1. Three oppositions

1.1 Texts vs. images

Paragraphs overlap with images in form of layers that fill the visual space and gradually pile up on the previous layers. This struggle produces a spatial stacking that gradually sinks an original substrate that, without ever having given itself to the gaze, is supposed there, behind the texts, behind the images. Further and further away, this primary substrate seems to escape us like the true face of an elusive reality.

Reality thus becomes unattainable, and in this way, it reminds us of the Kantian thing-in-itself, except that the Kantian thing is impenetrable, because consciousness is shaped by the perceptive experience of the subject, who remains then being unable to grasp the reality that escapes him. However, in *L’Inter-code*, the real world is vanished because of the entities that encode the reality (text and image) and mutually encode each other until they take the place in the real world. Man, thus far from reality, remains blind: despite all those powerful technologies, he is unable to direct his destiny in the direction of his happiness.

For Vilém Flusser, the technical image (photography, video), does not codify the real world, but it codifies other codes, namely, the scientific texts and theories that have materialized in the camera itself: the technical image is thus a metacode.\(^2\)

At the origins of humankind, Flusser places primary images: mental images and primitive drawings. These are the images that make thinking processes possible. The primitive images were charged with magic, until the text (linear writing) came to codify and demystify them. With linear writing, man begins the path of history and progress, because texts allow concepts to be arranged in order to form scientific theories.

With science, man acquires the ability to predict the inert world beyond the limits of perception, he deciphers the laws that govern celestial bodies, he discovers the subatomic universe. But in this way, according to Flusser, around the 19th century, scientific texts became increasingly hermetic, and later technical images began to codify texts. However, technical image claims to be

\(^1\) I. Kant, *Critique of Pure Reason*, 1781.
a trace, a window into the reality. Thus, when claimed to be an irrefutable witness of reality, the technical image deceives consciousness in a hallucinatory process that *L’Inter-code* exactly seeks to illustrate.

### 1.2 The so-called “primitive” man vs. technological progress

The text-image tension is doubled by another layer opposing two forms of existence. On the one hand, the man of progress who embraces the technique in a linear temporality, and on the other hand, the original consciousness that seems to evolve according to a cyclical temporality in balance with the cosmic order.

The original man also has a relationship with the image: for him, images are mediums between humanity and the whole. On the contrary, technological man instrumentalizes images by believing they will come to share a reality that is now within his reach, forgetting that it is himself who has built technical images: technical images are the product of historical, technical and political conditions, in contact with subjectivities and intentionalities.

Primitive man lives in a cosmic harmony that opposes technological progress. He worships the forces of nature that tirelessly propose the blossoming of life. The man of progress worships novelty, he is often deceived by rearrangements of the pre-existing one. By trusting technical images, and before them the texts that precede them, he detaches himself from the world and loses the ability of “feeling it.”

### 1.3 The photographer vs. the camera

The photographic experience is at the epicenter of a third register of tension: while the camera wishes to expand its program by considering the photographer as an extension of its trigger, the photographer wishes to defeat the camera’s program and use it to immortalize himself in the memory of others through his images.

The photographer in search of transcendence fights against his camera: the mechanical product of technology. In this, he reminds us of the first man being in contact with the whole through the image.

Thus, the technical image tends to distance man from the world, but, just like primary images, it is capable of bringing him transcendence. This paradoxical operation echoes the complex nature of the camera itself: technical measuring tool, artistic tool, or even a work of art offered to the aesthetic eye.
2. Representation as a way of measuring

2.1 The photo camera: a paradox

The photo camera can be considered as a technical element: thus, it is exposed to the Metiers Art Museum (Musée des Arts et Métiers) in Paris. Indeed, the camera produces images capable of providing information: a tool that measures distances (phototheodolite), it even may provide the data necessary to model space (photogrammetry).

Moreover, when well-used by the artist, the camera succeeds in proposing new ways of seeing reality, or new plastic forms: it becomes an artistic mean.

Finally, as presented in science museums, the camera offers itself to the eye as if it were an aesthetic object, displayed in a window in a coherent arrangement under a studied lighting.

As a multifaceted object, its functioning becomes extremely complex when the camera struggles with the photographer. He prints on the final image the contradictions, possibilities, and dangers he carries as a technical object.

2.2 Photogrammetry: Moving Further Away?

Photogrammetry makes it possible to build a 3D model from a series of images of a place or object. Unlike photography, which offers a fixed 2D representation, photogrammetry offers a 3D model, which can be visualized. Thus, it makes virtual reality possible when combined with interactive devices.

These new technologies produce models that seem transparent to us: we do not tend to problematize Google Maps® and its 3D reproduction of the city, for example, and we see some museum institutions embarking on the virtualization of their collection: the Metiers Art Museum, for example, now offers an interactive 3D tour available online.

However, from the esthetical thinking developed around photography, there are elements that can clarify the status of new technologies such as photogrammetry and virtual reality. Indeed, just like photography, these new technologies constitute a language. And just like photography has its own language elements, photogrammetry must have them too. The photographic point of view, for example, seems to become a viewing trajectory of the photogrammetric model. Focusing point seems not to be relevant in photogrammetry, and framing, defined as the limits of representation, becomes the spatial limits of any 3D model.
All in all, if we accept that photography can contribute to keeping man away from the world, this danger is valid, a fortiori for photogrammetry. Indeed, photogrammetry has the ability to bring illusion and hallucination to an even more advanced stage than photography because it considers three dimensions instead of two.

2.3 Corollary: *L’inter-code, a mise en abyme*

In the context of this animation, the action is controlled by an algorithm that interacts with computer tools. The algorithm is a code: it codifies the operations that can be performed by the computer in the form of a language readable by the operator (artist).

The computer equipment set up to generate and organize the elements used in the creation of *L’Inter-code*, like any technological tool, which can be considered as a materialization of scientific theories: this computer equipment tends to instrumentalize the operator to expand a program (logic of the device). However, in a contrary movement, the artist may try to establish the conditions for these technological devices to form a system capable of acting outside the program (logic of appareil).

*L’inter-code* results from the tension between an artistic desire for creation, against a technological system that aims to perpetuate a pre-established program.

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**References**


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3 Flusser’s critics against technical image may have a more drastic antecedent. Indeed, Günther Anders draws a strong critic on radio and television in his text *The outdatedness of Human Beings* (1956) (vol. 1, part 2: “The world as phantom and as matrix: philosophical considerations on radio and television”).

4 Here we are referring to the theory of *appareils* (in French), conceived among others by Jean-Louis Déotte, at the MSH Paris Nord.