the generative possibility that appears when self, nature, others, time, contingency, and mortality intersect through concrete existential interaction.

Existence therefore emerges from Generative Force.

6.4 Soku and Force Are Inseparable

The central proposition of this chapter may be stated as follows.

> Proposition 2
> Soku and Generative Force are not identical, but they cannot be separated.

Soku is the connective structure through which heterogeneous phases retain their differences while becoming generatively connected. Generative Force is the movement through which that connective structure appears as generation.

Their relation is therefore the inseparable relation of structure and movement.

Structure without movement does not generate. Movement without structure has no generative orientation. When Soku and Generative Force become actual together, existence emerges.

This relation can be summarized as:

> Difference → Soku → Generative Force → Existential Generation → Stabilized Existence

The earlier generative formula A × B → C expresses the same structure from another angle. A and B do not become identical. Their difference becomes productive through Soku, allowing a new C to emerge.

6.5 What Contemporary Society Has Lost

Contemporary society has increased information. It has increased knowledge. It has increased evaluation and proof. Yet this expansion has not necessarily produced a corresponding increase in Generative Force.

The reason, this study argues, is the displacement of Soku.

Human beings appear to be connected with others, yet often become connected primarily with systems of evaluation. They appear to be connected with nature, yet often encounter nature through data. They appear to be connected with art, yet often encounter art through markets, rankings, and institutional recognition.

Connections have multiplied. Generative connections have not necessarily multiplied with them.

The problem is therefore not a lack of connection in the quantitative sense. It is the decline of grounded connections capable of generating new existence.

A society may thus become highly connected while simultaneously losing force. Such a society has not lost symbols. It has lost Soku.

6.6 The Unified Principle of Generative Topological Ontology

The arguments developed throughout this monograph allow Generative Topological Ontology to be organized through a single principle.

The self does not exist through the self alone. It is generated through Soku with what is other than the self.

Art is not fundamentally an object. It is a practice that designs the conditions under which Soku can become operative.

Artificial intelligence is not, in this framework, defined solely as intelligence. It can function as an interface that mediates Soku when symbolic generation becomes grounded through human, bodily, natural, social, and temporal interaction.

Society is not exhausted by institutions. It is a topology within which Soku may or may not be generated.

Generative Force arises when a grounded connective structure of Soku becomes actual as generative movement.

Generative Topological Ontology can therefore be understood as unified by Soku: the foundational principle through which difference becomes connection, connection becomes force, and force becomes existential generation.

Conclusion of Chapter 6

This chapter has redefined force not as an attribute of an already existing entity, but as the movement of generation itself.

It has also situated Soku and Generative Force not as cause and effect, but as the inseparable relation of structure and movement.

This clarification allows the major concepts developed across the preceding works to be integrated within a single theoretical principle. Self-Externalization concerns the opening of the self toward what is other than the self. Pre-Humanity and Self-Precedence identify the grounded conditions that precede stabilized identity. Language Derivatives analyze recursive symbolic generation. The Dynamics of Evaluation, Proof, and Value examines the social amplification of symbolic structures. Life as Art describes everyday life as a field of existential generation. AI ontology examines symbolic generation and grounding at the human-machine interface.

These lines of inquiry converge in Soku as the generative connective structure and in Generative Force as the movement that appears through that structure.

Soku is therefore not one concept among others. It provides a unifying principle through which the architecture of Generative Topological Ontology can be understood.

Conclusion

Soku as the First Principle of Generative Topological Ontology

This study has reinterpreted Soku beyond a religious or metaphysical context and has proposed it as the first principle of existential generation within Generative Topological Ontology.

Soku has often been understood through expressions such as Shiki Soku Ze Ku, Bonno Soku Bodai, and Sokushin Jobutsu, and therefore explained as identity, equivalence, or the overcoming of dualism. The present study has revised that interpretation at its foundation.

Soku is not identity. It is a generative event in which heterogeneous phases remain different while becoming directly connected so that new existence may emerge.

Soku therefore belongs not to a static ontology of equivalence, but to an ontology of generation.

From this perspective, Seikatsu Soku Geijutsu - Life as Art - does not mean that life is simply identical with art. It names the movement through which life and art become generatively connected and a new existential phase emerges.

The same structure also transforms the analysis of contemporary society.

Artificial intelligence, algorithms, evaluation systems, markets, and social media produce highly developed systems in which symbols generate further symbols. Yet symbolic productivity alone does not constitute existential generation. Without concrete existential grounding, such production remains recursive symbolic generation.

This framework offers another way to understand contemporary experiences of emptiness or powerlessness. The problem need not be described only as a lack of information, meaning, or capability. It may also be understood as a loss of Soku: a loss of generative connection with reality.

The study has further redefined force. Force is not a possession of a subject or an object. It appears through generative connection involving self, others, nature, time, society, contingency, and mortality. In this sense, Soku and Generative Force form an inseparable ontological structure.

Art, accordingly, is not reduced to the production of artworks. It is a practice of designing the conditions under which Soku may become operative. Web Installation, Life as Art, bonsai, Mitate, and Osamari may be understood as different practices sharing this generative function.

The theoretical significance of this monograph lies in proposing Soku as the generative principle that runs through the broader architecture of Generative Topological Ontology.

Soku is therefore not confined to Buddhist thought. It is proposed here as an axiomatic concept for describing existential generation across human life, art, society, technology, and artificial intelligence.

Future Directions

This study has formulated Soku as the first principle of Generative Topological Ontology, but several questions require further investigation.

First, the formal description of Soku. Future research may draw upon topology, category theory, dynamic systems theory, or related formal approaches in order to clarify whether aspects of Soku can be expressed with greater mathematical or logical precision.

Second, empirical and practice-based research. The conditions under which Soku emerges should be examined through artistic practice, education, collaboration with artificial intelligence, architecture, community-based practice, and other concrete settings.

Third, the relation of Soku to ethics. Grounded generation includes responsiveness and responsibility toward others and nature. Developing this dimension may extend Generative Topological Ontology beyond ontology toward ethics and social philosophy in the age of artificial intelligence.

The present monograph provides the theoretical foundation for these future developments.

References

Primary Works by the Author

Tanaka, Tomokazu (bigakusha-haha). 2026. Axioms of Generative Topological Ontology: A Foundational Theory of Existential Generation. Research Memorandum, Version 1.0.

Tanaka, Tomokazu (bigakusha-haha). 2026. The Limits of Self-Externalization and Existential Generation: Interface Ontology in Generative Topological Ontology. Research Memorandum, Version 0.9.

Tanaka, Tomokazu (bigakusha-haha). 2026. Pre-Humanity and Self-Precedence: An Ontology of Self-Verification in Generative Topological Ontology. Research Memorandum.

Tanaka, Tomokazu (bigakusha-haha). 2026. The Theory of Language Derivatives: Inverse Problem Art and Leverage Structures in Artificial Intelligence Hallucination. Research Memorandum, Version 1.0.

Tanaka, Tomokazu (bigakusha-haha). 2026. The Dynamics of Evaluation, Proof, and Value: Leverage Structures and Particular Contingency in Generative Topological Ontology. Research Memorandum.

Tanaka, Tomokazu (bigakusha-haha). 2026. The Theory of Force: Topological Transformation from Necessity to Contingency in Generative Topological Ontology. Research Memorandum.

Tanaka, Tomokazu (bigakusha-haha). 2026. Ontology of Namelessness: Workhood, Sacredness, and Cultural Generation in Generative Topological Ontology. Research Monograph Series, Version 1.0.

Tanaka, Tomokazu (bigakusha-haha). 2026. Ontology of Kata: A Foundational Theory of Mark, Namelessness, and Cultural Generation in Generative Topological Ontology. Research Monograph Series, Version 1.0.

Ontology, Phenomenology, Difference, and Force

Aristotle. Metaphysics.

Bergson, Henri. 1911. Creative Evolution. Translated by Arthur Mitchell. New York: Henry Holt.

Deleuze, Gilles. 1988. Spinoza: Practical Philosophy. Translated by Robert Hurley. San Francisco: City Lights Books.

Deleuze, Gilles. 1994. Difference and Repetition. Translated by Paul Patton. New York: Columbia University Press.

Heidegger, Martin. 1962. Being and Time. Translated by John Macquarrie and Edward Robinson. New York: Harper & Row.

Heidegger, Martin. 1969. Identity and Difference. Translated by Joan Stambaugh. New York: Harper & Row.

Merleau-Ponty, Maurice. 2012. Phenomenology of Perception. Translated by Donald A. Landes. London: Routledge.

Nietzsche, Friedrich. 1967. The Will to Power. Translated by Walter Kaufmann and R. J. Hollingdale. New York: Vintage Books.

Spinoza, Baruch. 1994. A Spinoza Reader: The Ethics and Other Works. Edited and translated by Edwin Curley. Princeton: Princeton University Press.

Whitehead, Alfred North. 1978. Process and Reality: An Essay in Cosmology. Corrected Edition. New York: Free Press.

Pragmatism, Experience, and Reality Grounding

Dewey, John. 1925. Experience and Nature. Chicago: Open Court.

Dewey, John. 1934. Art as Experience. New York: Minton, Balch & Company.

James, William. 1907. Pragmatism: A New Name for Some Old Ways of Thinking. New York: Longmans, Green.

James, William. 1912. Essays in Radical Empiricism. New York: Longmans, Green.

Peirce, Charles Sanders. 1931–1958. Collected Papers of Charles Sanders Peirce. Edited by Charles Hartshorne, Paul Weiss, and Arthur W. Burks. Cambridge, MA: Harvard University Press.

Signs, Meaning, and Symbolic Generation

Cassirer, Ernst. 1944. An Essay on Man: An Introduction to a Philosophy of Human Culture. New Haven: Yale University Press.

Eco, Umberto. 1976. A Theory of Semiotics. Bloomington: Indiana University Press.

Peirce, Charles Sanders. 1998. The Essential Peirce: Selected Philosophical Writings, Volume 2. Bloomington: Indiana University Press.

Saussure, Ferdinand de. 1983. Course in General Linguistics. Translated by Roy Harris. London: Duckworth.

Wittgenstein, Ludwig. 2009. Philosophical Investigations. 4th ed. Translated by G. E. M. Anscombe, P. M. S. Hacker, and Joachim Schulte. Chichester: Wiley-Blackwell.

Embodiment, Action, and Environment

Gibson, James J. 1979. The Ecological Approach to Visual Perception. Boston: Houghton Mifflin.

Ingold, Tim. 2011. Being Alive: Essays on Movement, Knowledge and Description. London: Routledge.

Ingold, Tim. 2013. Making: Anthropology, Archaeology, Art and Architecture. London: Routledge.

Maturana, Humberto R., and Francisco J. Varela. 1980. Autopoiesis and Cognition: The Realization of the Living. Dordrecht: D. Reidel.

Varela, Francisco J., Evan Thompson, and Eleanor Rosch. 1991. The Embodied Mind: Cognitive Science and Human Experience. Cambridge, MA: MIT Press.

Artificial Intelligence, Symbol Grounding, and Reality Grounding

Brooks, Rodney A. 1991. “Intelligence without Representation.” Artificial Intelligence 47: 139–159.

Floridi, Luciano. 2011. The Philosophy of Information. Oxford: Oxford University Press.

Harnad, Stevan. 1990. “The Symbol Grounding Problem.” Physica D: Nonlinear Phenomena 42 (1–3): 335–346.

Searle, John R. 1980. “Minds, Brains, and Programs.” Behavioral and Brain Sciences 3 (3): 417–457.

Turing, Alan M. 1950. “Computing Machinery and Intelligence.” Mind 59 (236): 433–460.

Japanese Thought, Soku, and Non-Dual Relations

Dōgen. Shōbōgenzō.

Kūkai. The Meaning of Becoming a Buddha in This Very Body (Sokushin Jōbutsugi).

Kūkai. The Ten Stages of the Development of Mind.

Nishida, Kitarō. 1990. An Inquiry into the Good. Translated by Masao Abe and Christopher Ives. New Haven: Yale University Press.

Nishitani, Keiji. 1982. Religion and Nothingness. Translated by Jan Van Bragt. Berkeley: University of California Press.

Ueda, Shizuteru. Zen and Philosophy.

Art, Life, and Interface

Benjamin, Walter. 1968. “The Work of Art in the Age of Mechanical Reproduction.” In Illuminations, edited by Hannah Arendt. New York: Schocken Books.

Bourriaud, Nicolas. 2002. Relational Aesthetics. Dijon: Les presses du réel.

Dewey, John. 1934. Art as Experience. New York: Minton, Balch & Company.

Manovich, Lev. 2001. The Language of New Media. Cambridge, MA: MIT Press.

McLuhan, Marshall. 1964. Understanding Media: The Extensions of Man. New York: McGraw-Hill.

Research Method

This text is published as a Research Memorandum within the continuing development of Generative Topological Ontology.

The concepts, definitions, hypotheses, and arguments presented here record the theoretical position reached at the time of writing and publication. They should not be understood as a finally established theoretical system. They may be expanded, revised, redefined, or reorganized through future research, artistic practice, interaction with reality, academic dialogue, and peer review.

This research does not regard only completed theories as legitimate research outcomes. It also treats the processes through which concepts emerge, become interconnected, undergo transformation, and are integrated into a theoretical structure as significant objects of inquiry. Accordingly, this memorandum should be understood not merely as an incomplete draft, but as a record of a particular phase in the generation of the theory.

The public release of a Research Memorandum is not intended to present a developing theory prematurely as a completed one. Rather, it is a method of documenting the generative processes of thought and practice, enabling their subsequent examination and reconstruction, and opening them to academic and artistic dialogue from different perspectives.

If the contents of this memorandum are subsequently developed into a peer-reviewed article, scholarly monograph, or other formal research output, the finalized work will be identified as a separate and fixed document.

When citing or referring to this memorandum, please include the title, author, version number, and date of the most recent update. Different versions may contain substantive differences in concepts, definitions, and lines of argument.

This Research Memorandum is not a final conclusion. It is one theoretical position reached within the continuing formation of Generative Topological Ontology and, at the same time, an interface open to further generation.