

To the Function of the *Objet a*

In this text, the *objet a* is approached beyond its classical psychoanalytic formulation, not merely as the object-cause of desire, but as a topological effect of displacement, marked in the structure as an irreducible differential. The *objet a* does not exist as an entity, it is not localized in space or time; it manifests only as a curvature within the field, arising at the threshold where structural tension exceeds its capacity for containment. This distortion is neither incorporable into the structure nor subtractable from it. The *objet a* does not appear in presence, but marks its actualization retroactively. If structure is conceived as a connectivity that maintains form under conditions of tension, then any topological distortion is not a local rupture, but a global redistribution that alters the configuration of relations themselves. Structure here is not a set of elements, but a system of differential retention. Form, then, is not an external contour, but that which is held in place as a relation. A distortion that resists localization marks the limit at which the structure must reorganize within the bounds of its homeomorphic class, changing the local embedding of connections while preserving topological continuity. For this reason, the actualization of *objet a* is not registered as an event, but as a minimal yet irreducible transformation of form, not in the sense of visual outline, but in the configuration of retaining relations.

Such irreducible differential corresponds to gravity, not as a force or an action, but as an effect of disrupted equilibrium. Both *objet a* and gravity emerge as topological effects of displacement, arising at the threshold of structural tension.

1 Gravity

Gravity is neither an object nor a force in the substantial sense, but a condition of curvature that arises only in the presence of a “second” — that is, as an effect between, not within. Any object potentially has its own gravity, but it is revealed only in the presence of another, as a curvature that emerges not from the object itself, but from the interaction. In language, this appears as a displacement of meaning toward the zone proximate to S_1 , the primary signifier, that stabilizes a local configuration and inscribes curvature into the field of signifiers; in physics, as the deviation of a trajectory; in the subject’s experience — as an irreducible attraction toward a point that cannot be symbolized. Thus, gravity is not a property but an effect of the discrepancy between a pos-

sible configuration and an actual field, stabilized as curvature. It is precisely where the curvature of the field reaches its limit-tension that the *objet a* can be actualized as a topological marker of difference, not as a localizable distortion. Each word possesses the same potential mass as an element of language, but subjective gravity does not arise from the words themselves, it emerges from the configuration of signifiers already formed around S_1 , which determines a local curvature. The perception of even the simplest message is not guided by conscious choice, but by the inertial drift of meaning toward the nearest gravitational weight, as shaped by that structure.

Interpretation, therefore, is not enacted by the subject but occurs as a gravitational displacement, in which language bends toward the signifiers that lie closer to S_1 rather than toward neutral logic. This partially overlaps with Shannon's concept of information, in which meaning emerges as difference. Here, however, the difference is not pre-given, but it forms dynamically under the influence of local curvature within the field of signifiers.

The subject in this logic is not a bearer of meaning, but a field of distortion formed at the site where tension is realized through the actualization of *objet a*, where language no longer belongs to the speaker. It is not merely alienated; it exceeds the possible localization of the subject within the structure. Where *objet a* can no longer generate structural curvature, the chain of signifiers continues to circulate inertially. The structure of signifying movement persists, but no longer bends: no local tension, no event, no distortion of the field arises. This is language devoid of gravity: a dead language that replicates or condenses itself through repetition without intervention. The mass production of dead language is not an anomaly but a symptom: when the *objet a* has not been actualized through *jouissance* but exchanged for *plaisir*, tension has not reached the threshold, and the structure remains unchanged, functioning as a recursive enclosure in which motion of signifiers persists without deformation, forming knots of repetition that sustain circulation without transformation. Yet precisely where the *objet a* can neither be integrated nor redistributed, *jouissance* emerges as tension without discharge. If the structure endures this limit, without rupturing but curving, a structural exteriorization occurs: language as symbolization arising at the moment of gravitational distortion. Speech, in this context, is not an act of the subject, but a by-product of a topological rupture where tension does not destroy the structure, but deforms it enough to permit further retention. Otherwise, a psychotic manifestation becomes possible: the *objet a* is actualized, but the symbolic fails to contain it, and the structure disintegrates, or reassembles itself arbitrarily.

From this perspective, gravity is the condition of possibility for the language of the Real itself - that which, in Lacanian topology, designates a zone that is irreducible to the signifier, structurally excluded from the Symbolic. Where the Symbolic reaches its point of impossibility, gravity continues to operate not as metaphor, but as a real attraction that sustains a disintegrating field. Where the *objet a* induces deformation in the subject, this deformation is manifest not only in its internal logic, but in the local curvature of the topological space, analogous to the way a massive body distorts the fabric of spacetime. Gravity

acts as the retention of the split itself: not by supporting bodies or consciousness per se, but by fixing the minimal difference in which the possibility of the *objet a*'s actualization as a structural distortion still persists. It is the only one of the four "fundamental forces" with no screen or representative: electromagnetism is visualizable, strong and weak interactions are detected, but gravity is only inflection, deformation without body. In this sense, it is the language of the Real. In Penrose's model, consciousness is explained via gravity: the collapse of superposition, determined by a gravitational threshold, functions as the mechanism by which the possible becomes actual. A superposed state has a finite lifespan, the moment when maintaining multiplicity becomes structurally impossible. Building on this model, the collapse of the wave function is approached here as a point of structural overstrain, at which the previous topological configuration loses its stability. It is the moment when the structure is forced into reconfiguration. Here, the *objet a* actualizes as a fold where the tension reaches an irreversible threshold, beyond which stabilization is no longer viable. It is not symbolized, but it compels the structure to reconfigure rather than disintegrate. The *objet a* possesses no ontological status: it has neither energy, direction, nor magnitude. It is not localized, but it induces a distortion in the field, a curvature after which the structure can no longer preserve its topological coherence. The *objet a* belongs neither to the subject nor to matter, but is the impossibility of their convergence. Scientific discourse already identifies regions in which gravity eludes perception as a force or causal action. Temporal distortions attributed to dark matter and dark energy do not present themselves as empirical substances, but as topological displacements within the field. Their effect lies not in presence, but in disruption, manifested as curvature that fails to return to symmetry. In this context, gravity appears as an effect of the abandonment of equilibrium, masking space's incapacity to remain locked in its prior topological configuration. Thus, the expansion of space is not a consequence of an external impulse or motion, but a symptom of an internal inability to sustain the former configuration.

2 Time as Curvature

Einstein, when introducing the cosmological constant, was guided by the intuition that the universe must be stationary — as existing outside linear time. He later called this his "greatest mistake," yet the idea aligns more closely with quantum gravity than he perhaps realized. The Wheeler–DeWitt equation carries this view forward: by eliminating time as a variable, it describes the universe not as a developing event, but as a completed structure within which time is merely a local curvature. From this perspective, both the cosmological constant and the "absence of time" are attempts to capture a single topological fixation, in which everything has already occurred. If we accept that time is one of the vectors through which we perceive topological curvature, then there is no need to posit development, causality, or an observer. The actualization of the *objet a* is revealed in the curvature of the field, which does not arise from any local cause,

but manifests as an irreducible difference, expressed in the divergence of the structure from its expected homologous configuration. In this framework, time can be considered as an additional axis of rotation, along which what is fixed is not an event, but a structural divergence: just as rotating a Klein bottle reveals different cross-sections. Measurement, then, is not fixation but the choice of a particular cross-section where each contour does not disclose something new, but reveals another aspect of an already closed topology. Thus, description is not explanation, but a registration of divergences in which the structure fails to coincide with itself. The paradox is that what we read as the “map of divergences” is already contained within the structure, albeit at a different scale. We have no access to the whole: each slice is a projection, in which the form cannot be given in its entirety. In the holographic model, this means that each fragment contains information about the whole, but with reduced fidelity: as the scale diminishes, distinctions blur, and reconstruction becomes impossible.

3 The Topology of Time

If we accept that space possesses a multidimensional structure in which the state of a system is described as a vector in Hilbert space, then the notion of time as a universal and fixed axis loses its justification. Time (t) does not function as an independent dimension equivalent to the X, Y, and Z coordinates, but emerges as an effect of the orientation of the state vector relative to the observational configuration within which superposition retroactively articulates itself as temporal sequence. If such a structure could be rotated relative to the t -axis, then the directionality of the sequence would not stem from the system’s internal dynamics but from the topological configuration inclusive of the observer, as determined by how the orientation of the state relates to the direction of the rotational axis as the condition of articulation. Linearity, in this context, is not predetermined, but arises as a side effect of the coupling between the rotational direction and the point from which observation is made not as a choice, but as a constraint imposed on the articulation of state within the given orientation. This means that time appears as the effect of the observer’s attempt to interpret superposition in the form of sequence. The question, then, is not whether time exists, but under what conditions it becomes articulated as a measurable sequence. This allows for an approach to the *objet a* not as an element situated in time, but as the topological distortion itself, in which movement does not imply duration. Temporality, in this sense, is not a fundamental characteristic of reality, but a projection of absence, arising from the attempt to symbolize displacement in its pure form without fixation.

4 Limit of Coherence. Antimatter

The theoretical model of the Big Rip is not merely a hypothesis about the future of the universe, but a potential projection of the *objet a*’s logic carried to its

extreme point. The Big Rip is not a hypothetical catastrophe, but the terminal form of linkage, in which gravity can no longer sustain structure, and the *objet a* is actualized as an irreversible structural distortion. This is not an explosion, but a disintegration of structural bonds: galaxies, stars, planets, and eventually atoms can no longer retain coherence. From a physical standpoint, this is driven by the exponential expansion of space under the influence of dark energy. But in the logic proposed here, it is the extreme deformation of the field, where the *objet a* causes the collapse of the structure entirely, not because it is “negative,” but because it bears neither sign nor body. It is the effect of rupture as a terminal mode of deformation. In this perspective, the Big Rip is not a catastrophe, but a topological limit, the point at which gravity can no longer hold. At a certain threshold, the acceleration of expansion becomes so intense that even quarks disintegrate, culminating in the dissolution of difference itself. In this perspective, dark energy and dark matter are not presented as substances, but as effects of difference arising from the impossibility of symbolic retention, and this is precisely what excludes them from direct calculation. Despite attempts to integrate dark matter within frameworks of symmetry or energetic balance, it eludes these categories. It is not defined through the observable not because it is absent, but because it is structurally excluded from the field of observation. It is not absent, yet it is not articulable either. If dark matter is considered as a topological position that resists integration into the system of differences, it ceases to be an “opposite” or an indeterminate magnitude and aligns with the same register as the *objet a*: beyond symbolization, yet preserving the structural homology, not as realized symmetry, but as its internal compulsion toward self-coincidence, which remains inaccessible in its entirety. In this sense, dark matter continues to act as an empty site — not an object, but a precondition of structuration. Precisely for this reason, dark matter is not fixed within the gravitational landscape, yet it affects its metric. In this perspective, it has no mass, yet it continues to structure the very topology of spacetime, not through presence, but through the possibility of displacement. Dark matter does not “exist,” but its absence is operational. The ultimate deformation of the Big Rip thus brings to its limit the same topological impossibility of retention that is already enacted in the case of dark matter — namely, the impossibility of the structure fully coinciding with itself. Expansion and retention are not opposites but distinct regimes of deformation understood as irreducibility: one tears cohesion apart, the other structures it from absence. The *objet a* here is not a mediator, but a fold between the impossibility of articulation (in the case of dark matter) and the impossibility of retention (in the case of the Big Rip).

5 The Discourse of Science

In this context, the variation of the cosmological constant can be understood not as a shift in matter, but as a symptom of instability within the structure itself — the one that sustains the tension allowing distortion without collapse. Its variability thus appears not as an error, but as a dynamic symptom: a

displacement within the mechanism through which events become discernible. This conception of the constant as a boundary arising not in matter, but in the logic of differentiation itself, allows us to suppose: if language loses the capacity to sustain rupture and increasingly closes upon itself, eliminating discrepancies through which the actualization of the *objet a* might retroactively emerge, then perception too becomes a repetition of already articulated forms. The discourse of science is subject to the same smoothing: discursive structures increasingly redistribute what has already been articulated, displacing the possibility of new points of entry. This self-enclosing consistency operates not merely as a homeostatic defense against rupture, but as a form of jouissance derived from the elimination of the possibility of difference, producing the illusion of a lackless field. It is not simply an attempt to circumvent the impossible, but to annul it as a topological condition. This is not an acceleration of language, but its scarring: the closure in repetition cancels the very possibility of displacement. Without topological displacement, neither discovery nor event is possible. Initially, science upheld structure precisely to enable rupture: the mismatch between observation and model implied the possibility of another law, another curvature. The scientific subject was the one who allowed that an explanation might not yet exist. Today, such mismatches increasingly become mere replicas of previously articulated configurations of signifiers. The problem no longer resides in the internal content of theories, but in the structural form whereby the impossible is attempted to be incorporated into theory, even if accompanied by caveats. Where science approaches the boundary of the impossible, its discourse increasingly seeks to bypass the impossibility of articulation, introducing signifiers whose meaning appears “self-evident”, arresting the dynamism of the signifying chain by establishing a fictional equivalence with itself, thereby blocking the possibility of displacement. In this way, substitutions from pre-articulated semantic spaces become permissible, allowing smoothing through reliance on what is already symbolized. One of the most paradoxical fixations, in those places where a rupture should be detected but is instead operated on by virtually any discourse, is the signifier “understanding” (of meaning). By creating the illusion of connection between signifier and signified, it functions as a neutralizing substitution precisely where the actualization of divergence should have occurred. Drawing on Lacan’s optic of “understanding” as a false retroactivity that masks the mechanism of the act, it can be defined not as the interiorization of meaning, but as the moment of superposition collapse: from among many potential trajectories, one particular signifier intensifies the structure’s tension, forcing a mandatory redistribution, not because of logical or epistemological strength, but out of topological necessity. Here, understanding is not knowledge, but an effect of reconfiguring the field of signifiers, not by virtue of their content, but by the tension they can sustain. In this sense, scientific discourse is attractive because it offers stable, prolonged pathways of such redistribution, i.e. sequences in which the structure can continue to shift without collapsing. Meanwhile, in ordinary speech, when faced with the impossible, the subject more often shifts toward the phantasm via metonymy, masking the rupture. Thus, “understanding” becomes not merely a linguistic orgnoseological

issue, but a structural anomaly—a signifier that fails to function as a signifier precisely because it conceals the very possibility of difference. If semantics and syntax of scientific language are incapable of justifying what resists description, then mathematical formalization, operating not through meanings but through relations, can serve as a way to sustain difference without anchoring it to signification. Such an articulation steps outside the university discourse, where knowledge is structured as a system of already articulated differences (S_2), and instead deploys the mechanism of difference not from plenitude, but from the impossibility of coincidence. It is at this limit that Erik Verlinde’s work unfolds, interpreting gravity not as a fundamental force, but as an entropic effect of information redistribution. This perspective approaches an understanding of structure not as a stable framework but as a field of tensions arising where coincidence is impossible. Such a model does not add new knowledge into an already closed structure; rather, it ruptures its modality from within. Gravity here is not a force, but the function of difference, a consequence of variations in informational density. These ideas have not yet become dominant in scientific discourse, but they signal the possibility of a different scene: not a rejection of that discourse, but a topological mutation within it, in which the actualization of *objet a* is not excluded, but articulated as a systemic irreducibility. This is not a world model, but a possible shift in the articulating structure itself.

6 Physics, Paradoxes

From this perspective, a number of physical experiments can be understood not as isolated phenomena, but as manifestations of structural deformation where the act of observation coincides with the moment of distortion. In the double-slit experiment, the outcome depends on the fact of measurement: without it, the quantum behaves like a wave; with it, it behaves like a particle. Measurement here is not merely an act of observation, but a structural point of bifurcation in which difference brings about the observable. In other words, the act of measurement is a structural intervention that engages not an external observer, but difference itself, arising within the field and resulting in a binary outcome structured by the field itself. This difference generates a local curvature akin to gravitational displacement, and it is that curvature which already influences the particle’s behavior. Language, by recording the measurement’s result, becomes an active operator in this structure, not a neutral descriptive tool, but part of the very process. Attempting to preserve coherence without acknowledging that the structure is already unstable amounts to an attempt to hold form at the very moment its distortion becomes inevitable. Thus, the question is not only what we measure, but how the very possibility of measurement is constituted. The observer, or the apparatus, is already embedded within the structure of differentiation, the one that defines what can be observed and what cannot. If we allow for the possibility of fixing not the outcome of the wave-function collapse but the topology of the field prior to it, then we can speak of states that cannot be reduced to either particle or wave. This implies that a measurement’s outcome

is not a mirror of reality but an echo of a distortion that has already transpired. Experiments confirming the violation of Bell's inequalities (such as the Aspect experiment) reject local realism: one cannot assume that particles possess definite properties prior to measurement, nor that no information is transmitted faster than light. The standard explanation invokes either a rejection of realism or of locality. But a third path is possible: to relinquish the notion of a fixed structure and linear time, and to introduce the concept of the *objet a*—a function homologous to gravity, which collapses at the moment of measurement. If measurement in one part of the system induces a curvature in the topology of the field, then the entangled particle located elsewhere does not receive information but is already implicated in that same deformation shift. The *objet a* is not localized, but it does not violate causality in the conventional sense, because causality is itself derivative of the configuration. Thus, quantum nonlocality can be understood not as signal transmission but as redistribution across a curved structure, where measurement is not merely an act of observation, but a point of phase shift in the total system.

The observer in a quantum experiment is often imagined as one who “creates” reality at the moment of measurement. But this conception is creationist in its structure and thus distorts the topological nature of measurement itself. The observer does not fix or create, they induce displacement. Their presence, or even the mere potentiality of observation, reconfigures the field in which the event unfolds. If measurement is understood as gravitational curvature within the structure of the field, then it becomes not an act of selecting a single value from many, but a resonant response of a system in which the superposition is forced to collapse under the influence of the distortion in the field. The subject (or apparatus), in registering one state, does not so much choose it as become entangled in an already ongoing displacement, thereby amplifying it. This fundamentally dismantles the notion of observation as external intervention. On the contrary, the entire configuration, including the observer, is always already topologically entangled. What is at stake is not a local effect but a transformation of the system's structural coherence, from which the observable outcome emerges.

The Monty Hall paradox clearly illustrates how any act of observation, even one that seems neutral, shifts the probability field. Once one of the doors is opened, the system is no longer what it was: the *objet a*, as a gravitational distortion, has shifted. This is not a matter of fixed objects, but of how the very act of revealing alters the structure. That is why switching choices increases the probability of winning, not because the prize has “moved,” but because a phase shift has occurred in the configuration field. Rational resistance to this logic is nothing other than the desire to preserve the structure as intact, despite its evident distortion. One can imagine a model in which all known inconsistencies: quantum paradoxes, logical breakdowns, data anomalies, discrepancies between models and observations, are gathered into a single field as indicators of structural breakdowns. The issue is not a simple lack of data, but points where the structure fails to maintain coherence and begins to distort. If these failures are superimposed, one may hypothesize the existence of nodes in which disparate

paradoxes intersect and form a fold. Such a node does not become a localizable object but a topological trace of the *objet a*—a site where the structure turns itself inside out beyond familiar spatial bounds. This allows for the possibility of constructing a map not by matter density, but by the distribution of logical and topological distortions within the structural model of reality itself. In this context, the *objet a* does not merely indicate a breakdown, but points toward the structure’s potential transition into another register of coherence, where gravity and language may be distinct expressions of the same curvature.

7 Observer

If the observer is distant and does not enter into direct interaction with the system, the question remains open: why does the very fact of observation affect the outcome? This becomes explicable if one abandons the model of local interaction in favor of a topological configuration, where gravity functions not as a force, but as a tension of form, and structure is not a sum of objects, but a field capable of distortion. In this logic, observation acts not as an intervention, but as a symptom: it marks the emergence of a limit condition beyond which the structure loses stability. Observation does not cause the event, but registers the point at which deformation has already become necessary and marks modality rather than content. The signifier, as a component of this structure, does not exist in three-dimensional space, but in an additional dimension—a topological layer that determines the possible deformations of the system. Observation thus becomes not a voluntary act of a speaking subject, but an expression of the impossibility of maintaining symmetry. In any act of measurement, the observer participates not only as a physical object possessing mass or influence, but primarily as a bearer of language. Even when measurement involves an instrument, it is embedded within a structure of differentiation, in which measurement is possible only as an operation of symbolic fixation. The language through which measurement occurs (number, formula, model) is not a neutral description: it is itself a trace of displacement, an effect of tension that cannot be reduced either to the physical or the psychological, but which structures the very possibility of symbolic differentiation. Therefore, even remote observation is not passive. It influences not mechanically, but topologically: it actualizes a vector of difference within the structure and induces a shift. This means that any observer does not simply register reality but already participates in its displacement, through language, through the choice of operator, through the very fact of being embedded in the structure of differentiation. The Heisenberg uncertainty principle classically demonstrates the impossibility of simultaneously measuring conjugate quantities (e.g., position and momentum) with arbitrary precision, thereby revealing intrinsic limits embedded in the structure of measurement itself. However, this is not merely an epistemic constraint: it indicates that the very act of measurement organizes what is measured. Penrose, in attempting to explain wavefunction collapse, proposes the hypothesis of objective reduction, linking it to gravitational effects at the quantum level, specifically

at the scale of neutrons, while keeping the role of the observer unresolved. In contrast, Max Tegmark treats consciousness as an epiphenomenon of quantum processes, yet he too is compelled to acknowledge that the act of differentiation is inseparable from the mathematical model: that is, from language. Both acknowledge the boundary—one articulating it as a psychic effect, the other as a physical theory—but neither eliminates the topological necessity of difference. Language, therefore, does not merely accompany measurement; it constitutes its very possibility, as the surface on which rupture becomes articulable. This means that the actualization of the *objet a*, which structures difference, is not merely a secondary effect—it is the condition of measurement as such.

8 Displacing the Double-Slit Experiment

In classical interpretations of quantum mechanics (Copenhagen, Everettian, etc.), the act of measurement triggers the collapse of the wave function—a transition from wave-like superposition to a definite state that is conventionally attributed to the physical interaction between system and apparatus. In this text, we posit that the decisive condition for collapse is not the interaction itself, but the structural inclusion of the outcome into the symbolic register. In other words, what matters is not the physical contact with the device, but the moment of symbolic fixation in which the indefinite state becomes articulated. This shift of focus, from physical interaction to symbolic fixation, allows us to reconfigure the very structure of observation, aligning it with Lacan’s notion of the gaze: not as an optical function, but as the action of the signifier that nails the subject within the structure of differentiation. The gaze matters not because it “sees”, but because it “names”: the wave is read as a particle not by its “visibility,” but by the act of symbolization. A blind gaze does not produce collapse: it fails to establish the boundary between the seen and the named, and therefore cannot stabilize, it does not “articulate.” Hence, we can propose that the act of measurement, as a structural intervention, relies not on the presence of an instrument, but on the inclusion of the signifier. This leads to the necessity of shifting the conditions of the classic double-slit experiment, not by eliminating measurement, but by configuring it so that the result cannot be interpreted as indicating the localization of the particle: not fixing the trajectory directly, but measuring a conjugate parameter that is not intended for path reconstruction.. The detection system, in this case, could be tuned to indirect measurements of parameters that resist interpretation in terms of locality, such as temperature distributions on the potential impact plane, oscillatory displacements in the medium, pressure fluctuations, electromagnetic distortions, and other non-localizable effects. If the obtained data cannot be interpreted as pointing toward localization, either due to their inarticulable nature or because the form of fixation obstructs reverse reconstruction, one can expect the interference pattern to persist despite the technical presence of measurement. This would mean that the collapse of the wavefunction is determined not by the act of physical interaction itself, but by the integration of the result into the

semiotic structure. In Lacanian optics, the experiment functions not as a test of truth but as a function of witnessing. The scientific community’s thought system relies on the ability to draw conclusions based not on what “happens,” but on what can be structurally fixed and reproduced. Thus, the institution of the experiment is not merely a method, but a form of articulation grounded in the possibility of symbolic fixation. In this context, the modified double-slit experiment points to the boundary between the observable and the articulable: the result does not testify to a trajectory, but to the impossibility of reconstructing it as a signifier. This is witnessing in the Lacanian sense—structural rather than perceptual. Approaching the idea of an isomorphism between the function of the *objet a* and the act of wavefunction collapse, it is important to note that the *objet a* is neither an entity nor a choice, but a small differential which, if not held, initiates a displacement across the structure. The collapse of the wavefunction is not an external act, but an internal necessity: a vector of tension that has reached its limit. It does not actualize as an event, but serves as the condition for its possibility. The *objet a* does not coincide with the collapse, but renders it inevitable: it is not fixed, but deforms. The structure of language and the structure of probabilistic reality are isomorphic in their moment of actualization. It is in this collapse that “reality” emerges as an effect. Even within alternative physical models, for instance the dark photon hypothesis, which posits the existence of an “invisible” photon partner that does not interact with measuring instruments, the structure of differentiation is not bypassed, but merely deformed. Such a theory does not resolve the topological tension but redistributes its tension: the “dark” photon is not fixed, yet it influences the result. This indicates that regardless of the model, the critical factor is not the transmission mechanism itself, but the impossibility of fully aligning the observable with the articulable. Even when the ontological optics are shifted, the same conditions of curvature persist: the *objet a* does not vanish but returns as a tension that precludes structural coincidence.

9 Boundary of the thinkable: the impossibility of signifying “nothing” without form

To think “nothing” outside of form is impossible: any signification already shapes it. Even emptiness within a structure appears delineated and distinguishable. This is the limit of language: it can cease, but cannot transcend signification. From this follows that interpretation is not an act of a subject, but a means of stabilizing the structure at the moment of *objet a*’s actualization. Nobody “gives” an interpretation, it arises as an automatic redistribution of tension, a leveling of the field. To say “I interpret” is already a mistake. It is more accurate to say: at the point of greatest tension, the structure shifts so that interpretation becomes inevitable, as a trace, as a deformation. The subject is not constituted: they emerge not as the cause of interpretation, but as its residual effect—tension fixed at the moment of stabilization. It is within

this non-localizable tension that *objet a* may appear as the actualization of difference, as the effect of “nothingness” folding in upon itself. If all that exists is thought of as “nothing” folded into topological density, then “something” arises not as an entity, but as an illusion provoked by the intensity of form. In this configuration, there is no subject of interpretation: interpretation arises as an ejection at the edge of the fold, where the same surface simultaneously manifests as inside and outside. This “between” is not a position between two objects, but the rupture between two visibilities of the same fold of nothing. It is this tension that is felt as gravity, as the illusion of understanding, thought, action—even though, in essence, nothing thinks and nothing acts. “Nothing” has no will, no form, no direction, no time. It cannot fold in upon itself, nor remain flat. But precisely for this reason, folding becomes possible: there is nothing that could prohibit or resist its fluctuation. There is no structure that can hold “nothing” in its nothingness. Then the first fold of involution already becomes a distinction, already forms a contour. The infolding of ‘nothing into nothing’ produces a “between”: what we perceive as gravity and difference. It is neither motion nor choice, but a possibility “forbidden by nothing”. In this sense, all visible reality can be described as a displacement provoked by the turbulence of nothing, which “nothing prevented from happening”. The experienced structure is not fundamental, but merely an effect of infolding, arising without foundation.

The perception of reality, in this sense, is not the psychic activity of a subject, nor even electrical impulses, but the effect of form-taking itself, the mere semblance of difference. If the structure of language is capable of maintaining the contour, that is already sufficient, not because of the subject behind it, but because this very maintenance creates the possibility of differentiation.

Impossibility viewed as a hypothetical scene

“Nothing” may be given not as a homogeneous absence, but as a limit-state of superposition of all forms, including coincidence and non-coincidence. If to suppose that nothing truly obeys no law, then it is not obliged to remain symmetric or complete. Fluctuation is possible in its limit as a pure contingency, not as a probabilistic magnitude, but as a frameless instability which is not determined by cause. This is not a system failure, because no system yet exists. Not an event in space, because there is no space. Not an act of will, because there is no subject. It is a disruption of coincidence, an irreducible displacement, unshaped as event. Since nothing is not limited by anything, displacement is not suppressed: it requires no cause, and its irreducibility is its sufficient condition. That’s how difference arises, as what remains as the effect of a displacement not constrained by any law. This is the condition of everything: not a thing, but a structural allowance that makes it possible to speak of an effect without a cause. Not energy, not matter, and not even information, but difference that maintains the impossibility of coincidence. Here, difference is not yet attached to the site of *objet a*’s actualization; it functions as an ordinary instability, in which lack is not yet discernible, because no completeness has yet been given

that could be lost. However the difference is the tension that already produces the condition for the emergence of lack, as a logical place, not as potentiality. As a pure effect of displacement, difference requires minimal retention; this is also what constitutes the basis of structure. Yet the structure cannot maintain a stable configuration, for any stabilization, following the gradient of entropy, tends to smooth out differences, thereby erasing its own condition. This is an autocatalytic logic: in its drive toward order, the structure intensifies the tension generated at the threshold of retention, producing zones of potential rupture. The actualization of *objet a* becomes possible only when the structure once again confronts the impossibility of stabilization. Here emerges what will later be described as “gravity,” “time,” “matter.” The *objet a* cannot be calculated, but it is what structures. In this sense, it is not part of the structure but its condition. The *objet a* does not disappear, because it never appeared in the first place: it is not localized, but remains excessive in relation to the structure, as the sign that nothing has completely vanished.

What is perceived as the coherent, logical “world” populated with objects, is nothing more than a holographic projection emerging at the threshold where nothing infolds into nothing. This threshold is not physical but topological: not a point in space, but a locus where symmetry becomes impossible, and thus difference is registered as density. The illusion of “reality” emerges as a delay, as the subject’s failure to keep pace with the dynamics of folding: the world is felt because the subject is always lagging behind the displacement—not in time, but immanently, at the point where the moment fails to coincide with itself. It is this disjunction that constitutes what we call time, life, subject. None of these terms has ontological status outside the rupture.

Hologram, as an interference structure perfectly superimposed upon its identical copy, yields no image: when phase and amplitude coincide entirely, interference vanishes, and with it, the projection of the hologram. “Nothing” emerges not in the form of emptiness, but as the effect of superimposition in which all differences have been annulled. Prior to displacement, there is not even a “where”: the coordinate appears only as a function of non-coincidence. Space and time are not a backdrop, but the residues of a split. Structure does not unfold but becomes discernible at the moment when nothing ceases to be perfectly superimposed upon itself.

The unfolding of structure is not a guarantee, but a contingency. And if difference arises from a shift in superimposition, then “nothing”, having no foundation, is simultaneously a total overlay, dissolving both difference and observer. What is named “world”, is nothing more than the minimal retention of difference. There are no guarantees: “nothing” may invert, compress, vanish, displace itself anew—familiar laws, forms, sensations are merely a local illusion. Existence is possible only as long as difference persists.

Supposing “nothing” to possess the property of being both periodic and aperiodic at once, it is then retained not as structure, but as a superposition of possible, including incompatible, structures. This implies that nothing is

neither a stable symmetry nor a chaotic background, but a topological potentiality in which any displacement, even at the level of microscopic fluctuating misalignment, may generate an effect analogous to the moiré pattern that arises when two aperiodic Penrose tiling patterns are superimposed. In this context, aperiodicity is not the opposite of periodicity but its ineliminable companion: every strictly regular pattern contains within itself the potential for disalignment, because regularity demands perfect synchrony of all elements, something physically and logically impossible without external maintenance.

Thus, "nothing" as a hypothetical field contains both modalities, and their irresolvable overlay is precisely what gives rise to difference. This is not a matter of choice: "nothing" does not choose to be aperiodic, it simply cannot sustain absolute periodicity across all levels simultaneously. And it is at this point, at the impossibility of perfect coincidence, that what is called 'the effect' arises: not motion, not matter, not energy, but the tension of non-coincidence. If this effect recurs, it generates what we perceive as stability, world, or time—not through the emergence of something from "nothing", but as a delay within its own interference-based distortion.

The concept of the emergence of difference from "nothing" is not purely speculative, it already appears in several cosmological and topological models. For instance, in Vilenkin's work, quantum tunneling of the universe is described starting from a state of absolute "nothing," without space, time, or matter, into a configuration with non-zero radius, from which inflationary expansion begins. This is not a philosophical allegory but a formalizable quantum hypothesis with explicit boundary conditions drawn from scientific discourse. In another domain, quantum field theory, models of topological fluctuations are being developed, in which the very fabric of spacetime is unstable and can transition between different forms. Thus, even rigorous disciplines allow for the thought that form, structure, and difference may result from a minimal displacement within a presumptive "nothing," not as entities, but as functional instabilities.

What we perceive as time is not necessarily connected to a linear flow or physical motion. As considered here, time is an effect that arises from the disruption of total overlay without the preservation of differences. Any configuration may be possible within nothing, but sequence emerges only where a minimal displacement arises. Thus, our linear experience of life may not be a fundamental property of reality, but rather a byproduct of a single topological break that disrupts ideal "symmetry." Wherever one holographic projection imperfectly overlays another, the effect of motion, difference, and duration emerges. This explains why subjective perception of time can contract, stretch, or disappear altogether: because it is not the result of a stable flow, but a function of topological decoherence.

The illusion of time isn't simply what "seems to be," because at the point where difference arises, there is no subject yet who could perceive it. "Seeming"—is already an effect of the actualization of the *objet a* within the holographic structure. However, the displacement of the interference pattern does not create an image, but produces topological tension that unfolds in its pro-

jection as the illusion of movement.

The lenticular structure model provides a model of a plane containing multiple images that produce the illusion of motion with only minimal shifts in the viewing angle. Where movement and sequence are absent, it is the refraction between non-coinciding phases that gives rise to the semblance of time. A lenticular lens, as a physical structure, maintains simultaneity and difference, allowing one to perceive change without treating it as ontologically real. This optically accessible model reproduces the same topological logic in which the subject emerges as a point of delay relative to changing visibility.

The subject does not experience time; rather, the hologram itself refracts at the point of non-coincidence, creating what may later be called “experience”—that which does not precede displacement, but is its effect. In this sense, time is not something that is, but is an effect of structural failure.