

SUPERSTUDIO – VOLUME RAPA NUI

AR-597 / Fall 2020

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Content: *Volume Rapa Nui* is a Superstudio option set to question the notions of autonomy, metropolis, utopianism and abstraction at the basis of much of the ENAC architectural curriculum. Rather than continuing to feed one's love affair with heroic and self-comforting ideologies and disciplinary frameworks that have little bearing over what architects do and how people live, *Volume Rapa Nui* moves from the concrete limitations of the architectural profession within the current system of territorial development and building production, to posit new terms and new dimensions for architectural design.

A simple, terrifying question lies at the base of all this: How can architecture maintain a function in a sub-urban world characterised by absolute lack of design autonomy, where everything is a function of something else? Could it help architects' cause interpreting the word 'architect' as a verb – *to architect* – rather than a noun? Would it change the conceptual dimension of the work and the position of those who practice it? Would it fill a gap? Would it open new spaces for engagement? Would it require new knowledge?

These issues sit at the heart of contemporary environmental and urbanization dynamics, mostly concerning the growth of the non-city rather than the city, and the relatively inconsequential role played by the architectural profession in them.

In places like Switzerland, construction's partnership with the environment is well understood and accepted, so much so that both environment and building fabric preservation goals are enshrined in the Federal constitution and are not to be discussed. By contrast, world-wide construction activity within burgeoning recent settlements, often unprotected by effective land-use legislation, consumes plenty of land resources inefficiently and produces building structures that are shoddily constructed, environmentally deficient and short-lived.

The question triggering this Superstudio stream is thus the following: If the physical output of the economic processes driving urban growth today is only in minimal part the result of professional engagement, and by-and-large the by-product of an unromantic kind of *vernacular* activity – literally, work 'enslaved' to the prevailing industrial conditions of the locale – can the architectural profession rethink its historical function, and take on an indirect policy role by helping communities and

governing institutions define the context in which construction takes place, and the rules by which its markets should operate?

Answering this question requires a willingness to engage with the multiple matters that condition the remit of any building-related profession:

1. the relationship between disciplines and fields in the stewardship of the built environment, particularly architecture and urban planning, urban planning and design, urban planning and construction, and construction and industrial design;
2. the degree of environmental complexity in which we live, and professionals' ability to articulate it to themselves and to their public;
3. the relationship between technical knowledge and the configuration of the product markets we have access to;
4. the strength of collective culture, and its ability to develop and conserve awareness of the environment in which it evolves;
5. the ability to have informed open dialogue about existence and appropriateness of development alternatives;
6. the possibility to implement such alternatives as a way of showing that a different world is possible.

This list of six points provides the subject matter and the operative agenda of a teaching program such as this, sitting at the interstices of architecture, industrial design, regional development and urban planning – conceived to test the ability of a particular type of architectural thinking to facilitate eco-systemic views of a territory, and to induce technical building choices that are in line with its enrichment.

Proving the concept relies on the availability of a laboratory that contains all the elements of the equation, and enables these elements to be modelled and followed in their behaviour. This is why Superstudio has been employing Rapa Nui, the legendary island in the middle of the Pacific Ocean, home to the Moai sculptures and also known as Easter Island, as the physical context of reference, study and experimentation.

Though extravagant as it may seem, Rapa Nui represents the perfect illustration – and indeed ideal case-study – of the condition described. In spite of its global fame and inscription in the list of World Heritage sites, the 23-by-11 kilometers territory, home to 7,750 permanent residents and pressured by growing tourist demand, exists on a path of general resource dependency that ties it to the mainland nation it belongs administratively, Chile, and which conditions not only development opportunities but also built environment characteristics. Within an economic setting defined by remoteness-related high cost of living and scarcity, human settlements present numerous challenges – from land use to soil erosion, production and management of waste to infrastructural upkeep and threat of contamination, construction materials selection to typological choices. While such deficits may be

made to derive from the wicked association of demographic pressure, economic stagnation and industrial inertia, the poor quality of the built environment is also favoured by the insufficiency of planning and control instruments over spontaneous settlements or individual initiative. Social housing, for example, is developed by cashing a government check at the local hardware supplier, to buy the materials to build a quick unit. Rapa Nui's vernacular landscape inadvertently celebrates, on one side, the makeshift and driftwood traditions of a place where traditionally very few ever elected to stay; on the other side, the development haste and bonanza brought in by recent tourist flows.

Superstudio intends to focus on two specific aspects within this landscape: a) the availability of construction materials and systems as sources of built language; and b) the functional organisation of space as determinant of building form.

The idea is that concentrating on these two aspects will enable students to understand not only the structural limitations but also the potential of architects' role in facilitating good building practices.

To this end, work within Superstudio will seek to: a) articulate the link between planning decisions and building fabric characteristics; b) demonstrate there is a way of defining, assessing and articulating the 'social' performance of building construction methods and results; c) prove that it is possible to create design and building rules that inform and determine regardless of who's in charge of the construction process; d) show that the technical dialogue required for making enforceable decisions at community level can be facilitated.

The kernel of the work will revolve around experimentation with an innovative concept of typology – based on the integration of multiple sets of parameters – which can be used as a broad environmental analysis and control device.

We want to verify the possibility of creating building programs that speak of environmental circumstances on one side and socio-technical constraints on the other, without pre-empting formal results but ensuring inhabitation and settlement quality. The briefs in questions will be defined by overlaying design requirements and a series of parameters which, while reflecting types of concerns germane to Rapa Nui, are both generic and open to variations according to locale: 1. appropriateness of materials; 2. spatial efficiency; 3. importance of identity; 4. acknowledgement of social function; 5. environmental behaviour; 6. durability; 7. cost; 8. ease of procurement; 9. fabric integration; 10. infrastructural connections.

The relevance of this integrative process lies in the possibility of imagining a new form of technical and intellectual engagement with future territorial conditions for architects – an engagement that relies on our understanding of building fabric's determinants at broad policy level. Whilst the importance of achieving such a result for Rapa Nui is self-evident, given the 'ecoidal' history of the island and the

magnitude of the problems that still afflict its sustenance, the resonance of the undertaking reaches beyond its limited shores. UN agencies predict that, over the next 30 years, the world's floor area will grow by almost 200 billion square metres, of which almost 80% will be built in transitioning economies that make limited use of building professions. The sort of multidimensional engineering-supported ecology underlying the scope of this work seems a necessary conceptual base to build perspective on the instances of inappropriate design and construction practices that are likely to emerge or multiply across this impending geography.

Organisation: Superstudio will run over two full days of instruction and investigation a week. Its structure will be divided into 3 parallel parts, each with its own lecture program and assignment: a) vernaculus; b) typology; c) place.

Vernaculus will provide an analysis of the contemporary relationship between the physical availability of materials and practices in a place and the language adopted within its building fabric. A serie of invited lectures will shed light on how different architects have been dealing with this relationship. An assignment, due in week 4, will ask the students to go beyond the idea of 'picturesque', often associated with the idea of vernaculus, by reviewing materials and technologies within Lavaux, the UNESCO-protected lakeside site east of Lausanne.

Typology will introduce the students to the possibility of integrating poly-technicity in the conception of a building program, thus broadening the classical, XIX century-based idea of type. Same as with *Vernaculus*, there will be a series of lectures involving architects, engineers and planners. The assignment, due in week 8, will require students to push the typological development of a small building program provided by FAR to its technological, environmental, and political extremes.

Place will combine the two elements of *Vernaculus* and *Typology* by using Easter Island as a case-study. The lecture program will mix a review of the challenges on Easter Island with the review of work carried out by specific architects in comparable locales, from Switzerland to India, China to Mexico, Africa to Norway. The assignment, due in week 14 and involving a presentation, will focus on the application of the lessons learnt in the previous two phases to a building program in Easter Island.

Learning outcomes: By the end of the program, students must be able to: interpret socio-technical contexts; assess technological applicability; integrate analytical dimensions; establish problem hierarchies; formulate strategic plans; assess / evaluate viability of proposals.

Skills: Make optimal use of available time and other resources; set objectives and design an action plan to reach those objectives; communicate effectively with professionals

from other disciplines; demonstrate capacity for critical thinking; access and evaluate appropriate sources of information; process data; interpret technical reporting.

Resources: Cartography, historical references, multimedia resources, policy papers and technical documentation will be provided by FAR.

Language: English, French, Spanish