aiaVT

The aiaVT newsletter is published by AIA Vermont,
the Vermont Chapter of the
American Institute of Architects.

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president's column

david epstein, aia, leed ap
2005 president aiaVT

Public Policy has been getting a lot of attention lately at AIA National and here locally in our chapter. As I reported in previous newsletters, the national component has really ramped their efforts to effect positive change on public policy and legislation at the federal level. There were several successful lobbying efforts in the last session, including a community enhancement component in the transportation bill and several renewable energy initiatives. Buoyed by this success, AIA is launching the Grassroots Leadership Network (GLN). This is a group of AIA members, one from each state, who help coordinate AIA lobbying efforts with their federal congressional delegation. The national component will host a list serve and has developed position papers to aid in this effort. If you would like to serve as the aiaVT representative, please email Hanne Williams at aiavt@madriver.com.

Here at home, our Public Policy committee has also been busy. In our last meeting, we developed a framework for organizing our approach to this task. Our analysis focused on three key factors:

I. Process

- How do we get Architects on State-wide policy making boards?
- Establish a resource handbook of architect experts for State officials.
- Process for mobilizing membership to influence legislation.
- Yearly visits with key State leaders to advocate our positions, listen to concerns and offer assistance.
- Investigate adding additional staff/consultants for these activities.

cont.

excerpt from:

The New Modernity
The Architecture of Complexity and The Technology of Life

Michael W. Mehaffy
Katarxis Nº 3 2005

http://www.katarxis3.com/Jacobs.htm

I. The "Old Modernity" of Mechanical Science

> Modernism's alchemistic promise – to transform quantity into quality through abstraction and repetition – has been a failure, a hoax: magic that didn't work. Its ideas, aesthetics, strategies are finished. Together, all attempts to make a new beginning have only discredited the idea of a new beginning. A collective shame in the wake of this fiasco has left a massive crater in our understanding of modernity and modernization.
>
> - Rem Koolhaas, "Whatever Happened to Urbanism?"

"The future" is mired in the past.
Around the world today an old chimera of modernity still holds us spellbound. Its rules and assumptions fuel our prodigious industry, our fashions, our vision of ourselves. It

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aiaVT website: http://www.aiavt.org/

10.05:1

Architect Needed for Panel Discussion: Expanding the Used Building Materials Industry in Vermont

The conference is on November 3rd in Barre and its goals are to identify challenges to growing this industry, opportunities available, and strategies and stakeholders needed to move forward. For the panel discussion, we are seeking an architect with some experience (or at least interest and an attempt at experience!), to spec used materials for a project. In 10-15 minutes, we'd like an architect to discuss what projects have been done, the challenges to specifying used building materials, and possible solutions or opportunities to getting used building materials in more projects.

If you're interested, please contact:

Carolyn Grodinsky
Waste Prevention Coordinator
Agency of Natural Resources
Waste Management Division
103 South Main Street
Waterbury, VT 05601
(802) 241-3477
http://www.anr.state.vt.us/dec/wastediv/recycling/CandD.htm

II. Issues/Policies
- Business
- Healthcare
- Taxes
- Competition
- Permit reform
- Professional
- Professional Qualification Requirements
- Statute of Limitations
- Architect's Role in Contract Administration
- Building Codes
- Community
- Historic Preservation
- Sprawl
- Education
- Energy
- Stormwater

III. Collaborators
- Investigate joining existing organizations that have a strong lobbying apparatus when policy goals align.
- Investigate pooling resources with aiaVT partners to maximize lobbying effectiveness.

As you can see, this represents a first step at ramping up our efforts to be an effective advocate for healthy, livable communities on behalf of the profession. We recognize that most architects would rather be designing buildings than discussing policy issues. But the stakes are huge, and the profession needs to have a voice at the State level. With your help, aiaVT hopes to have a positive impact on shaping public policy. Please consider joining our effort.

Thanks.

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governs our pursuit of endlessly (not to say pointlessly) greater levels of prosperity and wealth. At a deeper level it lures us with its seductive promise of a final deliverance of humanity from the horrors of nature untamed. It is – or so we had desperately hoped — the final achievement of the Enlightenment triumph of human reason.

But the foundation of this quest is crumbling all around us; the signs of its internal contradictions and fallacies are increasingly unmistakable. Today it has become an ironic parody of its own once-confident quest for advancement. And yet we remain prisoners of its spell, unable to see where to go next.

In architecture – the realm of art with the greatest impact upon living patterns – today's "futuristic" jagged crystalline towers are not much different from set pieces from the 1924 movie Metropolis or the 1939 movie The Wizard of Oz. Skylines take on the quaint spaceship forms of Buck Rogers, or the dazzlingly wacky forms of an old theme park, complete with exploding fireworks. Interiors have returned to the uncomfortable

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National Slate Technology Center to Hold Fall Course

The National Slate Technology Center announces its fall course scheduled for October 13-14, 2005 to be held at the Valley Club in Poultney. The course, Designing with Slate for Beauty and Durability, is a twelve-hour intensive session intended to familiarize participants with the variety of uses for natural slate. It will cover the basics of designing and specifying slate for a number of different applications. Topics to be covered include a brief history of the American slate tradition with a focus on Vermont and New York, information on roofing, flooring slate, structural slate, exterior wall cladding, and interior finish applications such as countertops. Participants will become familiar with basic terminology, design considerations and limitations, slate selection, comparison to other materials, and basic installation techniques. In-classroom scale models and a walking tour of a historic district will allow firsthand exposure to installation approaches. A quarry visit will demonstrate modern slate quarrying and fabrication techniques. Participants will attend a reception hosted by the Slate Valley Museum that includes a museum tour, a product display, and an opportunity to visit with quarry owners.

The National Slate Technology Center is a registered provider with the American Institute of Architects Continuing Education Systems. Twelve credits (CES/HSW) earned on completion of this program will be reported to CES Records for AIA members. Course fees are $300 per person.

Instructor John Meyer has been involved with the slate industry since 1989. He began his slate career with Vermont Slate & Copper Services Inc., where he learned the craft of installing slate roofs. In 1998, John co-authored The Slate Book: How to Design, Specify, Install, and Repair a Slate Roof, which is the recipient of the National Roofing Contractors Association Gold Circle Award. John received his BA in History and MA in Education from Temple University.

For more information on the upcoming workshop, contact the NSTC office on 802-287-4284 or see their website www.nationalslatecenter.org.

architects responding to hurricane katrina: rebuilding phase presents numerous design and planning challenges

As part of its on-going response to Hurricane Katrina, the AIA has established a number of initiatives to help architects effected by this disaster. The "Displaced Architects Fund" is accepting donations to provide immediate financial assistance to architects and their teams. The AIA has also created an online "registry" where displaced architects can request the necessary tools (computers, telephones, furniture, etc.) they need to operate. Additionally, an online "matching" service has been developed to provide a central database with posting a search capability to match those looking for work or accommodations with those offering positions or space.

"While we are deeply saddened by the destruction caused by Hurricane Katrina and all of the lives that have been affected, we are encouraged by how the architecture profession has pulled together at both the local and national level. The generous response so far will be instrumental in ensuring that displaced architects have the opportunity to continue working during this turbulent time," said AIA Chief Executive Officer Norman L. Koonce, FAIA.

To participate in any of these services, or to volunteer for an AIA Disaster Assistance Program:
http://www.aia.org/about_katrina_aid

Immediate housing challenges
It is imperative that we take the necessary time to apply the best possible design and planning principles so that we are not forced to deal with unwise decisions made out of haste.

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fashion-victim minimalism of the 1960's, complete with tacky plastic chairs and un-tacky price tags. Metropolises are still largely planned around passengers in speeding automobiles, whisking far out to suburbs of gleaming corporate office parks set far back from the road – all of it perfectly described (sans congestion, pollution and other dysfunctions) in the utopian drawings of almost a century ago.

These are but the superficial signs that the "modern" era of roughly the last century — the most astonishingly productive and politically progressive epoch in human history — is today in a deepening end-stage crisis.

Let us be clear about the triumphs achieved. This era, with roots stretching back to Newton and Descartes – and even deeper, into the rational idealism of Plato and even the nature of human thought itself — has delivered breathtaking advancements for humanity. Its vast wealth has been fuelled by a revolution in science and mathematics, and in particular in our understanding of the structure of nature and the cosmos. Along

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The AIA advocates the following rebuilding positions:

- Because these facilities will be used for an extended period of time by residents, transitional housing arrangements must be approached with the basic design principles that go into developing a livable community;
- Planning to address the immediate needs for shelter must be done in concert with a long-term rebuilding plan to avoid making hasty decisions that will hamstring future efforts;
- To maintain viability of local architecture firms, as well as the spirit and character of the affected regions, local architecture firms should be sub-contracted by the large companies awarded rebuilding contracts by the federal government.

The American Institute of Architects is currently working on numerous federal legislative priorities including:

- Historic preservation: the AIA, along with the National Trust for Historic Preservation, proposes tax incentives and Federal grants to assist in the preservation and rebuilding of Katrina-damaged structures;
- Good Samaritan Law: the AIA favors Federal and State legislation to protect design professionals from liability during the voluntary provision of free services in times of emergency and natural disaster;
- School construction, repair, and modernization: the AIA proposes a $200 million, Federally-funded project should be initiated to meet the urgent need to replace and rebuild schools in the effected regions and to use 21st century design standards to enhance the learning environment for children.

New Community Demonstration Projects: the AIA seeks Federal funding for ten redevelopment projects in the impacted region to create incentive packages for the planning, design, development, and construction of new, well-designed community clusters in decimated areas.

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with this, as a parallel and interactive phenomenon, has come an explosive revolution in technology, production, wealth, political liberalism, and the means of living.

Today we can fly, heal, dine, in a manner undreamt of by the richest kings of history. Some of us – members of the industrialised democracies, at least — operate with unprecedented freedom from the oppressions of history. We should marvel indeed at this astonishing human achievement.

And yet we know there are costs. We know there is uncertainty, contradiction, danger. We struggle to see the next stage, and desperately try to rework the existing regime. Have we gone deeply enough? Are we hurtling toward the edge of a precipice?

Architecture has always had a unique place among the arts in shaping the structure of human life within nature. Often that singular responsibility has meant translating a new technological capability into a mode of living, thereby promoting and accelerating it. At

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architects push for long-term katrina recovery, permanent recovery

Key Proposals Include: Model Communities, Good Samaritan Law, School Construction, Historic Preservation, Brownfield Cleanup, and Long-Range Planning

In response to the Hurricane Katrina disaster and the need for massive rebuilding, The AIA has launched a nationwide push for Federal legislation that makes sure taxpayer dollars are well spent through redevelopment efforts that are well-planned, well-designed, and geared toward permanent solutions for the effected communities.

Ron Faucheux, Vice President of Government Advocacy for the 75,000-member AIA, said Federal recovery efforts in effected areas, "need to ensure that long-term community planning and design quality are incorporated into every step of the rebuilding effort."

"Even as emergency recovery and relief efforts continue," he said, "there is an urgent need to begin planning for an orderly transition from temporary solutions – such as locating people in mobile homes, tents and shelters – to permanent solutions."

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the beginning of the last century, the architecture profession took the new transformation as a challenge to create such a new architecture: more rational, more scientific, more open and more advanced than what came before. Along with this was a corollary of political liberation from the old aristocracies and the old bourgeois authorities. We would see the final completion of the grand Enlightenment project.

And in the last century, there was indeed a great explosion of new forms and new ideas, in architecture and in all the arts – propelled by, and in some cases racing to catch up to, the new technological realities. The era was fuelled by a boundless optimism about the possibilities of a more genuine and more liberating human culture. The impetus to liberation reached new levels in the wake of the victory over fascism, and an eagerness to cement the final graduation of humanity from such atavist horrors.

There is no doubt that this period, continuing with variations to the present day, has been an exuberant, fascinating and deeply important phase of the history of architecture and the means of living – a grand experiment in the application of once-new scientific and technological ideas toward humane ends. It has been one of humanity's great adventures. This author takes personal pleasure in having been a witness and participant in it.

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"America is about to launch the largest rebuilding effort in history," said Faucheux, a New Orleans native and former Louisiana legislator. "It must be done right from the start if taxpayer dollars are to be wisely spent and people's lives and communities are to be rebuilt."

Faucheux outlined the AIA's legislative proposals:

• A $50 million federal grant program to fund ten "New Community" demonstration projects in the impacted areas. These grants would be packaged with other incentives in the proposed Gulf Opportunity Zones to finance immediate construction of a variety of mixed-use developments designed to serve as models of quality design and to spur job creation, new housing, and business opportunities in the hardest hit areas;

• A $200 million "21st Century Schools: Demonstration Projects for Construction, Repair and Modernization." A proper built environment is vital to the health and safety of children in elementary and secondary schools. New, repaired and modernized educational facilities the region would serve as a catalyst for nearby economic and community development — crucial to rebuilding and reinvestment;

• New tax incentives and Federal grants to assist in the preservation and rebuilding of damaged historic structures and homes;

• Passage of Federal and State "Good Samaritan" legislation that protects architects and other design professionals from tort liability during the voluntary provision of free services to governmental authorities in times of disaster and catastrophic events;

• Incentives to encourage cleanup and redevelopment of contaminated brownfield sites through liability relief and tax breaks in the hurricane-impacted area;

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But as we enter a new century the signs are unavoidable that the project is moribund and near collapse. The legacy of almost a century of this modernism, this radical attempt to accommodate the old industrial technology to a fine architecture and design, has been disorder, dysfunction, and a deep complicity in the global threat to life itself.

Amid the occasional remarkable pieces of fine minimalist art, the effect upon the many thousands of ordinary buildings, public spaces and artefacts, and upon the environment generally around the globe, has been nothing short of devastating. The worthy project of architecture to accommodate the new industrial reality, and to humanise it, has been a quixotic dream. The technocratic architecture has instead conspired with an increasingly shallow technocratic culture to dehumanise humanity, and nature itself.

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• Federal grants for local community planning efforts directed by local citizens and governments with involvement from architects and planning professionals;

• Use of Federal royalty payments from the leasing of offshore oil and gas concessions to acquire and maintain lands in areas impacted by Katrina as natural flood protection barriers and wildlife refuges;

• A two-year property and sales tax holiday for residents and businesses in the effected counties, and parishes along with full Federal reimbursement of lost revenues to local tax-recipient governmental bodies pegged at pre-Katrina levels. This would efficiently channel federal assistance to thee areas by helping local governments provide basic services; avoid massive legal disputes involving property tax reassessments; protect governmental bond ratings; spur economic development through lower sales taxes on machinery, materials and equipment; and attract taxpayers and job creation through a stable business climate.

We modernists have a lot to answer for.

Today the old modernist project is in a frantic, desperate search for renewal. And in this endeavour it is increasingly an embarrassing parody of itself – at one moment acknowledging its relegation to the status of corporate servant creating fashionable "junkspace," at the next moment claiming to profound expression of the zeitgeist and sneering at the past, at still the next moment delving shamelessly back into its own retro-modernist version of "insipid nostalgia."

Moreover, we do not seem to be able to break away. The more we try to transcend our old technocratic bonds with one wild damn thing after another, the more we seem trapped in their inescapable grasp. The more we try to make extravagant singular novelties, the more they all merge into an incoherent white noise of disordered structure.

We have lost the coherent environmental order and geometric richness that was once the birthright of the human race.

"Good riddance!" we may well say. We are liberated and enlightened; we are modernists. This is our satisfactory bargain with history, or at any rate our inexorable condition, our fate: to swim in a sea of disordered "complexity." We cannot go home again.

But a curious dilemma then poses itself: how then to secure the theoretical basis of an increasingly antiquated "modernist" architectural art?

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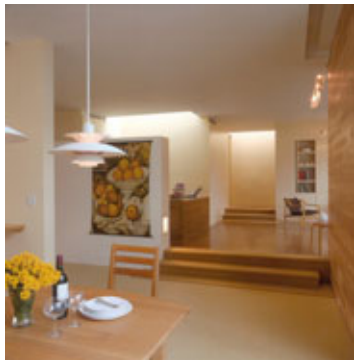

Gossens Bachman Architects (GBA) wins New England Award for Design Excellence.

Gossens Bachman Architects (GBA) wins New England Award for Design Excellence.

At its annual meeting on October 1, 2005, in Concord, Massachusetts, the New England Regional Chapter of the American Institute of Architects recognized GBA for their design of a Private Residence located in Vermont. The project was selected from a field of 234 entries for projects located throughout the world.

The jury commented:

This is a single-family residence in a secluded rural site where logging operations often disturb the natural beauty. Unique in design and concept, this is a fantastic small house. Built as a wall-within-a-wall structure, the exterior bunker like brick walls enclose an interior of light washed spaces and natural materials. The use of skylights instead of traditional picture windows provides natural light and extreme privacy. Excellent attention to detail and to the relationship of the exterior wall and the interior walls is evident throughout. A natural green roof provides additional sound and heat insulation.

II. The New Science of Complexity

As science has probed deeper into the mysteries of the universe, we have encountered a strange and wondrous truth. From galaxies to DNA to the nucleus of the atom to superstrings, we see that the universe is a vast assemblage of structures of energy in space and time. All of the characteristics we can experience, all of the complexities of life and beauty, are structures of smaller structural components. Though unfathomable in its immensity and intricacy, the universe is, in its essence, a geometric structure.

This structure is vast but far from chaotic. The precise relationships of its geometries are what make stars shine and flowers grow. All of the differences between a bacterium and a human being come down to tiny differences in the sequences of molecules of

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aiaVT welcomes

charles fulford, III, assoc. aia, waitsfield
stephen haskell, assoc. aia, warren
kim livellcra, assoc. aia, northfield

aiaVT welcomes back

jay white, aia, montpelier

Vermont Smart Growth Collaborative

The Vermont Smart Growth Collaborative is pleased to announce it has endorsed Burlington Co-Housing Development LLC's plan for housing on East Avenue. The Collaborative provides its Smart Growth Housing Endorsement to housing projects that incorporate smart growth principles and practices.

"This endorsement really embodies our approach to housing," said Don Schramm, project developer. "Housing should be integrated into the community's landscape and close to transportation, stores, and services. We think our plans do just that."

"The Burlington Co-Housing developers are doing a fabulous job," agreed Noelle MacKay, Executive Director for the Vermont Forum on Sprawl, coordinator of the Collaborative. "The plans have many smart growth features that will benefit residents and the community. We're thrilled to endorse this project." The design calls for clustered housing, a common dining and recreation building, a community garden, and a conservation area with trails connected to Centennial Woods. The development will consist of 6 one-bedroom flats, 12 two-bedroom flats, 3 two-bedroom townhouses, 9 three-bedroom townhouses, 2 three-bedroom detached homes, and a common house for shared facilities. It will be built on East Avenue in Burlington and construction is anticipated to begin March, 2006. The Burlington Co-Housing development team includes William Maclay Architects, Robert A. White, ASLA, Landscape Architects and Planners, Kevin P. Worden of Engineering Ventures, Inc., and housing consultant Michael Richardson.

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otherwise identical DNA, made from only four molecules. The structures of the universe are intricately ordered, but in a vastly complex way – and enormously, exceedingly difficult for the human mind to comprehend.

The history of science and technology is one of rough but improving approximations of these structures of the universe, and the geometries that order them. For example, the Euclidean plane gave way to the curved geometry of the surface of the earth, and later to the curved fabric of space-time itself. Similarly, the two-variable mathematics of Newtonian physics gave way to the statistical mathematics of probability, and, only recently, to the non-linear mathematics of organized complexity.

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The Vermont Smart Growth Collaborative provides its Smart Growth Housing Endorsement to projects that:

- Maintain the historic development pattern of compact village and urban centers separated by rural countryside;
- Develop compact, mixed-use centers at a scale appropriate for the community and the region;
- Enable choice in modes of transportation;
- Protect the state's important environmental, natural and historic features, including natural areas, water quality, scenic resources, and historic sites and districts;
- Strengthen agricultural and forest industries and minimize conflicts of development with these industries;
- Balance growth and the availability of economic and efficient public utilities and services;
- Support a diversity of viable businesses in downtowns and villages, including locally-owned businesses; and
- Provide for housing that meets the needs of diverse social and income groups in each community.

To date, eight projects have received the Vermont Smart Growth Collaborative's Smart Growth Housing Endorsement. The Vermont Smart Growth Collaborative is a coalition of Vermont housing, business and environmental organizations working together to promote State policies and local practices that encourage smart growth. The Collaborative provides technical assistance to help Vermont communities plan for growth. It is also active in efforts to create a state growth centers program, address big box store proposals, and explore alternatives to the Circumferential Highway. The Vermont Forum on Sprawl is coordinator of the Vermont Smart Growth Collaborative.

Visit www.vtsmartgrowth.org to see endorsed projects and learn more about the Collaborative. Visit www.bcoho.org to learn more about the Burlington Co-Housing Project.

It is in the nature of scientific understanding – and indeed of all knowledge — that at any given time we are not aware of the inaccuracies of our current model of reality. We do not know what we do not know. Indeed we are often bewitched by the theoretical elegance of scientific theories into thinking that we have the key to nature at last. This is especially true with modern science – after all, its great precisions have produced breathtaking technological successes.

It is only after a crisis brought on by the discovery of anomalous information that science gradually enters what the philosopher of science Thomas Kuhn famously called a paradigm shift.3 In the last half-century or so such a shift has indeed occurred in mathematics and in physics, as seemingly complete mathematical descriptions of reality were proven incomplete by the new "limitative" theorems of Gödel, Turing and others.4 In their wake has emerged a new mathematics of complexity.

The new mathematics and science thus abandoned the expectation of completeness in mathematical description, and embraced instead a recognition of the unavoidability of

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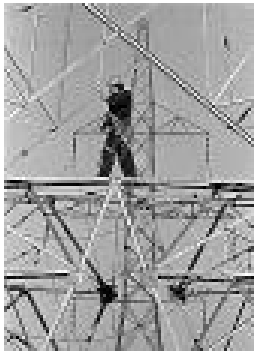

Vermont Wants to Buy Québec's Green not Blue Energy

(This is Part 4 of a series of articles and was published in Le Devoir, Montreal on March 6, 2005 and translated from the original story by reporter Louis-Gilles Francoeur.)

Le Devoir closes its series on energy efficiency in Vermont by giving a list of the elements of the formula that our neighbor to the south is in the process of perfecting. This is the final part of this series showing the areas that Vermonters are exploring in anticipation of the end of their contract with Hydro-Québec, which comes to term in six years.

Vermonters are very concerned about the renewal or replacement of the two contracts by which Hydro-Québec provides a little more than one-third of the electricity consumed in the state.

Let us create an enterprise in Québec that will take advantage of the enormous reservoir of kilowatts that you produce and use inefficiently. We'll do it at our own cost to help you save even more energy than you are currently achieving with your efficiency programs. We'll provide you with a high level of expertise. We would use this conserved "green" energy here in Vermont, and we could share the benefits of efficiency with Hydro-Quebec and its customers."

The person who is making this proposal is not some young eco-activist. Richard Cowart, today an international energy consultant, signed the report in 1999 as well as the order by the Vermont Public Service Board (PSB) that created Efficiency

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incompleteness. It sees formulas as approximations of reality, not as perfect "blueprints." Moreover, it understands much more clearly the way nature herself uses codes and generative "algorithms" (or sequences of rule-based processes) to produce vastly complex patterns. Such patterns may well be fundamentally unanalysable in any perfect sense.5 But they may be, in the memorable phrase of Herbert Simon, "nearly decomposable" into approximate hierarchical schemes. They may lend themselves to modelling and simulation according to analogous or "isomorphic" processes. This is the way that such complex and seemingly "irrational" phenomena as weather patterns and stock markets finally yield themselves to deeper understanding.

In this way we are no longer seeking to "distil" reality down to a perfect blueprint of the mechanics of nature — for we now understand that such a blueprint does not exist. Rather we are more like "gardeners" of a complex environment. We control it not by mastery of any "fundamental mechanism", but through intricate and well-developed knowledge of species, growing conditions, rules of hybridisation. We deduce the

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calender

October 7, 2005
BROWN BAG TALKS
Noon, Gallery of Chaplin Hall on the campus of Norwich University. A Tale of Two Houses: The Restoration of the Glessner and Charnley Houses. Elaine Harrington, Lecturer, Historic Preservation Department, School of the Art Institute of Chicago. For more information, please call: 802/485-2620.

October 7, 2005
DECADES OF DESIGN
Reception 5:00-7:00 pm at the Firehouse Gallery in Burlington. A retrospective show on the architecture of Marcel Beaudin.

October 8, 2005
DECADES OF DESIGN: GALLERY TALK
7:00 pm, Firehouse Gallery in Burlington.

October 10, 2005
ARCHITECTURE OF AMERICAN CITIES SERIES
4:00pm, Gallery of Chaplin Hall at Norwich University. "Chicago: City on the Make" Kevin Harrington, Professor of Architectural History, Illinois Institute of Technology. Sponsored by Centerbrook Architects and Planners. For more information, please call: 802/485-2620.

October 11, 2005
DECADES OF DESIGN: EVENING LECTURE
7:00 pm, Firehouse Gallery in Burlington. Tom Cullins of Truex Cullins and Partners and Bill Lipke, professor of Art History, (Emeritus) UVM.

October 13, 2005
CONCRETE SUBSTRATE PROBLEMS
& MOISTURE ISSUES IN FLOORING
11:00 am - 2:00 pm, The Double Tree Hotel (formerly the Clarion Inn) 1117 Williston Road, South Burlington. John Kamencik, CSI, Flooring Div. Mgr., Don-Vac Inc. will discuss proper flooring substrate detailing, specifications, and the new moisture-testing requirements and procedures. Product representatives will also be on hand to show tried and true flooring products and innovative new products. 2 Hours of HSW AIA CEU. RSVP no later than NOON, October 10th. $35 CSI Members - $50 Non-members - Students $10. E-Mail Reservations

Vermont, the organization which, in only a few years, has put Vermont, one of the smallest of the American states, at the head of the group of energy efficient states alongside giants like California.

Richard Cowart is very concerned, like many people in Vermont, about the renewal or replacement of the two contracts by which Hydro-Québec provides a little more than one-third of the electricity consumed in the state. Another third comes from the Vermont Yankee nuclear plant, situated in Vernon, whose proposed renovation has caused a vigorous debate in this state, known as being particularly green (in both senses of the word). The last third comes from regional thermal power plants. These power plants get all the new orders for electricity since they are the only ones able to rapidly respond when new power is needed.

But, as Richard Cowart, who knows the politics of Vermont quite well, indicates, this state would certainly prefer to get "green energy instead of blue" (a reference to hydroelectricity) from Québec. Energy from James Bay has quite a bad reputation in Vermont where all the politicians one meets are still back in the era of the battles of the Cree against the now-defunct Great Whale project. They are all literally astonished when you explain the terms of the settlement with the Cree and the revised opinion that the Cree nation, at least officially, has of the James Bay and Northern Québec Convention.

Natural gas

But if possible purchases of wind energy from Québec might be tempting to Vermont, it is above all the potential energy savings from the province that seems to be the most economically feasible long-term supply source. It's the source that draws an immediate consensus among everyone you talk to. Vermont, as Richard

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salient features of the deeper structure of things, as genetics pioneer Gregor Mendel did with his peas, through patient observation, modelling, experiment, induction.

Lest the gardening analogy seem too primitive, make no mistake: these are phenomenally powerful new scientific tools. The new mathematics — and its algorithmic cousins — have unlocked many of the secrets of biology and other complex processes. Stock markets, weather patterns, even the most intricate morphogenetic processes of life itself are finally yielding to human comprehension. Without doubt, this is a great historic achievement in human history.

Moreover, we understand now that the structures of the universe are not simply additive assemblies of smaller structures, in a grand rational hierarchy. They are rather structures that are interactive in their totality: they exhibit fields of mutual influence and adaptation, influencing one another as they differentiate in vastly complex ways. We see that when we isolate some part of the structure, we are abstracting it from its real field of influence, and pretending that the field does not matter. This is a trick, of course — one that is very useful up to a point, but in important ways, an inaccurate reflection of reality. Connectedness, as the mathematician and philosopher Alfred North Whitehead said, is of the essence of all things.

cont.

October 14, 2005

BROWN BAG TALKS

Noon, Gallery of Chaplin Hall on the campus of Norwich University. Fun at the Fair 2: The Architecture of Expo 2005, Aichi, Japan. Lisa Schrenk, Assistant Professor of Architecture and Art History, Norwich University. For more information, please call: 802/485-2620.

October 21, 2005

GREEN BUILDING WORKSHOP SERIES: TOWARDS ZERO NET ENERGY HOMES

Tracy Town Hall in Norwich, Vermont from 8:30 AM to 4:30 PM with Marc Rosenbaum, P.E. of Energysmiths, Inc. Learn about the planning and design of environmentally friendly homes that can annually produce as much clean energy as they consume. $195 if pre-registered, $245 if postmarked within 14 days of each scheduled workshop or at the door. $10 discount to VGBN or BSR members with paid 2005 memberships.

October 26, 2005

ARCHITECTURE &… "REMAKING THE WAY WE MAKE THINGS"

Building Momentum: Green Design Comes of Age, an introductory lecture by architect and sustainable design consultant Gunnar Hubbard; followed by The Next Industrial Revolution, a 55 minute film communicating the work and vision of architect William McDonough and chemist Dr. Michael Braungart, two leaders in a growing movement to transform the relationship between commerce and nature. Wednesday, 26 October 2005, 7:00 PM, in Dana Auditorium, Middlebury College, Middlebury, Vermont. The event is free and open to the public. (See announcement this issue for more event details.)

October 27, 2005

ARTGATE SUBMISSIONS DUE

At the Firehouse Center for the Visual Arts, next to City Hall, Burlington - 2:00 pm. Late arrivals will not be accepted.

October 28, 2005

Submissions for the AIA Vermont 2005 Design Awards Competition Due at the Chapter Office.

November 3, 2005

TRADITIONAL SLATE ROOF INSTALLATION FOR ARCHITECTS

November 3-4, Thursday: 12:00 pm until Friday: 5:00 pm The National Slate Center for Training and Education, 12 hours. Cost: $300. (See announcement this issue for more event details.)

Cowart explains, could invest and pay part of the cost for reducing the electricity bills of Québec's businesses and households, most notably by converting them from electric to gas heat.

It is in fact this policy of conversion to natural gas and propane that explains how Vermont manages to function with only 1000 MW at peak demand, in other words 3.5 times less electricity per person than Québec. "With a gas heater at 90-95% efficiency," Richard Cowart continues, "you can replace natural gas power plants with an efficiency rate of less than 50% or oil burning that produces twice the greenhouse gas emissions compared to natural gas. It would be better for the planet if Québec did the conversion, and made its hydro and wind power available to displace polluting generation in New England — but this would demand a regional vision instead of one limited strictly to political borders."

But not everyone is looking to Québec to replace the two contracts with Hydro-Québec which will run out in 2012. Hydro-Québec refused to renegotiate these contracts when the energy market was deregulated, an action that caused considerable consternation to its geographically, politically and morally close neighbor to the south.

According to Democratic Senator Matthew Dunne, Vermont should make it a priority to increase its energy independence. The biomass potential of his heavily forested state could be used, he says, especially since this energy source is, according to the international scientific community, neutral in terms of greenhouse gas emissions.

Senator Dunne, who graciously agreed to be interviewed in the cafeteria of the Vermont Legislature in Montpelier, is working on a bill that would create financial

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This trick is at the heart of modern science over the last half-millennium. It is extremely powerful, but equally extremely limited. And in its limitations lie its dangers.

The end of the current modernity is the encounter with the dangerous limitations of the usefulness of this trick.

Like science, human culture as a whole has generally developed an increasingly refined understanding of the structure of things. But human culture is lagging behind. The gifts of our age have largely been the fruits of analysis and reduction – counting, sorting, dividing into constituents and re-assembling into a prodigious economic machine. The historic achievements of our times are certainly breathtaking, and should not be underestimated — sanitation, medicines, agriculture, communication, travel.

And yet, we have paid a price for this reductionism, this mechanical view of the world. We have learnt to pull apart the structures of nature and re-assemble them in myriad ways. But we do not always get them to go back together right – like the mechanic who discovers a few extra parts after the car has gone back together. Perhaps, we hope, the car will run OK. We have discovered an immense power, but we poorly understand what our actions have released. We are like the Sorcerer's Apprentice, unwittingly

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November 3, 2005

EXPANDING THE USED BUILDING MATERIALS INDUSTRY IN VERMONT

9:30a.m. to 3:00 p.m. Vermont Historical Society, Barre, Vermont. A.M. Session Current state of deconstruction and used building material stores including the economic impacts of this industry — Construction industry perspective. How salvage stores and used building materials stores collaborate on reuse. Marketing strategies for used building materials - what works?

November 4, 2005

GREEN BUILDING WORKSHOP SERIES: TOWARDS ZERO NET ENERGY HOMES

Brattleboro Savings & Loan in Brattleboro, Vermont from 8:30 AM to 4:30 PM with Marc Rosenbaum, P.E. of Energysmiths, Inc. AIA Continuing Education credits reported by AIA/ Vermont and certificates of attendance will be available. (See October 21, 2005 listing for full event description.)

November 4, 2005

*aia***VT** CANSTRUCTION

AIA VT's Canstruction® combines the competitive spirit of a design/build competition with a unique way to help feed hungry people. Competing teams, led by architects and members of the design field showcase their talents by designing sculptures made entirely out of canned foods. At the close of the exhibition all the food used in the structures is donated to the Vermont Food Bank. aiaVT will host the first annual Vermont Canstruction November 4–6, 2005 at One Main Street Landing in Burlington VT. More information. See also the Call for entries

November 4, 2005

ARTGATE DESIGN COMPETITION GALLERY OPENING

6:00 p.m. Firehouse Gallery, Burlington. Panel discussions focus on creative architectural design, architecture as art, and the future of architecture in Vermont. There is no cost for attending. All Artgate Entries will continue on display for the month of November.

November 5, 2005

AWARDS CEREMONY FOR "CANSTRUCTION"

6:00 p.m. at One Main Street in Burlington. There is no cost to attend.

November 7, 2005

ARCHITECTURE OF AMERICAN CITIES SERIES

4:00 pm, Gallery of Chaplin Hall on the campus of Norwich University. The Dead Architect's Society Lives: A History of Baltimore's Significant Architecture Walter Schamu, Architect, SMG Architects, Inc., Baltimore, Maryland. For more information, please call: 802/485-2620.

mechanisms to reduce the use of fossil fuels in Vermont. When he is asked if the Efficiency Vermont model could be used to help reduce oil consumption, he enthusiastically agrees.

According to Democratic Representative Steven Maier, who is sponsoring a bill in the Legislature to control greenhouse gas emissions in Vermont, the mandate of Efficiency Vermont could be expanded to include fossil fuels. Already several of EVT's initiatives, such as conversion of electric furnaces and water heaters to natural gas, serve to reduce the use of hydrocarbons.

Steven Maier thinks that "it is certainly not too early and perhaps already too late" to start talks with Hydro-Québec to green up the total energy picture and especially to reduce greenhouse gas emissions in Vermont. A policy of emission reduction in Vermont, he says, will require the state to adapt or even integrate the reduction of all forms of energy consumption, not just electricity. His bill aims to bring greenhouse gas emissions in Vermont back to the 1990 level by 2010 and then 10% lower by 2020.

Joint development?

Why wouldn't Vermont, besides taking advantage of "the huge resource of wasted kilowatts" in Québec, make an offer to Hydro-Québec to fulfill all its energy needs by a joint development of a huge wind energy project, just as Québec and Newfoundland have done for Churchill Falls?

The idea has sparked several immediate favorable reactions. And no negative ones…

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unleashing destruction and disorder in our lives and in our environment. The accelerating pattern suggests that we cannot go on like this; it is an unsustainable enterprise.

And yet going on like this is precisely what we are doing. We are trying to cobble onto the old technological architecture a few new gadgets to solve the current set of problems – and we are appalled to discover a new set of problems, thanks to the principle of unintended consequences. That is because we are focussing on the parts, but we are not able to manage the whole. We cannot solve the problem at the level at which it was created.

We are in paradigm crisis.

The new science offers us a path out. It implies tools for a new kind of human technology — with strong echoes of ancient human patterns – helping us to become more able to adapt to real human needs, more able to comprehend the results of our actions, and hence more able to wield greater responsibility. But we will have to take some of our attention away from the reductive processes, and toward the inductive and the synthetic. We will have to supplement the emphasis on combinations with an equal

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In his office where he welcomes us without an appointment, replacing normal rules of protocol with an immediate warm familiarity, Lieutenant-Governor Brian Dubie (pronounced Dubé) doesn't immediately embrace the idea but he doesn't reject it outright either.

This former airline pilot reacts with a diplomatic metaphor: "As a pilot, I like to have a broad horizon in front of me, as wide as possible," he says with a little smile.

But unlike his Democratic colleagues, who give priority to an integration of green energy and social concerns, Lieutenant-Governor Dubie, a Republican, says that Hydro-Québec, hydroelectricity, or green energy strategies "will have to be put on the same footing as other sources of energy: we shouldn't include political criteria in a choice of this kind." It's his way of saying that the decision will have to be made strictly on a financial basis. In contrast to the Democrats, he adds, "I am not sure that the agreement [between the governors of New England and the Eastern Canadian premiers to reduce greenhouse gas emissions in eastern North America by 2020] is legally binding." He sees it more as a general orientation rather than a precise objective with a timetable and a deadline.

He does however think, like Richard Cowart, that Vermont could share its energy efficiency experience with Québec in the context of new broader energy agreements.

Technical dilemma

According to Frederick Weston, a consultant and a colleague of Richard Cowart, Vermont and New England are facing the same technical dilemma that Canada is in trying to stimulate the market for clean energies.

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emphasis on differentiation and adaptation. We will have to embrace the deeper lessons of the new science of complexity.

This implies a transformation of our culture, and of ourselves.

There is another vital aspect of this transformation. The trick of the old science relied upon the notion that nature is a "dead" collection of disconnected "things" without meaning. It was left for other fields like philosophy and religion the question of how meaning and value might get "layered" on to the scheme in some mysterious way. But the picture of nature itself included the core notion that there is no life or meaning to be had in the physical realm.

As science has advanced into the realm of life sciences, this has become an increasing problem. How do we explain the evident teleological qualities of life in a "dead" universe? How do we explain the phenomenon of life at all?

In answering that question science has found itself in uncomfortable territory, having to acknowledge the place of value in a more complete and more accurate scientific would view. As the philosopher Whitehead observed, we belie the existence of value at the

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"It would require," he says, "that governments allocate emission permits in proportion to the number of kilowatt-hours produced. In this way, all generators receive the same number of credits per kilowatt-hour. This means that the people who produce clean kilowatt-hours would get credits that they could sell to less-clean producers, which would therefore stimulate more renewable energy production. In Vermont, we would be rewarded for our efforts toward energy efficiency because we have one of the lowest rates in the country of greenhouse gas emissions per inhabitant."

"In contrast," continues this energy specialist, "if governments allocate permits on the basis of greenhouse gas emissions, this will concentrate the emission credits in the hands of the people who actually produce the emissions. Depending on how many credits are available, this may stimulate efficiency in fossil-fired power generation but it does nothing to encourage the development of renewables and end-use efficiency and transform the power sector. In this sense, the future rules governing emission permits and credits, that we are going to adopt New England-wide, will have a big influence on our own total energy picture in Vermont."

He could have added that this will also be the case in Canada where Ottawa is about to start granting permits on the basis of greenhouse gas emissions, and not based on the number of kilowatts produced.

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moment we form a concept of a bit of matter. It is only "matter" because it "matters" to us – because we can experience it, observe it, feel its impact upon our lives and our structure of meaning as observers. It is an inescapable a priori of science, and a more complete science must acknowledge it in some way.

Simple, brute "facts" do not underlie the formation of human value; rather, human value underlies exceedingly abstract and synthetic "facts." To reverse this order of concrete and abstract is to commit what Whitehead called "the fallacy of misplaced concreteness."

In the sciences of life, and in particular the neurosciences, there is emerging today a surprising integration of geometry and human experience – particularly the experience of "meaning". This integration of meaning cannot be explained away as a "psychological" phenomenon – for who is experiencing this phenomenon, other than the scientist who feels its value and meaning in the first place? How can a scientist who begins with a notion of the value of doing science claim that there is no place in the structure of things for value? That is a rather embarrassing contradiction, after all – an inability to explain matters beyond a certain level of thoroughness.

Thus science is returning however reluctantly to the notion, as the philosopher Whitehead and others have described, that nature is in some primordial sense "alive". This is a view that finds no opposition between "matter" and "spirit." The geometric arrangement of matter is simply a manifestation, in varying degrees, of what we experience (in the first place, before any knowledge of "matter") as transcendent value or "spirit".

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Architecture &…"Remaking the Way We Make Things"

Building Momentum: Green Design Comes of Age, an introductory lecture by architect and sustainable design consultant Gunnar Hubbard; followed by The Next Industrial Revolution, a 55 minute film communicating the work and vision of architect William McDonough and chemist Dr. Michael Braungart, two leaders in a growing movement to transform the relationship between commerce and nature. Wednesday, 26 October 2005, 7:00 PM, in Dana Auditorium, Middlebury College, Middlebury, Vermont. The event is free and open to the public.

The Talk

Gunnar will present an overview of state-of-the-art Green Design and Construction principles and practices. The lecture will include case studies of exemplary sustainable building projects that make the most of these methods. Gunnar will touch on building systems inspired by nature's models, 'biomimicry', and propose ecological standards for the appropriateness of our endless innovations. He will address the potential of a building site and its relationship and effect on the greater region.

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It is the nature of understanding that the meaning and value on which it rests will always remain an impenetrable mystery forever at the heart of things. It is like the knife that cannot cut itself, or the finger that cannot point to itself, as the Buddhists say. Nevertheless, science can articulate astonishing patterns of relationship and structure. They do not "explain away" the mystery, but they deepen and enrich it.

It is important to note that this view of things puts beauty back at the heart of objective reality, as a structural phenomenon. After all, the most beautiful music – a canon of Bach, an Indian raga – is nothing more, or less, than a pattern of vibrations in the air. That is all. And yet for us participating in it, that is everything.

Our reductionist science wants to see this phenomenon as nothing more than "psychological." But as we have seen, that is an alluring philosophical trick that actually explains nothing – for who or what is perceiving the psychology? We deceive ourselves if we think we can "explain out" our own participation. We cannot; it is always there, always mysterious.

We cannot explain the natural world of beauty and meaning in elemental terms of a "dead" collection of structure. But we can explain the world of structure in terms of

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Gunnar Hubbard is the principal of Fore Solutions, a forward-thinking, high performance, green building consulting firm located in Portland, Maine. He is an architect and a LEED Faculty for the U.S. Green Building Council. He is currently consulting on projects across the U.S., ranging from schools to large commercial buildings to retail and civic buildings. He is a past employee of the Rocky Mountain Institute, and past Director of the Yestermorrow Design/Build School.

The Film

McDonough and Braungart work with corporations with over half a trillion dollars in annual sales, companies like Ford and Nike, to redesign buildings, processes, and products to work according to nature's rules.

"When we follow nature's rules, growth is good," says Bill McDonough. "The question before us is not growth versus no growth, it is: what would good growth look like? And, this is a question of intent, of design. What if we grow health instead of sickness, home ownership instead of indigence, education instead of ignorance?"

Using the stories of five projects that represent a revolutionary change in the direction of the human economy, The Next Industrial Revolution inspires people to:

- Reconsider their current efforts for the environment;
- Reinvent their businesses and institutions to work with nature; and
- Redefine themselves as consumers, producers, and citizens to promote a new sustainable relationship with the Earth.

cont.

beauty and meaning. It is not meaning and value that is an additive trick of structure, but rather structure that is imbued with meaning and value.

Thus do we turn the old mechanist world on its head.

The new science confirms that there is indeed mechanism within the universe. Phenomena do indeed operate in relative autonomy – but within a totality that is not a mere assemblage of fundamentally discrete phenomena, but a web of interaction. We ignore this totality when we abstract specific elements, and pretend that they are fundamentally discrete. But this is a trick – in Whitehead's words, "nothing less than an omission of part of the truth." And it is the trick that makes us believe in a "dead" universe of detached elements that can be recombined in endless ways, as we have done so well in our technological age. But in this model we have been unable to explain the phenomenon of life.

The new science is able to explain the phenomenon, or at least point to its origin. The living force is not on an unseen plane, but all around us. It is not in the details but in the totality, and in us as intelligent beings. We cannot "explain" it in terms of something "dead" and "atomic" – but we can articulate specific aspects of its structure with greater and greater approximation to the reality.

cont.

William McDonough is a world-renowned architect and designer and winner of three U.S. presidential awards: the Presidential Award for Sustainable Development (1996), the National Design Award (2004), and the Presidential Green Chemistry Challenge Award (2003). Time magazine recognized him as a "Hero for the Planet" in 1999, stating that "his utopianism is grounded in a unified philosophy that—in demonstrable and practical ways—is changing the design of the world."

Mr. McDonough is the founding principal of William McDonough + Partners, Architecture and Community Design, an internationally recognized design firm practicing ecologically, socially, and economically intelligent architecture and planning in the U.S. and abroad. He is also the co-founder and principal, with German chemist Michael Braungart, of McDonough Braungart Design Chemistry (MBDC), which employs a comprehensive Cradle to Cradle design protocol to chemical benchmarking, supply-chain integration, energy and materials assessment, clean-production qualification, and sustainability issue management and optimization.

ARCHITECTURE &... is an event series organized jointly by Bread Loaf Architects, Planners, and Builders and Middlebury College.

All of this taken together implies a profound transformation of science — and a transformation of our current elementary technological culture. It is time to throw off the crude abstractions of our technological infancy, and step out of the artificial into the rich complex world of nature. Nothing less than our very survival depends upon it.

Perhaps through an ironic post-modernism we can still recover the symbol and meaning of our roots, while accommodating modern technologies and modern liberation from the oppressions of tradition? But we recoil in horror at the grotesquely out-scale, mechanically cartoonish forms of such symbolic expressions in a modern context. Something is creepily out of scale, out of out of place.

Perhaps a post-structural politics can inform our work? Then we can at least recognise the ways in which privileged elites impose their "narratives" on us, and we can "deconstruct" these impositions and thereby offer a cleansing art of liberation. But then we ourselves become privileged elites, imposing our own narratives upon cities on a massive scale. Moreover, we enter a philosophical hall of mirrors in which essential meaning itself is presumed socially constructed – in which, to use Derrida's phrase, there is nothing outside the text. Then we find ourselves in a tangle of self-contradictory

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aiaVT website: *http://www.aiavt.org/*

AIA/Rhode Island
A Chapter of the American Institute of Architects

EXECUTIVE DIRECTOR

AIA Rhode Island is currently seeking applications for the position of Executive Director of our organization. The Executive Director shall provide administrative and executive support for the Chapter. The Executive Director shall act as a representative of the Chapter within the greater community and shall be responsible for the administration of the affairs of the Chapter and such other duties as the Executive Committee may assign. The ideal candidate will be able to work from home and dedicate an average of 20 Hours per week during the day to the position. The ideal candidate will have a Bachelor's degree or equivalent with emphasis on marketing, public relations or business management. A love of architecture and the built environment is encouraged.

AIA Rhode Island is a statewide component of the American Institute of Architects in Washington, DC. It is a professional association representing nearly 200 professionals and 50 affiliate members. Affiliate members include engineers, contractors, client/owners and other allied support professionals.

Founded in 1875, the seventh oldest chapter in America, AIA Rhode Island remains highly committed to excellence in architecture and service to the public. It offers many programs that enhance the public understanding of design, as well as, the practice of architecture.

To apply for this position, please send a cover letter with resume to:

AIA Rhode Island Executive Director Search Committee
c/o RGB
50 Holden Street
Providence, RI 02908

Or via email to: President@aia-ri.org

www.aia-ri.org

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AIA Vermont reserves the right to edit articles for available space and determine appropriate content prior to inclusion. Submissions must be received by the 15th of the month prior to publication.

nihilism, in which the notion of externally-verifiable structure that must lie at the heart of credible science – the foundation of Enlightenment modernism – collapses into absurdity.1

The truth (whether or not anybody constructs it thus) is that architecture has long been marginalized by the hegemony of a rampaging technocracy. Architects, caught in this Ellulian trap,2 are no longer engaged deeply with the fabric of the culture, as that is now generated autonomously by technocratic imperatives. Thus they are relegated to the role of macro-sculptors, adding a layer of marketable style to the Empire's New Clothes. That they themselves still celebrate this exalted position for grand artistry is a sign of the full extent of their neurotic accommodation.

The reality is that in most of the building acts throughout the culture, the irrelevance of architects and "designers" is almost total. They have become part of the entertainment machine, engaged with rendering their own simulacra of culture – no less than the "theme park nostalgia" they so eagerly attack. Thus are we all relegated to quarrelling with one another over our mutual forgeries.

And so modernism and its progeny remain no less mired in the past – the past of a hegemonic industrial technocracy — trying ever more desperately to revive and reinvigorate a doomed project of naked apology. It has not yet understood that the problem cannot be solved at the level at which it was created.

The old modernity was largely a product of the old mechanical science. If there is indeed a "new science," we may suspect that it implies a new understanding of nature and of human nature, and it will inexorably produce a new ordering of technological culture. We have scarcely begun to assess in any depth what that might truly mean.