Richter Dahl Rocha & Associés

Toward an Integral Practice of Architecture

Un alto en el camino

Ignacio Dahl Rocha

Un alto en el camino

As architects, we know that the publication of a book is always a good occasion for "*un alto en el camino,*" as one says in Spanish, a stop along the way to reflect upon our work. In this instance there is also the fact that 2013 marks the twentieth anniversary of the founding of our studio in Lausanne, which gives it special significance. The aim of this book is a many-sided and ambitious one. In addition to the wish to share our experience, we wanted to make sure that the process involved in the book's preparation allowed us to consider what we ourselves have learned from the experience along the way, and what these reflections might modestly contribute to the debate about contemporary architecture. And, just as importantly, we hoped it might in various ways guide us on the road that still lies ahead.

In this retrospective glance, which takes in two decades of professional practice, the temporal dimension of the studio becomes more apparent as a long-term collective project that actively integrates successive generations of young architects. It is for them that this book, a collective project in itself, is destined. The concept for the book does not correspond to that of the traditional monograph. The presentation of the works and the texts that accompany them are organised in relation to a set of themes that interest us, and which we would like to emphasise here. These themes synthesise the recurrent preoccupations that have motivated our practice and our reflections on it over the years.

The book is divided into two parts which are preceded by an introductory chapter that attempts to situate our work in its professional and disciplinary context. This chapter also presents a project profile summarising our various interventions at En Bergère in Vevey, the site of Nestlé's international headquarters, an important series of projects in the history of the office which exemplify the notion of *an integral practice of architecture.* The first part of the book, dedicated to "Fundamentals," presents most of our

buildings over the course of three chapters organised according to the elemental themes of *aesthetics*, *construction*, and *typology*. At a moment in time when contemporary architectural culture gives the impression of being in headlong flight, we have sought to invoke these three basic elements of our discipline seen through the lens of our own work. In the chapter devoted to beauty, the reader is invited to be led by visual perception of the work through a selection of images that foreground the character and materiality of the buildings. The chapter devoted to construction focuses on facade studies, the aim being to highlight the relationship between building systems and architectural language. Lastly, the chapter devoted to typology presents our work in plans and sections intended to reveal enduring relationships among our projects with respect to type, and thus to give an overarching view of the *oeuvre*.

The second part of the book, dedicated to "Enquiries," foregrounds our explorations of various pathways within the discipline as well as beyond it. It includes significant renovations and transformations of historical buildings. We have also brought together a selection of experiments in the still new territory between the discipline of architecture and the fields of art and design. Finally, we include a number of competitions and unrealised projects. This part of the book concludes with a project profile devoted to the new Quartier Nord on the campus of the École Polytechnique Fédérale de Lausanne (EPFL), the SwissTech Convention Center, still under construction but slated for completion in spring 2014, and the newly completed student housing complex on the same site. Challenges inherent in the task of placemaking on an expanding campus, the exploration of new technological solutions for the convention center, and the evolution of ideas about student housing for the Quartier Nord rounds off the presentation of our work in prospective terms.

About the title of this book, for us the word "toward" implies something of the dynamic and unfinished nature of the experience that drives us ever onward and intimates the lessons we have learned as well as those we have yet to learn. It also refers to the road on which this book invites us to make a stop in order to evaluate what has been achieved up to now, and on that basis, to continue on our way. The term "integral" explicitly evokes the many different aspects of the architectural experience, human, disciplinary, professional, and academic, which appear in different ways and to varying degrees throughout this book. The persistence of the notion of "practice," literally embedded as it is in this book, reminds us of the essence and the nature of our profession, and has the virtue of dissuading us from any temptation to turn our reflections about the practice into a "theory" of architecture. Above all, the idea of *architecture as an integral experience* articulates a vision with which we identify, and a personal commitment that we constantly renew in our day-to-day work, an inclusive attitude of non-refusal, which attempts to grasp as much of ungraspable reality as possible, remaining alert to the constant search for balance and beauty to give coherence and meaning to the complex matrix of facts and values that belong to architecture.

In fact, Jorge Francisco Liernur takes up the theme of the title in depth in his preamble to this book. Liernur, who has followed our work from the beginning, and whose critical view of it comes closest to grasping what we have been trying to do in our practice, has written several essays on the subject which for us have been very relevant. In recognition of this, and in response, we conclude this volume with a reading of an essay he wrote for a monagraph on our studio published in 2007. Along with Liernur, Francisco Mangado, Pierre Milliet, and Catherine Bolle have contributed to the collective preamble that follows. All of them have been imbricated in our work in different ways, bringing to it their very different perspectives, and their texts constitute a lucid and indispensable preamble in the spirit of this book.

A perfect title

Preamble by Francisco Liernur

On two previous occasions, I've written about the reasons I admire the *oeuvre* of Richter Dahl Rocha. The works presented in this book merely confirm those arguments, and even increase my appreciation of them, if that is possible. On the other hand, it seems particularly worthwhile at this juncture to ponder the title of the present publication, as I believe it sums up what took me many pages to explain in the past.

In my mind, *Toward an Integral Practice of Architecture* is not, as will become obvious in the unfolding of the book, merely a paraphrasing of *Vers une architecture* (Toward an Architecture); rather, it intends to re-appropriate the meaning Le Corbusier himself had in mind. As Jean-Louis Cohen has so astutely pointed out, "the cover chosen for the 1923 edition of *Vers une architecture*, with its view down the promenade of the Aquitania, intimates motion 'toward' the bow of the ship. The window opened in the rectangle of the cover designates a horizon at which the hopes expressed in the book would converge."[1] The graphic metaphor highlights an important aspect of Le Corbusier's intent, namely, to situate his transatlantic-modern book proposition as a vehicle moving in the direction of its objective. The adoption of this idea entailed a significant displacement with regard to the first title he thought of giving the book, "Architecture or Revolution," not only because it was a way of attenuating its political reading, but because, in addition, the use of the preposition "toward" accentuated the preliminary nature of the contents.

To be sure, this idea of transition was not the exclusive purview of Le Corbusier, being present in other manifestos of the time such as Theo van Doesburg, Cor van Eesteren, and Gerrit Rietveld's *Vers une construction collective* (Toward a Collective Construction) of 1923, and van Doesburg's manifesto "Tot een beeldende Architectuur (Toward a Plastic Architecture)" of the following year. The originality of Le Corbusier's title lies precisely in

the *omission* of the adjective. I believe he intended to say that architecture should be reconsidered in its totality, and what he proposed in his work was intended to reconstitute that totality. This is why it is important to note that with later translations of the book, such as those of the 1927 English edition, or the Japanese edition of 1929, which presented it as *Toward a New Architecture* and *Toward an Artistic Architecture* respectively, a certain violence was done to his idea.

An endless series of paraphrases built upon nouns, verbs, adjectives, or additional prepositions followed that synthetic 1923 idea, capitalising on its suggestiveness. From *Painting Toward Architecture* by Henry-Russell Hitchcock (1948), to *Verso una Geo-Architettura* of Petra Bernitsa (2010), by way of *Towards a Social Architecture* by Andrew Saint (1987), the manifesto "Towards an Architecture of Humility" by Juhani Pallasmaa (1998), *Toward Absolute Architecture* by David Gilson De Long (1988) (which refers to the work of Bruce Goff), *Towards an Architecture of Suspension* by Farzam Yazdanseta (2012), or *Toward a Ludic Architecture* by Steffen P. Waltz (2010), publications that invoke Le Corbusier's initial proposition have continued to appear, and the book you have before you has the privilege of being the latest in this line, while we await what is to follow.

Except for the fact that this time, between preposition and noun the authors have not inserted a modifier, but on the contrary, have added two words that call for architecture's rehabilitation as a totality. This is what they are referring to when they use the terms "integral practice." With this, Richter Dahl Rocha assert the position that architecture as "an integral practice" currently doesn't exist, or at least it would appear to be in the process of ceasing to exist. This critical position harks back to a line of thought which in Spanish was adumbrated early on with the publication of Oriol Bohigas' influential *Contra una arquitectura adjetivada* (Against an Adjectivised

Architecture) of 1969. It is precisely this recuperation of Architecture *tout court* in its manifold dimensions, social, ecological, constructional, morphological, ludic, and economic, that Richter Dahl Rocha proposes to carry out in the name of "integral practice," as we witness a seemingly irreversible dispersion of the discipline's central meaning.

Perhaps a more succinct title might have been simply "Toward an Architecture." For those of us who are enamoured of the ineffable fact of the discipline's presence in the infinite plane of the human, it is nothing short of encouraging that, with explicit semantic volition, Richter Dahl Rocha would take this moment to remind us that trying to recuperate that condition of presence is still a project toward which our daily work can be directed. And indeed, the *oeuvre* and the ideas presented herewith confirm that the effort is worth it.

[1] Jean-Louis Cohen, "Introduction" to Le Corbusier, *Toward an Architecture*, trans. John Goodman (Los Angeles: The Getty Research Institute, 2007; London: Frances Lincoln Ltd., 2008), a translation of the 1928 printing of *Vers une architecture* (1923), 2nd ed. (Paris: G. Crès, 1924), 26.

Jorge Francisco Liernur received his architecture degree from the Universidad de Buenos Aires. He did postgraduate studies with Manfredo Tafuri at the Istituto Universitario di Architettura di Venezia, and with Tilmann Buddensieg at the Kunsthistorisches Institut, Philosophische Fakultät, Universität Bonn. He was awarded scholarships and grants from the Istituto Universitario di Architettura di Venezia, the Getty Foundation, the Alexander von Humboldt Stiftung, and the Rockefeller Foundation, among others. He teaches at the Centro de Estudios de Arquitectura Contemporánea, Universidad Torcuato Di Tella in Buenos Aires, and is a researcher of the Argentine National Council for Research on Science and Technology, and a guest curator at the Museum of Modern Art in New York. He has been a visiting scholar and lecturer at universities in the United States and Europe: Harvard University, Princeton University, Southern California Institute of Architecture (SCI-Arc), Columbia University; Universidad de Navarra, Universitat de Barcelona; La Sapienza Università di Roma, Politecnico di Milano; Eidgenössische Technische Hochschule (ETH), Zürich; Technische Universität (TU), Berlin; Universität Trier; Universidad Central de Venezuela, Caracas; and Universidad Católica, Santiago. His publications include *Architecture in XXth Century Argentina*; *The Southern Network: On the Works of Le Corbusier and his Disciples in Argentina*; *Writings on XXth Century Architecture in Latin America*; *Architecture in Latin America: 1965-1985* and *The Shadow of the Avant-Garde: Hannes Meyer in Mexico*. He has also published essays in *Assemblage, ANY, Zodiac, Casabella, AA Files, Arquitectura Viva, Der Architekt, At the End of the Century, World Architecture*.

Enquiring with intensity

Preamble by Francisco Mangado

I would like to begin by saying that, in general, I am interested in things that are done in a manner that is consistent with their nature. Can this be said about a publication on the work of an architecture studio? Are there parallels between how a book is presented and what it contains? Not always, of course, but we certainly have before us a case in which there is such a correspondence. Building on this notion, I would like to take this occasion to reflect on the essential attributes of this publication, with the conviction that to a great extent there is a reciprocity between the book and the character of the architectural work it presents. The title of Ignacio Dahl Rocha's prologue, "*Un alto en el camino*," perfectly captures the nature of a publication which, unlike the typical monograph (so often light on content and superficial in treatment), is deliberately taken by the authors as a pretext for examining what they have been doing these last twenty years: a retrospective glance that simultaneously clarifies the road still to be travelled.

What we have here is essentially a reflective book that is a reminder for architects – at least those with aspirations to leadership in the professional or academic realm – of the benefits of taking a publication on their work as an opportunity to engage in self-criticism, which is nothing if not constructive. It demonstrates both intelligence and courage: intelligence, in the sense of turning the task of making a book into a thoughtful pause for analysis and judgment, something particularly necessary in a world ruled by haste and a plethora of superficial information, where work is performed without reflection, and the resort to style rather than thought and ideals is all too common; and courage, in the sense that in order to improve, it is necessary to risk acknowledging one's weaknesses and errors.

Apart from this goal of reflection, the book demonstrates great generosity in its contents. The built works, competition projects, and various other pursuits of the studio are elaborated with an abundance of information that seeks to enquire into actual content and problems rather than mere appearances. Streamlined and extensive, the graphic information and texts compiled here speak to us of a real world where architecture shows itself as it is, as much throughout the design and realisation process as in the final result. One could say that through reflection and self-criticism, the architects have decided to lay all the cards on the table in a didactic exercise. Inescapably, such a didactic exercise demands more than simply presenting information "as is." On the contrary, the content has to be broken down and analysed if it is to reveal all the keys to the work, right down to the most hidden ones. But this publication represents much more than a presentation of the work, to the point that one can say it is in itself a study in how to present information on architectural work, and as such, it is surely a book with educational intentions. Are these educational intentions the logical extension of a vocation consistently demonstrated by the Richter Dahl Rocha, as much in their academic pursuits as in the *métier* of their studio in Lausanne? Yes, they surely are, as this studio is not only a place where architecture is practiced, but also the site of meaningful encounters for students and young architects coming from a diversity of cultures and schools.

The intensity of this latest publication lies not only in the abundance of material presented, nor in its strategies of analysis and assessment. In addition to this, it brings together a number of texts of a conceptual nature, which without a doubt gives it great value. In these texts, the architects situate themselves with respect to what they consider to be important in their practice. But they also express their doubts and concerns, and take a clear stand on architecture in our times, on design strategies and the idea of architecture as a service, on the problem of identity, on beauty in architecture, on aesthetic or reflective considerations with respect to time, on architecture's relation to art, and also on more urgent issues like sustainability, to name just a few of the subjects tackled in the book. All of these texts are brought together to define a theoretical corpus that reveals the rigor and reasoning behind the work of Richter Dahl Rocha. In sum, we can say that this book goes beyond the scope of the monograph to become a publication about architecture in the broadest sense, one in which a certain atemporality and profundity of approach reveal the personal objectives of the architects in the sense of their determination to use self-criticism as an essential tool for rethinking and improving architecture.

But I would like to come back to the point of the correspondence between the way projects are presented and the nature of those projects, in order to express my conviction that the value and virtue of the book are inherent as well in the body of work it presents. The works and projects featured here represent an architecture that, in all its diversity, cannot be stereotyped; there is no code that stands in for deeper reflection or is stubbornly reiterated, regardless of the specific nature of a project or its situation. On the contrary, the architectural works of Richter Dahl Rocha are the result of an analytic exercise which, based on an unwavering substratum of shared concerns, tenaciously devotes particular attention to each and every factor that might influence a project.

Along with this interest in the particular, their work demonstrates a delicate balance between the rational and the intuitive, with descriptive and synthetic thinking being brought together in the project. One could speak of the existence of a confident and refined intuition, which, with great subtlety, and over these many years, has functioned as the engine of the architects' work. It is attentive to the act of building and to material resolution, preoccupied with programmatic content, responding to certain fundamentals in its formal manifestation, and clearly concerned about context and specificity, all of which results in a design process that has the capacity to pose questions and doubts which offer a more vulnerable, more contemplative, and therefore richer and more intelligent architecture. The architecture of Richter Dahl Rocha, like their book, does not cheat. It is presented with naturalness, *sans* artifice. That said, it is quite possessed by a principle that the authors have emphasised here, that is, the will to serve, not only by solving problems, but by giving more than what society and the milieu demand. What they do is neither obvious nor servile. They operate within the marketplace, but not to gain its approval, rather to do what they believe needs to be done. Each project they undertake is treated as "special" because of the locale, the site, the users, the client, or simply the specific concerns surrounding the project. Not only the partners, but all of the collaborators share that principle of not settling for the obvious or the facile.

I sincerely hope that the vision of this *oeuvre*, as it has been set forth in this exceptionally well-produced and intelligent book, will be, for those interested in learning, a call to attention with respect to the seriousness and rigor that the practice of our profession demands.

Francisco Mangado was born in Navarra, Spain, in 1957, and earned his degree in architecture from the Universidad de Navarra in 1982. He has taught at the Graduate School of Design, Harvard University, the Yale University School of Architecture, and the École Polytechnique Fédérale de Lausanne (EPFL). He is a member of the architecture faculty in the master's program (MDA) as well as *professor extraordinario* in the School of Architecture of the University of Navarra. Francisco Mangado practices architecture in Pamploma. Among other distinctions, he has been awarded the *Thienne Architecture Award*, the *Premio Architécti*, the *Premio Foment de les Arts i del Diseny* (FAD), the *Premio Construmat*, the *Medalla de Oro Giancarlo Ius* conferred by the Unión Internacional de Arquitectos, the *Premio Garcia Mercadal*, the *Copper Medal* and the *Premio de Arquitectura Española* in 2009 from the Consejo Superior de Colegios de Arquitectos de España (SCAE). He was named an international fellow of the Royal Institute of British Architects (RIBA) in 2011, and an honorary fellow of the American Institute of Architects (AIA) in 2013. In June 2008, he founded the Fundación Arquitectura y Sociedad.

A client's reflections

Preamble by Pierre Milliet

Throughout history, it has been the client who brings to the table a building project corresponding to a need that must be satisfied through its realisation. The function of the project is central. This constraint of functionality clearly distinguishes the "client" who commissions a building from the "patron" who commissions a work from an artist for purely aesthetic reasons.

All building projects demand solutions that take into account the program, that is, the function of the building, the financial constraints, and the aesthetic aspect. The notion of durability is equally important, not only in terms of construction, but also with respect to the lifespan and management of the building. Too many architectural projects are the result of a compromise among these criteria which satisfies none of them to the fullest extent, and thus, sadly, leads to a banal result. The fixed demands of the program, building regulations, and budgetary constraints are difficult to reconcile. It is essentially an exercise in comprehension, synthesis, and creativity. On the part of an architect, it requires a variety of competencies that must coalesce in a team composed of diverse yet complementary sensibilities.

Fundamentally, a project must be the expression of functionality and technical solutions. In reality, certain recent buildings remind us that not all architectural projects adhere to this principle, some being too obsessed with making a fashion statement, or excessively interested in novelty with no other goal than making a mark or showcasing one or another of the personalities involved in the process, or both. We live in a world where appearances reign supreme and to stand out is the new conformism. For a client who wants to surprise, attract attention, or gain recognition, it is all too easy and tempting to commission an architect who will flatter the ego. The expression of the project is thus burdened by a doomed formalism

which, given its lack of authenticity, goes out of fashion or ages prematurely. Form takes precedence over content, especially when there is a dearth of the latter. This sort of formalism is simply the materialisation of the will to make an architectural "gesture" – to surprise, astonish, provoke debate, or simply induce a visual sensation. Every building must, to the extent that is possible, aim for a form of timelessness, far beyond whatever aesthetic criteria happens to be in fashion. To renew the sense of respect for concepts like equilibrium, the *juste milieu*, and harmony between form and material in the architectural project is vital. Curbing the tendency to extravagance must again become a priority. If the function is clearly expressed (which by no means rules out the innovative gesture), then the solution that follows will be clear and the building will stand the test of time. To accept this is a form of wisdom and humility.

I would like to make some personal remarks about relations between Richter Dahl Rocha and their clients. First of all, they always find the balance between rigorous research and innovative solutions, avoiding the pitfalls of the fashion system. Novelties that have genuine utility and meaning are placed in the service of the unfailing equilibrium that characterises their projects. In the body of work these architects have realised, it is abundantly clear that there is no room for compromise or superfluity. I say this from experience, having collaborated with the office over many years. It is with great admiration that I have observed how these architects take into account the parameters established by the client, and likewise, the importance they attach to explaining their proposals in order to engage the client in the decision-making process. Ideas generated by the client as well as by the team of architects are integrated into the process in order to enrich the project, and provisions are made to allow the time that this takes. There are no rigid presuppositions as to the architectural approach or the related technical solutions. The range of skills brought into

play to resolve the problems encountered by the client during the course of the working process is striking. Every project remains a unique prototype: no choice or option is taken for granted.

Throughout my long and fruitful collaboration with the office, the creative force of Richter Dahl Rocha has materialised in unique buildings, noteworthy for their clear and elegant architectural solutions, which have themselves become benchmarks of restraint and harmonious integration into their context. The desire to integrate the new, not only with respect to architectural ideas but also in terms of constructive techniques and materials, is always present, adding to the project. There is no question of novelty for its own sake, or because it is fashionable. This certainly does not prevent intense creativity, but here, creative innovation is always coherent with the other aspects of the project. Particular care is taken with construction details, an attitude indispensable to ensuring a building's longevity.

The strong sense of teamwork on which this office was founded prevents the emergence of egocentricity that can be encountered elsewhere. Consequently, each building or project is the work of Richter Dahl Rocha, and not any one individual. I am particularly impressed by the respect for human relations in general, which is literally primordial in the office; this is something that a client can sense. *It is a great strength to be able to take everything seriously without taking oneself seriously*. These architects are capable of patience, never imposing their own point of view, and always ready to call their projects into question, until such time as all participants and contributors, including planning authorities and the public, subscribe to their architectural solution. No matter what the scale of the project or prestige of the client, the architects also refuse to indulge in power, tempting as it is in this profession. No partner or collaborator derives any

advantage to the detriment of others: the work is realised with the highest professional integrity and ethical standards. Thus, the office of Richter Dahl Rocha manages the *tour de force* of demonstrating exemplary finesse in the practice of architecture itself, while remaining attentive to human relations and respecting everyone involved in the process. Over these many years that we have worked together, it has always been a great pleasure for me to collaborate with them on our common projects.

The future I have in mind for this office envisions their intrinsic values and ethics continuing to be upheld and transmitted to future generations as they develop new projects that are innovative, beautiful, and balanced, exuding a certain serenity. The success of the architects, duly recognised by their clients, is a direct result of a boundless commitment to these standards and a willingness to place themselves in the service of the common good over these last twenty years.

Pierre Milliet is president of the Solvalor Fund Management SA.
He studied architecture for two years at the École Polytechnique Fédérale de Lausanne (EPFL), and afterward he continued his studies at the École des Hautes Études Commerciales (HEC), where he earned his degree in economics. After working in a large banking firm in Lausanne, his professional path quickly led to real estate. Hired in 1984 by de Rham Holding SA (now Vavite Holding SA), he works primarily on development, finance, information technology, and management and development of the Fonds due Placement Immobilier Solvalor 61. Passionate about architecture, he is involved both privately and professionally with many real estate development projects.

The invitation

Preamble by Catherine Bolle

Encounter at the inauguration of their newly renovated offices at Avenue Dapples 54…

The light and ethereal "bridge," a piece of glass engraved by Baldwin Guggisberg, a metaphor, the key to the articulation of their office suspended between the building constructed in 1930 and an attached industrial shed. The dynamic transformation of this space plunges visitors into a universe where the dream of architecture is still very much present. Among photographs of the built works of Richter Dahl Rocha, there are many works of art, the atmosphere redolent with the life of this office steeped in artistic expression, where aesthetic thinking is totally integrated from project to realisation.

These entwinements, these projects forge an architecture that is human, contemporary, and luminous. One can detect three generations of constructive attitudes and propositions in the architectural work of these last twenty years. Perhaps it is a matter of the input of new collaborators? Perhaps it is the capacity to conceive projects that adapt immediately to the parameters of sustainable development and to elaborate their form? To transform a facade wall into a glazed skin, to integrate the coloured solar cells developed in the laboratories of Michael Grätzel and his collaborators at the EPFL: to be invited to work in this context is truly singular and captivating.

A continuity between balance and functionality is *de rigueur* here, where by their choice of materials, details, and volumes the architects bestow a sense of calm on their structures. The confidence they exude is palpable. In this atmosphere, I sense a concern for, and awareness of others which has been instilled by the two founders – somewhere between the aura of an extended family, the love of icons, the love of art.

And now the explorations of the last six years have culminated in a new quarter on a university campus, by way of other projects for housing complexes and transformations of commercial spaces. To me this seems to be all of a piece with the spirit that infuses the three sites of their offices: Avenue Dapples, rue du Jura, both in Lausanne, and calle Montevideo in Buenos Aires. It is largely due to an immense effort of digital imagination that these three entities are connected, functioning at times as a unit, and at other times in tandem. I have the sense that I want to remain close to each one of these archipelagos of creativity. The inclination and the intention dedicated to the encounter, the social aesthetic: *voilà*, this is what enriches me in our practice, which began with the installation of *Le Lapidaire* at La Verrière in Montreux in 2004, continued through several competitions, and now these multiple interventions in the Quartier Nord of the EPFL campus, or this one intervention, depending on the scale at which one sees the new convention center and student housing. To have the honour of conceiving artistic interventions for the foyer of the SwissTech Convention Center and the adjacent student housing complex, where views are proliferated by the interplay between facade/landscape, facade/glass, facade/pigment, roof/shell, spinal column/stained glass, and glazing/energy.

As a visual artist, to create work for this architecture, at the same time as the architects themselves are creating and realising it, is to contribute to a whole. To integrate the art from the atelier into constructed space, and then into public space is a lesson, an apprenticeship. Since the last half of twentieth, the integration of the givens of sustainable development and the rethinking of form has been one of the irreversible transformations in constructible solutions. Aesthetic thought grounded in a consciousness of the other: the energy of the two founders is perpetuated in the attitude toward human connections, in which respective contributions are constantly renewed and thus complete one another in a harmonious and functional continuum.

Catherine Bolle is a painter, printmaker, sculptor, book designer, and publisher based in Lausanne. She earned an MFA in visual arts in public space, and her apprenticeships in various countries have expanded her horizons with the experience of diverse cultural and intellectual environments. Her work in various media includes large-format linen canvases, and in architectural and urban contexts, indoor/outdoor sculptures in mineral glass and acrylic, and building facades in glass or fibre cement. In 1983, she founded Éditions Traces Genève, a publishing house with an emphasis on poetry, and she also edits and publishes *Journal Gravé*. Catherine Bolle continues to explore new spaces for printmaking as she moves between the theory of perception and realisation, between materiality and transparency.

Toward an Integral Practice of Architecture

Ignacio Dahl Rocha

Toward a professional model

Over many years of practice, certain preoccupations have emerged gradually to become what we might call our pet subjects or themes. These themes are what essentially motivated us to undertake the reflections in this book. They draw sustenance from two sources: reflection on our professional practice, on one hand, and on the other, a broader vision, one that inscribes our practice within its historic and cultural context – in short, architecture as a discipline. It is not our intention to articulate any sort of "theory" of architecture to justify our work, but rather to describe our way of understanding and making architecture with the hope of elucidating the meaning of what we do. The positions we address in this book might seem to fall into what are normally called the practical and theoretical domains of architecture, but our intention is not to see these as two distinct fields of operation that need to be reconciled; instead, we see them as two complementary approaches to the work itself.

The themes around which this book is organised have arisen as part of the unique experience, or we might even say universe, we are always in the process of fabricating, which is manifested consciously and unconsciously in our work. This universe revolves around a set of preferences and sensibilities that go to form our own patrimony as a collective creative subject, which we have a vested interest in understanding since, as we will see, they play a leading role in the "selective" moment of the creative process. Although these reflections may make claims with respect to the discipline of architecture in general, our universe has its own time and place, and necessarily deals with the vast but limited part of architecture it has fallen to us to address. As various critical writings on our work have noted, the particular histories of the founders and members of RDR are also important when it comes to understanding the multicultural nature of our universe.

The greater part of our architecture unfolds in the geographical and cultural context of French Switzerland, although many of its subtleties are nourished by our collective international experience, personal, professional, and academic. It is essentially a body of work in the field of architecture which we have had the opportunity to enrich with projects on an urban-scale, and at the opposite extreme, experiences in the fields of furniture, interior design, industrial design, graphic design, and collaborations with architects, artists, and landscape designers. Most of our commissions come from private-sector clients and funding, and despite the great diversity of building types we have undertaken, our work is not restricted to prestige buildings, but rather represents the profession as a whole, in 360 degrees. Our professional model has emerged from the nature and conditions of the local context, in which architects enjoy a relatively great degree of prominence, and may find themselves entrusted with a set of responsibilities during the construction process that is wide-ranging in comparison to that of architects working in other countries. In our case, we have elected to build into our practice professional services that range from the conception of the project to the management and administration of the building work. This includes services that might be undertaken by a construction company, and has to do with our desire to have maximum control over the whole process in order to guarantee the quality of the final product.

This model also corresponds to a particular studio size, one that enables us to take on projects of a certain scope and complexity. The challenge has been to respond to the organisational demands that come with the increasing scale of professional practice without, for all that, abandoning the "artisanal" quality of the work. Over the course of 20 years, as the studio expanded from 19 collaborators in 1993 to 58 in 2003, and almost 100 in 2013, the apparent contradiction between the inevitability of growth and our persistent desire to remain close to the design work to ensure its quality called for strategies that would not compromise the integral approach with which we began. From the aesthetic, technical, and human points of view, this approach has guaranteed

that the fragmentation and dispersion occasioned by the ever-increasing specialisation of professional skills and project management would not bring us to our limits. We have always placed great importance on a mode of practice wherein the partners participate actively in the design work, and our great challenge has been to strike a balance between the need for rigor and professional "efficiency," and the desire to maintain a stimulating environment conducive to architectural creativity. These demands have led us to experiment with and develop design methods that favour what we call "collective creativity." The efforts we have made to shape this professional model were recognised in 2012 when the Swiss Venture Club awarded us their *Prix SVC* as the second most innovative company in French-speaking Switzerland, a distinction that is unusual for an architecture studio. In keeping with our view of architecture, our professional model aspires to a broad and inclusive vision of practice, and is characterised by an effort to tackle all aspects of it, professional as well as disciplinary, with the same degree of excellence. This attempt at integration on the part of the studio seeks to go beyond the profession as a *métier* in order to link it to the historical and institutional trajectories of the discipline, thus granting it wider meaning as a cultural fact.

One of the aims of this integral model is to transcend stereotyped, reductive visions that distinguish between models of professional practice "committed" to creativity, critical thinking, and research, and others "devoted" to the demands of market efficiency, profitability, and representativeness, associated respectively with so-called "auteur" and "corporate" architectures. One of the symptoms of disintegration within the discipline is the stereotype of the architect as an eccentric sniper or presumptuous individual genius. While in the last few decades architects have regained social prominence in their new role as purveyors of "prestige brand-names" capable of responding to the needs of "marketing" with "stand-out" buildings, in reality, this represents a minuscule development with respect to the totality of the built environment and is not the type of "integration" we are referring to. In fact, as we see it, the integration of the architect ought to be based on an awareness of architecture as a vocation of service, and upon the great potential of one of the architect's more typical and natural skills: the capacity for synthesis. Indeed, the capacity for synthesis that architects bring to complex problems of a technical as well as a cultural kind becomes more rare as contemporary culture becomes more specialised, and as such grants us a relative advantage with respect to other professions.

RDR: Identity, Values, and Organisation
Founded in 1993, the Richter Dahl Rocha studio grew out of a friendship that began in 1981 at Yale University, where Jacques Richter and I pursued postgraduate studies. Incorporated into the team at an early date were Kenneth Ross and Christian Leibbrandt. They became *associés* of the office in 1999. In 2002, RDR Design SA was created with the dual objectives of capitalising on experiments carried out by the studio and providing our clients with a variety of services in the design field. Since 2008, Claudia Dell'Ariccia has been *directrice* of this team. In 2005, with the participation of Bruno Emmer and Bárbara Moyano, who had been working in the Lausanne studio for a number of years, RDR Arquitectos was founded in Buenos Aires. The three studios work in close collaboration and complement one another by means of permanent cultural and human exchange as well as through the transfer of knowledge and expertise.

As a group representing many nationalities, we share a vision of professional practice and of the discipline that is enriched by our diverse individual experiences and perspectives. The relatively rapid and sustained growth of the office eventually called for reflection, consultation, and eventually adaptation of its organisation on various occasions. As we have tried to map out in the synoptic diagram that follows, this has occurred in several stages, and in every instance, we worked with consultants to evaluate our architectural practice in light of the "tools" and strategies used in business management, adapting those to our particular needs. Today, the office is organised in five design teams supported by an administrative team. In order to improve the services we provide, and due to the sheer volume of our activities, an independent team was organised in 2007 to handle construction, with Fabrizio Giacometti assuming leadership and becoming an *associé* in 2009. Since 2013, the management of the studio has included seven *directeurs adjoints* who represent the next generation and guarantee the continuity of the studio.

The act of reflecting on our practice in the course of writing this book became an occasion to think about our collective identity, values, and goals. And when, in the context of a strategic workshop in Champéry in 2011, we were asked by consultants to produce a synthesis, we defined our vision as "an integral practice that strikes a balance between creativity and professionalism in order to place architecture in the service of everyone's well-being." In this scenario, the ideas that clearly appeared were our *concern for the human factors* and our collective understanding of *architecture as a vocation of service*. This also articulates the ethical dimension of our practice. The "well-being of everyone" includes the human development of the office as a whole, and each of our collaborators on an individual basis. It includes to no lesser degree the users of our buildings and our clients, as well as all those people and companies with whom we collaborate to bring our work into being.

For us, the question now is, does the model we have been developing up to this point have a future? Is it worthwhile to insist on a professional model founded on an integral vision, from a human and a technical point of view, when the forces of specialisation and globalisation constantly pull us in the opposite direction? We are experiencing a cultural evolution in which the information overload and increasing specialisation of knowledge pushes the scope and complexity of the universe of architecture beyond the traditional competencies of the architect. And as information and specialised knowledge become evermore unwieldy, our participation in the general process risks being reduced, even potentially eliminated, and it is not clear whether communication technologies allow us to offset the negative effects of the tendency to fragmentation and disintegration within our profession. In the face of this, how do we achieve balance between the need to circumscribe and specialise in a particular aspect of our work, and thus stay in the game, and the option to prioritise our role as "orchestra conductor" to ensure that architects will continue to be engaged with the development of the built environment at large. This brings us to a corollary question: is it possible to avoid the sense of alienation that results when the architect is excluded from full participation in this process? Is there a future for the model we think of as "artisanal" and to some extent localised geographically, even though it is international in its make-up and scope, in which we strive for direct collaboration, not only with our clients and the users of our buildings, but also the craftsmen and fabricators and the whole machinery of the construction industry? In a recent discussion with a young and talented architect, the subject of our professional model came up, and we heard the same question put another way. He explained how different from ours was the emerging model for their practice. What could be called a "global" model had on one hand solved the problem of a shortage of work in their local context, offering them the opportunity to win international competitions, but on the other hand imposed the rules of a game very different from the ones according to which we operate. Their priority had become knowing how not to be eliminated in the first round of a competition, how to seduce the jury in a moment so that the project would not be passed over along with many others. And if their project was selected, they would know in advance that they would be operating in an unknown place and in a cultural context they could barely comprehend. As a result, their participation would amount to a small part of the overall process. It was clear to us that they were highly conscious of the fact that the architecture they had produced under these conditions was profoundly affected by the rules of a very different game. On their side, they were forced to ask themselves, "Are we selling our souls to the devil?"

Balances and imbalances

Moving from the subject of our professional model to some reflections on the discipline of architecture, it is important to begin by situating our work within the context of contemporary culture. Of necessity, we do so from a panoramic perspective, and in a state of bewilderment and uncertainty with respect to the incessant transformations of that cultural context, which succeed one another at a dizzying rate. These changes affect the discipline in general, as well as the quality of professional life. Among the positive developments, it goes without saying that the passion for what we do has been enhanced by developments in computing and communication, a domain with seemingly unlimited horizons offering unprecedented stimulation, with instantaneous and nearly total access to information. The field of construction has likewise been greatly enhanced by developments in materials, technologies, and robotics applied to industrial tasks. Nevertheless, many advances in contemporary culture have led to "imbalances" which in our view have a negative effect on architecture.

The most obvious symptoms of these imbalances are expressed in the apparent inability of our discipline to improve the quality of the built environment. Ironically, the architecture that is often considered to be the most "advanced," and is most valued by the media, the marketplace, and even the academy, demonstrates little interest in this very basic problem, instead allowing itself to be absorbed in narcissism, adopting a solipsistic attitude. In fact, rather than concern themselves with the needs and well-being of their users, architects often serve only themselves and the market, with its insatiable demand for novelty and seduction. Much of today's architecture is known and judged by the consumption of images in the mass media rather than actual experience on the part of users and occupants. Innovation for its own sake has become an obsession, and the constant demand for novelty frantically accelerates the natural tempo of architecture. The processes of planning and building last for less and less time; the buildings, too. In short, we find ourselves running faster and faster without really knowing where to, while architecture gives ground as an object of culture and in its ability to endure, adopting the rules of the fashion system in which buildings become commodities. It is also worth noting that what we consider to be positive advances in computing and building technologies have also given rise to the cult of an architecture of complexity-for-complexity's-sake which frequently defies common sense, and deploys such an ostentatious quantity of means that its ends are forgotten. The ease with which material and intellectual resources are squandered in contemporary architecture starkly contrasts with the qualitative and quantitative poverty of the greater share of the built environment. This situation turns out to be particularly contradictory in a culture that with very good reason lays claim to the urgency of sustainable development.

It is important to emphasise that it is not a matter of opposing the phenomena against which we find ourselves resisting. Rather, we have adopted an attitude that calls into question the interpretation of these phenomena, and above all rejects their excesses. In our practice, when we are confronted with such outcomes, we ask ourselves how they affect our work. We view them as architecture out of balance, and our response is to revalorise the opposite notion, that of balance. In a culture that tends toward the obvious and the excessive, the notion of balance does not arouse much interest, and yet the writing is on the wall. Whereas we fully embrace innovation as a vital necessity and a tremendous stimulus to creativity, how can we not be disturbed by the distortions that fuel a frantic rush toward the new? And even if the benefits of the mass media are undeniable, how can we avoid being dismayed when we see architecture reduced to the status of images to be consumed? Astounding technical progress in the conception and fabrication of buildings is another domain of undeniable value to architecture, and yet how can we ignore the abuse of its potential, the cult of complexity, and the squandering of means that accompanies the formalist excesses characterising much contemporary architecture? Though we are exhilarated

by the infinite universe of design and visual art brought to us by the mass media, at the same time, we are uneasy when we see this overabundance leading to indiscriminate consumption, which inevitably diminishes our ability to appreciate things and our capacity to maintain a critical attitude toward them. The consequences of such egregious imbalances are transforming our discipline. The less optimistic don't hesitate to rule out architecture's disappearance, at least architecture as we know it today, in the form it has existed for centuries. We remain attentive and alert to these changes in order to understand and to incorporate them into our work.

Architecture as Service to Society

All the same, we are aware that, as protagonists, it is difficult for us to distinguish between transformations of a superficial nature and more profound ones. In the face of the cultural dispersion that characterises our times, what should our position be? Which values will endure? On what basic principles can we continue the practice and teaching of architecture? We believe that during such moments of dizzying change and transformation, only an attitude of maximum openness can allow us to deeply understand what is happening around us. However, a general principle that ought to be a common denominator and point of departure when it comes to redirecting the debate about architecture is the notion of *architecture as a service to society*. Paradoxically, and however obvious it may seem, this ethical dimension does not appear to find a meaningful place in debates on contemporary architecture, and the subject does not give the impression of really moving avant-garde designers, who appear to be in thrall to their own complacency. The lessons we learn through our daily practice in dealing with these imbalances allow us to hypothesise that a commitment to architecture as a service would suffice to redress many of them. We hope that our work and the reflections that accompany it will illustrate this stand.

The Culture of Ingenuity

While it is not the objective of these reflections to analyse the nature and origin of imbalances in the culture of architecture, an interpretation that has proven highly illuminating to us in our attempt to understand the cultural problems affecting architecture today is Spanish philosopher José Antonio Marina's *Elogio y refutación del ingenio* (Eulogy and Refutation of Ingenuity).[1] It is surprising to follow his interpretation of ingenuity, which, as the title suggests, begins with a eulogy and ends in refutation. Marina associates ingenuity with the culture of laughter, parody, irony, and cynicism. For him, the aesthetic of ingenuity is that of the dispenser, infinite proliferation, indiscriminate abundance. Paradoxically, the only "permanent" value with which it can be identified is novelty. To this can be added profusion, speed, and wit, tinged with contempt for tradition and received knowledge. Like contemporary art, which Marina considers ingenious, its goal is not to create beauty, but rather liberty. The ingenious person does not produce great works. He feels drawn to the extravagant, the false, the equivocal, and the insolent, yet is not a revolutionary, a destroyer of the established order; rather, he is a transgressor, an eccentric who thrives on surprise and scandal. Contemporary society is based on an ingenious culture. However, Marina puts us on guard by arguing that ingenuity is not a diversion, but rather an ambivalent way of life. For him, the ingenious intelligence generates a system, the internal logic of which produces a way of being and of creating culture. He confesses: "I was seeking to analyse an intellectual skill, a rhetorical game, in short, an aesthetic issue, and I came face to face with metaphysics and morality upon realising that ingenuity is an existential project, a life system."[2] Marina defines it in the following way: "Ingenuity is the project the intelligence devises in order to live playfully. Its goal is to arrive at a detached freedom, safe from veneration and the norm. Its method, the generalised devaluation of reality."[3] The purpose of ingenuity is to liberate the intelligence from the reality that oppresses it. It does not aspire to the denial of reality, but rather to play with it, to no purpose other than its own self-referential game. To that end, it fragments and arbitrarily disassociates things. It has collaborated with the main objective of modernism in the conquest of freedom, and it has achieved this by devaluing all manner of beliefs and ideologies, but when these bonds have disappeared, the individual is free in the name of nothingness. As Marina suggests, ingenuity deserves a eulogy because it liberates us, but its also deserves refutation insofar as it annihilates us. Its foundational experience is flight, and behind its witty gestures lies a disillusioned concept of reality. Marina believes that ingenious culture has run its course, and that at least we have learned that freedom is not achieved through contempt. It's possible to take this as a lens through which to read

contemporary architectural culture. It has helped us to comprehend the basis of our own discontent with respect to that culture of architecture, as well as to grasp and articulate another position with which we feel identified.

Toward an Integral Experience

Before moving on to the matter of our work, we want to pause for a moment to comment on precisely this position, which for us is a distinctive and pervasive feature of the work. The position we will try to articulate seeks to stimulate creativity based on reality, but avoid the pitfall of detaching oneself from reality by playing with it, breaking it up, and arbitrarily disassociating things. Instead, and even when reality is ungraspable, we seek to embrace it in a broader and deeper way, as a collective force opposed to cultural fragmentation and dedicated to cohesion and meaning. To do this requires, along with an inclusive attitude, a never-ending search for balance between the facts and the values that make up this reality. A practical application of this vision allows us to acknowledge that the nature and number of problems we choose to engage or to ignore in our experience of architecture, along with the relative importance we assign them, are not innocent with regard to the end result. We understand that the practice of any discipline entails conceptualising and breaking up a body of knowledge, but we know that the many ways in which these operations of "dissecting reality" are carried out do not represent objective methods for tackling reality, but rather our own subjective way of understanding and making architecture.

We must admit that an awareness of the importance of this issue has been strengthened as a critical reaction to another contemporary tendency: Architecture in thrall to desire for astonishment succumbs to the temptation to guarantee an interesting or novel result by emphasising, and at times even caricaturing certain aspects of the problem and playing down others. This almost always occurs to the detriment of the consistency of the buildings. We understand that exploring architecture by foregrounding some of its aspects or directly circumscribing parts of it and renouncing others is necessary, and has the virtue of opening up new horizons in our creative work and our research. However, it also carries the risk that this process of learning or research will be innocently generalised and uncritically applied in practice, whereas a balanced and inclusive attitude is fundamental. When urgencies were political, questions of project design were superfluous or bourgeois; in the heyday of methodology or semiology, there lay the path, we thought. Today it's the moment of ecology and computer modelling. Taking one or another parameter as a focus pushes us to think and to progress, provided we don't misread the fundamental architectural problem.

Our experience allows us to affirm that an architecture which consciously chooses the path of inclusion and balance, of non-refusal to confront all kinds of "constraints," whether technical, programmatic, or symbolic, and places human beings before the architectural object at the center of its preoccupations, is not choosing the "creatively" less ambitious path. On the contrary, we grant that it is the more difficult path, but we believe it is the one that potentially leads to the maximum critical and creative depth. The more the project grasps such an ultimately ungraspable reality, the more it benefits from those "constraints," giving them new critical meaning and a positive cast; and the more that reality is embraced, thus avoiding the temptation to superficially "enhance itself" with "extravagances," the more ethical and aesthetic weight it acquires.

[1] José Antonio Marina, *Elogio y refutación del ingenio* (Barcelona: Anagrama, 1992). As *Marina*'s book has not been translated into English, passages are quoted in translations by Paul Hammond, with my emendations.
[2] "*Pretendía analizar una habilidad intelectual, un juego retórico – en definitiva un tema estético – y me di de bruces con la metafísica y la moral al comprobar que el ingenio es un proyecto existencial, un sistema de vida,*" Marina, *Elogio y refutación del ingenio*, 23.
[3] "*Ingenio es el proyecto que elabora la inteligencia para vivir jugando. Su meta es conseguir una libertad desligada, a salvo de la veneración y de la norma. Su método, la devaluación generalizada de la realidad,*" Marina, *Elogio y refutación del ingenio*, 23.

Beauty

Ignacio Dahl Rocha

Between Beauty and Astonishment
Here we embark on the presentation of our work in the context of a reflection on the notion of Beauty. We are well aware that both the word and its meaning have been devalued by contemporary architectural culture. In spite of this, or precisely because of it, we have sought to concern ourselves with this subject, which occupies an important place in our work and in our thinking about the work. In his essay "On Tact" published some years ago, Jorge Francisco Liernur wrote of it that "no other glue than that of the search for beauty articulates the complex set of levels of demand, desire, and meaning that go to form it."[1]

Obviously, and this is what we wish to emphasise, architectural beauty is invoked here in its widest sense, and it is thus that we understand it. The quest for beauty refers not only to the domain of aesthetics, but also to the quest for the *meaning* of architecture as a cultural act. Liernur raised the issue of beauty in that sense, interpreting it on both the metaphysical and socio-ethical levels, and in the passage cited here, the word "glue" evokes the idea of the "binding agent of meaning." Beauty also encompasses the ineffable, the mystery inherent in architectural creativity as with all of the arts. It includes all that of which, as Wittgenstein would say, we cannot "speak," but which is, finally, that which is most obstinate. Commenting on our work two years ago, I referred to beauty as "the ultimate, albeit secret reason that we do what we do,"[2] while at the same time acknowledging the search for broader meaning and the intimate subjectivity of the ineffable which this search necessarily entails. On the same occasion, I summed up this metaphorical allusion to our work with a reference to architecture's "vocation for service," as the "first and most urgent reason" for our engagement with it.[3]

But what does it mean to say that beauty evokes the ultimate meaning of our work in a culture in which beauty itself has been devalued? Which beauty are we speaking of? And can we still speak of aesthetic ideals in this era of "the absolute and unstoppable polytheism of Beauty,"[4] which Umberto Eco identified with the consumption and provocation? To which secular beliefs and fetishes do we resort in order to give meaning to our architecture?

Between the Banal and the Rhetorical
Our "aesthetic ideal," the one which, like so many other architects, we have chosen to adopt, is nothing more than the one we inherited from the modern movement. Its essence might be defined as the search for architectural beauty in the act of construction itself. We also understand construction in its widest meaning, and not only from a technical point of view. In that sense, architectural beauty is inseparable from the social function and from construction, and it is here that the aesthetics that interest us appear strongly linked with the ethical dimension. The protagonists of the modern movement placed great emphasis on this ethical dimension in the social, functional, and technological meaning of the new architecture, but paradoxically, they did not explicitly recognise a conscious search for beauty: "It is our specific concern to liberate building activity [*Bauerei*] from aesthetic speculation and make building [*Bauen*] again what alone it should be, namely, BAUEN," wrote Mies van der Rohe in 1923,[5] though his work would reach the most sublime level of what we call the poetics of construction. For us, this paradox in itself has always possessed a mysterious aesthetic value. We know that what differentiates architecture from mere construction is the conscious addition of a wider meaning, which includes the aesthetic, and which transcends the technical and the functional. We also know that if this aesthetic will distance us from construction, architectural form tends to be emptied of its essential content. In that case we experience the malaise of the rhetorical, and our aesthetic intent may result in "embellishments in the worst sense of the word."[6] On the other hand, if we do not contribute a sufficient amount of aesthetic intent, we run the opposite risk, that is, the ghost of the banal appears: the building doesn't manage to become Architecture.

It is precisely between the banal and the rhetorical, in this space of precarious balance and of shifting boundaries, that we seek to develop our architectural language. The experience of "struggling" with those boundaries in search of our own balance is one of our most stimulating ethical and aesthetic motivations, because it entails exploring the very essence of architectural beauty. The interest in construction as a source of meaning, in addition to being a source of poetry in architecture, can also be read as a rejection of the tendency to formalist excesses in our times. The "silence" of construction, the objectivity of technics, as opposed to the arbitrariness of language, signals for many of us the illusion of a refuge amid the linguistic proliferation with which the avant-garde browbeats us today. It also possesses the lure of the impersonal, the non-autobiographical, as opposed to the cult of the individual genius. Although we know that this "silence" is impossible,[7] since aesthetic intentionality obliges us to break it, we can express ourselves by "speaking" as little as possible, by remaining very close to construction as the essential component of architecture. The architecture that results from these preoccupations has, moreover, the great advantage of also keeping us on an intimate footing with our professional responsibilities, and therefore with the needs of those who inhabit our buildings. In Liernur's essay, he warned us about the illusions of objectivity, truth, and authenticity that technics has provided to architectural form, referring to construction as "the most lasting form of solace"[8] in the face of the inability of architectural form to be self-founding, as modernism requires it to be. Unlike Mies, we accept that a conscious aesthetic volition inhabits our work, but "we choose" to retain construction as a source of poetry. The paradox is not resolved, but rather transformed into a "game" that provides us with the necessary "meaning," albeit partial and provisional.

On the occasion of an exhibition of our work in Buenos Aires in 1997, we referred to this matter: "These games, where we push reason to its limits before surrendering to what Borges described as the 'momentary faith that art demands of us', are perhaps not in vain. It is possibly this obstinate searching that provides us with the justification and the provisional belief that we can share despite it all, and to continue creating and discussing architecture."[9] To call this aesthetic argument a "game" explicitly avoids granting a transcendent *meaning* to beauty (although it doesn't mean that we are opposed to doing so), but it allows us to preserve beauty as an ultimate, secret meaning without having to be accountable. Contrary to the meaning Marina gives it, this game does not involve a devaluation of beauty, but rather a covert form of resistance to such devaluation. In any case, we know that preoccupation with the precariousness and instability of architectural language is an essential fact of modernism as it was lucidly articulated by architecture critics of the 1970s. But where are the protagonists of that lucid scepticism today? Who is able to counter the incessant formal verbiage and ingenuous optimism of the contemporary avant-garde? Has this problem been resolved or overcome? Or has it just been anesthetised?

The Decline of the Poetics of Construction
Notwithstanding the great diversity of languages explored by the full spectrum of avant-garde tendencies, they nevertheless share several motivations and features. These characteristics are the ones that give them their identity as "state-of-the-art" architecture and gradually distance them from the language of modernism. By way of comparison, this language, after evolving for almost a century and despite having resisted the onslaught of various "isms," begins to take on a nostalgic cast and to question its own validity. The question of the direction and meaning of these linguistic novelties suggests that it is necessary to distinguish the legitimate innovations deriving from technological or programmatic changes from those that respond to the phenomena of fashion. The constitution of architectural languages is complex, and in order to understand it one must take a close look at both the social and technical evolution that brings about structural changes and the symbolisms that every culture produces over the course of time. Despite our mistrust of the fashion system, we have grasped the legitimacy of and thoroughly embraced many recent developments. For example, the prevalent phenomenon of skins to which we devote a section of this book: while they may be understood by some to be a matter of fashion, skins belong to the evolution of construction, technology, and – of global importance today – environmental concerns.

Coming back to the current cultural context and its imbalances, on the basis of these reflections about our own body of work, we will float the hypothesis that the avant-garde no longer takes an interest in the metaphoric

[1] Jorge Francisco Liernur, "Acerca de la delicadeza: consideraciones sobre la obra de Richter & Dahl Rocha," 37, published as "On Tact," in *The Architecture of Richter & Dahl Rocha*, trans. Inéz Zalduendo (Basel, Berlin, Boston: Birkhäuser, 2007). In the course of writing the texts for this book, in my re-reading of Liernur I returned to the original Spanish version; passages quoted here and elsewhere in this volume have been retranslated by Paul Hammond, with my emendations.
[2] Ignacio Dahl Rocha, notes from an unpublished talk, *BienalBA11*, 2011, Buenos Aires, unpaged.
[3] Dahl Rocha, notes from an unpublished talk.
[4] *On Beauty: History of a Western Idea*, ed. Umberto Eco, trans. Alastair McEwen (London: Secker & Warburg, 2004), 428.
[5] Mies van der Rohe, "Building," G 2 (September 1923): 1, published in Fritz Neumeyer, *The Artless Word: Mies van der Rohe on the Building Art*, trans. Mark Jarzombek (Cambridge, Mass.: The MIT Press, 1991), 300.

[6] See Henry-Russell Hitchcock, "The Decline of Architecture," *The Hound & Horn* 1 (1927): 28-35 passim.
[7] See Jacques Richter and Ignacio Dahl Rocha, "The Impossible Silence," *Richter et Dahl Rocha Architectes 1990–1996*, with texts by Jorge Francisco Liernur and Jacques Gubler, exh. cat., March 13–April 30, 1997, Centro de Estudios de Arquitectura Contemporánea, Universidad Torcuato Di Tella and Fundación Proa, Buenos Aires (Lausanne: Éditions RDR,1997), 107, with slight modifications to the English translation.
[8] Liernur, "Acerca de la delicadeza," 25.
[9] Richter and Dahl Rocha, "The Impossible Silence," 107.

potential of construction, which throughout the history of architecture has been the referent. Construction is, in the best of cases, the means of giving material form to projects conceived using other strategies for generating meaning or symbolism. The new languages radicalise their abstract character, and no longer invoke the poetic expression inherent in the articulation of traditional constructional elements like beams, cornices, windows, louvers, and so forth. For contemporary aesthetics, these constructional elements tend toward figurative allusion, and thus get in the way. Architects attempt to conceal or disguise them behind the building envelope, which is clad in a skin, and to foreground instead the abstract and sculptural nature of the general volumetrics of the "object." We use the term "object" here, and not building, given that this radical abstraction entails the loss of the quality of architectural "character" that historically identified the different types of "buildings" as such. The modern movement was traditionally associated with abstract art, but despite coining a new language, it retained a figurative quality in its allusions to the "machine aesthetic," and above all, in its metaphorical allusion to construction. Today, faced with the loss of interest in construction as a source of symbolic meaning in architecture, we realise that perhaps this is one of the undeclared but lasting attributes of the modern movement, the one that gave it that air of neutrality and indifference with respect to the unresolved problem of language which still seduces many of us.

In any case, by reducing the dependency of construction on its technical, functional, and symbolic aspects, by anaesthetising any doubts about the capacity of language to convey meaning, and by reducing their interest in what they could learn from the history of architecture, the avant-garde clears the path in order to respond to their greatest obsession, the rapid succession of the new, so that they can perpetually surprise us with their formal inventions. The strategies of composition that give form to these buildings, converted into eye-catching sculptural objects, are literally infinite, arbitrary, and even not recognisable as strategies. The very notion of composition understood as a tool of conception and control of form and space undergoes an uncertain evolution, and it is difficult to evaluate the degree of awareness, mastery, and sensibility that these formalisms wield.

These architectures make use of the extraordinary ability of the new technology to generate complex forms, but they get the means mixed-up with the end product. The result is an aesthetic in which there are always supposedly good reasons for the volumes to have waveform or at least non-orthogonal surfaces, loads must not express their gravitational descent, but give the impression of levitating, and above all, tribute must be paid to *complexity* in order to avoid going unnoticed by the specialised media. In this admirable deployment of formal exploration, the most skillful finally achieve an acceptable compromise between the technical and the functional in their projects, but the majority succumb to rhetorical formalisms. From the aesthetic point of view, these new languages are more concerned with astonishment than beauty. They are born of an aesthetic sensibility that registers only the conspicuous, the aggressive, the strident, the glaringly obvious, which has an insatiable need for shock and provocation, and which is losing the ability to appreciate with serenity and profundity the hidden meanings that architecture might veil and unveil. This aesthetic sensibility does not know the pleasure of moderation, nuance, and subtlety.

The Aesthetics of Balance and Moderation
With respect to these cultural tendencies, we would admit that our practice goes against the grain, as if resisting them in some way. Ours is a body of work marked more by reserve than grandiloquence; more dedicated to moderation and balance than provocation; more desirous of simplicity and silence than complexity and stridence. We appeal more to the timeless than to the ephemeral. We actively engage building in lieu of the elaboration of images. Finally, we are more concerned with beauty than novelty. This universe of balance, moderation, and subtlety does not prevent us from experiencing the thrill of creative work. On the contrary, we find it enormously stimulating. It represents a choice, a challenge, and in large measure, it frames the ethics of our aesthetics. In Liernur's reading, this a granted positive value: "For those who are capable of resisting the demand for the spectacular that instant consumption demands, and who allow themselves to take the time needed to appreciate it, the work of Richter Dahl Rocha resonates intensely. But this intensity goes to work on the aesthetic senses as a sort of *pianissimo* (not a silence!) or a nearly inaudible whisper, contrary to the 'shock' and the provocative cry of the metropolitan *Nervenleben*. Only when we contemplate it attentively do we perceive the faint rustle that leads us to intuit the ontological difference between Architecture and construction."[10]

[10] Liernur, "Acerca de la delicadeza," 35.

From Tectonics to Skins

Ignacio Dahl Rocha

Construction and the Language of Architecture

Our intent here is to emphasise and illustrate the theme of the relationship between construction and the language of architecture. We have remained particularly alert to this relationship as an argument about architectural meaning in general, and as aesthetic expression in particular. If we have insisted on seeking beauty in the very act of building, this is not to say that we believe there is a causal relationship between construction and architectural language. We realise the language of architecture does not derive directly from a technical or functional logic. Rather, the relationship between construction and architectural language is of a metaphorical nature. Aesthetic intent establishes symbolic relations with construction, and may either coincide with functional and technical logics or depart from them. What it cannot do is ignore the dialogue. Ignoring the dialogue with construction means voiding architectural form of its essential content, and leads to what we call rhetoric or formalism. In the intensity of this dialogue resides the consistency of the work, and in its metaphorical nature, the potential for beauty.

The "Dematerialisation" of Construction

What Kenneth Frampton has described as the "dematerialisation" of architecture is a process construction has been undergoing since the end of the eighteenth century.[1] As architecture has evolved from traditional or monolithic systems, this process has manifested itself in the ever-increasing number and lightness of the components of the construction system. During the last few decades, in Switzerland as well as in the rest of the industrialised world, we have experienced an acceleration of this process fuelled by technological progress. This includes advances in glass technology, its structural use, and the notable improvement of its thermal performance as a constituent element of the building envelope. Other recent technological developments in the domain of construction that relate to our theme are the diversity, quality, resistance, and lightness of thermal insulation materials and facade claddings offered by the building industry, including the evolution of adhesives that are replacing mechanical connections as the last vestiges of a figurative aesthetic. It is also important to note advances in digital technology and robotics which are facilitating the design and manufacture of nonstandard components and reducing their cost. These developments lessen the obvious economic advantages of the standardisation of parts that belongs to a prefabricated building system, and permit us to envision the industrialisation of a system involving a multiplicity of parts, all of which could be different. The same developments facilitate the design and construction of complex forms, and in this sense have broken new ground in terms of architectural expression. Their secondary effects, as we have said, include abuses deriving from this potential, abuses which in many instances seek to justify architectures that make a fetish of complexity.

The Aesthetics of Sustainable Development

A significant force in the evolution of modes of construction is technical requirements related to the increasing demand for thermal insulation in the name of sustainable development. In order to adapt to these new demands, buildings are mutating, developing thick insulating wrappers whose outer layers are true skins that conceal from view constructional elements that previously determined the architectural language of the facade and now assume a leading role in the expression of the building. To this is added the fact that various lightweight thermal insulation materials have substantially increased in depth, and as a result, facade cladding moves away from the load-bearing structure and must be made lighter to facilitate their fastening. Heavier revetment materials, like brick or prefabricated reinforced concrete components, are less appropriate for this reason. Because they consume more material and are installed on the *outside* of the insulation, their weight does not even have a positive effect on the thermal inertia of the building.

[1] Kenneth Frampton, *Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture* (Cambridge, Mass.: The MIT Press, 1995).

This new language renounces the modernist paradigm of "the facade as section." The new envelope does not reveal or necessarily express, either literally or metaphorically, the structural and constructional concept it conceals. The aesthetic of buildings thus tends to become a question of skins, that is to say, the main problem is how to *clothe* the building. In this case, what dominates the architectural expression is a logic of design involving superficial textures instead of the traditional expression of the tectonic. There is a weakening of the traditional idea of an architectural composition based on the proportion and formal articulation of building components. Instead, what is emphasised are the "textile" qualities of weaves, patterns, colours, transparencies, and reflections which the new technology makes possible, and for which the building industry develops a range of products. As we have mentioned, these new languages are characterised by the search for radical abstract expression, and so any constructional element may turn into a dissonant figurative allusion. As with works of art, this formal abstraction is offset by a revalorisation of the expressive nature of the materials, although in the case of architecture, this is reduced to a matter of cosmetics. In effect, the vast repertoire of these skins, their endless variety and infinite subtlety constitutes the means of architectural expression, making possible a richness and effectiveness in terms of visual communication which is without precedent in the history of architecture. Important in this regard are serigraphy and other techniques for printing graphic motifs associated with glass technology, which have made significant contributions to the aesthetic development of building skins. If Venturi, Izenour, and Scott Brown invited us to learn from pop culture how much more effective were advertisements than buildings at communicating in the urban realm, today the skins that sheathe buildings allow them to take the lead once again.

The Facade Studies following this essay illustrate our understanding of the relationship between construction and architectural language. The aim of the synoptic table is to foreground various aspects of this relationship, bringing together the greater part of the works presented in this section, organised by facade type in relation to what we call the constructive and formal orders in the dematerialisation process mentioned above. For us, the study of facade details at the scales utilised here represents a key moment in the design process, in which the abstraction of the formal composition and its material and constructional meaning are clearly articulated.

Monolithic Systems

Two of the houses presented in the Portfolio represent monolithic building systems characterised by the expression of the most primitive type of facade: walls perforated by windows. Both examples combine this system with the paradigm of the modern flat roof. In Casa José Ignacio (2008–09) in Rocha, Uruguay, the architectural expression is one with the construction system, with the flat roof emerging as an isolated feature resting on stone walls. In the case of Casa La Hilaria (2007), in Punta del Este, also in Uruguay, the flat roof that cantilevers off to one side terminates on the other side, where it merges with the language of wall and window. The two construction and formal systems come together with a sculptural purpose, dissolving into a single language, with the homogeneity of the stuccoed wall surfaces playing its crucial role as a unifying element. Belonging to the same family is Avenue de Béthusy (2007–09) in Lausanne, an apartment building that also utilises stucco as an uninterrupted form of facing, except that in this instance, it is applied directly over a thick layer of lightweight insulation material. Due to its economy and efficiency, this system is widely used in cold climates. Moreover, it has the potential to give the illusion of preserving traditional architectural expression, as if genuine masonry walls were involved. As far as aesthetic expression is concerned, the distribution of "solids" and "voids" on the facade is fundamental. This expression coincides with the constructional logic, except in the detailing of the windows, which reinforce the idea of the thickness of the wall and subtly intervene in the composition.

Articulated Facades

In the examples of the next category, the uninterrupted surfaces give way to building envelopes that are articulated with different types of facade panelling. Their architectural language, inherited from the modern movement, invokes construction systems consisting of an independent structure infilled with non-loadbearing elements in the shape of continuous windows with or without sills, or a succession of windows and opaque panels, and is formally characterised by horizontal bands. In reality, in many cases, the facades are loadbearing walls of reinforced concrete

clad with a layer of continuous lightweight insulation. Their language metaphorically alludes to a construction system even though it does not completely coincide with the way they are built. For example, with L'Îlot-du-Centre (2006–11) in Lausanne, La Verrière (2001–05) in Montreux, and the student housing complex for the EPFL Quartier Nord (2008–13) in Écublens, banded cladding expresses the slabs of the mezzanine floors, although insulation may be installed between them. With the buildings that comprise the EPFL Quartier de l'Innovation (2006–11), also in Écublens, the main issue is not the expression of floor slabs, but the expression of the "*fenêtre en longeur*" type, and to reinforce its presence within the composition, the parapet appears as a great joint. The effect of lightness, conveyed through the banded composition, is maintained by the varied serigraphic treatment of the glass panes. For the facades of the buildings that comprise the UBS Rhône block (2010–15) in Geneva, in search of a language that would harmonise with the traditional urban context, we proposed a reinterpretation of the traditional post and lintel system. In light of our reflections on current tendencies, the Nestlé WellNes Centre (2005–08) in Vevey stands out as a particular case in which the structure is the main protagonist of the building's expression, and establishes a relation with the magnificent concrete pilotis of Jean Tschumi's mid-century building. These in turn draw their inspiration from "brutalist" architecture, whose language was strongly inspired by construction. In this instance, constructional logic and aesthetic volition are blurred in a single expression.

Solar Protection as Architectural Expression
As is often the case in contemporary architecture, whenever an abstract language is being sought, there is a tendency to repress certain building elements. In the case of Route de Berne 46 (2001–05) or the IMD Nestlé Building (2002–06), both in Lausanne, it is precisely the opposite. Like so many other modern buildings, solar protection elements turn out to be fundamental to the architectural expression. With the IMD Nestlé Building, in order to arrive at a simple abstract language, instead of avoiding louvers altogether, as we did with Flon Les Mercier (2006–08) in the center of Lausanne, the facade was composed almost exclusively of a standard system of louvers, in which they become the main aesthetic element. Eaves provide other options for protecting facades and have played an essential role in the composition of many of our buildings, like the IMD New Meeting Place (2002–05) in Lausanne, and the restaurant for the Bobst Headquarters (2010–12) in Mex.

Skins
Taken together, skins represent dematerialisation in its most developed form, and belong to a formal strategy, as we have already intimated, which instead of emphasising the aesthetic expression of the building components, adopts the expressive capacity of the surface as its main protagonist. In each instance, different reasons have led us to choose this type of solution. With the facades we designed for SICPA Chavornay (2010–14) or the SwissTech Convention Center in the EPFL Quartier Nord (2008–13), in keeping with the constructional logic of the buildings, the skins appear to be revetments of the opaque surfaces. In the case of Clinique La Source (2007–09) in Lausanne, in order to emphasise its horizontal proportions, the new skin permits the structure supporting it to be revealed. On the other hand, by virtue of its transparency, the existing windows can be concealed, thus guaranteeing its abstract character without impeding the passage of natural light. With Flon Les Mercier, a curtain wall that seeks to look like a skin provides a response to the aesthetic ambition of maximum simplicity and abstraction of the volumes of these buildings. To that end, we serigraphed the glass panels, whose graphic motif blends in with their construction joints. The serigraphy plays its part in minimising solar gain, thus avoiding the use of louvers on the exterior facade, which would have interfered with the aesthetic result we intended.

Enduring Relationships

Christian Leibbrandt

On the Typological Approach[1]

Since the concept of "type" was established by Quatremère de Quincy at the end of the eighteenth century, and applied by Jean-Nicolas-Louis Durand in the nineteenth century,[2] the typological approach has been a continual source of interest and research for architects, whether in theoretical work, teaching, or actual building. Even today, the profusion of articles, atlases, and compendia on the subject testifies to the discipline's enduring interest in the subject,[3] confirming Rafael Moneo's observation that "To raise the question of typology in architecture is to raise the question of the nature of the architectural work itself. To answer it means, for each generation, a redefinition of the essence of architecture and an explanation of all its attendant problems."[4] Beyond a doctrinaire approach to the notion of "type," and drawing on its documentary and referential potential, the field of typology at large has witnessed a resurgence of interest, in particular in the related notions of hybridisation and mixing of types.[5] This brings us to the twofold condition of the typological approach as an instrument of knowledge and of project-making.

At a time when architecture is besieged by douts that go so far as to question its very future, we believe that the typological approach continues to be instructive. To begin with, it affirms that our work exists in a historical continuum, which it seems to me is more a matter of evolutions and inflections than of leaps or ruptures. In its diachronic approach, typological analysis enables us to detect the nuances and modulations of this slow evolution. It is in this frame of reference that we place the reflection on typological innovation. Typology, conceived as a system of relations,[6] constitutes an attempt to understand the complexity of dwelling, in which there is a convergence of cultural and social models, representations, historical and professional models, constructive, aesthetic, economic parameters, and regulatory constraints.

Urban Form and Type: The Logics of the Creation of Form

One of the fundamental contributions of Italian research on typology during the 1960s was its emphasis on dialectical rather than causal relations between urban and architectural form, morphology, and typology. This attention to the generation of form, of the city *vis-à-vis* the object, or typological development *vis-à-vis* urban morphology constitutes one of the themes of reflection in our projects. This problematic takes us to the heart of what defines the specificity of our discipline, that is, the notion of *scale*. In our practice, there is a back-and-forth movement between scales, from the building to the city, from urban fabric to type, from object to ensemble, and from ensemble to neighbourhood. This interaction between type and urban morphology is one of the "materials" with which we work, and the understanding of it enables us to retrace the conditions of the creation of forms. Two logics are at work in this form-making process: an internal logic, which pushes the object toward the exterior, and an external logic which, at the scale of the parcel or urban fabric, acts upon urban form.

Rue de L'Avenir
Morges, Switzerland

Avenue de Béthusy
Lausanne, Switzerland

Internal logics

Program, constraints, and functional relations express their logic in schemas or spatial configurations, which in turn are translated into architectural form in accordance with the modern tradition of "form follows function," but also, and above all, in accordance with a will to expressive coherence.[7] Some buildings express their function unambiguously, and thus fit uneventfully into their typological class. For example, our competition project for the Hardturm Stadium (2012) is very much in keeping with the nature of its program, the CFF Swiss National Train Maintenance Center (1995–99) evokes a hangar for trains, and the SwissTech Conference Center, EPFL Quartier Nord (2008–14) takes its general volume from the form of the great hall. Other buildings may express the particularity of a mixed program through a hybrid or specific form, like Quartier Erlenmatt (2008) and Aquatis (2005–16), or on the contrary, attempt to integrate disparate programs into a coherent formal and volumetric whole, like the project for Bobst Headquarters (2008–12).

It is rare to find in our work forms based on compositional criteria,[8] like symmetry or a regulating line, which does not mean there are no strategies of formal composition. Rather, one could say that they refer to the heritage of the modern plan, as with the prototype for a Forest Refuge (1991–96) in the Vallée de Joux. Here, technical and constructional constraints led to a project based on the deployment of building elements which were given form by operations of geometrical composition. Walls were translated along their axes to free the four angles of the plan, while the ridge of the roof was shifted and aligned diagonally in relation to the quadrilateral plan, creating an irregularly canted canopy. Although it was designed according to basic geometric principles, the refuge paradoxically appears to be an "organic" form in tune with the landscape. Two other projects could also be described as organic: Clinique La Prairie (2001–05), and the Propriété Bellerive (2011), insofar as they share the specificity of being intimately linked to the natural and topographical context of their sites.

External logics

By external logics, we mean the manner in which constraints on architectural form are exercised from a scale greater than that of the building, like the urban fabric or the structure of parcels. These constraints are generally expressed through planning regulations, and apply to size, volumes, and building layout, and they define urban form and determine the architectural project. The urban structure, as articulated by rules of contiguity, alignment, and vista, also influences typological developments, as with projects like La Verrière (2001–05), L'Îlot-du-Centre (2006–11), Rue du Jura 6 (2012–15), Rue de l'Avenir (2010–13), and Dos Patios (2008–10).

The shape of a parcel can condition the morphology of a building, as in the case of the Delta Project (2008), in which the form of the lot naturally led to the development of a triangular building, and Chemin de l'Ochettaz (2012–15), where the irregularity of the parcel led to a differentiation and volumetric richness that contributed to the building's integration into its setting. To these determinants are added the specific qualities of place, topography, orientation, and view, with the aim of maximising the advantages, as in the cases of Clinique La Prairie and Les Terrasses de Villette (2010–13), or minimising the drawbacks, as in the case of La Verrière, in each natural or built context with which the new building establishes a new relation, or a new equilibrium.

The great majority of our projects share the common modality of having been developed within a precise and generally homogenous regulatory and legal framework, that of Switzerland and more specifically the canton of Vaud. Whether they are expressed through neighbourhood plans, as with Trait-Planches (2009–14), Tour de l'Esplanade (2012), Avenue de la Vallombreuse (1991–95), and the Quartier des Uttins (1998–2009), or communal regulations, the regulatory structures governing our projects are precise and above all binding. They condition and even directly determine the form of the buildings. There is, consequently, a close correlation between the morphology defined by the urban plan and the potential typological developments: both the form and its dimensions (notably, in the case of housing, depth) limit the typological options. In our practice, we have experienced this as an impediment to typological development and innovation. However, in some cases, the designer of the project is allowed a certain amount of room to maneuver, notably when there is a difference

Bobst Headquarters
Mex, Switzerland

Forest Refuge
Vallée de Joux, Switzerland

Clinique La Prairie
Clarens-Montreux, Switzerland

[1] Throughout this chapter we have left in French some terms commonly used in France and Switzerland, in recognition of their regional specificity as well as their resistance to translation: *barre*, the long slab type; *plot*, a term which in French Switzerland refers to a compact building type; and *traversant*, also a French-Swiss term for a type of apartment that traverses the lateral depth of a building with fenestration on both narrow ends. Likewise, the regional terms used by local governments in establishing zoning codes have been left in French: Indice d'utilisation du sol (IUS) and Coefficient d'Utilisation du sol (CUS) or floor area ratio (FAR), and Coefficient d'Occupation du Sol (COS) or the ratio of the area of the building footprint to the size of the parcel.

[2] Antoine Chrisostome Quatremère de Quincy, *Encyclopédie méthodique, Architecture*, 3 vols. (Paris: Panckoucke, 1825) and Jacques-Nicolas-Louis Durand, *Recueil et Parallèle des Edifices de tout genre Anciens et modernes, remarquables par leur beauté, par leur grandeur ou par singularité, et dessinés sur une même échelle* (Paris: L'Imprimerie de Gillé fils, 1801).

[3] See Emanuel Christ and Christoph Gantenbein, *Typology – Rome, New York, Hong Kong, Buenos Aires, Review* No. II (Zürich: Swiss Federal Institute of Technology-ETH, 2012); Peter Ebner, Eva Herrmann, Roman Höllbacher, Markus Kuntscher, Ulrike Wietzorrek, *Typology+Innovative Residential Architecture* (Basel, Berlin, Boston: Birkhäuser, 2010); Oliver Heckmann, Friederike Schneider, *Floor Plan Manual Housing* (Basel, Berlin, Boston: Birkhäuser, 2011); Aurora Fernández Per, Javier Mosas, Javier Arpa, *DBook, Density, Data, Diagrams, Dwellings* (Vitoria-Gasteiz: a+t ediciones, 2007); Bruno Marchand, Antigoni Katsakou, *Concevoir des logements, Concours en Suisse 2000–2005* (Lausanne: Presses Polytechniques Universitaires Romandes, 2009); Bettina & Claus Staniek, "A Typology of Office Forms," *Best of Detail: Büro Office* (Munich: Institut für Internationale Architektur-Dokumentation, 2013).

[4] Raphael Moneo, "On Typology," *Oppositions* 13 (Summer 1978): 23.

[5] Ebner, Herrmann, Höllbacher, Kuntscher, Wietzorrek, *Typology+Innovative Residential Architecture*, "Archetype, prototype, type, what interests us is the oscillation of the term, not its rigid constriction," 16.
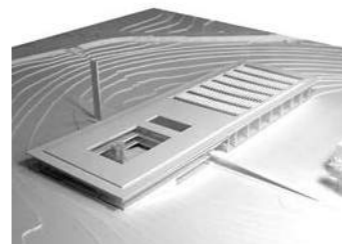
[6] "*Isolément (les) types ne représentent pas un outil très riche si on ne les replace pas dans un système global. C'est ce système, c'est-à-dire, l'ensemble des types et de leurs relations que nous nommerons typologie,*" Philippe Panerai, Jean Charles Depaule, Marcelle Demorgon, and Michel Veyrenche, *Elements d'Analyse Urbaine* (Brussels: Archives d'Architecture Moderne, 1980), 106.
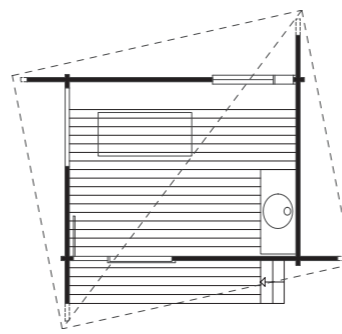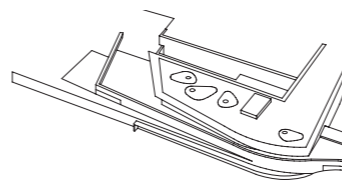
[7] "The signature trait of Richter & Dahl Rocha's work is the legibility with which each project expresses the program for which it was conceived. … What is quietly revealed is the 'character' of the architectural task, an ancient and specifically architectural way of affirming Aristotle's dictum that things (like the characters in his *Rhetoric*) are manifestly what they say they are," Jorge Francisco Liernur, "Acerca de la delicadeza: consideraciones sobre la obra de Richter & Dahl Rocha," published as "On Tact," in *The Architecture of Richter & Dahl Rocha*, trans. Inéz Zalduendo (Basel, Berlin, Boston: Birkhäuser, 2007), 23.

[8] The concept of composition is historically one of "*logiques inhérentes aux manières de concevoir un bâtiment,*" which is "*omniprésent jusqu'à la fin du XIXe siècle et dont l'érosion est indubitable à mesure que l'on avance dans le XXe siècle,*" Jacques Lucan, *Composition, non-composition* (Lausanne: Presses polytechniques universitaires romandes, 2009), 6f.

between the rights to build defined by the regulations and the theoretical constructible area defined by the plan (building perimeter, maximum height). This was the case with both Quartier des Uttins and Grand-Pré Sud (2012–14). In other cases, where regulations do not offer such latitude, the investor may appropriate that freedom, renouncing some of his rights to build in order to improve the quality of the urban project, for example the creation of a public space in the form of an esplanade, as with L'Îlot-du-Centre, or a restriction of the plan, as with Les Uttins G, or the height, like the IMD Executive Learning Center (1999–2002). In certain projects, we use a regulatory constraint to develop a typological diversification, as we did in Les Uttins D, where the voids between the buildings dictated by the neighbourhood plan were given the form of generous, covered outdoor spaces linking and articulating the built volumes. These few examples show that the degree of freedom offered by the regulatory framework can be conducive to innovation or the combination and hybridisation of types, and that it may consequently have a positive effect on the typological richness and quality of dwellings.

Aggregation and form: from unit to ensemble

The possibility of producing urban form through the architectural project allows greater scope for research or innovation, and more coherence and quality for urban space, as with our projects for Au Pré-du-Canal, begun in 1994, Plan de Quartier des Cèdres (2008–13), Les Moulins Rod (2011), and Les Planches (2012). This raises the question of how the regulation is to be given concrete form in order to ensure the required urban coherence, while leaving room for future builders to maneuver, with a view to "multi-party" construction or successive phases of construction, in other words, the question of open or closed planning. When the scale of the project and intervention goes beyond an isolated object to a group of buildings constituting an ensemble, or even a neighbourhood, the shift in scale reveals, more than in other cases, the need to work with the formal and morphological relations between buildings, in particular, the project for intermediary spaces, that is, the relation between public space (external spaces) and private space (the built), between void and solid. This scale of intervention brings into play the notions of unity and diversity, coherence and differentiation, in other words, the problematic of architectural and formal identity.

Dwelling and Type: Spatial Structure and Circulation

Just as urban form ensures the mediation of public and private space, at the level of architectural form, type, in terms of spatial structure, regulates relations between the individual and the family unit or social context.

From public space to private sphere: access, circulation, distribution

The question of access to housing, from the public space of the street to the heart of the dwelling, embraces the theme of the itinerary and its spatial sequences, the deployment of transitional spaces through which the inhabitant moves from the most public to the most private, across the thresholds of the semi-public and semi-private. This problematic, historically neglected by the narrowly functionalist approach, is crucial to contemporary thinking about the densification and qualitative improvement of collective housing.[9]

Access – The handling of access paths and spaces between buildings provides an opportunity to work on empty space, and to put in place itineraries that serve as transitional zones and places of sociability and relaxation, which are very different from monofunctional circulation spaces, for example in L'Îlot-du-Centre, Trait-Planches, and Champs-Meunier Nord (2009–13). With the Quartier des Uttins, the access sequences of the four housing blocks comprise a series of transitional spaces, moving from the residential street (public) to the access path (semi-public), to the building entrance, which opens onto an internal street (semi-private) linking the vertical circulation units leading to the landings on each floor.

Vertical circulation – There is no need to stress the importance of the quality of vertical circulation systems, and of their positioning in the building or their relation to the horizontal distribution system of the individual units. They contribute to the quality of reception and comfort. However, the imperatives of compactness and economy often cause vertical circulation cores to be positioned at the heart of the building, with no natural lighting. In order to avoid this negative outcome, the circulation space can be widened to create a hall lit from above, as with
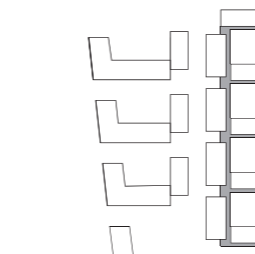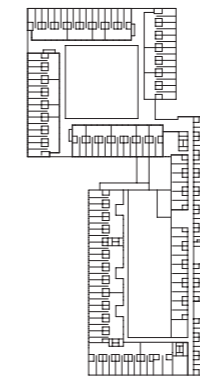

L'Îlot-du-Centre
Lausanne, Switzerland
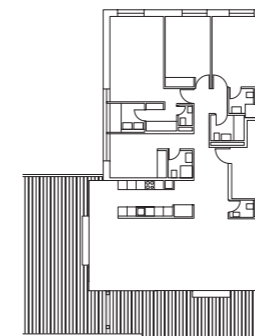

Quartier des Uttins
Rolle, Switzerland
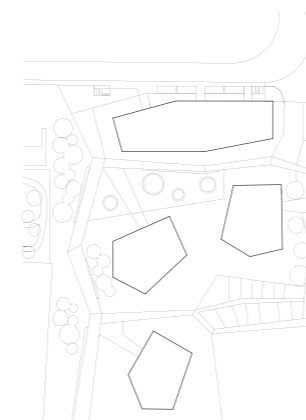
Grand-Pré Sud
Cheseaux-sur-Lausanne, Switzerland

Chemin des Peupliers (2010–13), Grand-Pré Sud, Les Fiches Nord (2011–15), and Quartier des Cèdres; a loggia can be created to provide a second source of daylight, as with Avenue de Sainte-Luce (2012–15) in Lausanne; or a light well can be opened up, as with Les Fiches (2013–15). In an atrium, like that of Chemin de Montelly (2013), vertical circulation is exploited to help create a spatial event which establishes this as a place for social exchange.

Horizontal distribution: from landing to access gallery – The most common mode of distribution in contemporary residential production, and our own projects are no exception, is a core for vertical circulation which gives access to a landing serving one to four apartments, since the constraints of orientation and exposure to sunlight limit the number of units that can be served by a single shaft. In the case of the *plot*, the compact form of the building and the centrality of the stairs condition the type of distribution: the landing can be extended, making possible a greater number of apartments per floor, as with Les Fiches Nord, Grand-Pré Sud, and the Quartier des Cèdres.

Two types of distribution also offer access to a large number of dwelling units from a single vertical circulation core: access galleries, whether open or closed, and the atrium. The theme of the access gallery is a recurrent feature in debates or research on matters of modern housing, and in thinking about distribution systems.[10] In a history marked by adherence as well as rejection, architectural, economic, stylistic and ideological questions all intersect. In climates such as ours, it is hard for external access galleries to play a role as spaces of encounter and exchange (they are usually and logically positioned on the north facade), which in part explains the fact that buildings with access galleries are relatively rare in contemporary housing construction in the region. However, access gallery-based distribution systems are not totally absent from our thinking, as evidenced by unbuilt projects like Au Pré-du-Canal, where the gallery providing access to the dwelling units links several buildings and constitutes an open "elevated street" running parallel to the canal, as with projects currently in development like Avenue de Gilamont (2010–15), or completed projects like Avenue de Béthusy (2007–09). In the new EPFL Quartier Nord student housing (2008–13), as well as our project for the adjacent student housing complex, Les Triaudes, the access gallery is inhabited: it constitutes a living space. In the case of atrium type distribution, central distribution, whether or not combined with a system of internal corridors – constitutes an interesting solution in terms of access. In this case, the atrium functions as a space of distribution and encounter, and as a vector for natural light at the heart of a building which is generally deep to the benefit, notably, of service and distribution spaces.

The plan and the internal structuring of the dwelling

The question of access and distribution in residential buildings brings us to the theme of distribution within individual dwelling units, and consequently their organisation and internal structure, as expressed in plan, which is analysed by typology, and constitutes the basis for typological classification.

Internal circulation and distribution – There are two types of internal circulation: closed or *cul-de-sac*, in which living and service spaces are distributed by a corridor or a hall, and open, circular or radial, offering a diversity of itineraries among and between the various spaces. In the case of looped circulation, the internal distribution may circumvent or envelop the bathrooms, as with Chemin des Peupliers, a block combining bathrooms and kitchen, as with L'Îlot-du-Centre, Chemin de l'Ochettaz, and L'Îlot Sainte-Luce (1992–96), or a vertical circulation core, like the attic of Les Uttins G. The tendency toward the open plan, with open rather than closed circulation, reflects a will to diversify and enrich spatial relations in collective housing. For example, for Shamrock (1996–97), the looped itinerary passes not only through spaces of circulation, but into, around, and through living spaces. The desire to provide economical housing, and therefore rational apartments occupying a reduced area, leads to the desire to optimise living spaces to the detriment of distribution spaces, through the search for a plan (if possible) without a corridor, as we did in Les Fiches Nord and Grand-Pré Sud (radial circulation). Sometimes the living room, and even the living room-kitchen combination distributes or leads to the area of the bedrooms, as in La Verrière B. The few examples given here illustrate the frequent and necessary search for balance between the rationalisation of the plan (the image of an economic rationality) and spatial richness (the image of a relational richness) in the dwelling space.
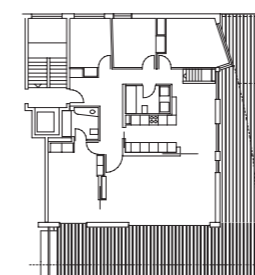

Au Pré-du-Canal
Yverdon-les-Bains, Switzerland

EPFL Quartier Nord
Student Housing
Écublens, Switzerland

Les Uttins D
Rolle, Switzerland

Shamrock
Pully, Switzerland

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9 "Access is also the thread that links the building to the networks of the city. The systems of communication are therefore one of the essential qualities of residential architecture," Ebner, Herrmann, Höllbacher, Kuntscher, Wietzorrek, *Typology+Innovative Residential Architecture*, 16.

10 Ebner, Herrmann, Höllbacher, Kuntscher, Wietzorrek, *Typology+Innovative Residential Architecture*, and Peter Ebner and Julius Klaffke, *Living Streets* (Vienna: Springer Verlag, 2009).

Day and night / common and private zoning – The distinction, or even the dichotomy between the day and night zones of a dwelling constitutes a functional and semantic category that appears frequently in the discourse on housing for the project and for analysis. However, to speak of "day and night" is ultimately reductive. What is at stake in this opposition is the order of factors determining relations between the private, intimate sphere of each inhabitant, and the sphere of contact and interaction represented by common spaces.

According to functionalist tradition and logic, there is a correspondence between day and night "zoning" and the orientation (exposure) of housing. Conventionally, in an apartment oriented east-west, the day zone is positioned on the west facade and the bedrooms on the east facade. To this approach is added the desire for the day zone to be positioned to take advantage of the best view. When the context is particularly prominent (for example, facing a park, like the residential buildings of the Quartier des Uttins), the position of the day zone will respond to the imperative of the view, to the detriment of orientation. The project for Avenue de Sainte-Luce, in an urban situation where open views and sunlight did not necessarily coincide, proposed an innovation to contravene this pattern: alternating the orientation of *traversant* apartments, ignoring the distinction between a street facade and courtyard facade, while combining the loggias with living spaces.

Depth and orientation – The history of the development of collective housing is one of the evolution of depth of plan. After a period of reduction between the nineteenth and twentieth centuries, when depth went from 20 or even 30 metres to about 10, the depth of housing plans once again increased.[11] The treatment of depth is inseparable from the effort to secure natural lighting and the organisation, in an increasingly distended space, of the common and private living spaces and their relations in terms of articulation and connection. In our practice, constraints linked to planning regulations, densification requirements, or the desire to optimise the relation between building length and depth (economic and energy optimisation, compactness) have led us to explore the relation between depth and type, by means of five formal operations: *cutting*, exemplified by Les Uttins F and G and Chemin de l'Ochettaz, *hollowing*, in La Verrière, Avenue de Gilamont, Les Fiches, Chemin de Bérée (2011), and Chemin de Montelly, *perforating* as with the Parc Gustave et Léonard Hentsch, LMI Building (2010–14), *stretching*, as in Dos Patios, and *articulating*, as with Chemin des Peupliers and Les Planches, in order to optimise the amount of natural light brought into a deep building. The imperatives of energy-conservation increasingly favour compact buildings, and are thus leading to the disappearance of overly articulated or disjointed forms, or even to the multiplication of compact polygonal forms like our Les Fiches Nord and Grand-Pré Sud projects, and the tendency toward the ideal form in terms of energy use: the circle. This tendency illustrates the relation between form constraint (here determined by the criteria of sustainable development) and typological freedom or innovation.

Flexibility of plan and evolution – Another recurrent theme in architectural reflection on housing is that of the dwelling's ability to respond over time to unforeseeable events or changes in the needs of the inhabitants, whether functional, familial, or economic. From the start, research on flexibility in collective housing has explored innumerable solutions to this problem. These can be divided into two categories: flexibility of plan during the conceptual stage, and flexibility in terms of actual use, which permits the inhabitant to modify the size or configuration of the dwelling after its construction, over time.

In reality, and in contrast to the often-published examples which in fact are more the exception than the rule, practical, economic, and regulatory constraints, along with the assumptions of public and private investors tend to obstruct the development of innovative, open-ended solutions. The most common form of flexibility, one that is very limited in scope, relatively speaking, is that which is instilled in the plan during the development phase. This flexibility becomes part of the sales pitch and a commercial guarantee for the developer. In this case, the structural conception of the building and the position of the sanitary cores and technical shafts define "fixed points" that liberate zones which can be divided-up at will, like our Les Uttins D; once the choice has been made, the plan becomes fixed. Another, more modest form of flexibility, intervening at the conceptual stage, is that which makes
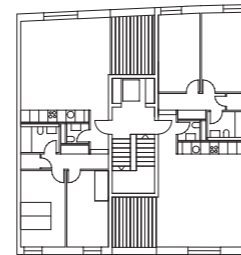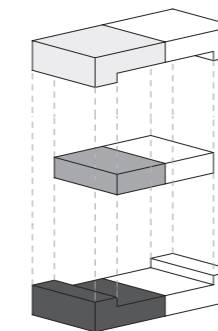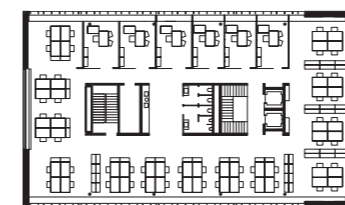

Avenue de Sainte-Luce
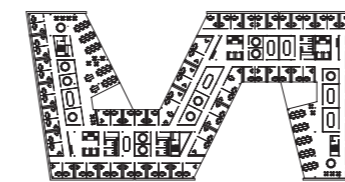*Lausanne, Switzerland*
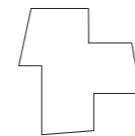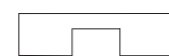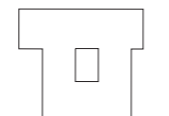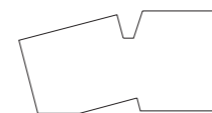
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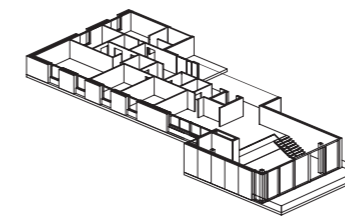
it possible to vary the size of two contiguous apartments by attributing one or two bedrooms to one of them. Here, it is worth pointing out that far-reaching research into the concept of open-ended housing was carried out in our office in the late 1980s and early 1990s, leading to the development of the SWHome® Housing System. Developed from the winning project presented at EUROPAN 1 (1989–90), *Évolution des modes de vie et architectures du logement* (Evolution of Modes of Life and the Architectures of Housing), the SWHome® concept was conceived to promote affordable modular, flexible, and open-ended apartment housing that could be transformed by occupants according to a logic that was "more do-it-yourself than self-build."

The section: duplex, semi-duplex or Raumplan – Corollary to the valorisation of urban life and its consequence, the densification of the city, one tendency of contemporary research on housing concerns introducing the quality and spatial generosity of individual housing into collective housing. One of the means applied here is the volumetric treatment of spaces which, without going quite as far as Adolf Loos' *Raumplan*, takes the architectural form of a differentiated treatment of the section. A typical solution, as our work illustrates, is that of the duplex, the most obvious evocation of the house type. This can lead to two different applications: horizontal juxtaposition, as with projects including Chemin de Liseron, and SWHome® Valmont, or vertical juxtaposition, as with Avenue de Béthusy, of duplex units, or the typological mix allowed by the integration of the duplex into ensembles combining single- and multi-storey apartments with, for example, Les Uttins E, the LMI Building on Parc Gustave et Léonard Hentsch, Im Forster "Le Garage" (2007–11), Avenue de Gilamont, and Champs-Meunier Nord.

Another form of section differentiation resides in split-level treatment of the plan. With Chemin de la Crétaz (2004–08), the sectional difference occurs at the level of the stairwell, volumetrically articulating two buildings and leading to a privatisation of the landings giving access to the apartments. The (lateral or transversal) combination of spaces with varying ceiling heights, generally with greater height in the living rooms like at La Verrière, Torre Bajo Belgrano (2011), or L'Îlot Sainte-Luce, illustrates one line of contemporary research. This innovative, if less economical category of solutions tends to be applicable to upper-middle and middle-income housing. In a context where energy criteria are becoming increasingly general, this research leads to exercises in spatial combination designed to integrate a great diversity of dwelling units in a single compact volume, accommodating both individualisation and coherence.[12]

Office Space: Standard, Non-standard, and Flexible Space for Work
Ideas about morphogenesis in housing can also be extended to office buildings. In this domain, too, the form of buildings results from the interaction of internal and external logics, and to the assimilation of functional and programmatic criteria; external logics respond to the constraints of urban form itself, whether these result from regulatory frameworks or an urban project.

Types of space
In our work we have proposed types of office space which are typically found in tertiary programs: the *cellular office*, the *group office*, the *combined office*, and the *open-plan office*. The repetition and combination of these types of office space is what defines the character of each administrative building. The layout of individual or group offices on a linear scheme can produce compact, rational plans, like for example Vennes 3 (2007–09), the extension of which leads to *barre* buildings, either singular, like Route de Berne 46 (2001–05), or combined, resulting in more complex forms, like Rue de la Galaise (2011) and Bobst Headquarters, with the jump in scale leading to typological variety. The juxtaposition of individual offices with combined offices, or even open-space offices, is the most common situation, also the one that best suits the various ways in which administrative and creative work is organised today, as well as guaranteeing flexibility of use over time. Our projects for Entre-Deux-Ville (2010), Vennes 3, and the Banco Ciudad Headquarters (2010) illustrate this situation. More unusual are programs that call for only one type of office, whether individual, like Route de Berne 46, or open-space as with the IMD Nestlé Building (2002–06).

La Verrière
Montreux, Switzerland

Torre Bajo Belgrano
Buenos Aires, Argentina

Vennes 3
Lausanne, Switzerland

Rue de la Galaise
Plan-les-Ouates, Switzerland

11 Nicolas Bassand, "Densité et logement collectif: Innovations architecturales et urbaines dans la Suisse contemporaine," PhD diss., no. 4276, École Polytechnique Fédérale, Lausanne, 2009, 124.

12 "Because of the rise of individualism in society, the subject of spatial diversity in multi-storey apartment buildings is enjoying a renaissance. ... The trick is to translate the diversity of sizes, layouts, and forms within a property into a coherent whole, so that the building volume does not disintegrate into an arbitrary hodgepodge because of all its 'individuality'," Ebner, Herrmann, Höllbacher, Kuntscher, Wietzorrek, *Typology+Innovative Residential Architecture*, 118.

Type and form
The combination of individual offices and open-space areas raises the question of the building depth and, as a corollary, the optimisation of natural light in a deep building; in spite of the generalisation of computer work stations, positions by windows remain the most popular. In the case of medium- to large-scale floors, the plan form can be inflected to bring natural light deep into the building, as we did with Swisscom Prilly (2011) and Banco Ciudad Headquarters; unfolded in order to spread out a relatively narrow strip, like Rue de la Galaise; or hollowed-out in order to create spaces that bring light into an atrium like the Golay Buchel Headquarters (1991– 97), the EPFL Quartier de l'Innovation, Banco Ciudad Headquarters, and the WCC Campus (2011–12), a closed courtyard like the Kudelski Headquarters (2008), Delta Project, and Bobst Headquarters, or an open courtyard like Entre-Deux-Villes and OMPI-WIPO (2000). In several projects, the form results from a desire for the building to engage in a dialogue with its surroundings. For example, the projects for the EPFL Quartier de l'Innovation (2006–11) and the WCC Campus propose simple, compact forms (cubes, cylinders) freely laid out in a park, as if on a campus. Banco Ciudad Headquarters, responds to the orthogonality of the urban fabric on its south side, while the opposite facade yields to embrace an extension of the public park; on the other hand, Propriété Bellerive in Rolle derives its low, organic form from the need and desire to merge with the site and be open to the landscape.

Flexibility, formal and informal
The importance of flexibility in the design of office space is well established. This constitutes a prerequisite for any project and is expressed by modular systems in terms of the constructive network (structure, partitioning, facades) and technology. Flexibility in terms of the potential for modifying or combining modules (opening and merging of individual spaces as group open-plan spaces) is key. The evolution of modes of teamwork leads to a new approach to the relation between formal (individual or group) working spaces and informal spaces of encounter and exchange. For example, in the layout of the building for Logitech Corporation in the EPFL Quartier de l'Innovation, spaces for meeting and informal work and for the stimulation of interpersonal relations and creativity open off the atrium, reinforcing its character as the building's central, defining public space.

Type, Professional Practice, and Social Practice
The projects presented here all explore permanent, recurring themes in the design of dwellings and office space. For dwellings, that involves access and paths toward, through, and between buildings, interpersonal relations in the neighbourhood and within the building, management of relations between private and public areas, individual and community, the answer to the inhabitant's search for meaning and need for comfort and safety, and the dwelling's relation to its environment. For office space, it entails equilibrium between served and servant spaces, the relation between individual and group work, between communication and withdrawal, and modularity as an answer to the need for flexibility. Each building aims for coherence in its particular articulation of these themes, the combination of which is a response to the particular context of the project, its program, situation, and public. When a given theme is emphasised, it is not to the detriment of another aspect or another quality. In the best cases, several qualities will be expressed simultaneously, their congruence helping to enrich the project, as for example with the Quartier des Uttins, La Verrière, L'Îlot-du-Centre, and others.

As we have learned from the history of housing since the turn of the century, in itself housing is not a field of radical innovation.[13] It is a field in which innovation springs from the exploration of nuances. In the tertiary sector, although the dynamic of functional change is more pronounced, and in spite of research and reflection on new forms of work and their incorporation in the architectural project, real typological innovation is a slow process. As we have seen, the typological approach proceeds by breaking up reality then recomposing its object of study by bringing the different elements into relation. It offers an approach to the complexity of the system of architecture, a system in which internal relations and the interactions among elements are ultimately more important than the constitutive elements themselves. In an effort to distill the nature of our architecture, one could say that this relational process reveals the principle on which our practice is founded: balance, between the technical and the economic (professionalism), the social and the functional (service), the symbolic and the aesthetic (beauty).

[13] This invokes the paradigmatic example of the concept of the "*bande active*" developed by Yves Lion in his project *Domus demain* of 1984, a radical idea which was met with numerous obstacles and thus led to more "conventional" solutions. See Jean-Michel Léger, *Yves Lion – Logements avec architecte* (Paris: Créaphis Editions, 2006), 76.

Temporality

Ignacio Dahl Rocha

On the Temporal Dimension
Our experience with renovation projects represents an important chapter in our work. At the theoretical level, they have nourished our thinking about an issue we take to be important when it comes to understanding many aspects of our profession, and that is Time, or the temporal dimension of architecture. A central issue in relation to this theme is the capacity of architecture and the city to endure as physical and cultural entities, as witnesses to the continuity of the successive generations of a society. Running counter to this is the profusion of ephemera pro-liferated by the dynamic of perpetual novelty inherent in the fashion system, and in consumer culture in general. We share a vision of architecture which is conscious of these phenomena and takes a stand with respect to them, inasmuch as we are interested not only in the durability of the building or the urban fabric as physical objects, but also its aesthetic validity, which has to do with the neutrality and timelessness of architecture's language and the quest for a way forward that does not refuse a dialogue with history.

Concerns stemming from the broad notion of sustainable development, an increasingly significant domain, have also raised our awareness of the temporal dimension in architecture, placing emphasis on its technical aspects. Setting aside the controversy over whether it is the central issue or should be relegated to the status of a technical matter, the relatively recent focus on environmental sustainability has had impact on architecture at all levels and has led to the emergence of a veritable body of specific knowledge with a precise and urgent objective. Never before has architecture had to address its negative impact on the environment. As a complement to the scientific and technological advances it has spurred in diverse fields, we hope sustainable development will also take re-newed advantage of the wisdom and common sense of vernacular building traditions.

For architecture, one of the most important outcomes of the contemporary focus on sustainability has been to awaken us to the notion of time, expanding our consciousness and understanding of the construction process. Thus, we shift from viewing architecture as a relatively static event, limited to the conception and construction of a building, to a dynamic process that has a temporal dimension, from the traceability of the materials with which it is constructed, to control over the quality of its use, the resources necessary to its functioning, and the life cycle and final destination of each element that goes to form it. In that sense, we may see "renovation work" not so much as a category in and of itself, like the making of new buildings, but as one stage of an ineluctable cycle involving the whole process of construction. Following this logic, it is no surprise that conservation and renovation are rapidly and progressively being conceived as parameters or conditions belonging to the process of designing new buildings. However, it is important that the awareness of the temporal dimension promulgated by sustainable development not be limited to technical questions: it must also fully embrace *architecture as a cultural fact*.

The Nestlé headquarters "En Bergère" in Vevey (1996–2000), our first intervention of any real consequence, was a rich and highly complex engagement that unfolded over time, enabling us to tackle the major issues inherent in the processes of renovation and transformation, issues which have continued to emerge in subsequent projects at all scales. In many ways, it became the "primer" for the other projects we undertook from that point onward, and we are still drawing upon the experience. Despite belonging to the heritage of modern architecture, the projects for Nestlé are inscribed within the long tradition of buildings and ensembles of buildings that are realised through successive interventions over time. In fact, these projects are the result of the work of three generations of architects spanning over half a century, each of whom decided, in keeping with the criteria and values of the time, how to intervene on this unique site, and what to bequeath to the next generation.

The first generation had to take the decision to demolish the old Grand Hôtel de Vevey, built in the late nineteenth century. Applying contemporary preservationist criteria, Jean Tschumi's Nestlé building would perhaps not have been built on that site. Fifteen years later, in 1976, the next generation, Martin Burckhardt and Frédéric Brugger, constructed a second building, a *barre* positioned perpendicular to, and the same size as, the first. Burckhardt and Brugger emphasised the sound implantation of the building rather than its relationship to the existing one, in terms of language and functional integration. In our case, as the third generation of architects addressing this site beginning in 1996, it was a given that we would approach the intervention in a manner consistent with the original building, which had been landmarked in 1980. Our objective was also to address the coherence of the entire site. Initial discussions revolved around the compromise between the necessity to preserve the building "museologically," and the necessary transformations that would allow the building to extend its active life. In the end, only the load-bearing structure and unique elements like the cantilevered entrance canopy, marble floors, Chambord stairway, a few revetments, and original furnishings were preserved. The work included interventions of all kinds, from massive demolition, to restorations (as in the case of the entrance hall floors and canopy), designs inspired by period furnishings, reconstructions that simulate the original appearance (as in the case of the entire curtain wall system of the facades), and completely new elements such as the Liaison Space connecting the two existing buildings and the oculus Tschumi envisaged to bring light in over the Chambord stairway, but which he never designed.

For us, each of these interventions raised matters of principle at the theoretical level, like for instance the question of preserving the physical material or the substance of the building, or the appropriateness of preserving the aesthetics of the facade, even though it was technically and functionally completely transformed. Aesthetic issues also arose, like, for example, whether new elements ought to be identified as such, or blend in with the original elements. The commission to design the Nestlé WellNes Centre (2005–08), the last of our interventions, raised the issue of what, finally, the relationship of a new building ought to be with respect to the two existing ones. Our response was to privilege the integration of the new building by renouncing the introduction of a new language and proposing a design with an identity of its own, albeit one inspired by the themes of the original building.

As we have presented a project profile on the Nestlé experience, what follows here is a selection of other renovation works that characterise the various problems we have confronted and the approaches we have taken. Credit Suisse Lion d'Or (2001–06) in Lausanne and Arenales (2011–12) in Buenos Aires exemplify interventions in buildings which, over the course of successive renovations, had lost the greater part of their original interior facings and ornament. In these cases, we chose to take the value of their spatial structure as a starting point. UBS Rhône (2010–15) in Geneva represents a typical renovation of an ensemble of buildings on a dense city block in which the commercial and public functions of the ground floor spaces are given a new lease on life, while the upper floors are renovated to accommodate administrative offices. The merits of the preserved facades inspire the contemporary language of the new ones. Rue du Jura 9-11 (2009–11) and Avenue Dapples 54 (1999) in Lausanne, along with the Alcorta campus of the Universidad Torcuato Di Tella (2009–13) in Buenos Aires belong to the *métier* of recycling of industrial structures in the context of an urban fabric. In all three instances, the original facades have been restored and the industrial character of the interiors preserved to capitalise on the generosity of their spaces, while at the same time adapting them to entirely new functions. Finally, EPFL, Les Bois Chamblard (2006–12) in Buchillon stands as an atypical case, in which the architectural value of the existing structure resided primarily in the exterior character of the house and in its relationship to the unique landscape. Of negligible value, the interior of this private villa was completely emptied and adapted to its more public function as an intimate seminar center, while a completely new element was introduced to provide for larger gatherings.

Encounters

Ignacio Dahl Rocha

Encounters

As we have already suggested, the *evolution of architecture* demands that the architect, hitherto educated as an "enlightened builder," or as Adolf Loos put it, "a bricklayer who has learned Latin,"[1] have recourse to skills and expressive tools beyond those of architecture as we understand it up to this point. Today the architect is obliged to expand his or her horizons and to enhance and even transform the traditional competencies of the discipline in dialogue with other fields. Moving from our reflections on the fundamentals of architecture into the domain of enquiries beyond the discipline, it is especially important for us to acknowledge certain encounters in the fields of art and design. Here, we present a number of those encounters. RDR Design has played a leading role in this activity as an independent team, one that is also embedded in the architecture studio. The team was created in 2004 to build on the important experience gained during the renovation and transformation of the Nestlé Headquarters in Vevey, among other projects for the company. The challenges there included the design of interiors, office furniture systems, as well as custom furnishings for various parts of the building, product display strategies, graphic design, and industrial design, represented here by the experience with Clestra in the design of partition wall systems. These experiences led us into the various fields of competence we have developed since that time. With respect to Clestra, it has been particularly interesting to develop ways to include the parameters of industrial processes in our design process, in other words, to learn to design a product for mass production, in contrast to architecture, which consists in the construction of prototypes. RDR Design collaborates in a variety of ways on architectural projects, and in response to the frequent need for the combined expertise of architects and graphic designers, we developed what we call "archigraphics" to describe certain hybrid encounters. There have been a number of occasions when the architecture studio has engaged the world of art, working together with artists including Baldwin and Guggisberg for the renovation and transformation of the RDR offices at Avenue Dapples 54 in Lausanne and the engraved glass panel for the lobby of the Nestlé Headquarters building in Vevey; Jean-Luc Manz for the Golay Buchel Headquarters building in Lausanne; Daniel Schlaepfer for the Clinique La Prairie in Clarens-Montreux, the Nestlé WellNes Centre in Vevey, and Flon Les Mercier in Lausanne, among others. In the case of the artist Catherine Bolle, beginning in 2004 we have been engaged with a series of collaborations which are presented in the following pages. In all of these instances, our enquiries have been aimed at broadening our experience of architecture by exploring with the artist the world of the intuitive and the sentient.

Little Sister

An earlier version of the text that follows here was written for a recent monograph on Catherine Bolle's work,[2] and because it offers a window onto the way we have approached the process of working with artists and underscores the importance of such collaborations in our practice, we wanted to include it in this book.

From an idealistic point of view, we could say that architecture is the little sister of the arts. The fact that it is required to serve a function, in this case to accommodate the varied activities of human beings, prevents architecture from aspiring to a more elevated goal, that of pure form-making. The artistic component is, however, essential to architecture. When the artistic dimension is in short supply, architecture tends to become pure construction and runs the risk of becoming banal. On the other hand, moving away from construction in search of aesthetic value and means can lead to imbalances that run the opposite risk, that architecture becomes purely rhetorical, and that form will be emptied of content. In the delicate balance between the banal and the rhetorical hangs the poetic nature of architecture, the fundamental characteristic that distinguishes it from artistic creativity.

Over the course of history, the relationship of art to architecture has been expressed in different ways. In the classical world, sculpture and painting shared ideals of beauty with architecture and in the context of intense collaborations adopted numerous and varied forms. Generally speaking, the ideals of classical beauty were applied to the visual arts as well as architectural composition and language. At a more specific level, architecture joined together with sculpture in the development of ornament and the classical orders that form the basis of the language of architecture. Finally, at a more intimate level, sculpture and painting contributed, without losing their individual identities, to the architectural opus. Not unlike opera, which brings together music, dance, theatre, poetry, and the expressiveness of the scenographic arts, this was the way that architecture put itself forward as a meeting place for all the visual arts. Spanning a long history of harmonious coexistence, art and architecture aspired to the ideal of total fusion.

At the dawn of the twentieth century, however, Adolf Loos abruptly declared that architecture was not an art. In his "Ornament and Crime" (1909), he reacted against the aberrations of eclectic architecture and the applied arts of his time. The ethics of industrial culture do not tolerate the sacrifice of the functional for the aesthetic. Balance is sundered, the danger of the rhetorical lies in wait. Radicals opine, following Mies van der Rohe, that construction alone is of interest to us, aesthetic expression is not our problem. Followers of the machine aesthetic claim that beauty lies in the functional. Does this imply the divorce of art and architecture, or that architecture is renouncing art and becoming merely a matter of technics? Or is this apparent revolution simply the invention of a new aesthetic? Where is the evolving relationship between art and architecture headed? At what point is it situated between the two extremes represented by the classical ideal of total fusion and the rupture hinted at by modernism? What are the new frontiers and the new forms of collaboration they suggest? What is the common destiny of these disciplines in an era during which the most typical features of visual culture are consumerism and provocation? What is the shared destiny of these disciplines when we hear people speaking of the "death" of art and architecture? Catherine Bolle's work, and in particular her incursions into architecture, reflect on these questions and explore fresh paths in an attempt to respond to them. When it comes to the purely artistic, Catherine's work resists the current tendency to seek meaning in the purely conceptual and provocative, vindicating seduction through the purely aesthetic. The entire value of her *oeuvre* is concentrated in the visual; the connections between her art and the word are metaphorical. Her work is also mistrustful of facile vanguardism, and yet has an astonishing power to permanently renew itself in a natural and spontaneous way, almost without meaning to do so. Without a trace of nostalgia, and resolutely immersed in the contemporary world, Catherine believes in visual beauty, without being satisfied to rely on traditional means of expression. This takes on even more meaning, and such has been my own experience, when from the admiration of, or better yet the delight in the work, one comes to know the artist. Along with an openly visual sensibility that explains the permanent seduction of her work and obliges one to use words like refinement and good taste, Catherine looks at the world with inexhaustible intensity and curiosity. Having been politically active, having experienced the world of science first hand, and having explored art by calling on the most diverse techniques, how could she not cross paths with architecture one day?

From the beginning of the 1990s, Catherine collaborated with various architects. In our case, in 2005 we embarked with her on what would become a very rich series of experiences which are still unfolding: *Le Lapidaire* for the residential complex La Verrière in Montreux (2001–05), *Erlenmatt* for the Quartier Erlenmatt in Basel (2008), and most recently, two works for the new EPFL Quartier Nord on the campus of the École Polytechnique Fédérale de Lausanne: *Le Semainier* for the SwissTech Convention Center (2008–14) and *Le Chromoscope* for the adjacent student housing complex (2008–13). The degree of integration between art and architecture in these collaborative works varies from the selection of an artwork that was not conceived for the site, but whose presence enhances the site both as an object in and of itself, and in terms of its interaction of the space it inhabits, to instances where Catherine contributed directly in the conception of the architectural design, as in the case of the skin for Quartier Erlenmatt.

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[1] Adolf Loos, "On Education" (1924), in *Ornament and Crime: Selected Essays*, trans. Michael Mitchell (Riverside: Ariadne Press, 1998), 187.
[2] Catherine Bolle: *Les ateliers contigus, Werkstatt als Kunstlabor, Laboratori permanenti*, preface Bernard Fassbind, with essays by Michel Melot, Libero Zupiroli, Ignacio Dahl Rocha et alia (Bern: Bentali Verlags AG and Catherine Bolle, 2011), 261-296.

Between these two extremes, we would put *La Verrière*, where the intent was to conspire with an architectural project that seeks to revalorise an outdoor space by reinforcing the articulation between the three buildings that comprise this residential complex. The principal component is a mural 20 metres long, bent at a 90-degree angle. The mural abuts an existing building and sits above a horizontal plane partly spanned by a reflecting pool. Catherine drew her inspiration from the urban and mineral character of the site in proposing a work that is composed of three layers of acrylic panelling, on which she combined printing and painting techniques. For this, she used stone dust from the Alps from which comes the title of the work, *Le Lapidaire*. The space surrounding the work is covered with pebbles collected from streams in the same Alpine region. In this first collaborative work, materiality came to the fore as the theme in common between the work of the artist and that of the architects. For both, the work only attains its full meaning when the abstraction of the formal composition materialises physically. In the project for student housing in the EPFL Quartier Nord, the intervention conceived with Catherine was meant to lend a distinctive and personal character to the circulation corridors which were conceived as spaces for casual encounters among students, where we sought to create an atmosphere that would be both intimate and lively, corresponding to their function. The work materialised in the revetment of the exterior access galleries surrounding the courtyard, and for this, we proposed the use of fibre-cement panels. These panels are a standard commercial product available in a given range of colours. The option of restricting the artwork to off-the-shelf materials belongs to a recurring theme in our collaboration with Catherine, this particular work making a significant contribution in that respect.

Catherine is an artist whose *oeuvre* has a very strong visual identity, one which despite its great variety is easily recognisable. Be it in a canvas, a series of acrylic panels, folded paper, or one of her translucent boxes, her language seems so much her own, her personal touch so unmistakable, notwithstanding the abstraction of the visual language, what we might call her calligraphy. In the case of interventions by artists in works of architecture, the scale and modes of production typically hamper or seriously obstruct the potential for artisanal work. In such a situation it is necessary to choose between the reproduction of the manual work and its abandonment altogether.

In Catherine's case, the latter option introduced an important challenge insofar as it effectively meant forgoing her calligraphy. She was prepared to accept this. In fact her magnificent stairway, created in collaboration with the architect Vincent Mangeat, is a good example of a work in which her aesthetic was manifested in the absence of calligraphy. Here, we could also mention another aspect of the same problem, pertaining to those elements of a building which are installed in public space. This involves the conundrum of the pertinence and significance of a statement as personal and intimate as the calligraphy of an artist, when it is rendered at the scale of public space. The design for the access galleries of Quartier Nord were Catherine's adroit response to this problem. In this instance, she agreed to fabricate her work using around 800 identical, mass-produced panels available in predetermined colours. However the prospect of restricting herself to combining off-the-shelf components didn't convince her, and she proposed an intervention which, within the bounds of the non-artisanal mode of production originally projected, still afforded her the necessary latitude to create poetry. A simple hand-application of sheer pigment not completely covering the whole panel immediately enlivened the inert surfaces and introduced subtle nuances of colour and light to modify the commercially-available colours of the panels according to her vision. As if by magic, proceeding from industrial panels, objects which on their own account were too basic and impersonal, and using a minimum of means, Catherine found a way to seduce us once again with her visual poetry: she may have accepted the challenge to forego her signature calligraphy, but she didn't leave her talent behind.

Finally, the project for Quartier Erlenmatt (2008) in Basel has enabled us to explore with Catherine a tendency in architecture where an interesting space for interdisciplinary work opens up. Today, architecture, which had managed to dispense with superfluous ornament in order to express itself as construction, is faced with new challenges. Now, to the priorities of technics and function are added those of sustainability. As we have noted, buildings are mutating, developing thick insulating wrappers whose outer layers are true skins that conceal

construction elements which up to now determined the architectural expression of the building. In order to adapt to these new demands, we can collaborate with artists and learn from them. The project for Basel consisted in designing the skin for a building to accommodate a shopping complex and a hotel, the facades of which have an imposing presence above a striking public space in a new neighbourhood occupying the area of the former Badischer Bahnhof railroad yards in Basel.

We proposed a facade composed of laminated glass panels serigraphed on their outer surfaces. The serigraphy reproduces motifs painted by Catherine especially for this building. Thus, it represented an opportunity to develop a handful of original artistic motifs in considerable numbers. Of course, the artist did not confine herself to providing these original motifs, but together with the architects participated actively in the conception and development of the overall design of the facades. Despite the serial construction, the elaboration of subtle variations in motif, texture, and colour conceived in small-scale resulted in unexpected aesthetic possibilities in the expression of the facades at an urban scale. An example of this was the discovery that from a distance, the organic motifs of the original drawings endowed the facades with a particular texture and colour which, without forgoing the reflective quality of the glass, were capable of evoking the red stone facades typical of the city. In this way, the artist's calligraphy, essentially an intimate, personal motif, took on new meaning by being expressed in a public context.

We began these reflections by pondering the question of the evolution of the relationship between art and architecture and the ways in which this interdisciplinary relationship might evolve. In that respect, our collaboration with Catherine is an open-ended one. Not only has it not come to an end, but there is even no urgency to look so far ahead, only to open up new horizons and to stimulate all who participate. For us as architects, this collaboration has taught us to recuperate an acute aesthetic sensibility that the demands of our profession tend to erode. It also teaches us to learn to recognise and to accept the value of the ineffable in the creative process; to enjoy the moments of solitude and anxiety in the face of aesthetic decisions which transcend the rationality of technique; to create without justifying ourselves. In short, it helps us to extend the boundaries of our architectural thinking. This doesn't mean taking the path of the arbitrary, the rhetorical, or the excessive, as is so common among the contemporary avant-garde, but rather encountering a denser and more profound dimension on the poetic side of our discipline.

In our case, the collaboration between artist and architect is in itself a collective work, a reciprocal exchange, in which we invite artists to escape the self-absorption of studio work and to delve instead into collective work. To do this, we must encourage them to give up a tiny bit of their freedom with respect to the outcome of the work, as well as the creative process the artist is obliged to share. Perhaps it is also a way of getting out of the gallery and conquering public space, of participating in the collective construction of the city as a physical and cultural entity.

Invention and Selection

Ignacio Dahl Rocha

Creativity and Innovation

For this chapter we have reserved a few observations on the subject of creativity and innovation in architecture in general, and in design processes in particular. For us, this is a particularly sensitive subject, and while we have insisted on persevering in our search for various kinds of balance in our practice, creativity and innovation are issues that we think call for special attention. There is no doubt that having the possibility to innovate is one of the great motivations for architects. At the same time, we are uneasy at being "obliged" to do so. In order to elaborate on this seemingly heretical confession, it may be helpful to distinguish between two manifestations of the notion of innovation. First is innovation in its noblest form, as the response to an essential human impulse to create. We think of innovation as the outcome of a successful creative process, or what we call sustainable innovation. Its importance in our profession is a given, and likewise, the stimulation and pleasure that the creative process brings. The trouble with innovation in this noblest sense has to do specifically with the challenges posed by our need to work *collectively* and to foster the optimum conditions for stimulating creativity in circumstances where the everyday reality of professional activity tends to impose other priorities. But innovation also arises out of another impulse. In this manifestation, it slips from being the outcome of a successful creative process to becoming an end in itself, even *a priority*. We have already referred to this as one of the most distinctive features of the architectural culture of our times, and one of the factors that contribute to imbalances in contemporary architecture. This phenomenon, by now a commonplace which at times verges on the obsessive, not only distorts the goals of architecture, but in many cases also devalues the creative process altogether as it culminates in "innovations" that are superficial.

The Trouble with Innovation

Two forces pressure us with the demand for innovation as an end in itself. First, there are expectations – our own, and those of others – that we will deliver an original and "genius" performance in our work. As a matter of fact, a work of architecture, in spite of being a service to society, is also a way for the auteur-architect to satisfy the ego, that is to say the need to be different, and if possible, better than other architects. The needs of the ego are not necessarily in conflict with good architecture, but when satisfying the ego becomes a priority, one runs the risk that the balance between the two, along with the the mission entrusted to us by society, will be undermined, leading to the dubious results we all have observed. José Antonio Coderch reminded us as long ago as 1960 that "it is not geniuses we need now," and bearing in mind the fact that genius is not a goal can help us to find this balance.[1] When we are fully conscious and in control of our own creative process, we are able to perceive the tensions between creative aspirations and the common sense our professional responsibility demands, and thus, with our freedom and ethical capacity, we can find a point of equilibrium.

The second force that lays claim to innovation for its own sake is a cultural phenomenon, one that stems one way or another from the demands of the market economy. As part of the dynamic of consumption and competition, the appeal of novelty becomes a fundamental tool for responding to these demands, and architecture is no exception. As Jorge Francisco Liernur put it, "Many of the prominent figures in contemporary architecture seem to be in a frantic rush to turn the discipline into one more instrument in a world dominated by the accelerated consumption of images."[2] The most obvious example of this phenomenon is so-called "architecture of the spectacle," which, impelled by the successful case of Bilbao, has typified the architecture of the last few decades: buildings by an elite of "star architects" which attain global visibility as "spectacular" instruments in the promotion of competitive cities and institutions. Many of these emblematic projects have already demonstrated their lack of viability, and this

phenomenon has been one of the most controversial outcomes of the current malaise. Architectural "innovation" runs the risk of becoming a purely formal exercise when it is not generated by a genuine programmatic or technical evolution. The market demands novelties that reach beyond such genuine evolutions, the result being more changes in the wrapping than the contents.

Innovation as a demand associated with consumerism goes hand in hand with the phenomenon of premature obsolescence. By the same implacable logic, the novelty that supersedes whatever existed before will be pushed aside by another one in due course, thus generating a vicious circle that exceeds the life cycle of a building, and can be explained only by the logic of consumerism. We know that the "sustainable" management of physical obsolescence in a building can be resolved by respecting the life cycles of each of its parts. What is less "sustainable" is for a building that is still physically viable to lose aesthetic validity, or when it must be replaced by another one whose *raison d'être* is simply its newness. The opposite of this phenomenon, timelessness, the ability to resist time and to endure, is an ancient and fundamental attribute of architecture which also concerns us in our practice, and which will be discussed further in my reflection on Liernur's essay.

Another aspect of architecture that overshadows the obsession with the new, apart from beauty, is the simple but intense pleasure of doing things well. A building that achieves excellence in many respects yet is not predicated on newness does not arouse much interest today. The design process for the IMD Mærsk Mc-Kinney Møller Center (2005–08) in Lausanne represents a case in which from the beginning, we imposed upon ourselves the demand for innovation. Many different variants were developed in the search for new or aesthetically cutting-edge solutions. All of these variants were discarded in the end, either for functional or economic reasons, and we resolved the expression of the building by means of a traditional constructional solution. In fact, the solution that best responded to practical needs turned out to be the most aesthetically convincing one as well, and we often cite this building as being representative of our aesthetic ideals. The design of the SwissTech Convention Center (2008–14) is an example of the opposite scenario, in which the demand for novelty was part of the brief. From the outset, SwissTech was envisioned as an emblematic building, so our design process involved a deliberate search for a sculptural form with strong unity and identity, but the solution managed to emerge from the spatial and structural logic of the project itself.

The Design Process

The processes of architectural design continue to increase in complexity due to the great quantity and diversity of specialised information that they incorporate, while particular attention has to be paid to the development and organisation of team work and interdisciplinary collaboration in order to tackle these effectively. Alongside these developments, advances in information technology keep pace, providing the new tools needed to address them. At an organisational level, new technologies propose exchange platforms and building models as a basis for shared work in which different specialists can intervene without increasing the time needed to do the work. Other models permit the optimisation of the design process by simulating alternatives, in terms of architectural form as well as the physical behaviour of buildings, or by analysing information about the actual utilisation of the building in order to incorporate what has been learned in future projects. Another huge advance has been the creation of programs that enable forms to be generated and which are capable of resolving complex geometries. These tools, in addition to the astonishing progress made in the virtual modelling of buildings, have had a significant influence on the evolution of contemporary architecture.

Enthusiasm for the advances implied by all of this, and the almost unlimited possibilities for evolution in the technical and quantifiable aspects of project design have led to instances in which these powerful programs are used not just to resolve individual problems, but in the overall design of architecture. These forays, among which we could cite the example of so-called parametric architecture, are of great experimental value, but at the same time, the results reveal their limits. Paradoxically, despite the fact that such programs have been developed to objectify the process of design and to optimise the response to the particular conditions of the project, they

[1] José Antonio Coderch, "It is not geniuses we need now" (1960), *Web Architecture Magazine* (WAM) 01 (July-August 1996).
[2] Jorge Francisco Liernur, "Acerca de la delicadeza: consideraciones sobre la obra de Richter & Dahl Rocha," 2, published as "On Tact," in *The Architecture of Richter & Dahl Rocha*, trans. Inéz Zalduendo (Basel, Berlin, Boston: Birkhäuser, 2007). In the course of writing the texts for this book, in my re-reading of Liernur I returned to the original Spanish version; passages quoted here and elsewhere in this volume have been retranslated by Paul Hammond, with my emendations.

end up imposing an a priori, omnipresent, and clichéd formal repertoire that fails to respond to fundamental specificities like use, relation to place, or inherent character. The outcome is often characterised by systematic recourse to the complex forms these programs make possible, which contradict such objectives as, for instance, optimisation of the design, or cost-effectiveness of resources.

On a theoretical level, advances such as these suggest the possibility of reducing architectural design to an entirely rational operation, which leads to questions about human nature that rapidly exceed the limits of what we are dealing with here. The important thing is that the evolution of technology tends, in fact, to rationalise the project to the utmost degree, thus begging the question of the role of the architect as we know it today. If the architectural project becomes the result of a purely mathematical process, the role of individual genius in the process of design is obviously diminished. As if to deny this, paradoxically, contemporary culture tends toward the cult of the individual creator, and it is precisely this tendency which makes it possible to imagine an evolution of architecture as just another industrial product. In this hypothetical scenario, the figure of the architect might survive in the form of a "brand" personifying a product, even though in actuality he would have little presence or agency in its conception and production, both processes having been effectively depersonalised.

The importance of technological advances would be misinterpreted were we to see in them the solution to challenges posed by the declining quality of the built environment. As in the case of sustainable development, we are dealing with knowledge that is indispensable, but not capable on its own of responding to the general problem of the built domain, since as we know all too well, this includes a cultural dimension which goes way beyond technology. In the same sense, it is important that enthusiasm for these remarkable advances does not lead to contempt for intuitive forms of knowledge as something primitive that must be superseded. On the contrary, it is as important to master and understand these intuitive and artisanal methods, as it is the new devices of design, and the challenge is to incorporate them in the collective creative process.

The Challenge of Collective Creativity
At a purely practical level, new technologies are being incorporated into professional work as effective tools, and at the present time, for us it is less a matter of deciding whether or not to entrust formal decisions to the computer, than a challenge to develop new modes of participation and organisation to deal with design work undertaken by teams. In our case, the challenge has been to adapt the dynamic of the design process gradually, in response to the increasing complexity, scale, and number of projects, and the growing size of the office. This dynamic has evolved over the last two decades from a studio model, in which the substance of the creative process occurred at the level of the individual designer, to an office in which we have attempted to found a collective creative process. By "collective creativity," we mean a process in which various individuals participate at key moments in the design process. Not all of the work of the team involves this sort of experience. A team may develop design processes in which the key moments are the outcome of individual creativity. Experiences of collective creativity pose a challenge not unlike the one posed by the teaching of architecture, that is, the need to rationalise to the greatest extent possible a process that is ultimately subjective. It is worth noting in passing that the "strategies" employed in this collective process are crucial to the outcome, hence the importance of understanding them fully in order to adapt them to our needs and objectives. In general, architects consciously or unconsciously keep some of the reasons and motivations behind a design idea to themselves, and it is important for the success of the collective process to make the effort to identify and share these.

In trying to understand the collective creative process, the distinction José Antonio Marina has drawn between the "inventive" and the "selective" moment is illuminating.[3] In the "inventive moment," individual genius predominates, and its fundamental contribution is undeniable. It is worth, however, taking time to focus on the potential of the selective moment, which overlaps with the inventive, but is an activity that can be rationalised and therefore more easily shared. In the selective moment, ideas that arise spontaneously during the inventive moment are evaluated, analysed, discussed, and validated or rejected. This is the moment when ideas "in the

3 José Antonio Marina, *Elogio y refutación del ingenio* (Barcelona: Anagrama, 1992), 23. As *Marina*'s book has not been translated into English, passages are quoted in translations by Paul Hammond, with my emendations.

rough" are subjected to in-depth critical discussion among a team which acts as a "collective creative subject." It is under these circumstances that the collective creative subject has the opportunity to construct a personality or identity of its own, something which has traditionally been reserved for the creative individual.

The notion of exploring the path of collective creativity has led us, more and more frequently, to turn to the study of variants as a systematic methodology. Although in reality such methods turn out to be complex hybridisations, we could describe the process that privileges the elaboration of variants as being the opposite of one that proceeds from a strongly intuitive position. In general, the latter process is the result of individual talent and privileges the inventive moment. It usually provides the more original responses, but is difficult to share. The variant method is based on elaborating different solutions for a given problem, which can be fuelled by brainstorming, and allows, step by step, for subsequent analysis, discussion at various stages of the process, and a collective selection of the final solution. The main trouble with this method is that the solutions agreed upon are usually more hybrid and have less "personality" than those that arise from processes in which individual creativity predominates.

The Place of the Ineffable
In our reflections, we have devoted an important part of this book to the notion of beauty, which as we have said, reserves a place for the ineffable, for all that "we cannot speak," but which is perhaps the most important of all. If we are to be consistent, when thinking about creativity and the design process, this is one aspect that cannot be ignored. We have mentioned that one of the difficulties of collective creativity has to do with recognising and incorporating the subjective or the intuitive into shared work. In that respect, we value our experience of working in collaboration with different artists, to which we have referred in the foregoing section on Encounters. In this respect, we have often had the opportunity to experience a creative moment divested of all possibility for rational argumentation. Indeed, the creative process is not only the outcome of what we rationally control, but also the result of a process that we do not fully control, although we are aware of it. The blank page may generate a positive creative anxiety of sorts, or on the contrary, an anguish which, along with the pressure of a lack of time, causes us to resort to default solutions. A state of alertness and confidence favours this creative moment, which averts the anguish of the *tabula rasa*, and which, while it accepts a certain measure of anxiety as a stimulus, adopts a partly passive attitude toward the situation, as if the "spark" might occur spontaneously. Another characteristic of our way of tackling the design process is to let the creative process flow unimpeded, to discuss parameters and constraints, letting the analysis mature without rushing to impose external formal strategies, so that the form emerges from the problem itself. These are extremely intense moments in architecture, when the designer, whether individual or collective, tries to minimise the traces of his own hand, as if the work was born by its own means. In poetry, as Rafael Alberti has suggested, one should not notice the making of it.

Sustainable Creativity
At the beginning of these reflections, we made reference to our preoccupation with establishing conditions that are conducive to the development of collective creativity in circumstances where the urgent needs of the profession also have their own priorities, which do not always proceed in the same direction. This preoccupation has led us to confront, in collaboration with consultants from outside, the task of revising the working methods and organisation of the studio by placing the emphasis on the specific issues incumbent upon creative activity like ours. From this analysis emerge these first reflections, which will serve as a basis for advancing in that direction, and which may be summed up in the notion of "sustainable creativity." By this, we mean creativity linked to the reality of the problem posed, and with the ambition of innovation as the successful outcome of the creative process and not as an end in itself.

The first question this poses is that of balance between the value of experience and knowledge on one hand, and spontaneity and innocence on the other, as the means of liberating creative potential. A condition of creativity, it was suggested, would be "knowing what one is talking about"; namely, relying on the depth of the particular knowledge that is required in a given situation – calling to mind gist of the Adolf Loos' story about the master

craftsman who, when presented with a new design by an artist, remarked to the effect that, "If I knew so little about my trade, I, too, would have fantasies."[4] The second question refers to the relationship between designers and their work, and the importance of being fully integrated in the creative process and receiving the feedback necessary to stimulate creativity. In our particular case, this means that although they might intervene in only a part of the process, it is important for architects to take an interest in the process as a whole, and above all, to gain an understanding of the building as it has been realised and in terms of its actual use. The third question, it seems, is the "tempo" of creativity. We agree that a lack of time works against creativity, but at the same time we know that during the creative process, it is frequently under the pressure of a deadline that hesitations give way to valid ideas. Is it important that one not act hastily, but rather take one's time, especially in the early stages of the process. What is also important is the need to control anxiety, and to know when to draw to a halt, if necessary, and to take distance. This taking of distance is also conducive to a serene vision of the road that has been travelled, and to the possibility of incorporating new ideas that have emerged from the process itself.

A corollary risk, albeit one which is not limited to the matter of tempo, is that of succumbing too rapidly to the search for solutions or responses to a given problem instead of concentrating from the start on asking the right questions. This is directly related to the need for a good *cahier des charges*, or brief, as a starting point for getting the creative process off to a good start. Finally, we realise that one of the main forces working against creativity is the demotivation caused by the pressures and tribulations of day-to-day activity.

The Teaching of Architecture
Like so many other architects, our engagement with higher education is an important complement to our professional activities. In schools of architecture, many professionals like ourselves come together to teach and share experiences. These schools are the place where discussions and research in the discipline naturally take place, since the demands of day-to-day work do not always provide the time or the conditions necessary for such activities. In addition to the great stimulus that is derived from sharing and discussing our experiences, the relationship with the academic world helps us to maintain a permanent state of critical awareness and to foment an investigative spirit in our work. In return, our professional activity enables us to offer the experience of reality as the kind of information and raw material indispensable to teaching, research, and theory.

Among the benefits this exchange has brought, we wish to mention first the permanent process of learning involved in the teaching of architectural design. As we have mentioned, the demands of collective creativity, the fact of having to teach, and to share the process of design with students, obliges us to make a continuous effort to understand and to rationalise a process we have profoundly internalised as an intuitive tool. It is a process comparable to psychoanalysis, which attempts to understand the conscious and unconscious motivations of a behaviour pattern in order to be able to guide it. Going back to our comments on this, were there to be a possibility that computers might act "creatively" on design, they would do so on the basis of a profound understanding of these mechanisms. For the time being, science has not managed to explain the mysteries of creativity.

Relations between the professional and academic worlds also provide us with an opportunity to nourish practice with reflection, and vice versa. Most of these reflections result from confronting the problems of day-to-day work with a line of theoretical thinking, which is in turn the result of personal interests developed over time within the framework of academic activity. As an example of this, we cite our central interest in the tradition of modern architecture, the will to remain as close as possible to construction and function in the real and metaphorical sense, stemming from the theoretical debates of the 1970s characterised by scepticism about architectural language, which marked our formative years. Both issues are in turn closely linked to our work itself. The practical and theoretical realms have mutually nourished one another, and we have taken an interest in theory as an instrument of critical reflection through which to observe and experience the practice of architecture, rather than as a way of constructing meaning to justify the work.

[4] Adolf Loos, "Josef Veillich" (1929), in *On Architecture,* trans. Michael Mitchell (Riverside: Ariadne Press, 2002), 186.

The different ways of integrating theory and research into professional practice at an institutional level give rise to a debate that manifests itself in the divergent tendencies typical of schools of architecture, and which is likewise reflected in the production of architecture. This debate occurs when the cultural tendency toward specialisation increasingly places teaching in the hands of professors and less in the hands of professionals, who devote only a part of their time to teaching. On one side, practical training is privileged with the goal of responding to the immediate needs of the profession; on the other side, critical and innovative thought and experiments are privileged in order to allow the discipline to progress. For those who defend the first scenario, the drawback consists of professing a commitment to reality as a poor excuse for avoiding creative risk, and closing the door on an enormous creative potential. For those who defend the second, the drawback is that theory and research become self-serving and disconnected from reality. The wager of the first is that naturally inquiring and creative professionals will break new ground anyway, on the basis of solid training, and the rest will exercise their profession efficiently; the wager of the second is that what is important is to teach everyone to learn to think, and the *métier* will be learned anyway as they go along.

École Hôtelière de Lausanne: A Collective Project
The importance of both visions and the need to strike a balance between the two of them is obvious. To do this, the need arises to reinforce and to energise relations between the professional and academic worlds. A case that illustrates this is an experience in the context of a project for extending the campus of the École Hôtelière de Lausanne (EHL) in Le Chalet-à-Gobet (Lausanne), in 2012. This unusual experiment, conceived and organised by the EHL, our office, and the Universidad de Navarra in Spain, has led to an exploration of the possibilities for interaction, not only fostering collaboration between academic and professional milieus, but also actively involving the figure of the client in the conception of a project. As this process unfolded, it provided an excellent opportunity to explore other themes we are interested in, such as that of collective creativity. This experiment involved incorporating the contributions of university architecture and landscape design students as well as students from the EHL in the creative process. To do this, 11 universities from North and South America, Asia, and Europe included the topic in their course offerings, and set students to work on it for a semester. At the end of this initial phase, the *New Campus Development Forum* was organised in Lausanne to present 35 of the 100 projects; faculty and students were invited to review and debate the results. At the conclusion of this academic phase, during which four students and a faculty representative were selected to continue collaborating on the design process, the professional phase, coordinated by our office as the designated architects, got under way. This second phase has involved the development of a preliminary design synthesising student proposals.

An initial advantage of the project was to generate a range of proposals for the same problem, which enriched the process by bringing multiple viewpoints from different cultures and disciplines. Unlike architecture competitions in which a great deal of work is submitted, but only that of the winning team is retained, in this case, all the work contributed to an understanding of the problem and the elaboration of the definitive design. The experience turned out to make a major contribution to our on-going reflections on collective creativity. Once concluded, it will permit us to evaluate the extent to which this method has been conducive to creativity and opened up new paths for investigating the issues it addresses. For example, the sheer number of designs alone has enabled us to implement the variant method on a grand scale. Monitoring the procedure that leads to the final synthesis will enable us to evaluate a crucial issue: the selective moment of the creative process as a collective task. We will be able to evaluate the consequences of this method in the final result, for example, the extent to which a project based on consensus can attain high levels of creativity without forgoing the strength and the personality individual talent brings. With respect to the EHL as a client, they learned what they needed to learn in this process, and as they learned, they were able to help us. The experience of participating in the entire process enabled the school to optimise its thinking about its own needs, to grasp the architectural problem to the fullest, and to actively guide us in the elaboration of the design. This experience has also turned out to be enriching from the human point of view, and the stimulus it has provided for all the individuals concerned has up to now had a very positive impact on the result. For us, this has the potential of becoming a model that could be proposed to any other client or company.

Reading Liernur

Ignacio Dahl Rocha

Reading Liernur

In the spirit of the integral vision that inspires it, we would not consider this book complete without mentioning the contribution of the critic and historian Jorge Francisco Liernur, who has followed our work with generous interest from the beginning, and whose critical vision and insight has been important for us in various ways. His essay "Acerca de la delicadeza: consideraciones sobre la obra de Richter & Dahl Rocha" (2006), written and translated into English as "On Tact" for a monograph on our studio,[1] best grasps the meaning of what we have been trying to do as architects, although I would hasten to add that the text's value exceeds by far the specific context of our work. In fact, the subject of our practice turns out to have been a good pretext for writing an important piece of architectural criticism, one that constitutes a lucid and overarching commentary on contemporary architecture. Although I have referred to this text a number of times in the foregoing essays, it seemed appropriate to conclude with a close reading of certain particularly relevant passages.

"Premises"
In the introduction to his essay, Liernur establishes the fundamental premises of his critical activity, which he defines, invoking the writings of Antonio Gramsci, as the "essential unity" of a "de-ideologised" architectural culture completely integrated into the market economy.[2] He includes our *oeuvre* in this system, proceeding to analyse it and attempting to describe its "distinction and difference,"[3] with respect to the field of avant-garde tendencies in contemporary architecture. In stating his premises, Liernur offers a critical diagnosis of the current situation, in which "many of the prominent figures in contemporary architecture seem to be in a frantic rush to turn the discipline into one more instrument in a world dominated by the accelerated consumption of images."[4] In his very first sentence, he anticipates the main themes of his essay: the fleeting nature of time, the dematerialisation of architecture, and the substitution of astonishment for beauty. These themes structure a critical vision that evokes a significant transformation of our discipline, and is developed throughout the essay as a counterpoint to his comments on our architecture. Liernur's vision also expresses a certain bewilderment in the face of what we have described as "imbalances" in the contemporary cultural context in which we operate.

"Spectacle versus Architecture"
In a chapter devoted to the theme of architecture as spectacle, Liernur describes this process of profound change in the very nature of architecture, quoting, among others, Kurt Forster, who metaphorically compares the

transformation of our discipline to the moment "when reptiles grew skin and feathers on their legs and turned into birds."[5] An example of these "feathers" would be the new status of image-givers architects are tending to adopt, encouraged by the demands of a society that privileges the facile consumption of images over the tangible and lasting experience of architecture.

Liernur argues that while this might be true (and in another part of his text ventures to say that "on this, one stakes the meaning of the actual existence of the discipline"),[6] architecture's imminent disappearance cannot be predicted on such grounds. He cites examples such as urbanism or industrial design, which once belonged to the discipline and eventually broke away and became independent of it. He asserts that we retain the right to accept or to reject the "world of the spectacle,"[7] and cites Kenneth Frampton, for whom "architecture can only survive as a form of critical culture, as a *resistant otherness*," a resistance "based on a nostalgic compulsion to prolong the existence of a discipline that might otherwise seem destined to disappear."[8]

The first "distinction and difference" that Liernur points up in our work with respect to the contemporary context is that "its singularity actually resides in the fact that it does not draw attention to its *originality*, but almost in the same moment that we would end up disregarding it as *merely commercial* or *déjà-vu*, it obliges us to perceive our oversight by engaging us with a subtle *resonance* that we hadn't noticed or grasped at first glance. Unlike the strong images that abound in contemporary architecture magazines, images capable of grabbing our attention in an obvious or aggressive way, the resonance we perceive in the work of Richter Dahl Rocha is mysterious, barely perceptible, and requires a concerted effort to be incorporated."[9] What he calls a "rejection of stridency" is then *analysed* in the context of the Swiss and Argentinian traditions of the founders of the studio, and in relation to the socioeconomic and professional context in which the work has evolved: "The vast majority of architects in the world, that is to say all but a few rare exceptions, are not called upon to propose unique works that embellish global cities, or which seek to put unknown towns on the map, or to spotlight the avant-garde taste of progressive impresarios in the cultural supplements of major daily newspapers. Relatively speaking, the vast majority of architects in the world work with the same resources as those of Richter Dahl Rocha, but in most cases, they do so grudgingly, without managing or knowing how to

conjure those resources into a work of Architecture. Richter Dahl Rocha's *oeuvre* demonstrates that this is possible. Furthermore, it demonstrates, as we shall see, that with those same means, without stridency or extravagant gestures, it is possible to generate works of Architecture of disturbing elegance and intensity capable of helping us to go on believing in the *promise of happiness*."[10]

"Archaisms"
"And the interesting thing is that the *oeuvre* of Richter Dahl Rocha achieves this subtle resonance by situating itself in the narrow, taut space defined by their refusal to abandon the archaic territory of Architecture and to adapt to the demands of the rhetoric and exaggerated histrionics coming from the mass media, without ceasing thereby to accept ... the field of work defined by the program and conditioned by contemporary modes of production and public and private actors. It is precisely in its equilibrium, on the brink of disappearance, that its attraction lies."[11] In order to describe this "archaic territory" as a set of values fundamental to the discipline, Liernur offers examples from our work and cites certain attributes that he calls "archaisms."[12] Among these, he mentions "character," "that amiable way in which things reveal themselves as being what they claim to be,"[13] "building," the "material" status of our buildings, as thing and not image, in the sense of how we conceive the work, and "human scale," which reflects the humankind for whom the work has been built, adding that "only the most cursory of glances can identify this intentional and profound archaism with a conservative or indifferent attitude with respect to the global context. In its non-actuality, its stubborn work within Architecture as an institution, this work is in harmony with Theodor Adorno's conception of the role of the "sister" institution of art. On these premises, Liernur tackles the main themes of his essay which, coming from different places, converge with various questions arising in our own reflections and, as we see it, touch on central issues in contemporary debates on architecture.

"The Role of Technics"
Liernur refers to technics as "the most lasting form of solace"[14] in the face of the inability of architectonic form to be self-generating, as modernity requires it to be, and citing different attempts on the part of modernism in that direction, warns us of the illusions of objectivity, truth and authenticity that technique has tried to foist on architectonic form: "To be sure, the modernist destruction of any anchoring of *truth* outside of the world of human representations comes up against the belief in its unmediated presentation

thanks to a wayward articulation of materials responding to a presumably pure technical logic. Architecture, understood in terms of institutional tradition ... involves, instead, a clear awareness of the conventional basis of *truth*. Yet form must be founded on something and "representations" are presented as an "inevitable human way of constructing the world."[15] "To admit these representations," says Liernur, citing Gianni Vattimo, who in turn is citing Nietzsche, "means accepting a *masking* that is not presented as a form of decadence, but as the only means of avoiding it when faced with the requirement to assume some element of human existence as a value."[16] In light of these reflections, Liernur adds that "that is why any attempt to *unveil* the alleged truth through the brutalist display of the technical entrails of a building ... is tantamount to useless exhibitionism."[17] He argues that, far from such exhibitionism, the various aspects of our work are not intended to be subordinated to technics, but neither is this dimension denied, as occurs in much contemporary architecture; rather, technics "occupy the subordinate role it used to occupy in the traditional practice of architecture,"[18] and that our architecture not only has no recourse to the logic of construction in order to arrive at the unity of the work, in the "tectonic" sense, but often elects to negate this.

"Past, Present, and Future"
For Liernur, the question of time, the fleetingness and acceleration that characterise contemporary culture has been one of the key issues in his interpretation of the evolution of the discipline of architecture. In this essay, he addresses the subject in light of Hannah Arendt's distinction between the meaning of "labour" as the activity inherent in reproducing the vital or biological conditions of life, as for example in the production of food to be consumed, and the meaning of "work" as the capacity "to produce world," that is to say, to produce objects that resist immediate consumption and that guarantee permanence and durability. "Without these kinds of permanence, without the traces of human efforts, society tends to be embedded in the timeless eternity of nature."[19] Architecture and the city, witnesses as they are to the continuity of successive generations of human beings, have proven to possess the greatest capacity "to produce world," for enduring, for resisting the assault of time. "I believe that the work of Richter Dahl Rocha forms part of *this* architecture, understood as a basis for the constitution of our world, as a privileged means of preserving human sociality and historicity. In contrast to the demands of immediate consumption and the constant perpetual instability of the modern condition, and by the acceleration of the process of dissipation of all value as a consequence of the rise of

[1] Jorge Francisco Liernur, "Acerca de la delicadeza: consideraciones sobre la obra de Richter & Dahl Rocha," 37, published as "On Tact," in *The Architecture of Richter & Dahl Rocha,* trans. Inéz Zalduendo (Basel, Berlin, Boston: Birkhäuser, 2007). In the course of writing the texts for this book, in my re-reading of Liernur I returned to the original Spanish version; passages quoted here and elsewhere in this volume have been retranslated by Paul Hammond, with my emendations.
[2] Liernur, "Acerca de la delicadeza," 2-3.
[3] Liernur, "Acerca de la delicadeza," 2.
[4] Liernur, "Acerca de la delicadeza," 2.

[5] Liernur, "Acerca de la delicadeza," 2.
[6] Kurt Forster, "Thoughts on the Metamorphoses of Architecture," *Log* 3 (Fall 2004): 19, quoted in Liernur, "Acerca de la delicadeza," 17.
[7] Liernur, "Acerca de la delicadeza," 32.
[8] Liernur, "Acerca de la delicadeza," 18.
[9] Kenneth Frampton, "On the Predicament of Architecture at the End of the Century," *Hunch* 6/7 (Summer 2003): 176; quoted by Liernur, "Acerca de la delicadeza," 18.

[10] Liernur, "Acerca de la delicadeza," 4.
[11] Liernur, "Acerca de la delicadeza," 3.
[12] Liernur, "Acerca de la delicadeza," 19-25.
[13] Liernur, "Acerca de la delicadeza," 20.
[14] Liernur, "Acerca de la delicadeza," 25.

[15] Liernur, "Acerca de la delicadeza," 27.
[16] Liernur, "Acerca de la delicadeza," 27.
[17] Liernur, "Acerca de la delicadeza," 27.
[18] Liernur, "Acerca de la delicadeza," 31.
[19] Liernur, "Acerca de la delicadeza," 31.

globalisation, this capacity or vocation for resistance is undoubtedly put to the test, and I would venture to say that with it, the meaning of the very existence of the discipline is at stake."[20]

Liernur mentions two specific conditions of architecture that are required if it is "to resist": one would be the idea of form being "resistant to" the passage of time, which Adolf Loos prefigured when he argued that, due to the nature of its production, architecture could not be assimilated to the processes of other commodities of transitory use; the other would be the need for "common codes" within the discipline that would make what Liernur calls *architecture as institution* possible: "That is why an *institutional* act like the one which, in my opinion, Richter Dahl Rocha are carrying out can neither ignore the problem of its potential permanence by limiting itself to the pursuit of pure presence, nor fail to come to terms with the inherited past. It is this requirement that causes the work to enter into dialogue with the masterworks of the past. ... Every creator, according to Harold Bloom, struggles to attain the level of the masterworks that preceded him, and only in achieving this can he think about a new opening."[21]

"The Principle of Hope"
Among the central issues laid out in the essay, there also appears the search for Beauty. I have already quoted Liernur's comment with reference to our body of work, that "no other glue than that of the search for beauty articulates the complex set of levels of demand, desire, and meaning that go to form it."[22] He addresses the subject of beauty also in a wider sense by interpreting it metaphysically as a socio-ethical commitment. He begins by linking it to what he considers to be one of the most famous modernist definitions: "Beauty is above all, as Baudelaire liked to say, paraphrasing Stendhal, the promise of happiness."[23] Liernur relates this "promise of happiness" to the capacity of utopia, the imaginary realm onto which unrealised desires are projected, to constitute itself as a source of hope. He also invokes Ernst Bloch, for whom hope has to do with the anticipation of an unattainable better world, but as an activity undertaken from the reality of the present, in a way that is anticipatory more than messianic, stemming from an attitude that does not submit to the world but rather reconfirms a commitment to institutions and to everyday work.

But the demand for beauty that architecture formulates on our behalf, he adds, may also be read as a metaphysical necessity. In light of this, he invokes the Western conception of beauty as understood by Simone

Weil and Aristotle, among others, as an expression of the desire for order and harmony capable of forcefully opposing the chaos of the city that its inhabitants simultaneously experience as "absolute freedom and agonising solitude."[24] These forces of order and harmony would no longer appear, as in the classical world, to be totalising gestures, but as a fragmentary action aware of its own impotence. "It is the possibility of the beautiful, the hope of beauty, which impels us with greater force toward the need to avoid the inhumanity of ugliness."[25]

Reflecting on the social and transcendent dimension of the quest for beauty, Liernur quotes the philosopher Hans-Georg Gadamer, for whom beauty is not merely subjective aesthetic perception: "He who says that something is beautiful is not only saying that he likes it, as he might like a plate of food, for example. If I find something beautiful, then I want to say that it's beautiful. Or as Kant would say, 'I demand universal agreement'."[26] Liernur points out that the agreement as to human re-union which forms the basis of Beauty has no spatial or temporal boundaries and generates a "presence" that also endows beauty with the capacity to oppose the susceptibility to consumption that defines objects as commodities. "We would not raise the question of beauty if we did not share a bewildering experience of it with other generations, and even other places."[27] In conclusion, and before moving on to illustrate his comments with examples from our work, Liernur adds: "I think that, if the work of Richter Dahl Rocha can be accused of something by those who do not share these criteria, it is precisely its beauty. In it, one perceives a powerful desire for *reunion*, *order*, *harmony*, *balance*, *proportion*, *stability*, *timelessness*, *measure*, *grace*, *elegance*, *certitude*, and *consonance* that the buildings we consider to be beautiful arouse in us. Of course these attributes are suspect from the viewpoint of an important fringe element in contemporary criticism, but what for some constitutes a demerit, turns out to be for us, fortunately, for the reasons suggested above, an example of rare and necessary virtue."[28]

"On *tacere*"
As I mentioned in the chapter on Beauty, one of the most significant contributions of Liernur's essay is his revalorisation of balance and moderation as possible *loci* of intense aesthetic resonance, a phenomenon which, as he points out, runs counter to contemporary aesthetic ideals. Quoting Antonio Gramsci: "It is too easy to be original by doing the opposite of what everyone else is doing; this is just a mechanical thing. It is too easy to speak differently from others, to play with neologisms, whereas it is difficult

to distinguish oneself from others without doing acrobatics."[29] Liernur immediately adds: "Indeed, Richter Dahl Rocha's work carefully avoids acrobatics of any kind, to such an extent that, as I have said, it demands close attention and time for the observer to enjoy it. In actual fact, their buildings seem to openly reject grandiloquence, resounding definitions, and the 'manifesto' spirit that permeates contemporary buildings consumed as advanced or (trans)avant-garde products. They inhabit, we would say, the space of neutral production."[30] He notes, however, that it would be an error to assume that "neutrality" has any negative connotation. It is here that he encounters in Roland Barthes, who devoted one of his last seminars to a few illuminating ideas in this respect. Barthes wrote: "I call Neutral everything that baffles the paradigm."[31] Liernur explains that the term "paradigm," for Barthes, refers to the "motor of meaning ... which operates within the opposition of clear extremes, among which conflict is established: it requires the maximum profundity. ... The avant-garde and the moral act upon the paradigm. The Neutral is a state of provoked dysfunction of the paradigm, and therefore leaves us uncertain."[32] In Barthes' terms, "the Neutral doesn't refer to 'impressions of greyness, of neutrality, of indifference. The Neutral – my Neutral – can refer to intense, strong, unprecedented states, ... the right mix of emotion and distance. ... In short, a well-behaved Eros, restrained, reserved."[33]

Liernur immediately reminds us "that while the work of Richter Dahl Rocha does not have a violent impact on us, neither does it suggest absolute silence, in the sense of an absence of a communicative vocation,"[34] and here he returns to Barthes, who distinguished between the Latin words *tacere*, the deliberate act of remaining silent, and *silere*, the passive silence of objects and of natural phenomena. In light of this distinction, "the Neutral would be defined not by permanent silence, which, being systematic, dogmatic, would become the signifier of an affirmation ('I am systematically taciturn'), but by the minimal expenditure of a speech act meant to neutralise silence as a sign. ... I believe that Richter Dahl Rocha's *modus operandi* consists precisely of this, of attaining the *silere* of things (buildings) such that they offer themselves up to us in the 'state of balance' proper to Beauty, but by adjusting or reducing the speech act to the extreme, that is to say *tacere*, remaining silent long enough to neutralise [their] silence as a sign."[35] Finally, commenting on our design for the Oculus of Nestlé building, Liernur invites us to take a last step toward understanding this *modus operandi*, concluding his essay with the following question: "What manifestation could be more eloquent than working toward the existence of a presence whose maximum intensity is attained precisely where it is reduced to an almost total absence?"[36]

[20] Liernur, "Acerca de la delicadeza," 31.
[21] Liernur, "Acerca de la delicadeza," 37.
[22] Liernur, "Acerca de la delicadeza," 37.
[23] Liernur, "Acerca de la delicadeza," 36.

[24] Liernur, "Acerca de la delicadeza," 37.
[25] Liernur, "Acerca de la delicadeza," 38.
[26] Liernur, "Acerca de la delicadeza," 40.
[27] Liernur, "Acerca de la delicadeza," 40.
[28] Liernur, "Acerca de la delicadeza," 41.

[29] Liernur, "Acerca de la delicadeza," citing Antonio Gramsci, "Sincere (or Spontaneity) and Discipline," *Selections from Cultural Writings: Problems of Criticism*, ed. David Forgacs and Jeffrey Nowell-Smith, trans. William Boelhower (Cambridge, Mass.: Harvard University Press, 1985), 214. [30] Liernur, "Acerca de la delicadeza," 43.
[31] Roland Barthes, *The Neutral: Lecture Course at the Collège de France (1977–1978)*, trans. Rosalind E. Krauss and Denis Hollier (New York: Columbia University Press, 2005), 6, 7, and 14-16; *Le Neutre, de Roland Barthes, Notes de cours au Collège de France, 1977–1978*, texte établi, annoté et présenté par Thomas Clerc (Paris: Éditions du Seuil, 2002).

[32] Barthes, *The Neutral*, 7.
[33] Barthes, *The Neutral*, 14-16.
[34] Liernur, "Acerca de la delicadeza," 44.
[35] Liernur, "Acerca de la delicadeza," 44.
[36] Liernur, "Acerca de la delicadeza," 46.

Retomando el camino

Ignacio Dahl Rocha

Retomando el camino

In the course of these essays we have reflected on a series of changes that are transforming the discipline of architecture in a significant manner. What are the questions suggested by these reflections? Is architecture yielding to a process of mutation that will lead to something new and perhaps better, which we must comprehend and to which we must adapt? Or are we living through a time of decadence that could incite more radical reactions and give rise to cultural changes more profound than the ones we imagine? And what should be our attitude toward all of this? We find ourselves hesitant, on one hand caught up in the optimism of the sciences and technology, whose headlong rush into the future assumes humanity's insatiable curiosity will lead to a better future, though it may take us down very different paths than those we already know; on the other hand, we contemplate the general panorama with the pessimism and nostalgia of the humanities, resisting certain tendencies in contemporary culture where we recognise the erosion of certain fundamental values of our discipline.

While this view may be interpreted as negative, even reactionary, we prefer to interpret resistance as a critical and responsible attitude, a direct expression of our vested interest in what we have called "sustainable creativity." A certain resistance based on the historical and institutional foundations of our discipline and on a strong commitment to reality should not prevent us from "enquiring with intensity," as Mangado has observed. On the contrary, we see it as indispensable. We cannot know if this resistance is a futile attempt to slow down an inevitable process of disciplinary evolution, or if it has the virtue of anticipating problems that not only architects, but all of society will sooner or later have to confront.

Notwithstanding its dynamism and ambition, most of contemporary architectural culture does not appear to be committed to a critical stance *vis-à-vis* the degradation of the built environment. It has not even advanced, as in times past, utopias or ideals that would stimulate architectural culture to put forward a determined effort to build a better world. In effect, the culture of architecture has become out of touch to the extent that the most consistent and stimulating "ideals" it offers today have more to do with the notion of "sustainable development," in the sense of the need to reduce the "negative impact" of architecture on the environment, than with its fundamental *raison d'être* as the setting for human and social life, that is, for our collective existence.

As a sustainable and collective project, Richter Dahl Rocha has engaged a new generation of architects who will continue along the road that lies ahead. We count on them to discover the new "lines of enquiry." The hypothesis that has emerged from the collective reflection that went into the making of this book is that the more we base ourselves on reality, the more sustainable will be the creative freedom to which we aspire, and the more firmly we anchor ourselves in the "fundamentals" of our discipline, the more room we have to exercise that freedom. In this regard, it is important to recall the observations of José Antonio Marina, in particular his comments about contemporary culture's failure to engage with reality, its tendency to seek only escape from it, and to devalue it by means of parody, irony, and even cynicism, which finally leads to its own self-devaluation. "In effect, this freedom," he concluded, "cannot be won with contempt."

As Liernur's reflections on beauty suggest, in the broadest sense, the aspiration to creative freedom is propelled by the stimulus that comes with the notion of utopia, with the hope for a better world – not only its possibility to become actual, but its power to cultivate an attitude that does not yield to the world, but makes a commitment to institutions and daily work. Taking up once again our own metaphor, the form of hope inherent in beauty has to do with what we have called architecture's *ultimate, albeit secret meaning*, precisely founded on the vocation for service as its *first and most urgent reason*, in short, the challenge of creating a more propitious environment for human life and in doing so, if possible, to procure Beauty.