DAS SPORADISCHE INSTITUT

INHALT

In sordibus cognitio
In ambiguitate; veritas exstatica

Das Sporadische Institut ist der Titel für ein Siegerprojekt beim Wettbewerb für Kunst und Bau zur Renovierung der Fachhochschule Vorarlberg, ausgeschrieben vom Land Vorarlberg. Umgesetzt wurde das Projekt in den Jahren 2020–2025 von den Künstlern Mathias Garnitschnig und Bernhard Garnicnig. Dieses Buch ist Teil des Gesamtwerks, bestehend aus Sitzskulpturen innen und außen, der permanenten Installation einer Tür mit Türschild und diesem Buch.

I.

THE SPORADIC INSTITUTE

TEXT: BERNHARD GARNICNIG

Last weekend, my dog crash-landed on a branch and ripped open her skin. Beneath that furry protective layer appeared a fragile infrastructure of muscle and bone, suddenly exposed to my shocked eyes. I rushed to a vet who assured me the wound would heal well. But he added that if even one or two bacteria that entered during exposure had survived the administered antibiotics, the healing process could become significantly more complicated. This happened the weekend before I wanted to finalize this book's introduction, and it made me think about facades—those protective skins that wrap buildings.

When we first encountered the facade of the FHV (Vorarlberg University of Applied Sciences) in 2019, it looked faded, grey, sort of neglected—what many would dismiss as simply "dirty". The modernist architectural ethos and the technical authorities demanded its cleaning and renovation. Indeed, within five years, the facade was renovated back to homogenous white, which after years of close examination of its details, now appears blinding and bland. But in that moment of initial observation, we had a hunch that dirt was something different: not deterioration, but life. What began as a curious investigation into this supposedly "dirty" facade revealed itself to be an exploration of a complex biome—a living system of fungi, lichens, bacteria, and other organisms and their residue interacting with anthropogenic materials. Through our research, we began to explore and document this intricate ecosystem thriving in what most would consider mere grime.

Have the lichens, mosses and fungi and other organisms that colonize these surfaces also to be viewed as dangerous infections requiring elimination? Or could we find ways to allow a biome of harmless flora and fauna to thrive as contributors to critical thought and investigative spirit, supporting the rethinking of aesthetic ideals, as contributors to design and architecture, and as part of a healthy environment shared between diverse species?

Stagonosporopsis
pp. 66-69

Cepaea und Clausiliidae
pp. 46-49

In particular, our research found two elements of this biome whose interactions we explore both scientifically and aesthetically throughout this work. One of them is Stagonosporopsis, a common fungus which inhabits the facade's biofilm. If given additional nutrients and time, it develops into a fluffy pink fruiting body. Its sculptural growth patterns and cozy outside served as inspiration for the conversational seating sculptures developed for the interior and exterior. The second members are Cepaea and Clausiliidae snails. They scrape off the biofilm on the facade using their radula, their feeding organ consisting of a jaw and thousands of tiny teeth. Their "grazing" of the facade leaves large scale "drawings," as they slowly remove the biofilm and reveal the brighter plaster below as they methodically move along in an oscillating choreography. *The Sporadic Institute* considers these two to be participants in the creation of forms and stories in the environment of the campus. As we won a competition to contribute artistic work to the renovation process of this building complex, it was clear that we did not want to drop off a number of objects made in our studio while thinking of the place. Instead, we wanted to continue not only with a critical stance towards the subtle modernist Bauhaus legacy in the building's architecture, but also towards the role of critical artistic research and practice in such a process of renewal itself. It was clear that we needed to move forward by including the environment, both conceptually and physically, and act conductively to what is already there. The contribution is thus also an intervention on the level of the institution which is inhabiting the building, and thus expands its program onto its users and dwellers.
The institution, with its categories of thought and value divided through departments and disciplines, is the invisible yet palpable layer of a cognitive infrastructure that declares the values ascribed to surfaces, appearances, and lifeforms.

The Sporadic Institute is therefore an intervention not only in the categorization of knowledge present on campus of this applied science school, but also an ongoing presence that reminds us to leave space, in the sense of the potential for agency, for unplanned—sporadic—contributions. In addition to the maintenance and restoration of the buildings on campus, *The Sporadic Institute* is a form of critical maintenance of spaces which arise from the imagination and exist across the separations of departments and categories. By transposing them from the conceptual to the physical—as a book, as conversational seating sculptures, and an architectural intervention—it demonstrates such spaces to be appropriated and occupied, the same way that lichens and algae will continue to occupy other parts of the buildings. Through the form of an institute among departments, an entry in the library among many others, seating areas and a door among others, *The Sporadic Institute* employs a form of imitation known in biology as crypsis, using space in a way that disappears in the patterns of its dominating surroundings, yet claiming this space for alliances of alterity. These sporadic alliances will expand into the cracks that will inevitably form also on this renovated campus, new surfaces that are ready for contamination.

Penicillium
pp. 55/56, 76-78, 86/87

This insight resonates with another accidental discovery from nearly a century ago. When Alexander Fleming left the windows open in his laboratory, he returned to find some of his culture plates covered in mould fungus while others were not. This apparent contamination led to one of medicine's greatest breakthroughs: the discovery of penicillin. Fleming's serendipitous finding isn't just about antibiotics—it's a metaphor for the potential benefits of biological diversity and the value of leaving space for the unexpected. Sometimes we need to allow gaps for sporadic agency. To invite external elements—like spores flying through an open window—to inhabit our world and co-design it with us. These literal and metaphoric intrusions, infections, and contaminations can yield not just unexpected results, but genuine improvements to our lives, at least by forcing us to rethink fundamental categories.

Mary Douglas (1966)
pp. 276-287

In *Purity and Danger* (1966), anthropologist Mary Douglas argued that our ideas about dirt and cleanliness are not primarily about hygiene, but about order. "Dirt," she wrote, "is matter out of place." What we consider dirty is contextual—it's whatever violates our established categories and systems of classification. Through this lens, our aversion to "dirty" facades might reveal more about our cultural preoccupations with order and control than any actual biological threat.

Mary Douglas (1986)
pp. 288-301

Douglas expands on these ideas in her later work *How Institutions Think* (1986). She argues that institutions, as complex systems for organizing human knowledge and behaviour, inevitably construct analogies to nature to legitimize their instituted, and thus made quasi-permanent, social conventions. These analogies, such as the female = mother of children analogy, the museum = safekeeping from entropy analogies, or the dirt = infection analogy once established, become difficult to dislodge, even when they no longer accurately reflect the realities they purport to regulate. They become what Roland Barthes would describe as a myth. Institutions thus tend to "forget" or suppress knowledge that doesn't fit their established frames of reference, by overruling intrusions that disturb its categories legitimized by analogies to nature or the supernatural. They become, like ancient myths about the origin of lightning, cognitive infrastructure to which we outsource thinking in categories we cannot explain or no longer care to think about. Thus, in fact, becoming containers for what we refuse to reconsider, or avoid to rethink so we can get on with our lives.

Applied to architecture, Douglas' insights suggest that our institutional aversion to "dirty" facades may stem from a constructed analogy between the purity of whitewashed surfaces, an idealized, orderly vision of nature, and our distinction of architecture from nature as culture. This analogy, however, ignores the actual complexities of biological systems, which often thrive on diversity and interdependence rather than sterile homogeneity.

Study Fungi
pp. 56-87

This complexity is documented by the four studies commissioned by *The Sporadic Institute* that form the backbone of this project. The studies conducted with Marina Jecmenica and Diethard Mattanovich at BOKU Wien, University of Natural Resources and Life Sciences, Vienna, look at the microscopic world of the FHV facade through DNA analysis, isolating and identifying fungal species present in the biofilm. Their work reveals a biome thriving in what appears to the naked eye as mere grime. Samples of the façade's surface were taken to the laboratory, where they were experimentally cultivated on different variants of agar growth media. After incubation, individual colonies were isolated and collected for DNA extraction. Next, the researchers used the PCR method infamous since the Covid19 pandemic. Polymerase Chain Reaction (PCR) allows to amplify specific regions of the fungal DNA. The amplified DNA was then sequenced, and the resulting sequences were compared to a database of known fungal sequences using the BLAST (Basic Local Alignment Search Tool) algorithm on the NCBI (National Centre for Biotechnology Information) website. This allowed the researchers to identify the fungi based on the similarity of their DNA sequences to those of known species. The results of these analyses revealed a diverse array of fungal species living on the facade. The most common genera identified were Cladosporium, Alternaria, and Neosetophoma. Other genera included Stagonosporopsis/ Didymella, Aureobasidium, Epicoccum, Septoria, Penicillium, and Itersonilia. Finally, the researchers conducted an Amplicon sequencing of the ITS region, which allowed them to assess the overall fungal diversity on the facade without the need for culture-based methods. This analysis revealed an even greater diversity of fungi, with numerous taxa identified at the genus and species level.

Study Lychens
pp. 114-137

The study by Veronika Pfefferkorn-Dellali and Roman Türk documents the diversity of lichens found on the facades and surfaces of the building complex. They identified 34 distinct species, representing a significant portion of the lichen diversity found in the entire region of Vorarlberg. These lichens often live in areas that are rarely seen by the building's users. One of the most significant growth areas was hidden away on a roof vent, its discovery preceded by the researchers leaving the building through a window on the second floor.

Study Moss,
pp. 90-113

Georg Amann's study of moss adds another layer to this ecological portrait. His study identifies 35 species of moss living on the facade, again representing a substantial slice of the region's moss diversity. Amann's work highlights the adaptability of these organisms, which are able to thrive in the seemingly inhospitable environment of a building facade and the cracks of functional structures, such as parking lots. Moss, as the initial technical study has shown, is used as a signifier and indicator of structural deterioration by natural influences. As moss traps humidity and provides refuge for insects, it becomes problematic for the impermeability of facades and windows. This is even though moss does not aggressively root into substrates and materials and joints can be designed for beneficial coexistence.

Study "Fassadengeschichte"
pp. 45-55

Finally, Dietmar Buhmann at the Umweltinstitut Vorarlberg provides a broader context for these findings in his "Fassadengeschichte." His analysis of the façade's history and the biological growth found on it suggests that what we perceive as dirt is in fact a complex biofilm, a living layer composed of fungi, algae, bacteria, and other microorganisms. It also shows the different constituents of the biofilm, including anthropogenic materials resulting from vehicle emissions.

Together, these studies paint a picture of the FHV's facade not as a sterile, lifeless surface, but as a diverse ecosystem. Encountering this research becomes a moment of meeting sporadic participants of our built environment in which dirt is a source of knowledge, and our ambiguities towards it can be a process of narration and *Gestaltung*.

Brian Dillon, Jean Duprat (2009)
pp. 206-2011

As explored in *Cabinet* magazine's meditation on Dust (Issue 35, 2009), these microscopic particles are both ubiquitous and profound in their implications. Approximately 40,000 tons of cosmic dust enter our atmosphere annually, while in our homes, dust is largely composed of our own shed skin cells. Dust thus represents a peculiar intersection of the cosmic and the intimately personal. The skin shedding this dust wraps a body whose vitality might be a result of the "seeds" of life contaminating this world through interplanetary debris in what is called the Panspermia theory of life. In artistic practice, as Jean Duprat notes in his work on micrometeorites, dust becomes a "silent witness"—it penetrates but doesn't disturb, recording histories without interfering with them. Marcel Duchamp famously made dust part of his artistic practice, allowing it to accumulate on "The Large Glass" as "Dust Breeding," challenging our impulse to clean and control our environment.

Christian Enzensberger (1968)
pp. 140-149

Christian Enzensberger takes this analysis further in his provocative work *Größerer Versuch über den Schmutz* (1968). He argues that dirt is anything that threatens "the proper separateness of the individual, his anxiously guarded isolation." In this light, our relationship with dirt becomes deeply psychological—it's about maintaining boundaries between the self and the other, inside and outside. The "dirty" facade thus represents a kind of categorical crisis: is it building or biology, and is the building truly separating us from the natural and cosmic surroundings? Are we culture or nature? Are we ready to give up institutional distinctions between the inside and outside? This ambiguity makes us uncomfortable, and plenty of "natural" reasons have been generated to maintain this separation.

Irene Vögeli (2003)
pp. 150-157

Irene Vögeli's "Schmutz-Glossar" (*Kunstforum*, 2003) is a lexicographical approach to dirt and contamination that helps us to understand how deeply our conceptions of cleanliness are embedded in the language itself. Her glossary-format exploration of terms related to dirt, filth, and contamination reveals how our vocabulary for describing these phenomena is remarkably rich and nuanced, suggesting their central importance in human culture and cognition. Through careful attention to etymology and usage, Vögeli shows how words used for "dirt" often carry moral and social connotations beyond their literal meanings. This linguistic analysis provides an important context for understanding our complex relationship with the biofilm on the FH Dornbirn's facade—our immediate impulse to label it as "dirt" or "contamination" reveals more about our cultural categories and anxieties than about the actual biological processes at work.

Alfred Russel Wallace (1889)
pp. 174-177

Alfred Russel Wallace's 1889 essay "The Importance of Dust: A Source of Beauty and Essential to Life" provides a prehistory for reconsidering substances we typically view as contamination. While some of Wallace's specific claims about dust's relationship to the coloration of the sky and sea have been refined by modern physics (which explains these phenomena primarily through the scattering of light waves), his fundamental insight—that dust, far from being merely a nuisance, plays a vital role in Earth's ecological systems—remains profound. His work represents an early recognition that what we consider "dirt" often plays crucial and overlooked roles in natural systems. This Victorian defence of dust's importance resonates with our investigation of the FHV's facade, where what appears as "dirt" to the casual observer is actually a biological system involved in the co-design of the appearance of our built environment. Wallace's ability to see both beauty and necessity in what others dismissed as mere contamination provides a historical model for our own reconsideration of biological growth on buildings. Media theorist Gloria Meynen's analysis of Wallace's writing highlights his "concept of singularity"—his appreciation for how every particle of dust, like every species, is unique and irreplaceable. This attention to the particular, to the unique properties of what others dismiss as mere dirt, mirrors our own careful scientific investigation of the façade's microscopic inhabitants.

Christian Gottfried Ehrenberg (1849)
pp. 178-195

Christian Gottfried Ehrenberg's 1849 study *Passat-Staub und Blut-Regen* (Trade Wind Dust and Blood Rain) represents one of the earliest systematic scientific investigations of atmospheric dust. Through microscopic examination, Ehrenberg documented over 1,200 distinct forms of microorganisms, minerals, and other particles in dust samples collected from various locations. His detailed hand-drawn illustrations of these microscopic constituents demonstrate an early recognition that dust is not mere "matter out of place" but contains a complex world of living organisms and their remnants. Ehrenberg's methodical approach to classifying and documenting these particles established important groundwork for understanding the biological components of atmospheric dust. His work examining samples from the "blood rain" phenomenon (now known to be caused by dust from the Sahara) shows how these particles travel vast distances through atmospheric circulation, predating our modern understanding of global dust transport. His careful attention to the living components of dust provides a historical parallel to our own microscopic investigation of the FHV's façade's biofilm, where similarly detailed examination reveals a complex ecosystem of microorganisms thriving in what appears to the naked eye as mere grime.

Caitlin DeSilvey (2006)
pp. 164-171

Caitlin DeSilvey's *Observed Decay* (2006) offers a radical reframing of how we might understand degradation and memory. She argues that the erosion of physical integrity, typically seen as a loss of cultural information, might actually contribute to different forms of remembrance. DeSilvey found that the decay of abandoned homestead artifacts revealed otherwise invisible histories. Working with degraded objects and buildings, she suggests that entropic processes of decomposition and decay, while destructive on one register, can generate new forms of knowledge on another. Her work invites us to consider decay not as an endpoint but as a process of transformation that can reveal new narratives and meanings. Applied to our understanding of building facades, this suggests that sporadic colonization might actually create new forms of architectural meaning and memory. The "dirty" facade becomes not just a record of decay but a living archive of environmental interaction, where fungi, lichens, and other organisms become collaborators in creating new forms of biological and cultural knowledge.

Mark Wigley (1995)
pp. 227-235

Our preoccupation with cleanliness in architecture has deeper implications, as Mark Wigley reveals in *White Walls, Designer Dresse*s (1995). Wigley argues that modern architecture's obsession with white walls is not merely aesthetic but ideological. The white wall, he suggests, is a form of clothing that paradoxically presents itself as naked truth. Modern architects claimed to strip buildings of ornament, yet the white paint itself becomes a kind of dress—one that proclaims its own absence. This complex relationship between surface, cleanliness, and truth raises questions about what we're really doing when we "clean" a facade. Are we revealing something authentic, or simply applying a new layer of cultural expectations? Bernhard Rudofsky's studies of vernacular architecture (1977) show that white washing is not only modernist compulsion but exists in mediterranean villages. Applying a new layer of limewash is part of the process of tending to the house that exists in dense village structures, and thus is a practice of social cohesion.

Bernhard Rudofsky (1977)
pp. 237-351

Robert E. Proctor (2009)
pp. 252-265

Architecture has always drawn inspiration from nature. As the exchange between biologist Ernst Haeckel and architect René Binet in Robert E. Proctor's text from 2009, the fascination with nature's forms can draw the curious eye to romantic translations and transpositions of shapes. Binet's designs for biologically inspired architecture are stunning and draw on Haeckel's studies of fungi and lichens. Yet these visually pleasing transpositions between scales of organisms might also distract us from thinking about more cooperative relations of co-creation between species. Instead of copying shapes, as we also did for our seating sculptures, perhaps it is more important for architecture to create spaces for nature to live, mutually non-destructively in institutional structures?

Andrew Adamsky et al. (2019)
pp. 267-271

The speculative vision of architecture colonized by and coexisting with biological systems finds a parallel in Andrew Adamsky et al.'s *Fungal Architecture* (2019). Their proposal envisions buildings that could be grown from living fungal mycelium, creating structures that not only house humans but are themselves alive and responsive to their environment. While this may seem like science fiction, their research suggests that fungal materials could be functionalized with nanoparticles and polymers to create buildings that self-grow and self-repair. This radical reimagining of architecture moves beyond simply allowing biological colonization of our buildings—it proposes making the building itself a living organism. Their work represents an important counterpoint to modernist architectural ideals: rather than fighting against biological intrusion with sterile white walls, they propose embracing and extending biological processes to create truly hybrid architectures. In this light, the biofilm on the FHV's facade becomes not just an ecological system to be studied, but an encounter for reflecting on new forms of architectural thinking that embrace rather than reject biological complexity. Other novel ways of cooperative contamination are emerging: Fungal suspensions are developed as protective biofilm for wood preservation (Michael Sailer et al.), moss gels are developed for application on bioreceptive concrete for living surfaces (Respyre).

Anna Lowenhaupt Tsing (2015)
pp. 272-275

Anna Lowenhaupt Tsing's "Contamination as Collaboration" (from *The Mushroom at the End of the World*, 2015) offers a theoretical framework for reconsidering our relationship with the biofilm on facades and sporadic encounters of living beings. Her argument that "contamination is the source of ecological diversity" challenges our instinct to see biological colonization as degradation. Through her examination of matsutake mushrooms growing in human-disturbed forests, Tsing demonstrates how life flourishes precisely through "contamination"—the mixing and meeting of different species and forms of life. She argues that "purity is not an option" in our world; instead, we must learn to appreciate how different forms of life make their way together through what she calls "collaborative survival." This insight is particularly relevant to our investigation of the FHV's facade, where fungi, lichens, mosses, and bacteria have created a complex collaborative ecosystem on what was intended to be a pure white surface. These organisms are not simply contaminating the building but are engaging in what Tsing calls "cross-species world-making." Her concept of "precarious survival"—the way different species must work together in disturbed landscapes—lets us see that biofilm represents not degradation but adaptation, not contamination but collaboration. As she writes, "We are contaminated by our encounters; they change who we are as we make way for others." Architecture at *The Sporadic Institute* embraces this contamination, recognizing that our buildings, too, might be enriched by leaving space for others.

At the end of this research journey, it seems we weren't alone in recognizing the significance of these overlooked yet ubiquitous organisms. In October 2024, a global initiative emerged proposing that fungi and lichens be granted its own specific conservation status distinct from flora and fauna. Creating new institutional categories would elevate the status of mushrooms, mould fungi, mildew, yeast, and lichen under conservation policies. The "pledge for fungal conservation" argues for fungi to be recognized as an independent kingdom of life in legislation and policies in order to advance their conservation and maintain the crucial benefits they provide to ecosystems and people. This is because a growing body of research has demonstrated the vital role fungi play in areas like soil remediation, carbon sequestration, and the decomposition of plastics and pollutants. Experts assert that most plant life on land could not exist without fungi. This shift in science-driven environmental policy mirrors our own journey from seeing a dirty facade to recognizing a biome worth protecting.

Revisiting Douglas' insights, this development suggests the emergence of new institutional analogies—one that understands nature not as a pristine, orderly system, but as a complex web of interdependent, often messy relationships. Such analogies, if embraced by our architectural and educational institutions, could lead to a profound rethinking of how we design, construct, and maintain our built environments. Rather than waging a constant battle against outside interference of aesthetic ideals, we might learn to work with them, cultivating diverse urban ecologies.

This reader tells the story of what happens when we continue asking provocative questions about our relationship with the built environment: What do we lose when we prioritize aesthetic purity over biological diversity? Why has modernist architecture maintained such a steadfast devotion to white, clean facades? And perhaps most importantly, could "dirty" facades be reconsidered as valuable urban ecosystems worthy of our support to thrive rather than dealt with using pesticides?

The answers may challenge our conventional notions of cleanliness, maintenance, and what it means for architecture to be truly contemporary, literally in the sense of living at the current time together. More than that, they may point the way toward a new paradigm for how our institutions embody and express the post-natural turn in its departmental and legitimation structures. *The Sporadic Institute* no longer distinguishes humans as the rational animal that exists separate from the rest of nature. This distinction is abandoned in favour of complex entanglements. Instead of removing and preventing sporadic growth and errant diversity, we can design and build for mutually non-destructive cohabitation. By applying fungicide, we also commit localized epistemicide—the eradication of organisms is the eradication of potential understanding, forms, and stories. *The Sporadic Institute* is an invitation to think and talk about life and dirt.