Organized Crime: The Role of Ornament in Contemporary Architecture

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In contemporary architecture, there are clever crooks engaging in organized crime. New architectural identities arise from the clever doubling of the performative and aesthetic/affective roles that architectural surfaces must, and can now feasibly assume. In 1908, Adolf Loos, in his celebrated piece, Ornament and Crime, called for “the elimination of ornament from useful objects.” Rather than demanding elimination and removal, it can be understood that what Adolf Loos was really calling for was reinterpretation. Through the clever reinterpretation and generation of ornament in contemporary architecture with the aid of parametric design software the term “ornament” has assumed a new definition and identity.

Two design projects supported by parametric digital design processes and completed at the University of Kentucky showcase the potential to re-imagine how ornament can actively operate within architectural design. In both projects, primary building components simultaneously fulfill the technical requirements and aesthetic considerations that make the overall visual appeal of the project unique, potent, and affective.
Organized Crime

In contemporary architecture, there are clever crooks engaging in organized crime. New architectural identities and images arise from the clever doubling of the performative (technical) and aesthetic/affective (conceptual) roles that architectural surfaces must, and can now feasibly assume. The terms ‘ornamentation’ and ‘surface’ in architecture are being redefined and repurposed as each strive to become multi-dimensional (literally and figuratively) and performative, shedding the superficiality that they were associated with in previous architectural discourses.

The use of ornament in architecture has long provided fuel for debate about architectural aesthetics. Ornament is typically defined as the elaboration of functionally complete objects for the sake of visual pleasure or cultural significance. Historically, ornament in architecture has been conceptualized as something that is an additive, unnecessary, building component applied to a host surface or object. In 1908, Adolf Loos writes, “The evolution of culture is synonymous with the removal of ornament from utilitarian objects.” It is largely accepted that Modern architecture (1900-1968) abided by the call to eliminate ornament from architecture in lieu of augmenting the true spatial experience produced by architectural surface, form and space. It is also often agreed upon that Post-Modern architecture (1968-1994) took an opposing position to the use of ornamentation, utilizing it to support its desire to communicate, to reference something other than itself. Post-Modern architecture seeks exuberance and celebrates the use of ornament. In contemporary architecture (1994-Present), many practitioners are seeking to redefine the term, “ornament”. Rather than being viewed as additive or an appliqué, ornament can now be understood as an integrated, performative, functional building component, one that bears technical responsibilities such as enclosure, aperture, daylight modulation, and temperature control, as well as the aesthetic and affective considerations that augment the visual potency and overall emotive qualities of a contemporary structure, and more specifically, a contemporary building facade. Contemporary ornamentation rejects the superficial applications of previous architectural genres and simultaneously seeks the authenticity that was sought after in Modernism. In Organized Crime, there are no lies and nothing is fake.

Rather than demanding elimination and removal, it can be understood that what Adolf Loos was really calling for was reinterpretation. Through the clever reinterpretation and generation of ornament in contemporary architecture (specifically in contemporary, complex building facades), the term “ornament” has been redefined and has assumed a new identity. One can understand how ornamentation can be reinterpreted in a project such as Tomacco (Fig. 1), a design completed in the 2010 University of Kentucky College of Design seminar led by Kyle Miller. In this project, the generation of ornament occurs naturally through the strategic assembly and active manipulation of the façade’s wooden slat system. A proposal is made to redefine how a tobacco barn in Kentucky, a vernacular symbol of the state’s agricultural heritage, is visually received and to reinterpret its image in contemporary design culture. The agenda is to create an operable, performative façade system (Fig. 2), one that fulfills the changing environmental requirements from season to season and yields a complex visual resultant that is tied directly to its performative aspects. The operable facade permits the tobacco farmer to conceptually slice the façade incrementally, allowing for optimal environmental conditions with respect to the cultivation process. Both temperature and humidity inside the barn can be precisely controlled.
A tobacco barn façade is inherently thin; but in calling

**Figure 1.** Tobacco Barn Façade Design

**Figure 2:** Tobacco Barn Façade Slats
The pursuit of affect as a discourse in architecture follows a clear path of architectural movements and architectural intentionality throughout the past century. In Modern architecture, built work seeks to stimulate the human consciousness through the inhabitants of a building engaging in a subject/object relationship with the building itself in order to siphon the essence of the architecture. Phenomenology, backed by the writings of Martin Heidegger, is born as an architectural discourse and considerable attention is paid to the experience of building materials and their inherent sensory properties. In contrast, Post-Modern architecture seeks to stimulate the human consciousness through semiotics and simulated building references. The individual is the reader and the building (or any architectural construct) is a text to be read. What is viewed, intentionally points to or refers to something other than the viewed object itself.

In contemporary architecture a new agenda of affect replaces the previous discourses of phenomenology and semiotics. Architecture now seeks to appeal viscerally to this surface to perform (actually and virtually), the façade gains thickness and becomes volumetric. It is within this volume that there is an opportunity for complex design. By repositioning the surfaces of the wooden slats in the barn’s façades, a complex visual construct is generated while maintaining nominal environmental parameters. It is this concept of employing multiple intrinsic qualities that embodies the performative nature of this design. Ornamentation ceases to be symbolic of something else and becomes valid in its own right as an integrated design element.

The reinterpretation and generation of ornamentation can also occur through more complex combinatorial processes and clever prototyping of new composite materials. This means of reinterpretation can be best expressed in Fresh Gills (Fig. 3), another design completed in the College of Design seminar led by Miller. The primary goal for this urban infill project was to design a complex façade system capable of performing basic functions of interior environmental controls. Simultaneously, there exists a desire to explore the generative capacity of unsynchronized local, physical building component manipulations at the scale of the individual dwelling unit to produce coherent, complex visual field effects at the scale of the building facade. The four superior floors are equipped with an array of colored vertical fins, creased and hinged along their length, capable of transforming between lying flat, parallel to the façade, and folding in half, orienting themselves perpendicularly to the facade. Fin deformations are controlled in two manners that produce or exploit macro patterns emerging from the field: control by a coordinated master system that deploys the hinge motion according to prearranged patterns; control by each individual apartment user.

Preset macro patterns deployed across the field can be organized seasonally and according to time of day, allowing for temperature and lighting control at the scale of the facade. Macro patterns can also be exploited to create a range of interactions between the building and the public. Periods of time when automotive traffic is dominant indicates that the dominant viewer group is moving at high speeds, whereas primarily pedestrian times involve people moving at significantly lower speeds. The façade system can employ patterns best suited to be visually consumed by each user, evolving large, unarticulated patterns as well as more articulated patterns with localized, subtler deformations. Such a pattern also emerges when the individual inhabitants directly deform the façade. Not only could this produce a ‘hyper articulated,’ unique pattern, but the façade also functions organically as an index for internal functions and desired environmental conditions. The fins are also colored along a separate, invariable, radial gradation, free of the kinetic system (Fig. 4). Thus, a disassociation between the chromatic field and the deformed three-dimensional field evolves naturally. Combined with the constant transformation of the field (Fig. 5), the chromatic gradation contributes to creating a strong break with expectations regarding pattern associations, inducing a potent, affectively driven visual construct.

Critical to the repurposing of the terms ‘ornamentation’ and ‘surface’ is the desire to create an “affective” architectural construct. Affect can be best described as temporary, cognitive pattern-recognition disruption that produces non-cognitive bodily sensations. Simply stated, affect is visceral engagement with the built environment. Affect relies on and requires the absence of reference.
The pursuit of affect as a discourse in architecture follows a clear path of architectural movements and architectural intentionality throughout the past century. In Modern architecture, built work seeks to stimulate the human consciousness through the inhabitants of a building engaging in a subject/object relationship with the building itself in order to siphon the essence of the architecture. Phenomenology, backed by the writings of Martin Heidegger, is born as an architectural discourse and considerable attention is paid to the experience of building materials and their inherent sensory properties.

In contrast, Post-Modern architecture seeks to stimulate the human consciousness through semiotics and simulated building references. The individual is the reader and the building (or any architectural construct) is a text to be read. What is viewed, intentionally points to or refers to something other than the viewed object itself. In contemporary architecture a new agenda of affect replaces the previous discourses of phenomenology and semiotics. Architecture now seeks to appeal viscerally to
the senses rather than cognitively to the mind. Affect, similar to phenomenology, is most concerned with the non-cognitive visceral experience. Phenomenology is more concerned with tangible, authentic spatial extents, whereas, the discourse of affect is more focused on an unlimited, sensual experience.

In On Intelligence, a book written by computer engineer and entrepreneur Jeff Hawkins, the basis of human intelligence is explored. Hawkins identifies the brain as a memory system that stores experiences and remembers sequences of events. The brain makes predications based on those memories and nested relationships that exist among them. With this in mind, one can understand how affect in architecture will always be temporary as an individual experience. Affect, as a discourse of interest, was first activated through digital formalism. Unexpected, unprecedented, immaterial architectural forms were capable of being produced, and induced unfamiliar visual sensations. As the newness of formal experimentation wore off, material experimentation took its place. Many contemporary practitioners currently seek to both prototype and produce new building materials, and to use conventional building materials in an unconventional way. In both instances (formal and material experimentation), unexpected visual experiences cannot connect with a cognitive reference (memory). This produces visceral, non-cognitive sensations void of signs and void of mental representations or culturally predefined meanings aimed at sentimentality or nostalgia.

In Organized Crime, reinterpreted ornamentation, thickened architectural surfaces, and a growing interest in the discourse of affect are strategically combined to create technically and aesthetically sophisticated, honest architectural constructs. The impostors subsumed by the creation of their counterfeit architectures will be arrested and the clever crooks will prevail.

Notes

Supported by new publications and recently built complex contemporary building facades, the seminar surveyed how ornamentation has become performative and functional (both actually and virtually). Participants of the seminar sought to understand the difference between ornamentation and decoration; furthered the distinction between scientific (technical) performance and aesthetic (virtual) performance; and learned to objectively evaluate contemporary ornament based on the seemingly ambiguous parameters of affect and sensation. The seminar specifically analyzed contemporary how new parametric software increases the potential for complex façade systems to develop through highly controlled, efficient, iterative processes. The end product of the seminar was the design of a rain-screen façade system. Students were prompted to fulfill the requirement to create an inclusive, ornamental (performative) façade system and to consider how construction techniques (twisting, tessellating, folding, puncturing, peeling, etc.) not only generate ornamental effects (material and process based), but also are tuned to meet the design criteria for each situation.

Fresh Gills

Raleigh Arrowood
Matt Knowles
Jonathan Laurel

Tomacco

Josh Dudday
Ross Graham
Jason Milsted
Kellin Vellenoweth
The design objectives of this seminar were the following:
To further develop an understanding of how contemporary building façades reconceptualize and reconsider the use of ornamentation as a functional, performative, and integrated building component; to understand how building elements are integrated into the façade as functional components and control tangible parameters such as natural light transmittance and inhabitable or structural depth of the façade; to master parametric design techniques that allow rapid production and manipulation of a façade design and its potential variations, to present a thoughtful analysis of the façade’s visual and spatial effects through varying the individual or collective elements that create these effects and a specified overall surface affect; and to indicate how specific variations of components, locally (at the scale of the panel of module) or universally (at the scale of the field), create significantly or subtly different overall aesthetics of the building facade.

References


