The Curve of the World

Why World-Binding Cannot Be Linear — Shift of Being, Time, and the Impossibility of the Archive

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Abstract

This paper examines the thesis that world formation necessarily assumes a curved structure. Its point of departure is the concept of Seinsverschiebung (Shift of Being), which in the underlying theoretical framework (MNO theory) designates the transition from unbound possibility to world-sustaining existence. Seinsverschiebung is not a change of state within a given space, but a pre-ontological shift of conditions through which space, relation, and the viability of existence are first brought forth. Each Seinsverschiebung entails an irreversible loss of possibility; at the same time, the space itself is distorted. Being is thus displaced by the very process through which it comes to be.

From this perspective, world does not arise through the additive accumulation of states, but through condensation that binds and transforms openness. Because each stabilization alters the conditions of its own continuation, world processes can neither proceed linearly nor be reversed. Recurrence does not occur as identity, but as displacement under altered conditions. This structure enforces a curved trajectory—not as a geometric metaphor, but as an ontological necessity. The spiral figure described in earlier works is here made explicit for the first time as a formal constraint (spherical closure) of world-binding.

Central to this account is the insight that the operative core of world formation does not constitute an archive. The operator does not preserve a complete past, but generates world through the irreversible consumption of possibility. Memory, in this perspective, appears not as storage or representation, but as world deformation. Archive- and simulation-based models, as presupposed in particular by contemporary AI research, fundamentally miss this structure.

The paper shows why linear models of time, reversible simulations, and transportable existence remain ontologically empty. The curve of the world marks the boundary between formal reconstruction and real world viability. Time appears here not as an external parameter, but as

the signature of this curvature: the condition under which condensation and opening do not collapse.

The terms used here are developed in detail elsewhere and function in this paper as operative markers rather than definitions.

(This paper is an interface text. The author's primary research corpus employs an autistic, non-linear, rhythmically recursive writing mode that cannot be fully preserved in academic English without structural loss of epistemic function.)

1. Introduction: Why World Cannot Be Linear

In many theoretical models it is tacitly assumed that world unfolds along linear transitions: states follow one another, processes transform what is given, and history appears as a sequence of reconstructible configurations. This assumption shapes physical models of dynamics as well as contemporary concepts of simulation, memory, and artificial intelligence. World thus appears as a neutral space within which change takes place, without the space itself being fundamentally altered.

The present contribution challenges this presupposition. It proceeds from the assumption that world does not arise *within* a given space, but that space, relation, and the viability of existence are first brought forth through world formation. The central concept employed here, Seinsverschiebung (Shift of Being), does not denote a change of state within an existing world-context, but a pre-ontological transition in which possibility is transferred into world-sustaining existence. This transition is not reversible, because it alters the conditions of its own repeatability.

Each Seinsverschiebung entails a loss of possibility. What is could have been otherwise—and precisely this unrealized possibility is irretrievably lost. At the same time, space itself is distorted: the conditions under which further Seinsverschiebungen can occur are no longer identical to those that preceded them. World therefore does not arise additively, but through condensation that binds and transforms openness.

From this structure follows a central consequence: world processes cannot proceed linearly. Recurrence does not signify identity, but displacement under altered conditions. An ontology that takes shifts of conditions seriously cannot unfold along straight lines or closed circles. It enforces a curved trajectory—a spiral movement in which structural recurrence and irreversible displacement are inseparably intertwined.

The figure of the sphere cycle (submergence, indimergence, emergence), developed in earlier works, is reread in this contribution from this perspective. It no longer appears as a cyclical structural model in an abstract sense, but as a dynamic form that attains its full ontological significance only under the condition of time. Time is not understood here as an external parameter, but as the signature of curvature itself: as the expression of the fact that world-binding must not fully close openness without dissolving itself.

The aim of this paper is to make the curve explicit as the minimal form of world formation. In doing so, it also becomes clear why archive-, storage-, and simulation-based models that rely on linear reversibility remain ontologically empty. The curve of the world marks the boundary

between formal reconstruction and real world viability. It is not a metaphor, but a structural necessity wherever existence is not transportable, but world-bound.

2. Seinsverschiebung (Shift of Being) as a Change of Conditions

In the theory underlying this contribution, Seinsverschiebung (Shift of Being) does not designate a transition between states within an already existing world, but a change of the conditions under which world is viable at all. It is not an event *in* the world, but a process through which world first comes into being. In this respect, Seinsverschiebung differs categorically from transformations, rearrangements, or dynamical processes as presupposed in linear ontologies.

A change of state presupposes a stable space within which something changes without the conditions of this change themselves being affected. Seinsverschiebung, by contrast, alters precisely these conditions. With it, not only what exists is displaced, but how existence is possible at all. Space, relation, and difference are not merely utilized, but co-constituted. Seinsverschiebung is therefore pre-ontological: it precedes any object description and eludes purely processual modeling.

Each Seinsverschiebung entails an irreversible loss of possibility. Possibility is not understood here as an abstract set of alternative states, but as the open viability of world. What is transferred into existence excludes other possibilities, not merely factually, but structurally. This exclusion is not a deficit, but the condition under which world can take form at all. World does not arise *despite* this loss, but *through* it.

The loss of possibility is inseparable from a distortion of space. Because Seinsverschiebung alters the conditions of its own continuation, the space in which a further shift can occur is no longer the same as before. There is no neutral background to which one could return. Each shift leaves a trace, not as stored information, but as structural asymmetry. Space is not left behind, but folded.

This folding is the reason why Seinsverschiebung is not reversible. Reversal would presuppose that the conditions under which something emerged remain unchanged and available. This is precisely not the case. The conditions themselves have been shifted. What is to be undone already presupposes a world that would thereby be lost. Reversal is therefore not a technical problem, but a categorical one.

In this sense, Seinsverschiebung is neither accumulative nor conservative. It preserves nothing in the sense of an archive and transfers nothing unchanged into the future. Its productivity consists precisely in consuming possibility and distorting space. World does not arise through storage, but through irreversible positing. Memory here is not representation, but the continued efficacy of this positing within the space of possibilities.

From this structure it follows that any ontology that takes Seinsverschiebung seriously must abandon linear extensions. Where conditions themselves are set in motion, there can be no straight trajectory. Seinsverschiebung enforces curvature—not as a geometric illustration, but as the minimal form under which world formation can be thought consistently.

3. The Curve as an Ontological Necessity

If Seinsverschiebung (Shift of Being) is understood as a change of conditions, a consequence follows that is systematically obscured in linear ontologies: recurrence cannot be conceived as identity. What reappears under altered conditions is not the same, even if structural similarities persist. World does not repeat itself; it shifts. This shift is not a deviation from the model, but the normal case of world formation.

Linear models presuppose that a process can be extended along an unchanged dimension. They imply that the space in which something occurs remains stable, while only states within that space change. It is precisely this presupposition that is undermined by Seinsverschiebung. Because each shift alters the conditions of its own continuation, linear extension is logically excluded. There is no invariant framework along which world could simply "move forward."

Nor can world formation be understood as circular motion. A circle presupposes the possibility of returning to a point of origin without that point itself having changed. Such a return would imply identity under repetition. Seinsverschiebung, however, excludes this identity. What returns does so under altered conditions and therefore cannot be identical with its earlier state. Cyclical models without a change of direction underestimate the irreversibility of world-binding.

The minimal form under which recurrence and irreversibility can be thought together is therefore the curve. The curve connects structural recurrence with irreversible displacement. It is neither linear nor closed, but recursive under altered conditions. In this form it becomes visible that world formation possesses memory without being an archive: the past continues to exert effects not as a stored state, but as an altered geometry of possibility.

This curve is not to be understood as a geometric image retroactively projected onto world processes. It follows necessarily from the logic of Seinsverschiebung itself. Where conditions are co-shifted, a trajectory necessarily emerges that does not intersect itself and does not return to its point of origin. Curvature here is not a metaphor, but an expression of the fact that world can stabilize itself only through the loss of possibility.

In earlier works this structure was described as a spiral movement. The spiral is not to be read as a figure of progress or a teleological model, but as a precise articulation of a recursive ontology with memory. It describes a recurrence around a singularity that is itself not consumed, while its foldings condense and open. The singularity functions neither as origin nor as goal, but as the bearer of curvature.

The curve makes visible why world can be neither fully closed nor arbitrarily open. A fully closed world would congeal into a state; a fully open world would fail to form any stability. The curve sustains this tension by interweaving condensation and opening. It is the form under which world can persist without losing its own viability.

It thus becomes clear that curvature is not an additional property of world, but its condition. Where world comes into being, existence curves—not because it is complex, but because it binds irreversibly. The curve is the minimal ontological form of this binding.

The spiral is not introduced as a metaphor, but as the minimal form capable of expressing recurrence without reversibility. Linear models lose recurrence; circular models lose irreversibility. The spiral is the simplest structure in which both are preserved.

4. The Operator Is Not an Archive — Memory as World Deformation

The assumption that world formation is based on storage, archiving, or reconstruction is deeply embedded in theoretical models. It shapes concepts of memory as well as notions of simulation, repeatability, and historical reversibility. Implicitly, it is assumed that what has been can be preserved in a form that is, in principle, reconstructible. This assumption is incompatible with the concept of Seinsverschiebung (Shift of Being) developed here.

The operator through which world is stabilized is not an archive. It does not preserve a complete past, store neutral states, or hold possibilities in reserve. Its efficacy does not consist in conservation, but in positing. With each Seinsverschiebung, possibility is not deposited but consumed. What is transferred into world leaves behind no retrievable copy of its alternatives, but an irreversible trace in the conditions of further world formation.

Memory, in this perspective, is not to be understood as the representation of past states. Nor is it an internal data structure that conserves information. Rather, memory designates the continued efficacy of past Seinsverschiebungen within the present space of possibility. It is not storage, but deformation. World does not remember by preserving, but by changing.

This deformation is not locally confined. It affects the space itself within which further Seinsverschiebungen can occur. Because each shift alters the conditions of its own continuation, world carries its history not as content, but as geometry. The past does not exert effects as a retrievable state, but as a structural asymmetry that determines what is still possible and what is no longer possible.

For this reason, any notion of complete reversal is categorically misguided. Reversal would presuppose that the conditions of earlier world states remain unchanged and available. This is precisely what is excluded, since those conditions have themselves been altered by the shift. What appears as “the past” no longer exists as a viable world, but only as a trace within another world configuration.

Archive thinking misrecognizes this structure because it treats world as a neutral container in which contents can be deposited and retrieved. In such a perspective, history, identity, and experience appear as, in principle, reconstructible, provided sufficient information is available. The approach developed here fundamentally contradicts this assumption. World is not a storage device, but a nexus of irreversible positings.

The operator therefore does not act conservatively, but productively in the strict sense. Its productivity consists not in generating ever new contents, but in the continued restriction of possibility through which world remains viable. Memory is not a resource that can be accessed, but a condition under which further occurrence can make sense at all.

This insight marks a sharp boundary for all models that rely on complete reproducibility. Where memory is conceived as an archive, world is neutralized. Where world is neutralized, existence loses its binding. The curve of the world cannot be stored—it can only proceed.

5. Simulation, AI, and the Neutralization of the Curve

Models of simulation and artificial intelligence implicitly operate with an ontological presupposition that has already been rejected in the preceding argument: the assumption that states are, in principle, transportable, reconstructible, and treatable independently of their

world-binding. Simulation presupposes that a state space can be defined in which transitions proceed regularly, without the conditions of this space themselves being altered. Artificial intelligence extends this paradigm by organizing reconstruction not explicitly, but statistically.

In both cases, world is treated as a neutral carrier. The past appears as a dataset, experience as information, memory as storage. These assumptions are not merely technical simplifications, but ontological positings. They neutralize precisely that curvature which necessarily follows from Seinsverschiebung (Shift of Being). Simulation and AI therefore do not operate on world, but on abstracted traces of world.

The functioning of contemporary AI systems makes this neutralization explicit. Language models, for example, generate coherence through the recombination of statistical patterns, not through Seinsverschiebung. They condense correlations without consuming possibility. They alter probability distributions without shifting the conditions of their own continuation. The space in which they operate remains invariant. For precisely this reason, such systems possess no curve.

That AI nonetheless produces coherent, at times highly complex outputs is not a counterargument, but confirms the diagnosis. Coherence here replaces world viability. The models move within a fully reconstructible space in which every state is, in principle, repeatable. History appears as data history, not as an irreversible world trace. What is lacking is not information, but binding.

Simulations therefore fail not due to insufficient computational power or incomplete data, but due to a categorical limitation. They can model processes within a stabilized world, but not stabilization itself. World formation is presupposed, not produced. The curve of the world is flattened in order to enable calculability. This flattening is functionally successful, but ontologically empty.

The neutralization of the curve does not remain without consequences. Where existence is conceived as a reconstructible state, human biographies, social relations, and historical processes likewise appear as, in principle, reconfigurable. Suffering becomes data noise, poverty a misparameterization, deviation an optimization problem. Archive thinking thus becomes the basis of technocratic interventions that destroy real world-binding while promising formal order.

The concept of the curve developed here marks a boundary with respect to these models. It shows that world cannot be simulated, because its viability arises from irreversible binding. AI can extend patterns, but cannot carry world. It can imitate memory, but cannot have history. Its time is parametric, not directed; its repetition is identical, not displaced.

It thus becomes clear that the failure of simulation with respect to world formation is not a provisional deficit, but structural. Where no Seinsverschiebung occurs, no curvature emerges. Where no curvature emerges, there is no world. The curve of the world cannot be computed—only inhabited.

A related phenomenon can be observed in biological morphogenesis, as investigated, for example, in the work of Michael Levin. Biological systems do not repair themselves by retrieving an archived blueprint, but by re-forming their shape under altered conditions. After an injury, the earlier state is not reconstructible, because the conditions of its stability are no longer given. Repair therefore does not occur as reversal, but as a further Seinsverschiebung within an already curved space of possibility.

What is described in this context as morphological or anatomical memory is, in the perspective developed here, not a stored state, but the persisting geometry of earlier world-bindings. The goal-directedness of biological repair does not rest on copy–paste mechanisms, but on the fact that certain further formations are viable, while others are not. Here, too, it becomes evident: world is not reversible, but only further formable. Repair is not reconstruction, but a further folding of the curve.

6. Indimergence, Time, and the Boundary of Experience

Within the framework of the theory underlying this contribution, indimergence designates that phase of world formation in which condensation no longer appears primarily as the emergence of new forms, but as the maximal binding of an already constituted world. While submergence marks open possibility and emergence denotes the stabilization of new world-relations, indimergence stands for the condition in which world maintains its viability through increasing self-binding. Indimergence thus designates a boundary phase in which world remains viable through maximal binding, while Seinsverschiebung (Shift of Being) can occur only under altered conditions that are no longer compatible with the observer's previous form of embodiment, temporality, and world.

The question of whether time comes to an end in indimergence arises inevitably once Seinsverschiebung is understood as an irreversible change of conditions. If condensation increasingly binds possibility and space is maximally distorted, no further transition seems possible. In this boundary constellation, time appears to be suspended. The central question therefore is not whether time ends, but for whom.

Ontologically, time cannot end in indimergence without world itself collapsing. In the perspective developed here, time is not a sequence of moments, but the recurring opening against complete condensation. Were this opening to disappear entirely, world would no longer be viable. Indimergence therefore does not designate an end state, but a phase of maximal binding in which openness is not abolished, but driven to its limit.

For the embodied observer, however, this boundary appears differently. For the observer, time is bound to difference: to change, to novelty, to the possibility of further Seinsverschiebung. Where no new difference can be experienced, time disappears phenomenally. This is not an ontological end of time, but the end of its experiential accessibility under given conditions. The observer reaches a boundary, not the world.

This distinction is decisive in order not to misunderstand indimergence. It is neither stasis nor completion. It marks the point at which condensation has progressed so far that further Seinsverschiebungen can no longer occur within the same experiential structure. World remains open, but no longer for the same observer. Time does not end here; it withdraws.

This also clarifies why indimergence cannot be interpreted as a goal. It is not a telos, but a structural boundary. An ontology that reads indimergence as a conclusion misapprehends its status. It projects an observer's experience onto the structure of world itself. The perspective developed here explicitly separates these levels.

Time thus appears in a double aspect: ontologically as the condition for keeping world open, phenomenally as experienced difference. In indimergence, these two levels diverge. What appears to the observer as an end is ontologically a threshold. World continues, but no longer in a form that sustains the same mode of experience.

This insight closes the arc back to the curve of the world. The spiral does not end; it exceeds. What disappears is not time, but the observer in their previous world-binding. The curve remains, even if its further course is no longer experienceable.

7. Conclusion: The Curve of the World as an Ontological Boundary

The present contribution has shown that world formation cannot be understood along linear transitions. Its point of departure was the insight that Seinsverschiebung (Shift of Being) does not designate a change of state within a given space, but a change of conditions through which space, relation, and the viability of existence are first brought forth. Each Seinsverschiebung entails an irreversible loss of possibility; at the same time, the conditions of further world formation are altered. This structure excludes linear continuations as well as cyclical repetitions under identity.

The form that follows from this is the curve. It is not a metaphor, but the minimal ontological configuration under which recurrence and irreversibility can be thought together. The curve connects structural repetition with non-reversible displacement. It renders intelligible why world possesses memory without being an archive, and why history has effects without remaining reconstructible. The past does not exist as a retrievable state, but as an altered geometry of possibility.

From this perspective, it becomes clear that the operator of world formation does not act conservatively, but productively. Its productivity does not consist in storage, but in positing. Memory appears as world deformation, not as representation. This insight marks a clear boundary with respect to archive-, simulation-, and AI-based models that treat world as a neutral carrier of reconstructible states. Where no Seinsverschiebung occurs, no curve emerges; where no curve emerges, there is no world viability.

The analysis of indimergence has shown that maximal condensation does not constitute an endpoint of world, but a boundary of experience. Time does not end here ontologically, but phenomenally for a particular observer in a particular world form. World remains open, though no longer under the same conditions. This distinction prevents both teleological misreadings and the assumption of absolute stasis.

In this way, the curve of the world integrates into a broader ontological clarification. Time does not appear as an external parameter, but as the signature of the curvature that arises from irreversible binding. World is not directed because processes unfold, but because changes of conditions occur that cannot be reversed without losing world itself.

The curve thus marks an ontological boundary. It separates formal reconstruction from real world formation, simulation from existence, archive from history. World cannot be stored, transported, or reversed. It can only further unfold—through the loss of possibility and under altered conditions.

Where world comes into being, existence curves.
Not as an image, but as a condition.

This does not contradict physical time theories; it addresses a different explanatory level.

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