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A Program for Design Futures: Frontiers of Ontological Design

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A Program for Design Futures

Frontiers of Ontological Design

未来を構想し、未来と共生する技術

存在論的デザインの最前線

KOGA Toru [1]
古賀徹

Abstract

This paper explores the emerging field of ontological design as a way to reorient design practice toward the question of “being” and the future. Modern design has largely focused on the efficient development of tools, neglecting its own purpose and reinforcing dominant values. Drawing on Escobar’s critique of Western dualism and Willis’s notion of “worlding,” ontological design emphasizes the manner in which humans and tools shape one another in a circular process, rejecting the separation of the subject and object. This perspective resonates with Heidegger’s theory of tool being, in which spatiality emerges from embodied relationships rather than objective coordinates. Furthermore, Fry’s notion of “defuturing” highlights how modern design colonizes the future by projecting present values onto it. However, Heidegger’s idea of the “closed future” reveals that confronting finitude can collapse instrumental temporality and disclose itself. During this collapse, designers recover authenticity by returning to their history, uncovering unrealized “wellness,” and opening new possibilities for design rooted in tradition and locality. Hence, this study reflects on the ethics of design. Designers must accept the groundlessness of their practice and resist the compulsion to control or justify it. Instead, they should cultivate attentiveness, humility, and openness. Thus, ontological design points toward a theory of time and practice that affirms “well-being.”

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Introduction

In recent years, the promotion of the “well-being” of humans and other beings has become the central goal of design. However, modern science, technology, and design focus almost exclusively on the efficient improvement of tools and means, losing sight of their own purpose and placing the “being” of humans and other life forms in crisis. If this continues, the design will solely project the dominant values of the past and present into the future, while neglecting the diverse possibilities that might otherwise emerge.

Thus, questions of “being” and the future converge. An ontological shift in design—redirecting its focus from tools as a means to “being” as an end—is tied to a transformation in the concept of time: How do we envision a future that is not merely an extension of the present?

Hence, this paper

1. Builds on recent discussions on ontological design by Escobar and Willis
2. Reconstructs design using Heidegger’s theory of the spatiality of tools
3. Examines two concepts of the future—Fry’s “defuturing” and Heidegger’s “closed future” (*Zukunft*)
4. Offers an original exploration of how technology can embody the value of “being”
5. Discusses the ethics of designers, proposing a new theory of time that affirms “well-being.”

1. What Is Ontological Design?

What does "well-being" mean, and how might such a state be possible? In recent years, these questions have drawn attention to Escobar's critique of modernity and discussions of multiculturalism. According to Escobar, the belief that designers can rationally control nature and society through advanced planning is rooted in the Western modernist view of technology. This worldview is characterized by a mechanistic understanding of reality, reductionist science, positivist epistemology, and computational modeling.

Underlying this Western paradigm is the philosophical assumption that objectivity exists independently of human ways of being; humans can access this objectivity through reason and can, therefore, precisely control the world. Drawing on thinkers such as Francisco Varela, Escobar calls this framework "Cartesian dualism," extending it to what he terms "ontological dualisms." [1)]

In Escobar's view, ontological dualism assumes that reason takes the form of a universal, neutral science that can perceive objects as they truly are, free from the influence of culture or context. When people resist this type of scientific reasoning, designers and technologists interpret it as irrational and rooted in cultural particularities. Therefore, they treat the local culture as a problem that must be addressed.

Escobar argues that this binary, reason versus unreason, maps onto the binary of the West versus the non-West, producing a "colonial difference." [2)] Designers who have internalized this coloniality need not explicitly reject other cultures. Even when they respect, scientifically study, and respond rationally to them, they may still unconsciously reproduce colonial patterns if they remain unaware of the universalist, dualistic ontology of their thinking.

Hence, the question is what kind of ontology should take its place. To explore this, we turn to Anne-Marie Willis, whom Escobar frequently cites. Willis begins with the premise that humans who perceive and shape the world are also shaped by it. Her phrase captures this reciprocity:

> *We are designed by our designing, and by that which we have designed.* [3)]

Consider the role of tools. Within ontological dualism, tools are instruments through which reason engages with the world: a one-way chain of reason → tool → world. However, as Willis points out, our capacity for reasoning is shaped by the tools we use, which, in turn, are shaped by the world. Reason is not a transparent view of reality; instead, it is already colored by the world acting back on it through such tools.

Willis distinguishes this from environmental determinism. Environmental determinism assumes that the environment unilaterally determines the character of human beings, while treating both as separate entities, leaving the dualistic ontology intact. In contrast, Willis argues that "ontological designing" rejects the separation of the subject ("I") and object ("world"). We dwell within the world and are continually formed within it. Through this ongoing process of being shaped, we discover the world anew, and through the same process, we act upon it. In this circular relationship, both the world and self are transformed. Willis refers to this dynamic as "worlding."

> *Worlding is not the same as background, milieu or environment, nor is it another way of simply asserting environmental determinism. This is because worlding assumes and accepts the circularity of being and the workings of the hermeneutic circle, which could never be reduced to a one way movement of 'environment determining human subject' or vice versa, in fact the idea of worlding refuses 'human' and 'world' as separate or self-contained entities.* [4)]

In environmental determinism, designers are aware that they are shaped by Western culture and are subject to local biases and prejudices. They reflect rationally on these limitations and attempt to overcome them, aspiring to reach a universal standpoint. This drive to transcend the local becomes the foundation of the designer's "agency." However, as long as this

remains the case, environmental determinism upholds universalism and reinforces scientific objectivism, which Escobar calls Western centrism.

By contrast, in ontological designing, designers do not seek to overcome their embeddedness in the world. Instead, as they are shaped by the world, they attune themselves to it. They listen to the voice of being—the way the world makes itself felt from within—and follow its lead. What to make and how to make it is guided by specific materials, tools, and relationships in that moment and place. Concepts, plans, and blueprints are provisional. Designers sense a situation, interpret it, and proceed accordingly, constantly reinterpreting their agency.

As Willis puts it:

> *Ontological designing, then, is a hermeneutics of design concerned with the nature and of the agency of design, which understands design as a subject-decentred practice, acknowledging that things as well as people design.* [5)]

In environmental determinism, design agency is limited to human reflective reason. However, ontological design recognizes that agency emerges from the accumulated influence of non-human and human elements, that is, the silent histories of nature, artifacts, other people, and even the depths of the self that lie under conscious awareness. Hence, the designer's agency becomes a field in which multiple, often voiceless, forces intersect. Therefore, the designer's role is not to dominate, but to act as a steward and maintain a healthy balance in this field.

As Escobar observes, design rooted in coloniality has historically denied the vitality of local contexts, the places where human and non-human life intertwine, thereby undermining the generative diversity of "worlding." However, ontological design affirms locality. It embraces the idea that several rich and varied worlds can arise from the specificities of regions, cultures, and individuals. These worlds are dynamic and continually regenerated through the interplay between beings and the environment.

Hence, ontological designing offers an alternative to the universalist, dualistic, and often colonial logic of modern design. It invites designers to inhabit the world differently—to listen, co-create, and let worlds emerge.

2. The Spatial Theory of Tool-Being

Willis insists that environmental determinism and ontological designing are fundamentally different, characterizing the latter through the "circularity of being." However, the idea of "circulation" might not appear unique to ontological designing. Design adopted cybernetic thinking in the latter half of the 20th century, defining its agency in terms of feedback from the environment. Approaches such as Plan-Do-Check-Act (PDCA) cycles, environmental impact assessments, and systemic design thinking demonstrate methods for predicting and evaluating the effects of design and adjusting subsequent actions accordingly. These practices have long been a part of design methodology. Hence, what distinguishes cybernetic feedback thinking from ontological designing?

Both environmental determinism and feedback theory assume the existence of objectively real influence relationships between independently existing entities and take for granted the three-dimensional geometrical spatial order (Cartesian coordinate space) that underpins them. By contrast, ontological designing does not presuppose the objectivity of entities or the objective spatial order in which they are arranged. To clarify this distinct spatial theory, we return to Martin Heidegger, the 20th-century German philosopher upon whom both Escobar and Willis rely.

Heidegger builds upon Husserl's phenomenology. For Husserl, consciousness consists of two inseparable aspects: the objective aspect (*noema*), which is the appearance of objects, and the operative aspect (*noesis*), which constitutes them. Within this structure, all worldly phenomena unfold in the objective aspect of consciousness.

In *Being and Time* (1927), Heidegger names the site of this unfolding as "there" (*Da*) and defines the human

mode of being that must always be toward this "there" as "there-being" (*Dasein*). Heidegger argues that a three-dimensional space emerges from within "there," from the interrelation of phenomena endowed with tool-like meanings. From Section 22 onward in *Being and Time*, he develops his distinctive spatial theory based on the concept of "handiness" (*Zuhandenheit*):

> *There is never a three-dimensional multiplicity of possible positions initially given which is then filled out with objectively present things. This dimensionality of space is still veiled in the spatiality of what is at hand.* (SZ 103 / BT 100-101) [6]

For example, Heidegger explains that a house's south side lets in sunlight and its north side shields from wind and rain. These directions are already imbued with tool-like significance for "*Dasein*," which generates various types of "rooms" (*Räume*) between them by inhabiting these meanings (SZ 103/BT 101).

Furthermore, when a carpenter hammers a nail, the nail is first situated between the lumber and hammer. This positioning arises from the meanings embedded in the two tools. Similarly, the roof and pillars are positioned between the tiles and foundation stones, and the veranda lies between the garden and the sitting room. A house articulates spaces structured by such tool-like meaning relationships.

Here, tool-being unfolds at the level of embodiment. The carpenter does not primarily design with the brain but with the hands. The hands "know" where and how the hammer has struck, and they proceed almost automatically to the next movement. The body is conditioned by what it has already constructed which, in turn, makes new construction possible. This circulation creates space.

Thus, "there-being" does not merely open a space through tools; it is opened up by the space through tools. The carpenter bodily awakens space, summoning tools, lumber, and ultimately nature into a shared "there" as participants in the design activity. The carpenter follows these agents, acting as a mediator who brings the space to completion.

Heidegger calls the passive condition of "there-being" directed by the world as "thrownness" (*Geworfenheit*). However, it is precisely by being thrown that "there-being" can project itself toward possibilities. Heidegger terms this active movement "projection" (*Entwerfen*). The world that receives this projection, in turn, conditions "there-being" and enables further projection.

As a "thrown project" (*der geworfene Entwurf*) (SZ 148/BT 143), "there-being" is an embodied being simultaneously shaped by existing spatial arrangements and altering them through its activity. Since "*Entwurf*" literally means design in German, Heidegger's embodied theory of tool-being can be directly interpreted as a design theory. [7]

This logic of thrown projection applies to both makers and users. Willis illustrates this through Heidegger's short essay, *Building Dwelling Thinking*:

> *When I head for the exit of the lecture hall, I am already there. If I were not there, I could not possibly go there. I am never merely here, as capsuled body. Rather, I am there—I permeate the room, and only in this way can I pass through it.* [8]

In other words, he accepts the meaning relations that structure the lecture hall and these relations "pervade" him. This thrownness enables him to act appropriately within space. Simultaneously, when he projects, the projection pervades the entire space. At the nodal point where these two orders mutually interpenetrate, the exit—that *there* (*dort*)—comes into focus and he finds himself already oriented toward it. Through this intertwining of *thrownness* and *projection*, the *here* is drawn toward the *there*; in this way, he traverses the space toward the exit.

When considered more closely, this spatial theory can be extended to the semantic relations that constitute his being with others. He is situated *among* others as a student because he was first taken up instrumentally—by teachers and classmates alike—and he has accepted that role. However, these orders of thrown meaning form the basis of his projection. In the *there*, grounded in his role, he plans, speaks, and acts

appropriately. As long as this order functions, it becomes possible to meaningfully situate the *here* of one's own being from *there*. This constitution establishes the field of human relations, that is, the social space.

Feedback theory, by contrast, objectifies the model of control that achieves homeostasis as a self-contained system. However, ontological design actively dwells within that feedback loop. There, a person ceases to occupy the design agency and becomes attuned to the invisible being, which entrusts them with subjectivity. This being is manifested as nature, as others, and as the innermost depth of the self. Within the feedback circuit, a person senses acutely the *outside* of the *there*. Based on this sensitivity, cybernetics approaches an ontological design. [9)]

3. Defuturing and Recovery

Escobar criticizes colonialism for the way subjectivity believing itself to be transparent, projects its hidden cognitive frameworks onto objectivity and mistakes this projection for objective truth. Tony Fry extends this critique of subject–object dualism to the temporal dimension, framing it as a dualism of the present and future.

From the standpoint of the present, which assumes transparency, the future appears blank, neutral, and undetermined. However, the present crushes the unseen possibilities of the future by projecting onto it its cognitive frameworks and values. Fry calls this crush "defuturing." As Fry puts it:

> *We need to remind ourselves that the future is never empty, never a blank space to be filled with the output of human activity. It is already colonized by what the past and present have sent to it.* [10)]

The temporal structure of modern design enacts defuturing. Industrial design typically begins with product concepts, draft blueprints, and mass production using machine tools and aims for social implementation. In this process, concepts devised in the present dictate the future.

Fry argues that the past and present colonize the future. However, the reverse can be argued: when future goals are set and the present and past are mobilized as a means to achieve them, the supposed future colonizes the present and past. This creates a false ontological circulation in which the past, present, and future mutually colonize and reduce each other's possibilities.

The ontological circulation Escobar and Willis hoped for can remain trapped within this dimension of defuturing. Circulation remains false because it grounds its temporality and spatiality in everyday instrumentality—the logic of being useful for something. Instrumentality temporalizes itself in the form of "do X for Y," where the present and past are mobilized as means of moving toward a predetermined future. Hence, ontological circulation, left to itself, reinforces the dominant values of the present. Overcoming the colonization of time requires a decolonial theory of temporality that breaks with instrumentality.

A key clue to this can be found in Heidegger's notion of "Being-toward-Death" (*Sein zum Tode*) (SZ 260/BT 249). The instrumental meaning of the everyday world collapses when one becomes aware of being carried toward death. For example, if a student is told that they have less than a year to live, credit, job hunting, and studies lose meaning. Along with the collapse of their future self-image, their present self-image disintegrates. University relationships and classrooms feel alien. At this moment, the projection of the future onto the present and the interpretation of the present due to the future break down, and the circuit of everyday ontological circulation collapses.

Things, others, and the self are stripped of instrumental meaning and appear "uncanny" (SZ 277/BT 266). However, in this uncanniness, humans intensely recognize themselves as alive—as "being." This conversion from meaning to being forms the condition for recovering what Heidegger calls "authenticity" (SZ 259/BT 249).

When "*Dasein*" (there-being) becomes conscious of its annihilation, the future no longer opens in the usual way. Heidegger calls this temporal mode the

"closed-future" (*Zu-kunft*: SZ 325/BT 311). [11] In confronting the absence of future possibilities in "there," "there-being" becomes free from the colonization of the "there" and can live in the "here-now" of its being. Heidegger calls such moments the "present" (*Gegenwart*) and the undistorted apprehension of things in this present as "awaiting in the present" (*Gegenwärtigen*).

> *Only as the present, in the sense of making present, can resoluteness be what it is; namely, letting what it takes hold of in action be encountered undistortedly.* (SZ 326/BT 311)

In this "temporality" (*Zeitlichkeit*: SZ 326/BT 311), neither the present can define the future nor the future can determine the present. Each moment stands independently, like particles in succession. In this unfolding, things, others, and the self step outside existing frameworks and reveal themselves "undistortedly" in their unbounded being.

When the future is experienced as not closed, people set goals, construct chains of means to achieve them, and dwell within these instrumental linkages. In doing so, the past (*Vergangenheit*: SZ 378/BT 361) is neglected as irrelevant, except where it can be instrumentalized as "lessons for the future." However, when the future is blocked, the distinction between the useful and useless aspects of oneself collapses, and one's whole being, including what seems useless, is disclosed with intensity. Forgotten pasts return, intruding upon the consciousness of the "here-now." Heidegger calls this distinctive temporal dimension "what is having been" (*das Gewesen*). Hence, what one "is having been" enters the experience into things that appear "now."

> *Only because Dasein in general is as I am-having-been, can it come futurally toward itself in such a way that it comes-back. Authentically futural, Dasein is authentically having-been. Anticipation of the most extreme and ownmost possibility comes back understandingly to one's ownmost having-been.* (SZ 326/BT 311)

Returning to the earlier example, when a student is faced with the impossibility of continuing life as before, the chain of means of moving toward the future collapses. The student recalls how they "are having been" and changes the temporal mode of study. They continue their studies, not as a means to achieve future goals, but as a way of facing things unfolding to the self now, meeting others anew in each encounter, and savoring the presence of things and people. This is a bodily awareness, felt in each instant, of one's still-being. To live the future as one is having lived means not forgetting oneself as one "was" and re-living it daily in the present, integrating one's history under the urgency of finitude, and realizing one's destiny. [12] In this way, "one" becomes an irreplaceable self, an authentic self.

In everyday life, the future appears as a point projected forward on a linear axis defined by purpose-mean relationships. In the closed future, this axis collapses, the present turns back to relive the past, and the future, as blocked, is liberated from instrumental determination. The future, present, and past are all freed from mutual colonization and stand independently. [13]

The possibility of ontological design resides within this ontology of liberated time. While Escobar and Willis are right to emphasize the circularity of being, we must add that the collapse of instrumental circulation brings being into view. In this interpretation, Fry's notion of defuturing adopts a new meaning.

Fry regards defuturing as a negative condition that should be avoided. However, in Heidegger's terms, recognizing the unsustainability of civilization and confronting finitude in that collapse can become a condition for recovering authenticity, encountering others and nature in their undistorted being. It opens the possibility of a new temporality, where design might find another circuit. [14]

4. The Order of Being and Space

Design has been defined by its instrumental nature. If this is the case, what type of design agency can transcend instrumentality? It is certainly not a rational and competent subjectivity grounded in

ontological dualism, nor is it a form of self-abandonment that merely leaves everything to chance. Within an ontological circulation that surpasses instrumentality, what kind of logic could bring about "well-being," and what form of agency emerges from it?

According to Heidegger, "*Dasein*" is compelled by "the They" to live through specific purpose–means relationships as a thrown projection. Professional designers aim to efficiently realize immediate solutions to immediate social demands. They construct frameworks to achieve their goals, restrict themselves to professional tasks, select the appropriate materials and collaborators, and plan the final product. However, once this work is completed, both the product and producer are handed over to the past, sinking into oblivion.

This temporal design mode becomes impossible when designers encounter a "closed future." At that point, they must seek the grounds of design within their "interior"—their history. They must return to what they have previously made, to the "what is having been" of their creative acts. By counterfactually uncovering "what might have been" within "what has been," they reveal the moments of "wellness," whether realized or overlooked, in the countless choices of the design process. Hence, designing becomes possible only through a deep exploration of intrinsic motivations, a return to the fundamental question of why one has designed something in a particular way.

This alternative possibility, the "might have been," embedded within the designer's history, points toward the future. Hence, nature, others, and alternative aspects of oneself come into view as possibilities excluded from earlier frameworks. A path opens toward the totality of "being" that exceeds those frameworks. This is similar to the reorganization of learning, where one reflects on how the pursuit of immediate credit has led to overlooking the deeper possibilities of learning and reinterpreting learning as a way of being with oneself, others, and nature. This reinterpretation of the past can be called the inheritance of tradition.

The inheritance of tradition consists of discerning the "wellness" that "might have been" within what has passed and realizing that possibility in the present. It is the rediscovery of rationalities overlooked in the past and a deliberate attempt to explore the unrealized excellence latent in them. However, this "well-being" is unique, fleeting, and irreplaceable, bound to a moment and context that cannot be fully reproduced in the present. Therefore, one must construct entirely new contexts and configurations. Completing that preparatory work and "awaiting"—so to speak—the descent of that wellness within its constellation defines the agency of design.

This preparatory work is always prone to failure; however, its repetition constitutes tradition. The logic that sustains such efforts, the attempt to reproduce the hope of the past in the present, can be called the "order of being." This order unsettles fixed relationships between the past, present, and future, maintaining a temporal indeterminacy, an openness that "awaits" something still to come.

From the perspective of modern industrial design, the collapse of purpose and design concepts is critical. However, is this true of designing in a broader sense? In a type of service design, goals are defined in advance. How and to what extent should customer satisfaction be achieved and under what conditions? This design seeks to control the psychology, cognition, and behavior of others within predetermined frameworks through environmental arrangements and service structures. In contrast, a *poiesis*-oriented design seeks to draw out others' agency and enhance creativity, spontaneity, and self-affirmation. This form determines what should be done, how others should be engaged, and what movements should be made moment by moment in unpredictable ways. However, this change is not disorder, as, each time, the logic of what "might have been" is rediscovered in the unfolding process. This logic of awaiting and receiving something constitutes the "order of being."

In this order, others are beings that are grasped in their entirety: how they have lived, how they are living, and with whom they live. One's stance toward others becomes one of "awaiting in the presence," evoking the other's history in the "*Gegenwart*," and attuning oneself to the fleeting possibilities that emerge in their

changing expressions. Even for those who seem "futureless," those who can no longer fulfill social roles and stand face-to-face with death, such responsiveness can disclose a future.

The same applies to artifacts and materials. In the process of making, unexpected forms may arise or planned forms may collapse. Materials that are not originally anticipated may prove to be the most appropriate. This is a mode of facing materials and "awaiting" their spontaneous possibilities. Here, design sovereignty is yielded to others or matter, while the designer assumes the role of a mediator and draws out their agency.

This responsiveness extends to designers. One must step outside the self-understanding framed by regulation and face one's entire being. In doing so, they recover the history of their creative acts, become aware of their historical unity, and explore latent possibilities. Hence, the designer decolonizes the soul. Design agency becomes decentered, that is, distributed among others, materials, nature, the body, situations, and history. This decenteredness aligns with the generative logic of being.

This ontological generativity is not alien to modern design but rather constitutes its core. Planning-oriented design requires, at times, a suspension of the subjective will to face situations openly. In those moments of neutrality, designers approach "being." This neutralization, this interruption of will, occurs throughout the design process as plans are revised in response to each situation. Such revision is a necessary opening for the generative "order of being." Modern design, although dependent on this order, courts self-destruction when it forgets and reduces itself to compliance with procedures and methodologies alone.

Therefore, the collapse of the instrumental order of space need not be uncanny. It may reveal positive aspects because the "order of being" that liberates design from purpose and function corresponds to a "spatial order" that discloses dwelling. Dwelling arises when we suddenly recognize that the others within instrumental space are finite beings—irreplaceable and always vulnerable to loss. At such moments, the self is awakened to its irreplaceability. Space ceases to function merely as an instrument and interrupts itself. This differentiated spatiality reveals the dwellings in everyday life.

A dwelling place, first of all, is the instrumental housing place that sustains one's living. However, when functioning instrumentally, it is not consciously experienced as a dwelling. It is only when the inhabitants are absent that the environment stands out, as a trace of their presence persists in the dwelling place. Hence, their absence discloses their existence. Here, estrangement and intimacy coexist. Functionality collapses, yet the other's existence is felt more intimately.

A dwelling is not merely a safe and secure space where functional needs are met. Even when its inhabitants are physically present, it is perceived as a place of dwelling, precisely because their absence is anticipated and sensed in advance. One anticipates that person's "closed future" with oneself, and it is through the very possibility of that absence that their existence stands out—making one aware of the irretrievability of the present moment. At the same time, the visages of "what once was" and "what could have been" overlap with the actual image of the person who now stands before one's eyes. This person has both passed away and been recovered "there," and though they are present now, they are suffused with nostalgia. In this manner, the depth of the space surrounding a person is defined by temporal layering, in which the present moment is at once an anticipated future and a recovered past.

The interweaving of the present that is here and the past and future that are absent—this interruption, in which functional estrangement and existential intimacy coexist—constitutes transience. Transience arises from the instantaneous condensation of temporal amplitude into the single point of the "now" in which that person is present: the persistence of the past in a future moment when that person will have been lost from the place once familiar to them. This spatio-temporal configuration conveys a type of uncanniness or estrangement by departing from instrumentality. Yet, on another level, it carries a sense of the miraculous,

precisely because it allows the present moment to recover what will one day be lost in the presence; in other words, it restores the lost past to the present as it will be remembered from a future point in time. This "lost possibilities in a future," recovered in the present, is what discloses the preciousness of things and people simply being there—the "wellness" of being itself.

The functional space that unfolds through instrumentality and the dwelling that unfolds through the "order of being" are not distinct in the sense of an office versus a living room. Just as authenticity sometimes seeps through the inauthenticity within a single person, the dwelling already breathes, potentially within the functional space. Dwelling then manifests as a contradiction—as a distortion within the functionality itself. Thus, designing spaces where people can breathe is not about creating a relaxing area apart from the functional space but about awakening a contradiction that transcends the functional framework from within it. If we call the possibility of such contradiction the "conscience" of place, then it resides at the very limits of physical design.

5. The Designer's Ethics

Thus, it becomes clear that human actions are uniformly without grounding because what sustains people's projects is what the project has found from its perspective and interests. People end up supporting their own grounding by themselves. This circular relationship, which is rooted in instrumentality, causes an action to lose its ultimate foundation.

This groundlessness within the circuit of everyday instrumentality becomes exposed when *Dasein* becomes aware of its own finitude, for at that moment, the circular foundation of instrumental projection loses its validity. The mode of groundlessness inherent in the circuit of significance and instrumentality is revealed precisely through the breakdown of the circuit itself. This is why designers conceal the inevitability of their own death, immersing themselves in the everyday circuit before them—desperately trying to believe that grounding can still be found there.

Driven by ever-shifting agendas and unable to secure foundations either in society or within themselves, or perhaps precisely because of this phenomenon, designers act as if they have secured scientific grounds for manipulating others and nature. Following Escobar and Willis, we see scientific positivism as a compulsive search for grounds, an attempt to compensate for their absence, and a supplementary movement of reasons.

Heidegger calls the emotion arising from this lack of grounds, and its concealment, "guilt" (*Schuld*). Guilt silently drives the projector from behind without being consciously faced. Increasingly compelled to produce goods and control others, designers seek to mitigate groundlessness through accumulated achievements. However, the more they are driven in this manner, the more their "being" calls to them to recognize their emptiness. This is the call of "conscience" (*Gewissen)* (SZ 271/BT 261).

For designers, conscience is the recognition that one has deceived oneself and others, pretending one's projections are grounded when they are not. When design acts as though it has grounds despite lacking them, it produces what Escobar calls colonization and falls into what Fry calls defuturing. Hence, design must abandon its impulse to ground itself, accept contradictions, and cultivate an ironic and even humorous stance toward its work.

Education on Design Futures must critique defuturing. For Fry, unsustainability arises when the future is imagined as an extension of present dominant values. Future visions that remain bound by this false circulation risk becoming unsustainable even as they claim to seek sustainability. [15] For Fry, modern design education participates in this very structure, thereby instilling defuturing in the next generation and subsequently robbing it of its "sustain-ability." [16]

In contrast, sustainability requires the ability to relativize these frames. This does not mean discarding tools of modern design such as concept formation, social implementation, and empirical evaluation. Instead, education that nurtures the operation of modern design and the capacity to think beyond its framework can renew the possibilities of sustainability.

Similarly, for design agency, when pursuing the "order of being," the process begins with a concept of an ideal state. Concepts are revised as the design unfolds; however, continuity remains. Even when facing the "being" of others and materials, frameworks are needed. Therefore, negating the established image of the future requires envisioning it differently, recognizing one's lack of ground requires presenting "grounded" proposals, moving beyond anthropocentrism requires humanistic education, and knowing the limits of modeling requires modeling itself. Hence, the disclosure of "being" often flashes forth within roles and framework compliance. Thus, sustaining design requires enduring contradiction—repetition eventually produces a difference. This endurance enables the imagination of futures and coexistence with what transcends one's framework.

Heidegger contrasted everydayness with resoluteness in the face of finitude. However, these are not binary choices; in life, they are interwoven and request each other. Conscience, for Heidegger, attempts to articulate this contradiction. Defuturing, as Fry names it, arises when this contradiction is denied, conscience is silenced, and designers compulsively seek to justify themselves.

Note

1) Escobar, *Designs for the Pluriverse*, Duke University Press, 2018, p.81. Japanese translation: translated by Mizuno Daijiro, Mizuuchi Tomohide, Morita Atsuro, and Kanzaki Hayato. BNN Publishing, 2024, p.146.
2) *Ibid*., p.94. Japanese translation, p.169.
3) Anne-Marie Willis, Ontological Designing – Laying the Ground, *Design Philosophy Papers*, 2006, p.80.
4) *Ibid*., p. 84.
5) *Ibid*., p. 81.
6) Heidegger, Martin. *Sein und Zeit*. 16th ed. Tübingen, Max Niemeyer Verlag, 1986. *Being and Time*, Translated by Joan Stambaugh. Albany, State University of New York Press, 2010. Citations from this work are provided in the text with the abbreviations SZ/BT, followed by the pagination of the German original and English translation.
7) Heidegger calls this mode of *Dasein*'s being "Being-in-the-world" (*In-der-Welt-sein*) (SZ 52/BT 53). This is an ongoing process of being conditioned by the world while intervening in it. Willis's "ontological designing" in the English present progressive reflects this processual dimension, echoing the tradition of Ruskin and Morris.
8) Heidegger, Bauen Wohnen Denken (1951), in: Gesammtausgabe Bd. 7: *Vorträge und Aufsätze*, Vittorio Klostermann, p.159.
9) Heinz von Foerster introduced the concept of "second-order cybernetics," in which the observer is immanent to the feedback loop, describing its ethics as a "dance." For differences between this and ontological design, see Chapter 3 of this paper. Cf. Heinz von Foerster, "Ethics and Second-Order Cybernetics" (1991), in *Understanding Understanding*, Springer, 2003, pp.287–304.
10) Fry, *Defuturing – A New Design Philosophy*, Bloomsbury Publishing, 2020, p.10.
11) The German term *kunft* refers to "arrival" from the other side, while *zu* suggests a state of closure. The word *Zukunft*, translated as "future," can indicate a temporal dimension in which something continues to arrive from "there," even though the way ahead appears blocked.
12) See Heidegger, *Being and Time*, §74: "The Essential Constitution of Historicity."
13) The aspect of the world that discloses itself in each instantaneous fluctuation of the "now," what could be called its differential phase, is termed "situation" (SZ 299/BT 286).
14) In §26 of *Being and Time*, Heidegger identifies our mode of engagement with others as "care" (*Fürsorge*), which he divides into two forms: inauthentic and authentic modes of being. The first is a welfare-oriented relation that assimilates the other into tool-like institutions and takes away their troubles, a mode Heidegger characterizes as a form of "domination." The second consists of taking the lead for the other by authentically exemplifying an authentic way of being, enabling the other to become "free" from entanglement with inauthentic relations (SZ 122/BT 118–119).
15) From this perspective, Fry rejects both ecologically sustainable development as a universal framework and the Limits to Growth model of growth management that relies on strong control, arguing that both are unsustainable. In either case, such approaches reinforce human agency, as defined by dominant contemporary values, and further entrench the temporal structures responsible for colonizing the future (Fry, *ibid.,* p.7).
16) Fry, *ibid*., p.9.