The Sympathy of Things

Ruskin and
the Ecology
of Design

2ND EDITION

LARS SPUYBROEK

"John Ruskin did not like machines. He thought that mechanical machines make everything look the same. Lars Spuybroek, a protagonist of the digital turn in architecture, and a scholar, shows that today's digital tools vindicate John Ruskin's plea for the animation of artisan making. This book offers an anticipation of our technological future, as well as an understanding of our pre-mechanical past."

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"If Spuybroek, like Ruskin, does not shake your design and aesthetic concepts, you haven't understood him."

CHARLES JENCKS

"*The Sympathy of Things* is a stirring call to action; an amazing reconstruction of the ideas of the Victorian sage John Ruskin; and, above all, a visionary look at the inner life of things. Lars Spuybroek makes the case that aesthetics is first philosophy, and proposes a radical new aesthetics for the digital age."

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". . . the term 'brilliant' is often misused in reviews, but the opening chapter on 'the digital nature of gothic' is truly scintillating."

STEPHEN KITE, *Architectural Research Quarterly*

"This is a dazzling, provocative, baffling, and sometimes vexing manifesto. . . . *The Sympathy of Things* is an unforgettable book."

FRANCIS O'GORMAN, *Carlyle Studies Annual*

"Ruskin has at last found an interpreter with the breadth of learning and a poetic imagination to make his perceptions relevant to our own day."

PETER DAVEY, *Architectural Review*

"A must for digitized Ruskinites everywhere."

BRUCE STERLING, *WIRED Magazine*

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Ruskin and the Ecology of Design

Revised and Expanded Edition

Lars Spuybroek

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To J.B.

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Second Edition

The well-known phrase "revised and expanded edition" is slightly misleading, since even when unattended most words revise themselves over time, and most books tend to expand, especially when used in lectures, seminars, and discussions. True revision would require another book; therefore, I have refrained from inserting any new insights, limiting the changes to clarifications and the smoothing out of transitions. Expansion is already an important characteristic of the first edition of 2011 (published by V2_ in Rotterdam), with its long chapters and cumulative argumentation. For this second edition, I have chosen to add even more examples and citations from the most important protagonists. From the outset the book was meant to be mosaic in character and, above all, not governed by a single discipline, littered with imagery, and using a structure in which words and things alternate in a completely equal relationship. The development of a thought may break off halfway through to be taken over by the description of a thing, and a thing may quickly give way to an exposition of logic, often making an argument that starts out as a classic exegesis and ends up as formal as programming language. In one section in the book, we move from William Morris's rugs to a differentiation between empathy and sympathy, become engaged in a discussion—which never happened—between Ruskin and Viollet-le-Duc on the geometrical aspects of mountains, and move back to Lipps's and Worringer's differentiation of abstraction and empathy before ending in a formal discussion of angular figures in Shoowa Kuba cloths—all in the space of about ten pages. It might be the designer's way of thinking that allows for such trains of thought. In a designer's mind, things and words are wholly on a par with each other: reasoning is constantly augmented with quickly sketched diagrams, the pointing at imaginary objects, the use of three-dimensional models, the constant opening of books, and the xeroxing of images that end up pinned on the wall. As a result, the chapters take on the form of extensive maps with paths that lead into many directions and connect to many disciplines.

Speaking of designers, it might be useful to point out that this book was not written in connection with my work as an architect. In fact, the writing of it played an important part in the cessation of my practice. Every morning I arrived in the office earlier and earlier to finish the previous evening's writing, and each day at 9 a.m. when people came in to start work, I was

filled with increasing disappointment, because I had to postpone my writing again until the evening. After two chapters, I decided enough was enough and closed up shop.

Atlanta, March 2015

Preface to the
First Edition

There are two ways of revitalizing a historical figure. One is to expand the study of his or her relationship with contemporaries, to find more links and with any luck make unexpected discoveries, and to see whether you can reconstruct the person's main inventions in another light—in short, to make the person more historical. The other is to wrest the figure from history, to see whether you can filter out the typical statements of the day and discover what is left on the table, and, out of these parts, construct a creature we can recognize as one of our own, while hoping you are not creating a ghost version of the original.

The book before you attempts to do the latter. It takes John Ruskin and places him primarily in the context of historical figures that have appeared *after* him. It is like a history written backwards. While the technique is not uncommon among those seeking to prove that a particular subject should be viewed as a precursor to others who followed, that is not my aim here. My ambition is to update Ruskin, not to see him diluted in the countless streams of diverging trends. Many of the figures I have him meet on his way to the present never referred to him and can by no means be characterized as followers, though I make them forge alliances with Ruskin because of deep theoretical affinities. This is quite an ahistorical approach, one that looks more like a design or construction project, certainly if we understand a project in the literal sense, as a projectile. Think, for instance, of the animated diagrams of the Voyager probe's launch into space: we see the projectile sweeping around Jupiter—not landing there but merely using the planet's gravitational field to increase its own speed—and then, some years later, around Saturn and Uranus, ever faster; then, it makes one more turn around Neptune before being ejected from the solar system, at a speed now approaching that of light, and straight into the dark beyond. In the same way, I let Ruskin encounter William James, revolve around him, and absorb some of his thought, but not enough to slow him down; sweep around Henri Bergson, acquiring more speed; and again around a few Germans (Theodor Lipps, Wilhelm Worringer, and even Martin Heidegger); eject him over the twentieth century (which at several points in the book I call the dark age of the sublime), with its world wars, its minimalism, and its deconstructivism; and stop him so that he appears suddenly in our own age, like Doctor Who, meeting the likes of Bruno Latour and Peter Sloterdijk. One could hardly call this project historiographic—but it is not pure science fiction either,

since we are bound to make the creature from the past speak in words both he and we understand.

Though we do see Ruskin encountering some of his contemporaries—less affectionately in the cases of Charles Babbage and Charles Darwin but much more so in that of William Morris—this project follows a tradition in which every twenty or thirty years a new Ruskin is sculpted out of his huge volume of work. The Ruskins of Marcel Proust, Patrick Geddes, the Guild Socialists, Kenneth Clark, Raymond Williams, Peter Fuller, Richard Sennett—to name just a few, dispersed over the breadth of the spectrum—are all shaped according to what they saw as the needs of the times. In this sense, this book fits an established custom: to create a Ruskin object, a probe sent from the past to shine light on our own times. It should come as no surprise that has happened with Ruskin more than with other historical figures, since he was so outspoken and often so angry that his voice was fated to be heard for centuries. More than a cultural commentator or art critic, he was an agitator, even a castigator at times, and a merciless one at that.

My Ruskin will be a rather confusing one to many, since the version I create does not condemn machinery—digital machinery, to be exact. This must sound awkward at best, if not completely illegitimate. How can one make the aesthetic philosopher (as Edmund White correctly qualifies him) of variation, imperfection, and fragility into one of machinery? This question brings me to my second project: I will argue that our contemporary tools of design and production should be understood in a framework not of modern times but of premodern ones—not only of Ruskin's age of the picturesque and ornament but also of the pre-Renaissance era his own century tried to recreate: the age of the Gothic. John Ruskin's Gothic, either misjudged as sheer ethics or aesthetically not taken entirely seriously, turns out to be such a radical concept of design that I do not hesitate to call it a Gothic ontology, a notion that fuels the rest of the book.

In Chapters 1 and 2, Gothic ontology is defined as a special relationship between figures and configurations, in which the figures are active parts that have a certain freedom to act, though only in relation to others and in order to form collaborative entities. This concept transcends the aesthetic opposition of structure and ornament, making the Gothic "a beauty that works," one that leads to a much broader notion of an aesthetics based on sympathy. Sympathy, in my briefest definition, is what things feel when they shape each other. In Chapter 3, sympathy is first elaborated in the context of the work of James and Bergson; then inserted back into aesthetic theory via the German concept of *Einfühlung*, which we develop through Lipps and Worringer; and returns to Ruskin's hands in the fourth chapter. It is here that he quarrels with Heidegger over care and concern, but also over sacrifice and gift, veiling and unveiling, and beauty and the sublime. For Ruskin, the sublime is what things grow away from as they take on the form of flourishing beauty, while for Heidegger it is what things open up toward. Finally, in Chapter 5, I arrive at an ecology of design in which sympathy

becomes part of a universal aesthetics, perhaps even what we could call a panaesthetics, which is involved not only in the production of artworks but that of all beings, animate and inanimate, human and nonhuman. So, to summarize the book, what seems to begin as a history of art quickly becomes an aesthetic theory and, step by step, turns into an aesthetic ontology.

I will discuss how we might adopt Ruskin's concepts from a digital perspective in only a few instances, refraining from exploring it further. I believe the transformation of history into theory must be limited by rigor; if the exercise were taken too far, it would turn the book into one with a double agenda—transforming a historical Ruskin into a theory of digital design—and would degrade his position into a mere legitimization of our own. When we stop at the moment of transformation itself, his way into a future becomes our way back into a past, and, instead of visiting our times, Ruskin lures us into his own. I think that if there is one thing we can learn from John Ruskin, it is that each age must find its own way to beauty, and in our case, this means finding our way *back* to beauty, since we seem to have lost sight of it completely. One cannot simply hope to survive a hundred-year obsession with fracture and fragment by accident. As I say at one point in this book, so much has been destroyed that to have any hope of repairing it, we must learn a forgotten language, make it new and speak up until we are heard.

Rotterdam/Atlanta, June 2011

Foreword

Brian Massumi

To modern eyes, a Gothic arch is a musty old thing, still in stone-cold shadows, remote from the bustle of the contemporary world in ways that cannot be measured in inches and feet. Ornamental William Morris wallpaper, to modern eyes, is all very nice, but quaint. A picturesque country scene, not far from kitsch.

For Lars Spuybroek, these are so many reasons why we should cease to look with modern eyes. In *The Sympathy of Things*, he teaches us to look anew. Not (perish the thought) through postmodern eyes; that is not the only alternative. What Spuybroek proposes, rather, is a radically *amodern* vision, one able to see past its own contemporaneity to a restless "vital beauty" too moving to be confined to any particular age. In this *untimely* vision, Gothic is already digital, and through the bushes of the picturesque landscape we glimpse the "technological wild" of the future. The guide throughout is John Ruskin, appearing suddenly in our own age "like Doctor Who."

Gothic . . . digital? Rest assured that it is not a question of superimposing a canned notion of the digital on the Gothic. The untimely moves in both directions. What Spuybroek's Doctor of amodern art teaches us is that Gothic architectural design and contemporary computerized design share certain fundamental processual characteristics. Spuybroek proposes a cross-contagion between their concepts that challenges dominant notions of the digital no less than the modernist devaluation of the Gothic. No less: actually, more. Computer design ends up taking a decidedly Gothic twist, rather than the Gothic having a superficial digital gloss applied to it. Spuybroek terms the perspective that comes with Ruskin's return a "Gothic ontology," despite its crossing with the digital. The Gothic, after all, has the seniority, and with that comes naming rights. The phrase conveys the stakes of the book: no less than an ontology. Actually, more: a cross-ontology; specifically, a cross-ontology of design (and therefore one that is fundamentally aesthetic).

Among the first crossings through which Spuybroek develops this ontology pertains to design itself. The Gothic, he says, "conflates work and design." In Gothic architecture, the form of the final product is not fully pregiven in a completed plan, nor the elements of the construction in standardized molds to be filled in with inert matter. Templates are used for what to modern eyes would be considered the structural elements, such as a

column or a vault. But the templates are filled in not with inert matter, but with a burgeoning of motifs. Although continuous in form, the motifs grow across "broken lines." At each step, their curvature might inflect, or they might bifurcate or merge. The continuity of the form emerges stepwise across these break points, or inflection points where a variation might occur. Exactly which variation eventuates is determined in the process of stone-cutting, influenced by the stone's singular material characteristics. The craftwork of the stonecutter, in its encounter with the material, becomes an internal growth factor of the design. The work of execution and the elaboration of the design coincide. This cooperation extends across the boundaries between structural elements. The bundling of a column will soar into a vault. The boundary between column and vault is now no longer simply a structural joint. It is a transition in the construction of a continuing-across, an inflection point placing the two categories of element, column and vault, into shared variation. The curve of the motif continues across the break between elements, smoothing it into a continuous transition, embracing the elements in a single sweep without erasing their difference. The two elements are brought together as phases of a continuing variation. Because this placing into continuous variation across elements is worked-through the characteristics of the material, it is able to assume a weight-bearing function. The ornamental overcomes its opposition with functional structure, literally joining forces with it. The modernist vision predicated on the structure–ornament opposition crumbles. The associated modernist tendency to separate force from form also goes out the window. The design-work *renders* architectural forces: it does not just concretize their form according to structural plan; it varies and distributes them following the *growth* of form. Form-making becomes form-taking. Force versus form melds into force *of* form.

   All of this requires a rethinking of the very nature of the element, with far-reaching implications for how we conceive of the space of design. If elements are treated as separate, they are joined *partes extra partes* to form a larger whole, and the joint is a third element. The relation between the agglomerating elements is external, mediated by the joint. The elements' nature is unvarying, block-like; their difference, unsmoothed; the building, segmentary. The mediated approach of joining separate blocks in segmentary fashion is *combinatorial*. Since in a combinatorial approach, the relation that is external, the act of relating must come from the outside. It swoops down from another plane, according to plan, to execute the combination. The space of construction is subordinated to the external plan(e) of an authorial intention making structural intervention. In the Gothic, on the contrary, the relation between elements is internal to the form-taking process and the sweeping up of the elements in a continuous variation. That relation is one with the movement of design-work rendering force-of-form. There is only one "plane," that of the movement of the design-work itself, on a level with the material. Authorial intention defers to the characteristics of the

material that the process follows, and resonates with the potential inflections that might occur at any break-point in the process's stepwise smoothing. This telescoping of plan into construction, work into design, intention into execution, qualifies Gothic ontology as a "flat ontology": one in which differences come together on the same variational plane, rather than holding each to its own place in a hierarchy of levels. The space of design is what Spuybroek calls the "sectional plane" of Gothic ontology: a crossing of differences in reciprocal involvement in the same process.

The basic principle of Gothic ontology is: design is concerned with *internal relations*. These relations work out in a stepwise *becoming of continuity,* as curves throw themselves across breaks smoothed by that very passage, composing motifs that cannot be reduced to "mere" ornament. What the relations are internal to is precisely that *movement* passing through. The movement is that of the *force-of-form* composing. There is a term of Ruskin's that Spuybroek takes up to sum this up: *changefulness*. Spuybroek also takes up a term to designate the non-combinatorial nature of this ontology of design-work: *configurational*. The basic element is no longer the structural element, column, or vault, to which a structurally superfluous ornamental motif is applied. The basic element is the curve of the growing motif that will abolish that opposition. It is this *figural* element that becomes primary. The developing figure of the curve *fills out* the structural element, to excess. It *overspills* the structural elements' discreteness, changing their nature by recruiting them into a continuous variation. The figure is already configural from step one. It includes configuration in its own growth potential from the start. When more than one developing figure come together, it is not block-wise. They entwine themselves around each other, or change direction in unison to avoid entwinement. They dance with and around each other. Rather than adding together as separate segments, they mutually inflect, in a shared movement tending toward (but never reaching) the plane-filling limit, that of the saturation of their shared ontological plane of cross-construction. The fact that they never reach the plane-filling limit means that some of their excessiveness is *left over*, leaving a reserve of changefulness still vibrating in the stone and soaring into the air with the spires.

This is where the wildness comes in: with the reserve of changefulness. That reserve actually figures twice. It comes once in the overspill, where the movement of design-work continues past its end, in excess of its own product, like the momentum you feel when you suddenly stop running. The feeling of the movement continues virtually in place. The movement continues abstractly, after its own cessation, in an immediate experience of the changefulness of bodily posture. But the movement of design-work is able to continue past itself only because it already has an excessiveness immanent to its movement. Every break-point where an inflection might occur in the becoming of the figural motif is already overfull of potential variations. These are also abstract: most of the variations never actualize.

Yet their real potential—their verging on coming to pass, their pressing to be actualized—is nevertheless an active, formative factor in the design-work. The mutual inflection of concurrently growing figures jostles these potentials, affecting how the design works them out, changing changefulness en route. The reserve of changefulness that overspills the configuration with the momentum of the construction's completion is one and the same with the overfullness of potential encountered by the design-work at each step in its progression: with the potential entwinements and bifurcations populating the ontological plane of the design, precisely where it is not yet filled. When we look at a Gothic cathedral with amodern eyes, we do not see a static form, structurally buttressed and adorned with ornament. We see the excess of changefulness, at once immanent to and overspilling the structural integrity of the form. We see changefulness still vibrating with its own form-taking, like an afterimage of its coming to completion. We feel that becoming in our form-filled eyes. We sense the reserve of variational potential, vibrating in place, in excess over the form we see. What we actually see, then, is not the form, but the force-of-form taking. We see this as unmediately as it became: with all the directness with which we feel the momentum of a sudden stop leaving us breathless, stone-still in the posture of moving in place. This is the beauty of the Gothic: the beauty of the force-of-form beckoning to further movement of variation, excessively, exuberantly, betokening an always more of vitality—call of the wild.

This is the *savagery* that Ruskin attributes to the changefulness of the Gothic: the *abstract* wildness of figural lines' felt potential for more, immanently overspilling their actual configuration. This is vital beauty: the untimely beauty of that which will not stand still in its place—even if it stands for centuries. A beauty that will not be domesticated, even by history.

This is all well and fine, one might be tempted to say: a craftwork wild. But what does that have to do with the digital? What makes it a *technological* wild? Spuybroek's answer is that similar processual characteristics can be seen in computer-assisted design. What is an algorithm, if not a stepwise process at every step of which an inflection of the trajectory might occur. He is referring to parametric design practices that do not work in segmentary fashion, adding modules to each other, but contrive to overspill the combinatorial model. Infusions of programmed randomness can make each step a break-point, palpably vibrating with a certain wildness of potential. Developing figures can be programmed with characteristics that make them mutually inflecting, with a dose of randomness thrown in so that whether they meld, mate, intertwine, or bifurcate is struck by a degree of co-involved unpredictability. This amounts to a programming of abstract forces acting with the same form-taking momentum that we find in Gothic. Digital objects become figural elements contributing their form-inflecting potential just as Gothic stone does. They become carriers of configurational force-of-form. Although the process is programmed, the resulting form is more in-grown, through the working out of abstract forces immanent to the digital design

plane, than they are planned-out in advance by an externally applied intention. Most compellingly for Spuybroek, the configurations that emerge through this digital design-work can be built off-screen, concretized in any material of choice. The processing can then continue, using analogue computing techniques like those pioneered by Frei Otto. In this way, the digital and the analogue can themselves configure processually, producing at each transition between them a reserve of potential that overspills from one to the other. The curve of the design process continues across their difference, smoothing the breaks between them into a continuous process of form-taking. The analogue phases add an element of craft: the digital rejoins design-work. It was precisely this kind of craft-inflected design process that Spuybroek explored as an architect,[1] and that now informs his work as a theorist, to scintillating effect.

Throughout *The Sympathy of Things* Spuybroek develops the vital beauty at the basis of his Gothic ontology with unfailing powers of observation and conceptual synthesis, moving with his time-traveling Ruskin from the Gothic proper through many a form of ornamental art to the picturesque, and finally to the "ecology of design" that he sees as the twenty-first century working out of the Gothic ontology of design. The reader will discover a richness in the episodes through which this conceptual design-work moves that invites one to tarry along the way, as the eye luxuriates on the tangle of a picturesque thicket, and makes return visits a must. The discussions of the textility of architecture stand out for their originality, the analysis of the nonorganic life of the abstract lines of design-work for its evocative precision, and the critique of the sublime in the name of beauty for the radicality of the opening it effects for thought and feeling. Thought and feeling: coming together. That is what vital beauty is all about. That is sympathy. "Sympathy," Spuybroek writes, "is felt abstraction."

The timeliest part of the book's untimely journey is its radical reconstruction of sympathy. In the central chapter on "Abstraction and Sympathy," Spuybroek advances a concept of sympathy with strong Bergsonian resonance that carefully differentiates sympathy from empathy, understood as a subjective state of the human toward other humans or the world. Empathy, Spuybroek writes, is "nothing but a psychological residue of what originally lay at the heart of all the relations within the realms of the animate and inanimate." What originally lay at the heart is a "strange intermediate being" where "things, like us, are involved in each other"; where we are involved with things, and they with us. It is in this middling of co-involvement, where our actions cross with those of things, and those of the animate with the inanimate, that we rejoin the broken Gothic line of the figural becoming of

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[1] See Lars Spuybroek, "Machining Architecture" and "The Structure of Vagueness" in Lars Spuybroek, *NOX: Machining Architecture* (London: Thames and Hudson, 2004), 6–13, 352–69.

continuity on the abstract plane of shared potential that is our deepest ecology. "Sympathy only appears when the dualism disappears." There, "subject and object share an abstract, sectional plane" of life.

An essential part of Spuybroek's proposition is that things do design work among themselves, just as we work design directly in their midst. To be is to be in the movement of design. This move toward an eventful flat ontology that is ecological through and through strikes a chord with what has come to be known as the "nonhuman turn" of the last ten years. Spuybroek's particular path is uniquely his own. His Gothic ontology extolls abstraction without opposing it to the concrete; revalues things without making them withdraw; remains exquisitely attentive to form without divorcing it from force; plunges into the material without abandoning it to either function or structure; and most of all, affirms vitality without straight-jacking it in the organic.

Let the time travel begin. Doctor John Ruskin Who awaits.

'*The Sympathy of Things* is an astonishing and visionary work. I have never before come across a book so brimming with insight, written with such feeling, and so keenly in touch with life. Ostensibly a meditation on the oeuvre of John Ruskin, what Spuybroek offers us is an intoxicating meditation on art, architecture and design that soars above the ponderous deadweight of thing-theory to luxuriate in the unruly and exuberant proliferation of the things themselves.'

Tim Ingold, Professor and Chair in Social Anthropology, University of Aberdeen

'Spuybroek offers us a fascinating exploration of the sympathetic forces traversing, infusing, composing, and affecting us and other bodies. This wondrous book will change the way you experience the world and shake up established notions of causality, agency, and "life".'

Jane Bennett, Professor of Political Science, Johns Hopkins University

'If there is one thing we can learn from John Ruskin, it is that each age must find its own way to beauty,' writes Lars Spuybroek in *The Sympathy of Things*, his ground-breaking work which proposes a radical new aesthetics for the digital age.

Spuybroek argues that we must 'undo' the twentieth century and learn to look anew at the insights of the nineteenth-century art critic John Ruskin, from whom he distils pointers for the contemporary age. Presenting a broad aesthetic philosophy which entangles architecture, art history, design, craft, and the digital to rich effect, Spuybroek explores the romantic notion of 'sympathy', a core concept in Ruskin's aesthetics, re-evaluating it as the driving force of the twenty-first century aesthetic experience.

Revised throughout, and featuring a new foreword by philosopher Brian Massumi, this is a new edition of a work which has drawn praise from fields as diverse as digital architecture and philosophical speculative realism.

LARS SPUYBROEK is Professor of Architectural Design at the Georgia Institute of Technology in Atlanta, USA. He is the author of *NOX: Machining Architecture* (2004), *The Architecture of Continuity* (2008), *Research & Design: The Architecture of Variation* (2009) and *Research & Design: Textile Tectonics* (2011).

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