

Aura Disassembled: The Mechanism of Withering in the Age of Technological and Digital Reproducibility

Introduction: Benjamin's Paradoxes

In 1935, Walter Benjamin formulated a thesis that has become the canonical framework for media analysis: technological reproduction destroys the “aura” of the work of art. Yet Benjamin’s own concept of aura is far from uniform. Within a single text, he operates with several characterizations of aura without reflecting on their inconsistency.

Aura is “the unique apparition of a distance, however near it may be”: a phenomenological definition through perception, through the mode of a thing’s presence for the observer.

Aura is the “here and now” of the work, its attachment to a singular place and its own history: an ontological definition through the thing’s being in the world.

Finally, aura is the work’s connection to ritual, its “cult value” (*Kultwert*): a functional definition through the thing’s role in practice.

This inconsistency is not carelessness; it reflects the genuine complexity of a phenomenon that Benjamin gropes toward rather than defines. But it is precisely this inconsistency that renders the central thesis — “technological reproduction destroys aura” — unstable: it remains unclear what exactly is destroyed — perceptual distance, material attachment to place, or ritual function.

Benjamin describes the process in different terms: in the artwork essay, aura *verkümmert* — withers, atrophies; in the essay on photography, he speaks of *Zertrümmerung der Aura* — the shattering of aura. In both cases, the point is the same: “that which withers in the age of the technological reproducibility of the work of art is the latter’s aura,” for “even the most perfect reproduction of a work of art is lacking in one element: its here and now — its unique existence in the place where it is” (*das Hier und Jetzt des Kunstwerks — sein einmaliges Dasein an dem Orte, an dem es sich befindet*).¹

But already in this description, a problem is audible: “withering” presupposes that we know what exactly is withering — and this is precisely what Benjamin does not specify. Which of the three definitions of aura is meant here — and does the thesis hold for each of them?

The thesis carries intuitive conviction. But a careful reading of Benjamin’s text reveals contradictions that he himself registers but does not resolve. Three paradoxes are especially telling.

The daguerreotype paradox. Benjamin writes of early photographs: “In the fleeting expression of a human face, the aura beckons from early photographs for the last

¹All citations from Benjamin follow the translation by Edmund Jephcott in: Benjamin, W. “The Work of Art in the Age of Its Technological Reproducibility” (Second Version). In *Selected Writings, Volume 3: 1935–1938*, ed. H. Eiland and M. W. Jennings. Cambridge, MA: Harvard University Press, 2002.

time. This is what gives them their melancholy and incomparable beauty.” But if photography is the medium that destroyed aura, where does this “melancholy beauty” come from? Where does aura come from in the very medium that killed it? Benjamin calls this a “last breath” — but that is a metaphor, not an explanation. Why does photography, which supposedly destroyed aura, itself turn out to be an auratic object?

The reproduction paradox. Benjamin claims that reproductions destroy the aura of the original, “prying the reproduced object from the sphere of tradition.” But observable reality suggests the opposite: the more reproductions of the *Mona Lisa* — postcards, posters, memes — the more people seek out the original. The queue at the Louvre grows; pilgrimage intensifies. The encounter with the singular canvas touched by da Vinci’s hand is experienced as a significant event — and experienced all the more intensely the more familiar the image was before the encounter. If reproductions “destroy” aura, why does the experience of standing before the original become more valuable, not less?

The star paradox. Benjamin states that cinema lacks aura: “the audience’s empathy with the actor is really an empathy with the apparatus,” and the actor becomes a “prop.” Yet he also describes the “cult of the movie star” — the quasi-religious bond of millions of viewers with the screen image. If cinema is aura-less, where does this “magic of personality” come from? Benjamin calls it “the phony spell of a commodity” — but this is an evaluation, not a mechanism. Moreover, in Benjamin’s own analysis, the connection between *Starkult* (the cult of the star) and aura is explicit: the film industry cultivates the star cult as compensation for the loss of the actor’s aura before the apparatus — capital promotes the “magic of personality” as a commodity surrogate for what the camera took away. But Benjamin states this compensatory function without proposing a mechanism: how exactly does a quasi-auratic bond between viewer and screen image arise, if aura does not touch the screen image itself?

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These paradoxes are not accidental glitches in the argument. They point to a systemic problem: Benjamin registers a symptom but does not propose a mechanism. He describes “withering” without explaining what exactly withers and why in some cases it occurs and in others it does not.

We argue: the root of the problem lies in the choice of analytical object. Benjamin looks at the product — the copy, the reproduction — and registers the result: whether aura is present or absent. But looking at the product does not explain why in some cases it is present and in others not — it registers a consequence without uncovering the cause. The key to understanding lies not in the product but in the process of its generation — in the matrix from which the product arises, and in the type of operation that created that matrix.

The present work proposes an analysis of media based on three independent axes: the source of form in the matrix, the presence or absence of computational mediation, and the mode of being of the bearer. The intersection of these axes defines a space in which each medium occupies a determinate position — and this position determines which modalities of aura are available to it. We distinguish innate and accrued aura, the aura of co-presence, and quasi-auratic affect — and show that Benjamin’s paradoxes arise from their conflation. We do not aim to “correct” Benjamin. We construct an analytical apparatus in which his intuitions are systematized and his contradictions do not arise — not because we deliberately circumvent them, but because our conceptual apparatus offers a higher degree of differentiation.

1 Part I. The Genesis of Form

1.1 Corporeal and Selectional Trace

To understand why some media preserve aura while others do not, one must pose a question Benjamin never posed: what action generated the form in the matrix — in the object from which all copies are made — and whose trace remains in it?

Our analysis proceeds from a distinction between two types of indexicality² and is confined to media with a continuous causal chain between the source of form and the bearer. We will unfold the description of these types below.

Woodcut is one of the oldest methods of reproducing images. In Benjamin’s framework, it is placed alongside photography: both allow multiple copies from a single matrix. But can we really speak of their structural similarity? If not, “technological reproducibility” is too crude a category, concealing fundamentally different modes of generating form.

Take a carved woodblock. Every groove is a frozen movement of the hand: pressure, turn, acceleration and deceleration. The wood resists — and the carver feels this resistance, works around a knot, changes the angle. Form arises from a dialogue between gesture and material, and this dialogue is inscribed in the substrate. We call this the **corporeal trace**: the material imprint of a gesture, where form is a function of a specific movement of the hand.

Now take photography. The negative also stores something — the photographer’s decision: choice of moment, angle, composition. But the form on the negative is not the imprint of the photographer’s hand. It is the imprint of light reflected from the object. The photographer presses the button — and from that moment the form of the image is determined no longer by the gesture but by the physical interaction of light and material: light reflected from the scene passes through the lens and forms on the emulsion a pattern of exposure corresponding to the optical projection of the object. We call this the **selectional trace**: the informational result of a choice, where form-making occurs in a physical process unfolding under conditions set by the construction of the apparatus.

But what exactly is the difference? After all, the body is involved in both; a technical intermediary is present in both.

The difference lies in the source of form. The groove in wood is indexical relative to the author’s gesture: change the pressure — the depth changes; change the angle — the direction changes. The exposure pattern on the emulsion is indexical relative to the scene but not relative to the gesture: however the photographer holds the camera, the distribution of light and shadow on the negative is determined by the form of the object, not by the form of the hand’s movement. The negative stores an index of what was; the block stores an index of what was done.

Here a natural objection arises: what about camera settings? Focus, exposure, depth of field — these too are bodily manipulations that affect the result. True, but these are second-order indices: the settings determine what light reaches the emulsion, but what is recorded in the form on the negative is the light itself, not the gesture that established the conditions. Settings determine what light and how much of it reaches the emulsion; the groove directly stores the trajectory of the gesture. One is condition; the other is content.

²Index — a sign standing in a relation of physical contiguity with its object (Peirce, C.S. *Collected Papers*, vol. 2, §248). A fingerprint is an index of a hand; a photograph is an index of what was before the camera.

And here we must be careful with the notion of “directness.” Between gesture and form there always stand conditions that the gesture controls partially or not at all. The sharpening of the chisel, the shape of the handle, the density of the steel configure the hand’s movement and resist it. The construction of lenses, color-separation algorithms, optical schemes of the camera — all these are engineering decisions sealed in a black box. The choice of film, focus, exposure — the photographer’s decisions setting the parameters of the process. All of these are second-order indices: conditions that determine how form-making will proceed, but that do not generate form themselves. They are present in both types of media, and their presence does not erase the difference between them.

The difference lies in at what point the body exits the causal chain of form-making. In craft, the body is causally active throughout the entire process: every millimeter of the groove corresponds to a moment of muscular effort — change the trajectory, and the groove changes accordingly. The instrument modulates the gesture but does not replace it. In photography, the body exits the causal chain at the moment of pressing the button — from that point on, form is generated by a physico-chemical process that proceeds autonomously. The form on the negative is a function of luminous flux and exposure time, but not a function of muscular effort.

This difference manifests also in how each type of medium encounters the noise of the substrate — knots in wood, grain of emulsion, inhomogeneity of material. Noise is present in both cases, but in craft the body is in the causal chain when the noise arises: the carver encounters a knot here and now, adjusts the movement, works around or overcomes the obstacle — and this struggle is recorded in the form. In photography, the body has already exited the causal chain by the moment the grain settles on the emulsion. The specific grain on a specific area of the negative is generated not by the movement of a hand but by a reaction that proceeded without it.

Let us summarize the opposition. The photographer determines composition, angle, moment — and this is a fully valid creative act, but an act of selection: the photographer chooses which fragment of reality to fix, while the form of that fragment exists before and independently of the photographer. The carver does not choose form — the carver generates it: before the gesture, this groove did not exist in the world. The difference here is not between “real” and “unreal” creativity, but between what is recorded in the matrix: the trace of a gesture or the trace of light. ³⁴

³Our apparatus analyzes media in which form is essential to the work. However, there exist practices where the authorial act is performed not at the level of form-making. Text is an extreme case: meaning is not bound to the material embodiment of signs; the same text can be set in any typeface, written by hand, or spoken aloud without loss of identity. Conceptual art lays bare a different structure: Duchamp’s readymade is not the creation of form, nor its selection in the sense in which a photographer selects a moment. It is an act of re-scripture: the placement of a ready-made object in a new context, where the object itself functions as material — like paint in painting or marble in sculpture — and the “work” is the gesture of redefinition and the discourse it engenders. The creative act here is closer to literary than to visual art: it creates not form but utterance. In both cases, our apparatus poses an irrelevant question. It asks “how was the form generated?” — but for text, the identity of the work lies not in form but in meaning: a manuscript and a printout are different matrices but the same work. For the readymade, the apparatus would describe the industrial production of the urinal, not what Duchamp did: his authorial act occurs at the level of re-scripture, which the axes of genesis cannot reach. Our three axes work only where form constitutes the work. Where this condition is not met, a different analytical apparatus is required. A detailed analysis of such practices will be undertaken in subsequent works.

⁴Corporeal-contact indexicality: form arises from the direct physical interaction of the author’s body with the material (hand → chisel → substrate). Perceptual-distant indexicality: form arises from the automatic capture of external input, mediated by the apparatus (light → lens → emulsion). The distinction itself is descriptive — these are two different causal processes. Our theoretical choice consists

A material object is individuated through material evidence — traces that allow one to say: before me is not an instance of a model but a specific thing with a specific history. How to distinguish my smartphone from millions of smartphones of the same series? By a dead pixel, by a scratch on the case — by the aggregate of material features behind which stands the unique lived history of this particular unit.

The corporeal trace in the matrix is also material evidence, but primary: it individuates the artifact from the moment of birth. A groove in wood is not merely “form”; it is evidence that a specific hand made a specific movement at a specific moment. From the moment of its creation, the artifact is coupled with a singular event of someone’s life — and this coupling is inscribed in the substrate. The negative carries no such evidence: what is recorded in it is light, not gesture.

It is precisely this difference — the presence or absence of primary material evidence in the matrix — that determines whether the matrix can carry what we will call innate aura. What exactly we mean by innate aura — and how to distinguish aura from what merely resembles it — we will unfold in Part II.

1.2 Computational Mediation

So far we have considered media in which the causal chain between the source of form and the bearer is continuous: gesture deforms substrate, light exposes emulsion. However, there exists a class of media where a computational layer interposes between source and form — the causal chain does not vanish, but is transformed, passing from the physical register into the informational one. This is computational mediation — that is, the introduction of a computational layer between source and form. It is not a marginal case or a borderline anomaly — it is the second axis of analysis, orthogonal to the first.

Axis 1 asks: whose trace is in the matrix — that of gesture or of light? Axis 2 asks: does the causal chain from source to form pass through an act of computation — or is it continuous?

The computational layer can interpose in the causal chain of any type of genesis along Axis 1. Let us consider three cases.

Corporeal trace mediated by computation (digital painting, VR sculpting). Here the gesture exists — the hand moves, the stylus registers pressure and trajectory. But the stylus does not deform a substrate — it slides across the glass of a tablet, and the program interprets the data and renders the result. Between gesture and visible form stands an act of computation. A chisel deforms wood: the form of the groove is a function of the gesture modulated by the instrument. A stylus informs a program: the program builds an image on the basis of data about the gesture. The difference lies not in the precision of registration (digital registration can be more precise than mechanical) but in the fact that the trace is converted into data about the trace. Information about the gesture is preserved, but locked in code devoid of substrate.

Selectional trace mediated by computation (digital photography, CT, MRI). Here external input (light, X-ray radiation) is captured not by emulsion but by a sensor, and passes through computational processing before becoming form. Digital photography already at the capture stage applies algorithms: noise reduction, exposure stacking,

in considering this very distinction ontologically significant for understanding aura. How productive this choice is will be demonstrated by its capacity to resolve the paradoxes posed in the introduction. A separate question concerns media in which the causal chain passes through a computational layer (from CT to generative AI); their analysis is undertaken in section 1.2.

distortion correction. A CT scanner does not “photograph” a tumor — it measures the attenuation of X-rays at thousands of points and passes an array of numbers to an algorithm that constructs a visualization. Changing the visualization parameters radically alters the visible form: with one set of settings bones are visible, with another — soft tissue. The causal connection to the object is preserved — but the form on the screen is no longer a direct trace of the source but the result of computation.

Absence of a concrete source (generative AI). Here there is neither gesture nor capture of external input. A neural network reconstructs statistical patterns from training data. When a user requests “a painting in the style of Van Gogh,” the model reproduces not Van Gogh’s gestures but the appearance of the results of those gestures, averaged across thousands of samples. The corporeal trace was lost at the point of digitizing the paintings into the dataset: what entered were the visual results of gestures, not the gestures themselves. The result is a simulacrum of the index: a form that looks like the result of a corporeal gesture but is causally connected not to a specific object but to a statistical distribution across a multitude of objects. The index in the Peircean sense always points to a *this* (*haecceity*): this fire, this light, this gesture. Statistical averaging destroys *haecceity* — it produces a form whose referent (the mean of a distribution) does not exist in the world as a concrete being.⁵

Technically, generation constitutes navigation in a multidimensional latent space: “the style of Van Gogh” is a region in this space, a set of statistical coordinates with no physical referent. Style here is not the trace of a specific hand but a position in a mathematical abstraction built from a multitude of samples. The ontological rupture consists in the transition from history (the causal trajectory of a gesture) to cartography (the position of a vector in a probability space). Indexical media store the causal trace of a concrete, singular past — this light, this gesture. Generative media produce form from statistical patterns extracted from a multitude of past events, none of which is preserved as such.

All three cases share one thing: the causal chain between the source of form and its bearer passes through a computational layer. This does not annul the connection but transforms its character. The computational layer introduces its own logic (algorithms, parameters, models) into the process of form-making — and this logic becomes part of the causal chain.

The critical question for our analysis: does the computational layer sever the corporeal trace? We argue — yes. In craft, gesture and form are connected by continuous deformation of the substrate: change the trajectory of the hand — the groove changes. In digital painting, between gesture and form stands an act of interpretation: the program decides what the result looks like. This decision may be predictable and stable — but it remains an act of computation, not a deformation. A Procreate file stores data about the gesture, but not the gesture itself — just as a transcript stores data about speech, but not the voice.

⁵*Haecceity* (thisness) — a scholastic term (Duns Scotus) designating what makes a concrete thing this thing and not another. The index in the Peircean sense always appeals to *haecceity*: a photograph is an index of this object, not of objects in general. Cf. Heidegger’s *das Man* (*Sein und Zeit*, §27): the averaged mode of being really functions (people behave “as one does”) but does not exist as a concrete being — one cannot point a finger at *das Man*. The statistical distribution in a dataset occupies an analogous position: it really functions (generation works) but does not exist as a concrete object with which physical contiguity is possible. On the materiality of datasets as an infrastructural problem, see: Crawford, K. *Atlas of AI*. New Haven: Yale University Press, 2021; Parikka, J. *A Geology of Media*. Minneapolis: University of Minnesota Press, 2015.

1.3 The Binariness of the Distinction, the Irreversibility of the Transition

It might seem that the distinction between corporeal and selectional trace is gradual: that there exists a spectrum with hand carving at one pole and photography at the other, and between them a zone of indeterminacy. To show that this is not the case, let us examine borderline cases — media where the mediation of gesture is maximal but the body has not yet exited the causal chain.

The pantograph is a mechanical device that copies the hand's movement with a change of scale. The engraver guides a stylus along a template, and a connected lever reproduces the trajectory on the matrix. The gesture is mediated by the mechanism more heavily than in manual carving — but the hand remains in the causal chain throughout the entire process: change the pressure — the depth of the groove changes. The stencil is an analogous case: the hand is constrained by the form, its freedom is minimal, but pressure, speed, and distribution of paint are still determined by muscular effort. Both cases: the corporeal trace is present, though modulated by the instrument.

Now take the jigsaw — a tool for cutting curvilinear forms. Manual jigsaw: the hand sets the trajectory, speed, and pressure — the body is fully in the causal chain of form-making. Electric jigsaw: the motor takes over the reciprocating movement of the blade, but the trajectory is still guided by the hand. Mediation has increased, part of the effort is delegated to the mechanism — but the body remains in the causal chain. CNC cutter: the trajectory is set by a file, the machine cuts autonomously. The body has exited the chain.

The transition from manual to electric jigsaw is gradual: more mediation, less muscular effort. The transition from electric jigsaw to CNC is structural: the body ceases to determine form. The gradualness of mediation does not blur the boundary: between the electric jigsaw and the CNC cutter there is no intermediate step — there is a point at which the hand ceases to guide.

The criterion is simple and binary: is the author's body in the causal chain of form-making at the moment form arises — or has it already exited? Pantograph and stencil — yes, the body is in the chain. Camera and CNC — no, the body has exited. There is no intermediate state: one cannot “half” be in a causal chain. The degree of mediation varies (from bare hand to pantograph), but the fact of the body's presence in the chain is binary.

From the binarity of the distinction follows the irreversibility of the transition. Imagine 3D-scanning a carved woodblock — a matrix for woodcut, bearing the corporeal trace of the craftsman. The scanner creates a precise digital model, the printer produces a copy. The form is transferred — but the genesis of the form is lost. The form of the original causally traces back to the movement of the hand; the form of the copy traces back to the work of the scanner. The carver's gesture generates form: hand movement → chisel trajectory → groove in wood. The scanner follows an already existing form: form of the block → laser trajectory → data → form of the copy. In the first case, form is a consequence of gesture; in the second, the scanner's movements are a consequence of form.

The significance of this distinction lies in the relation of form to time. In craft, form unfolds in the time of work: each groove corresponds to a segment of time; form stores time as its internal structure. In scanning, form already exists; the time of scanning is not recorded in the form of the copy — the copy looks identical regardless of whether

scanning took a minute or an hour.

The transition from corporeal trace to non-corporeal genesis is possible (digitization), but the reverse is not: a duplicate of a photographic negative does not acquire a corporeal trace, because there was none in the source. Copying here transfers form that originally contained no corporeal trace: the form of the negative arose from light, and the form of the duplicate — likewise. The connection is not broken, because in the source there was no trace that could be lost.

This allows us to specify where exactly the ontological rupture occurs. It might seem that the rupture is a property of copying as such. But the examples presented show otherwise. Copying within a type does not produce a rupture: the duplicate remains in the same ontological regime as the original. The rupture occurs at the inter-type transition — where a matrix that stored the corporeal trace is replaced by a matrix that does not. It is not about copying but about genesis.

1.4 The Genesis Map

The distinctions introduced in the preceding sections — source of form (Axis 1) and computational mediation (Axis 2) — are not alternatives to each other. They are two independent axes defining a space of combinations. Each medium occupies a determinate position along both axes simultaneously.

Axis 1 asks: what is the source of form in the matrix? Corporeal trace — the author’s gesture deforms the substrate and generates a form that did not exist before this gesture. Selectional trace — the apparatus captures external input (light, radiation); form is determined by the object, not the gesture. Statistical reconstruction — form is generated not from a concrete source but by computation across an array of data.

Axis 2 asks: does the causal chain from source to form pass through a computational layer? Continuous chain — gesture deforms substrate or light exposes emulsion without an intermediate act of computation. Computationally mediated chain — between source and form stands an act of interpretation, rendering, or reconstruction.

Their intersection yields the genesis map:

	Continuous chain	Computationally mediated
Corporeal trace	Woodcut, lithography, painting	Digital painting, VR sculpting
Selectional trace	Analog photography, analog cinema	Digital photography, CT, MRI
Statistical reconstruction	—	Generative AI

The upper-left cell (corporeal trace + continuous chain) is the only position where the author’s gesture is continuously connected to the form in the substrate. It is the only position where innate aura is possible — a concept we will unfold in Part II.

The right column unites media in which the causal chain passes through a computational layer. Within it, differences along Axis 1 persist: digital painting stores data about the specific gesture of a specific author; digital photography stores data about specific light from a specific scene; generative AI stores a statistical distribution devoid of a specific referent. The computational layer does not equalize these media — but it transforms the character of the connection between source and form in all three cases.

The lower-left cell (statistical reconstruction + continuous chain) is empty — this is not accidental. Statistical reconstruction by definition requires computation; a continuous causal chain from a statistical distribution to form is impossible.

The genesis map describes how form arose. But it says nothing about how the object exists after its creation — on what bearer, in what regime of identity. For this, a third axis of analysis is required, which we will introduce in Part II.

2 Part II. Aura and Affect

2.1 The Bearer: Consubstantiality, Ubiquity, Ephemerality

The genesis map describes how form arose. But two objects with identical genesis can exist in radically different regimes. Analog photography and digital photography occupy adjacent positions along Axes 1 and 2 — both capture a selectional trace, differing only in the presence of a computational layer. Yet the analog print yellows, creases, stores traces of its owners — while the digital file remains identical to itself with each copy. The difference lies not in the genesis of form but in the mode of being of the bearer. This is the third axis of analysis.

We distinguish three modes of being of the bearer.

Consubstantiality. In physical media, the bearer is the body of the work: paint is the body of the painting, emulsion is the body of the photograph. You cannot “transfer” the image to different paper without creating a new copy. Bearer and work are inseparable — they are one and the same physical body.⁶ Consubstantiality is a property of all physical media regardless of genesis: a woodcut print (corporeal trace + continuous chain) is consubstantial with its bearer to the same degree as a photographic print (selectional trace + continuous chain) or a printout of a Procreate file (corporeal trace + computationally mediated chain). A consubstantial object co-exists with events and is capable of being affected by them: each event can leave a trace, and these traces accumulate without destroying the identity of the object.

Ubiquity. In digital media, the bearer is detached from the work: a file can be transferred to a different disk without loss of identity.⁷ The identity of a digital object is determined by its informational structure, not by its material body. Replacing the body is a routine operation that raises no doubt whatsoever: a file copied to a new disk is the same file. This is not a paradox but a norm. But precisely for this reason, a digital object cannot be “affected” by an event: any change, even of a single bit, produces not a “trace” but a different object.⁸ The bearer here is not a body but a temporary vessel.

⁶We use the term “consubstantiality” in a strictly materialist sense: paint is the body of the painting, rather than “carrying” it as a bearer carries information. The theological parallel (*homoousios*, the consubstantiality of Father and Son in the Nicene Creed) is not accidental here, but is inverted: in theology, consubstantiality asserts the identity of immaterial natures; in our analysis, the inseparability of material ones.

⁷On the constitution of the digital object through its informational structure, see: Hui, Y. *On the Existence of Digital Objects*. Minneapolis: University of Minnesota Press, 2016. Hui distinguishes three levels of existence of the digital object: material (electrical signals on the bearer), logical (binary code), and object (the visible result of interpretation). The identity of the object is determined not by the material substrate (which is replaceable) but by the logical structure: as soon as the structure is violated, the verification system registers a different object. The adoption of informational identity as the criterion of identity is our theoretical choice. Alternative approaches (functional equivalence, version history) could lead to different conclusions. However, we consider informational identity the most adequate criterion precisely because it reflects the way in which digital systems themselves establish the identity of their objects.

⁸The mathematical foundation of the discrete identity of the digital object is the avalanche effect of cryptographic hash functions: a change of a single bit of input data leads to a radical (on average

Ephemerality. In event-based media, no stable bearer exists at all. A theatrical performance, a concert, a happening — the work arises as a temporary configuration of elements (actors, stage, audience) and dissolves after the event.⁹ Here there is neither a consubstantial body capable of aging nor an informational structure capable of being copied. There is only the moment.

The three modes of the bearer are orthogonal to the two axes of genesis. An object at any position along Axes 1 and 2 can exist in any of the three modes — or transition from one to another: a digital file printed on paper acquires consubstantiality; a performance recorded on film passes from ephemerality to consubstantiality (and recorded on a digital camera — to ubiquity). The genesis of form does not change in such transitions — what changes is the mode of being of the bearer.

2.2 Three Modalities of Aura

The intersection of the three axes allows us to refine the concept of aura — a concept that in Benjamin remains intuitive and blurred. We distinguish three modalities of aura, each determined by its own combination of axes.

Innate aura belongs to the object from the moment of its creation. It requires the simultaneous fulfillment of two conditions: corporeal trace along Axis 1 (the author’s gesture generates the form) and a continuous causal chain along Axis 2 (no computational layer between gesture and form). Only under this combination is the gesture continuously connected to the substrate — the groove in wood stores the trajectory of the hand, the paint layer stores the movement of the brush.¹⁰ If along Axis 1 the source of form is

50%) change in the checksum. NIST (National Institute of Standards and Technology) is the American national standards body, performing in the digital world a role analogous to the keeping of the standards of the meter and kilogram in the physical world. It was NIST that standardized the SHA (Secure Hash Algorithm) family, which makes it possible to mathematically verify the integrity of a file. Collision resistance means that it is impossible to alter even a single bit of a file such that the checksum remains unchanged (see: FIPS PUB 180-4, Secure Hash Standard, NIST, 2015). This is not a metaphor but a theorem: for a digital verification system, a file with a changed bit is not “the same file with a defect” but a different object. A reader familiar with Heidegger’s *Ge-stell* (enframing) may see in juridical provenance (blockchain, git) an example of how uniqueness is converted into a calculable resource. We share this intuition but hold that descriptive fixation must precede critical evaluation.

⁹One might be tempted to view a score or a dramatic text as the “matrix” of a performance. We reject this assimilation. A matrix (in our definition) presupposes the physical or optical transfer of form, whereas a score presupposes interpretation. The distinction is structural: two prints from the same block differ microscopically while remaining within a single form. Two performances of the same play can differ macroscopically — tempo, intonation, staging. A score is an instruction for the generation of an event, not a matrix for its reproduction. In theater, each act is a new generation, not a copy.

¹⁰A reader familiar with the later Heidegger will recognize in the structure of innate aura echoes of *Ereignis* — “event of appropriation” (*Beiträge zur Philosophie*, 1936–38). We deliberately avoid direct use of this terminology so as not to enter exegetical disputes, but consider it necessary to indicate the structural parallel. *Ereignis* in Heidegger is the moment of mutual “appropriation” of being and the human, where both are disclosed through and for each other. In our analysis, the form of a craft object arises in an isomorphic manner: not from a detached choice of the subject (as in photography), but from the event of the encounter between gesture and material. A groove in wood stores simultaneously the pressure of the chisel and the resistance of the wood — one is impossible without the other. The gesture “appropriates” the material, but the material also “appropriates” the gesture, constraining and directing it. Form is the trace of this mutual appropriation, not of a one-sided causation. The difference between our analysis and Heidegger’s *Ereignis*: in Heidegger, what is at stake is the disclosure of being as such; in our case, the concrete event of the genesis of a concrete thing. We work at the ontic level (this groove, this gesture) but discover in it a structure isomorphic to the one Heidegger described at the ontological level.

not gesture (selectional trace, statistical reconstruction), there is no innate aura: what is recorded in the matrix is light or statistics, not corporeal effort. If along Axis 2 the causal chain passes through a computational layer (digital painting), there is likewise no innate aura: the gesture has been converted into data about the gesture, and data do not deform a substrate. A Procreate file stores information about the specific movements of a specific hand — but stores it as code, not as groove.

Accrued aura is accumulated by the object through its own lived history — fading, scratches, owner’s annotations. It is the patina of lived history: evidence that the object has lived through time in the world. Accrued aura is determined solely by Axis 3: it is possible where the bearer is consubstantial with the work. The genesis of form (Axes 1 and 2) is irrelevant: a photographic print (selectional trace + continuous chain) accumulates accrued aura to the same degree as a woodcut print (corporeal trace + continuous chain) or a printout of a digital drawing (corporeal trace + computationally mediated chain + consubstantiality after printing). A consubstantial body ages — and in this aging, history is inscribed.

Aura of co-presence arises in event-based media — where the bearer is ephemeral. It is determined by Axis 3 (ephemerality), and Axes 1 and 2 are inapplicable to it: in theater, at a concert, in a performance there is no matrix, no fixation of form in a substrate — and therefore the question of the source of form and computational mediation has no meaning. The aura of co-presence is the aura of a shared moment: it is maximally intense during the event but can neither accumulate (there is no body) nor be transmitted (there is no matrix). After the curtain falls, the configuration dissolves, and the aura disappears — not because something destroyed it, but because it exists only in the duration of the act.

The three modalities of aura are not three gradations of a single phenomenon but three different mechanisms determined by different combinations of axes. They can coexist in a single object: a woodcut print possesses both innate aura (the corporeal trace of the craftsman is transmitted through the chain block → ink → paper) and accrued aura (the print ages, accumulates patina of lived history). They can be present separately: a photographic print possesses accrued aura but not innate aura. All three can be absent: a digital file that has never been printed possesses no modality of aura whatsoever.

But there exists yet another phenomenon easily confused with aura — and it is precisely this confusion that lies at the root of Benjamin’s paradoxes.

2.3 Quasi-Auratic Affect

Beyond aura, which is bound to the bearer, there exists a different phenomenon — **quasi-auratic affect**: an intense experience connected not to this copy but to what is depicted or represented. We deliberately do not call it “aura,” although subjectively it is experienced in a similar way — as “attraction,” “magic,” “presence.” It is precisely this similarity of experience amid a difference of source that generates Benjamin’s paradoxes.¹¹

¹¹Our distinction between aura and quasi-auratic affect resonates with Barthes’s opposition of *studium* and *punctum* in *Camera Lucida* (1980). *Studium* in Barthes is the cultural interest in a photograph: I understand its context, read its meaning, it “informs” or “moves” me in a general sense. *Studium* belongs to the image and does not depend on the specific copy — any reproduction of the photograph carries the same *studium*. *Punctum* is the “prick,” the detail that “wounds” me personally, knocking me out of cultural reading. Barthes emphasizes that *punctum* is not subject to the photographer’s intention — it is accidental and subjective. Our quasi-auratic affect is close to *studium* in its cultural dimension

We distinguish two modalities of affect. **Personal affect** is the emotional bond of the subject with what is depicted: the photograph shows a loved one, and the affect is stable from original to any copy. This is not a property of the copy — it is a property of the image. **Cultural affect** is the significance of the image in collective consciousness: Marilyn Monroe as an icon of the era, the *Mona Lisa* as a symbol of art. This affect too belongs to the image and is transmitted to all copies without loss.

Affect is easily confused with aura because subjectively both are experienced as “something special” in the object. But their sources differ. Aura is a property of this body: it answers the question “is this the object that was there? is this the trace of that hand?” Affect is a property of this image: it answers the question “who/what is depicted? what does it mean?” An anonymous medieval fragment in a museum storeroom may possess powerful accrued aura (it is eight hundred years old, dozens of hands have touched it) with minimal affect — we do not know who is depicted on it, and it does not enter our cultural vocabulary. A cult meme possesses powerful cultural affect with a complete absence of aura — it has no “body” that could be scratched.

The two phenomena can coexist. A copy of *Being and Time* with Hannah Arendt’s marginalia carries both the affect of content (available in any edition) and accrued aura (her handwriting in the margins, the traces of her reading, the lived history of this particular copy). The experience of touching a thing that has physically passed through the hands of a significant person is irreducible to the experience of its content. One can read the same text in another edition (affect) and simultaneously value the specific copy bearing the traces of another person’s engagement with it (accrued aura). This is not a matter of “more or less” emotion — these are different existential modalities, irreducible to one another.

Why did Benjamin conflate them? Because in his time, affect and aura always came in one package. All media were physical; every bearer of an image could accumulate patina of lived history. Separating the affect of the image from the aura of the copy was empirically impossible — only the appearance of digital objects, carrying powerful affect at zero aura, made this distinction visible and necessary. This conflation is the source of the difficulties to which we will return in Part III.

2.4 The Digital Object: From Consubstantiality to Ubiquity

The digital file represents a special case — one that Benjamin could not have foreseen, but to which his intuitions are paradoxically applicable.

The digital object possesses no modality of aura. Innate aura is impossible: even digital painting, which stores data about the gesture, passes through a computational layer (Axis 2 blocks). Accrued aura is impossible: the digital object is ubiquitous, it has no consubstantial body (Axis 3 blocks). The aura of co-presence is inapplicable: a digital object is not an event.

(the image of Marilyn as an icon of the era) and to *punctum* in its personal dimension (the photograph shows my loved one). Both modalities of affect belong to the image and are stable across any copy. However, in *Camera Lucida* Barthes moves toward something else — toward *ça-a-été* (“that-has-been”): the ontological assertion that this light was reflected from this body. Here Barthes describes the indexical connection of the image with the referent — what in our terminology is a property of the selectional trace (the causal connection light → emulsion), not a property of the specific copy. Barthes registers “that-has-been” as a physical connection but does not distinguish it from the accrued aura of the bearer or from the affect of the image. Our apparatus systematizes what in Barthes remains phenomenological description, and extends the analysis to media that Barthes did not consider.

Let us examine in detail why accrued aura is unavailable to the digital object.

A physical object is its atoms. Its identity is determined by material continuity: these are the same atoms, even if rearranged. A painting may lose a fragment of the paint layer, develop craquelure, yellow — but it remains the same painting in an altered state. Its being is a continuum admitting of degrees. A physical object co-exists with events and is capable of being affected by them: each event can leave a trace, and these traces accumulate without destroying the object’s identity. It is precisely this capacity — to be affected and to endure — that makes accrued aura possible.

A digital object is its informational structure. Its identity is determined by exact correspondence: a file with an altered checksum (hash) is already a different structure. There is no “same object in an altered state” — there is either the same object or a different one. The being of a digital object is discrete: it either is or it is not. A digital object cannot be “affected” by an event — any change, even of a single bit, produces not a “trace” but a different object.

How this works technically. Matthew Kirschenbaum, in *Mechanisms: New Media and the Forensic Imagination* (2008), proposed a distinction that clarifies the structure of the digital object.¹² Forensic materiality consists of physical traces on a specific bearer: transistor states, magnetic domains, voltage levels on memory cells. Formal materiality is the logical structure abstracted from the bearer through copying protocols and error correction. For physical objects, this distinction is redundant: a painting does not need to be separated into levels of materiality, because there is nothing to separate — substrate and work are inseparable. This inseparability is precisely consubstantiality in our sense. In a digital object, by contrast, the two levels are decoupled — and it is precisely this decoupling that makes ubiquity possible: formal materiality (the bit structure) can be transferred to another bearer, leaving the forensic materiality of the old bearer behind.

At the same time, at the physical level, a digital object continuously degrades. A bit on an SSD is an electrical charge in a memory cell. This charge gradually leaks (a phenomenon called leakage): without intervention, it will eventually drop below the threshold at which the system distinguishes “0” from “1.” To prevent this, the infrastructure periodically rewrites the data, restoring the charge. Error-correction algorithms (ECC) detect and correct random failures; integrity-verification protocols confirm that the structure is intact. The identity of a digital file is not a given but the result of continuous technical maintenance.

A physical object, by contrast, ages passively — entropy works toward the patina of lived history. A digital object is maintained actively: the infrastructure continuously expends energy to cut off entropic noise and assert the binary structure. What appears to be the “immortality” of a digital file is in fact a technically maintained abstraction that functions only as long as the infrastructure sustains it. Paradoxically: what appears as ubiquity is, at the level of infrastructure, a constant migration between specific disks on specific servers. A digital object does not “float in the cloud” — it is continuously copied

¹²The distinction between forensic materiality (physical traces on a specific bearer) and formal materiality (logical structure abstracted from the bearer) is borrowed from: Kirschenbaum, M. *Mechanisms: New Media and the Forensic Imagination*. Cambridge, MA: MIT Press, 2008. Kirschenbaum convincingly demonstrated that “digital immateriality” does not exist: every file is a physical change of voltage or magnetic domains on a specific sector of a specific disk. Our thesis does not contradict this but refines it: the formal materiality of a digital object can be transferred to another bearer without loss of identity, whereas the formal and forensic materiality of a physical object are inseparable. It is precisely this separability that underlies the ubiquity of the digital object and its incapacity to accumulate accrued aura.

between physical bearers, each located in a specific data center and consuming specific watts.

But infrastructure is not omnipotent. When error correction fails, data is corrupted — a phenomenon known as bit rot. It might seem that this is the digital analog of physical aging: the object is “affected” by an event, as a painting is affected by time. But the analogy does not hold.

The patina of lived history is the accumulation of history while preserving identity. A painting yellows but remains the same painting. Bit rot is a rupture of identity, the emergence of a different object. An unreadable file is akin not to an aged painting but to a jar of ash from a burned canvas: the material substrate remains, but the informational structure is irreversibly destroyed.

Even in formats “tolerant” of data damage (.bmp, .txt), a changed bit does not produce a “patina of lived history.” Software interprets damaged data as other valid data: a changed bit in the byte of the letter “A” turns it into the character “Á” — for the text editor, this is not a “damaged A” but a different letter. A changed bit in a pixel of a photograph yields a different color — the software faithfully displays it without “knowing” that the color should have been otherwise. Stricter formats (.zip, .exe, encrypted containers) react more radically: their interpreters check the integrity of the structure and refuse to read the file at the slightest discrepancy. In both cases, the result is not “aging” but either the replacement of one object by another or the loss of the ability to be read by the interpreter.¹³

Glitch lays bare yet another feature of the digital object: we see not the damaged file itself but the result of its interpretation by a program. This is not an exception — it is the norm. We never see a digital object directly. Between the bits on the bearer and the image on the screen stands rendering; between the bits and the text stands decoding. The digital object is always mediated by an act of computational interpretation. We do not claim that physical perception is “direct” in an absolute sense — the phenomenological tradition has demonstrated the mediatedness of any perceptual act. However, the digital object adds to the perceptual mediation common to all objects yet another layer — computational interpretation. This is second-order mediation: to appear to the subject even as a phenomenon, the digital object must first be computed by a program, and only then perceived by consciousness.

2.5 Provenance and Attempts at Compensation

The digital object carries no traces of its history within itself — we have shown this. But from this a practical question follows: can this absence be compensated by creating traces where they do not arise naturally? It is precisely this task that blockchain and NFT technologies attempt to solve.

¹³An objection may arise: does glitch aesthetics not demonstrate that digital objects are in fact capable of “aging” or bearing traces of impact? Glitch confirms our distinction rather than refuting it. When a viewer recognizes the original image in a damaged file, quasi-auratic affect is triggered (the level of the image). However, at the level of informational structure, what we have before us is a different object. A glitch is not a “digital patina of lived history” accumulated over time but generation through destruction: an error or deliberate intervention creates a new object whose visuality inherits remnants of the structure of the old one. This is not aging (preservation of identity in change) but mutation (rupture of identity for the sake of the birth of a new image). An analogous logic applies to lossy compression formats: each re-saving of a JPEG produces — by the criterion of informational identity — a different object, even though the codec is designed so that the differences remain below the threshold of human perception.

In the world of physical objects, juridical and material provenance are intertwined: a painting that has changed owners bears traces of storage, restorations, accidental damage. Archival documents here are witnesses that merely confirm what can be discovered in the object itself through analysis of materials. Provenance is inscribed in the body of the thing — and verified through it.

In the world of digital objects, material provenance is impossible: the file is transmitted without alteration; the history of ownership leaves no trace in the file itself. Blockchain attempts to compensate for this absence by establishing a provenance of a different type — juridical. A blockchain is a distributed ledger: a chain of cryptographically linked records stored simultaneously on a multitude of independent computers, making it practically unforgeable. An NFT token is a record in this ledger, fixing who and when declared ownership of a given file. But this is provenance not in the object but alongside it. The token is not identical to the work whose authenticity it certifies — it is external to it, as a passport is external to a person. Any token can be attached to any file; the original file can exist without a token. In the world of physical objects, provenance is discovered in the body of the thing — as fingerprints belong to the person. In the world of digital objects, provenance is assigned from outside.¹⁴

Version-control systems (git) demonstrate the same structure: the history of a digital object is stored not in it but alongside it — in an external verifying instance. Delete the repository — and the object “forgets” its past. A physical object cannot “forget” its scratches.¹⁵

The conclusion: a digital object can possess only quasi-auratic affect (personal and cultural). Aura — innate, accrued, or of co-presence — is unavailable to it. Innate — because the computational layer severs the corporeal trace (Axis 2). Accrued — because the object has no consubstantial body (Axis 3). Of co-presence — because a digital object is not an event.

3 Part III. Resolving the Paradoxes

We can now return to the paradoxes posed in the introduction — and resolve them.

3.1 The Daguerreotype Paradox: Affect and Aura

Benjamin writes: “In the cult of remembrance of dead or absent loved ones, the cult value of the image finds its last refuge. In the fleeting expression of a human face, the

¹⁴A noteworthy attempt to radicalize the NFT: uploading not finished images (which are copies of the working file) but source files — files that preserve the history of creation. In such formats (for example, Procreate), a speed-paint replay is available — a recording of the entire working process, stroke by stroke. The blockchain would fix the creation date coinciding with the date of the first stroke, and a researcher could study the working process just as art historians study underpaintings and pentimenti with the help of X-rays. This is an attempt to create traces where they do not arise naturally — and it merits separate analysis beyond the scope of the present work.

¹⁵The present apparatus is a regional ontology of media: it investigates the modes of being of reproducible artifacts, working with ontic material (this groove, this negative, this file) to construct ontological distinctions (axes of genesis, modalities of aura). Heidegger’s question of the “thinging of the thing” (*Das Ding*, 1950) — the question of the being of the thing as such, of its capacity to “gather” a world around it — belongs to a different level, with which our analysis is compatible but which it is not obliged to address. We analyze not the being of things but the genesis of artifacts — objects created for the storage and transmission of form.

aura beckons from early photographs for the last time. This is what gives them their melancholy and incomparable beauty.” He sees in this beauty the “last breath” of a dying aura. But what exactly is he describing?

“Melancholy beauty” arises not from the material condition of the daguerreotype (its age, patina of lived history, scratches) but from who is depicted on it. This is the cult of remembrance — the emotional bond with the face of a loved one. In our terms, Benjamin is describing personal affect — and calling it “aura” because he lacks an instrument for distinguishing them.

Personal affect is attached to the image, not to the copy: it is stable across any reproduction of the photograph. This is not a property of the daguerreotype as an object — it is a property of the depicted face. The “last breath” of aura that Benjamin perceives is in truth neither last nor a breath: it is affect, which does not die but simply migrates from the physical portrait to any of its bearers.

At the same time, the daguerreotype as a physical object does indeed possess accrued aura — it is consubstantial with its bearer, has lived for over a century, has faded, been scratched, passed from hand to hand. But Benjamin does not speak of this. He describes not the material history of the thing but the emotional bond with the depicted — and conflates two phenomena that our apparatus distinguishes.

3.2 The Reproduction Paradox: Amplification Through Contrast

Benjamin claims that reproductions “pry the reproduced object from the sphere of tradition.” But by his own definition, aura is “the here and now of the work of art — its unique existence in the place where it is.” A reproduction is a different physical object in a different place. It is unclear by what mechanism a photograph of the *Mona Lisa* on a postcard in Berlin could affect the canvas in Paris — take from it its “here,” its history, its material presence. In our terms, the reason for this difficulty is clear: a reproduction transfers neither innate aura (da Vinci’s corporeal trace remains with the canvas) nor accrued aura (the original continues to age, accumulating patina of lived history). A reproduction transfers only the image — and with it, affect.

Moreover, reproductions amplify the quasi-auratic affect of the image — and thereby make the experience of encountering the original more intense. Millions of posters of the *Mona Lisa* disseminate cultural affect: everyone knows this image, everyone has a share in it. But this is precisely why the pilgrimage to the singular point where the corporeal trace is embodied becomes meaningful. The contrast between the ubiquity of copies (carrying only affect) and the singularity of the original (carrying aura) does not destroy aura — it makes it perceptible.

3.3 The Star Paradox: Aura and Affect

Benjamin himself senses that the “cult of the star” is not aura: he calls it “the phony spell of a commodity,” marking it as surrogate, substitution. But he can describe what exactly substitutes for aura only negatively — it is “not real,” “phony.” He has no positive concept for this phenomenon. In our terms, this distinction receives a name: the “cult of the star” is quasi-auratic affect, displaced from the bearer to the image. Cultural affect: the image of Marilyn Monroe becomes an icon of the era, a symbol functioning in collective consciousness. Personal affect: the viewer falls in love with the screen image,

and this bond is stable across all copies of the film. Aura was never present in cinema — film stock originally occupies the position “selectional trace + continuous chain” along the axes of genesis, and the consubstantiality of the filmstrip gives it only accrued aura (scratches, fading). The affect of the image arose and functions independently of the bearer. Benjamin grasped the distinction — we propose its mechanism.

3.4 Hand and Eye: Generation and Selection

Benjamin observes that in photography “the hand was for the first time relieved of the most important artistic tasks, which henceforth devolved upon the eye alone as it peered into the lens.” For him, this is part of a general acceleration: the hand now merely presses a button, and the image is captured faster than the hand could draw it. He sees in this a symptom of the age of technological reproductibility — but does not ask what exactly changes when the hand ceases to generate form. The transition from hand to eye is registered as a historical fact, but its ontological content remains unarticulated.

Yet this is not simply “relief” — it is a change in the source of form. In craft, the hand is the generator: before its gesture, the groove did not exist in the world. In photography, the eye is the selector: the form of the scene exists before and independently of the photographer; the photographer merely chooses which fragment to capture. The negative stores an index of what was (the scene); the block stores an index of what was done (the gesture). Benjamin described the symptom (“the hand was relieved”); we propose the mechanism — the transition from corporeal trace to non-corporeal genesis, from form-as-trace to form-as-capture.

3.5 Theater and Cinema: Modes of Being

Benjamin describes in detail what the actor loses before the camera: the actor is deprived of contact with the audience, the performance is fragmented into pieces that the editor reassembles in arbitrary order — the actor “performs not for an audience but for a mechanical contrivance.” This is why Benjamin considers theater auratic and cinema aura-less: for him, aura is bound to the co-presence of the living performer and the viewer. But having registered this opposition, he does not ask what happens to the aura of theater after the performance — outside the moment of co-presence. The camera is described as the cause of loss, whereas the loss may be a property of the medium itself.

Theater is an ephemeral medium (Axis 3). Its aura is the aura of co-presence, of a shared moment. It is maximally intense during the performance but cannot accumulate materially: after the curtain falls, the configuration (actors, stage, audience) dissolves. The camera does not “kill” this aura — the aura disappears by the nature of the medium, regardless of whether it is recorded. Even without a camera, it would have disappeared after the curtain. Cinema (selectional trace + continuous chain, consubstantial bearer) lacks innate aura, but the physical filmstrip can accumulate accrued aura — scratches, fading, the history of screenings. The difference between theater and cinema is not in the “presence or absence” of aura but in the position along the three axes and the modalities of aura available to each position.

3.6 The Masses and Distraction: Two Modes of Perception

Benjamin elaborates at length on the opposition between two modes of perception. Concentration — “collectedness,” *Sammlung* — is the viewer’s immersion in the work: one enters the painting, loses oneself in it. Entertainment — *Zerstreuung*, literally “scattering” — is the reverse movement: the masses absorb the work into themselves, consuming it “in a state of distraction.” Cinema for Benjamin is the paradigmatic medium of distracted perception: the rapid succession of frames does not allow the viewer to pause; images “strike” the viewer rather than awaiting contemplation. Benjamin registers the correlation — new media engender a new mode of perception — but describes it as degradation, without asking why different media require different modes.

Our apparatus offers an answer. Concentration is required to read the corporeal trace (corporeal trace + continuous chain): to perceive the craftsman’s gesture in the groove, one must pause and look closely — the trace does not announce itself; it must be sought. Distraction suffices for the reception of affect: since in media with non-corporeal genesis there is no “trace of the hand,” there is nothing to “read” — what remains is the shock-affect of the image, which can be consumed “in passing.” The masses do not “destroy” aura — they transition to media where aura was never present, and receive affect in its place. This is not degradation but a shift in the type of perception corresponding to a shift in position along the axes of genesis.

3.7 Valéry’s Prophecy: Ubiquity

Benjamin cites Valéry, who titled his text *La conquête de l’ubiquité* (“The Conquest of Ubiquity,” 1928): images will be delivered to us “like water, gas, and electricity” — instantly, on demand. In 1935, this was a premonition; today it is a description of reality. But neither Valéry nor Benjamin asked what must structurally change in the object for ubiquity to become possible. A physical photograph and a filmstrip are consubstantial with their bearer — to “deliver” them, one must physically move the body. It was precisely consubstantiality that held these media back from the full realization of Valéry’s prophecy: innate aura was already absent from them, but the attachment to a body persisted — and with it, the possibility of accrued aura. The digital file severs this attachment: it is ubiquitous, devoid of “its own” body, capable of being delivered instantly to any point in the world. The digital completes the process begun by photography: it strips the object not only of innate but also of accrued aura, leaving only affect.

Conclusion

Our apparatus takes Benjamin’s intuitions seriously — and for precisely this reason discovers in them unrealized potential. Benjamin saw the essential: that the “here and now” of the work is an ontological characteristic, not a metaphor; that technological reproduction transforms the mode of being of the work; that different media engender different modes of perception. Yet he operated with a single concept where three axes and four distinctions are necessary — and this led to generalizations that conceal structural differences. We have proposed a mechanism where Benjamin registered a symptom.

In place of a list of “types,” we propose a space of coordinates. Three independent axes — source of form, computational mediation, mode of being of the bearer — define

the position of each medium. Three modalities of aura — innate, accrued, co-presence — are determined by different combinations of axes. Quasi-auratic affect is a fourth phenomenon, orthogonal to all three modalities of aura. “Monsters” and borderline cases disappear: every medium is not an anomaly but a point in the space.

This space registers not a hierarchy but a structural trade-off. A physical object provides depth — the capacity to accumulate patina of lived history, to bear the traces of time, to be a witness to history. The price is fragility: a burned original is irreplaceable. A digital object provides resilience — ubiquity, the protection of the image from material catastrophe. The price is the absence of depth: it has no “place” and no capacity to age. The mortality of the physical object is the condition of possibility for the patina of lived history; the immortality of the digital is the condition of possibility for ubiquity.

Our apparatus is clear at the poles, but it is precisely in the hybrid zones that it is subjected to productive doubt. NFTs attached to physical objects; bio-art in which bacterial cultures serve as bearers of genetic information — all these are cases requiring precise mapping along the three axes. Beyond the scope of this work remains the political economy of aura — an analysis of how artificial scarcity and “auraticity” function as instruments of power and market value. Our task is to construct an ontological foundation that allows one to distinguish the being of the object from the institutional constructions around it. The analysis of hybrids and political economy are the next steps, for which the proposed apparatus serves as a necessary instrument, not the final word.

Finally, the understanding that digital objects cannot age raises the question of archival responsibility. A physical object leaves ruins — fragments, traces, patina of lived history. A digital object vanishes into null: the discreteness of its identity does not admit gradual destruction — the object is either intact or it is not, with no intermediate state of ruin. If the conditions of reproduction are lost (software, formats, emulators), a culture leaves no ruins — it simply ceases to be accessible. We are dealing with a civilization that, for the first time in history, risks leaving no ruins.¹⁶

¹⁶Cf. Georg Simmel’s essay “The Ruin” (*Die Ruine*, 1911), where the ruin is described as an equilibrium between the ascending will of human design and the descending force of nature: the building strives upward, gravity and wind pull it down, and the ruin is the point where these forces come into balance. The digital object leaves no ruins not because there is no destructive force (charge entropy is real) but because its discrete identity does not admit graduality: error correction either succeeds — and the object is intact — or it does not — and the object is destroyed. There can be no intermediate state of ruin. An analysis of what the impossibility of ruination means for culture is a promising task for future works.