

### Architectonics Of Humanism Essays On Number In Architecture

German architecture prior to the modern period has received less systemic, analytical study than that of Italy, France, and Britain. Scholarly discussion of broad traditions or continuities within Germanic or Central European façade design is even sparser. Baroque era studies of the region mostly devote themselves to isolated architects, monuments, or movements. Modernism's advent decisively changed this: Germanic architecture enjoyed sudden ascendancy. Yet, even so, study specifically of that region's façades still lagged – nothing compares to the dozens of treatments of Le Corbusier's façade systems, for example, and how these juxtapose with French neoclassical or Italian Renaissance methods. Given the paucity of multi-period studies, one can be forgiven for believing Germany's effervescence of radical, modern works seems unprecedented. This book takes up these multiple quandaries. It identifies and documents a previously unrecognized compositional tradition – characterized here as the 'screen façade' – and posits it as a counter-narrative critiquing the essentialist, 'authentic' canon currently dominant in Western architectural history. By crossing evenly over the dividing line between the historical and modern periods, it offers valuable insights on indigenous roots underlying some aspects of Germany's invigorating early twentieth-century architectural developments. The book chronologically examines 400 years of closely related facades, concentrated in Germany but also found in Austria, the Czech Republic, German-speaking Switzerland, and nearby areas of Central Europe. While nearly 75 buildings are mentioned and illustrated, a dozen are given extensive analysis and the book focuses on the works of three architects – Schinkel, Behrens and Mies. Relationships between examples of these three architects' façades far transcend mere homage amongst masters. Glimmers of the system they eventually codify are apparent as early as at Heidelberg Castle in 1559 and Nürnberg's Rathaus in 1622. The book argues that in Germany, northern Gothic affinities for bisection, intense repetition and rote aggregation intersected with southern Classical affinities for symmetry, hierarchy and centrality, thereby spawning a unique hybrid product – the screen. Instead of graphic formality, this study is guided by on-site perceptions, propositional contrasts, means of approach, interpretive conflicts and emotion and it relates the design of these façades to concepts proposed by contemporary philosophers including Novalis, Hegel, Nietzsche, Freud, Adorno, and, most importantly, Gadamer on hermeneutics.

London has a unique series of churches built after the Great Fire of 1666, when most of the City of London was destroyed. Among these iconic churches are St Paul's, St Mary-le-Bow, St Bride's, St Clement Danes, St Martin-in-the-Fields, St Mary-le-Strand, St George Bloomsbury and Christ Church Spitalfields. They remain today as outstanding landmarks that define their local cityscapes. Designed by Sir Christopher Wren and his followers – Hawksmoor, Gibbs, Archer and James – these beautiful churches embody spiritual principles expressed through the conventions of Classical architecture. Underlying their outward, visible forms is sacred geometry, an ancient art that explores the invisible inner structure of the Cosmos and gives expression to it in physical form. In this book, Nigel Pennick explains the sacred geometry, spiritual symbols and emblems that make these churches among the most notable buildings of London.

"Computational Design Thinking, " AD Reader Edited by Achim Menges and Sean Ahlquist The current transition from Computer Aided Design (CAD) to Computational Design in architecture represents a profound shift in design thinking and methods. Representation is being replaced by simulation, and the crafting of objects is moving towards the generation of integrated systems through designer-authored computational processes. While there is a particular history of such an approach in architecture, its relative newness requires the continued progression of novel modes of design thinking for the architect of the 21st century. This AD Reader establishes a foundation for such thinking. It includes multifaceted reflections and speculations on the profound influence of computational paradigms on architecture. It presents relevant principles from the domains of mathematics and computer science, developmental and evolutionary biology, system science and philosophy, establishing a discourse for computational design thinking in architecture. Rather than a merely technical approach, the book will discuss essential intellectual concepts that are fundamental not only for a discourse on computational design but also for its practice. This anthology provides a unique collection of seminal texts by authors, who have either provided a significant starting point through which a computational approach to design has been pursued or have played a considerable role in shaping the field. An important aspect of this book is the manner in which adjacent fields and historical texts are connected. Both the source of original inspiration and scientific thought are presented alongside contemporary writings on the continually evolving computational design discourse. Emerging from the field of science, principally the subjects of morphogenesis, evolution and mathematics, selected texts provide a historical basis for a reconfigured mindset of processes that generate, arrange and describe form. Juxtaposed against more contemporary statements regarding the influence of computation on design thinking, the book offers advancements of fundamental texts to the particular purpose of establishing novel thought processes for architecture, theoretically and practically. The first reader to provide an effective framework for computational thinking in design. Includes classic texts by Johan W. von Goethe, D'Arcy Thompson, Ernst Mayr, Ludwig von Bertalanffy, Gordan Pask, Christopher Alexander, John H. Holland, Nicholas Negroponte, William Mitchell, Peter J. Bentley & David W. Corne, Sanford Kwinter, John Frazer, Kostis Terzidis, Michael Weinstock and Achim Menges Features new writing by: Mark Burry, Jane Burry, Manuel DeLanda and Peter Trummer.

This study examines the influence of perspective on architecture, highlighting how critical historical changes in the representation and perception of space continue to inform the way architects design. Since its earliest developments, perspective was conceived as an exemplary form of representation that served as an ideal model of how everyday existence could be measured and ultimately judged. Temple argues that underlying the symbolic and epistemological meanings of perspective there prevails a deeply embedded redemptive view of the world that is deemed perfectible. Temple explores this idea through a genealogical investigation of the cultural and philosophical contexts of perspective throughout history, highlighting how these developments influenced architectural thought. This broad historical enquiry is accompanied by a series of case-studies of modern or contemporary buildings, each demonstrating a particular affinity with the accompanying historical model of perspective.

Essays on the History of the Illustrated Art Book

The Philosophy of Georg Henrik von Wright

On Ratio and Proportion

Architecture's Pretexts

Sacred Architecture of London

MUSIC AND DEEP MEMORY

Environment and Planning

Features the principles of classical sacred geometry, and application to churches built in London after the great fire of 1666. This title also provides background in symbolism and emblemata.

This book presents a new take on the evolution of digital design theories in architecture from modernity to today, as they have been inspired both by contemporary philosophy and the emergence and access to advanced computation. It focuses on how concepts of difference in philosophy transformed architectural design theory and takes on even more significance with the introduction and ubiquitous use of computers within the discipline, changing the architectural design paradigm forever. Beginning with a presentation of American Pragmatism's push towards process, the book continues on to Husserl's influence on the modern movement, mid-century phenomenology, post-structuralist Derridean exchanges with architects, the Deleuzian influence on the smoothing of form and finally contemporary architectural references to speculative realism. Analyzing the arc of design theory as influenced by philosophical and computational logics, this book presents the transformation to contemporary design approaches that includes more biology, more data and more information, moving from "less is more" to "From Less to More!" Philosophical Difference and Advanced Computation in Architectural Theory is an influential read for students and academics of architectural theory, computational design and related areas.

This volume features a collection of papers dedicated to "Canons of Form-Making", in honor of the 500th anniversary of the birth of architect Andrea Palladio (1508-1580). Theorist as well as practitioner, Palladio's architecture was based on well-defined canons that he had gleaned from studying the treatises as well as the remains of architecture from antiquity. Palladio himself left to posterity not only his large corpus of built works, but his Quattro libri d'architettura. Three of the papers in this issue are specifically about Palladio and his work. The other papers deal with canons of form-making, ancient and contemporary.

Reinterpreting the architectural principles of the Renaissance period. This book presents a fresh viewpoint on the use of symmetry and proportion in Alberti and Palladio with the help of new illustrations and examples. Covering the evolution of the Renaissance tradition into the twentieth century, this book offers a new evaluation which veers from Le Corbusier and the French school and moves toward the continuation and transformation in the Viennese and Chicago practices exemplified by Frank Lloyd Wright and the American school. Lionel March (Los Angeles, CA) is a practicing architect and an avid follower of the Modernist tradition in architecture.

He also teaches at the Center for Medieval and Renaissance Studies at UCLA.

Computation Design Thinking

The Common Properties of Quantity

Measured Words

The Architects' Journal

Volume II: The 1500s to the Future

The Rise of the Image

Essays on Number in Architecture

*Originally published in 1971 The Geometry of Environment is a fusion of art and mathematics introducing stimulating ideas from modern geometry, using illustrations from architecture and design. The revolution in the teaching of mathematics and the advent of the computer in design challenge traditional ways of appreciating the space about us, and expand the 'structural' understanding of our surroundings through such concepts as transformations, symmetry groups, sets and graphs. This book aims to show the relevance of 'new maths' and encourages exploration of the widening intellectual horizons of environmental design and architecture.*

*Giordano Bruno and the Geometry of Language brings to the fore a sixteenth-century philosopher's role in early modern Europe as a bridge between science and literature, or more specifically, between the spatial paradigm of geometry and that of language. Arielle Saiber examines how, to invite what Bruno believed to be an infinite universe-its qualities and vicissitudes-into the world of language, Bruno forged a system of 'figurative' vocabularies: number, form, space, and word. This verbal and symbolic system in which geometric figures are seen to underlie rhetorical figures, is what Saiber calls 'geometric rhetoric.' Through analysis of Bruno's writings, Saiber shows how Bruno's writing necessitates a crafting of space, and is, in essence, a lexicon of spatial concepts. This study constitutes an original contribution both to scholarship on Bruno and to the fields of early modern scientific and literary studies. It also addresses the broader question of what role geometry has in the formation of any language and literature of any place and time.*

*This widely acclaimed, beautifully illustrated survey of Western architecture is now fully revised throughout, including essays on non-Western traditions. The expanded book vividly examines the structure, function, history, and meaning of architecture in ways that are both accessible and engaging. Significant features of the third edition include: Increased global coverage, with new essays on Africa, Japan, China, India, Islamic architecture, and the architecture of the Americas. A new chapter covering twenty-first century architecture. Updated coverage of sustainable and green architecture and its impact on design. Revised historical survey and expanded and illustrated timeline. Thoroughly revised and expanded art program, including more than 650 black and white images; 135 new to this edition, and more than 200 line art drawings created by author Leland Roth. A new 32-page, full color insert features more than 50 new color images. Understanding Architecture continues to be the only text in the field to examine architecture as a cultural phenomenon as well as an artistic and technological achievement with its straightforward, two-part structure: The Elements of Architecture and The History and Meaning of Architecture. Comprehensive and clearly written, Understanding Architecture is a classic survey of architecture.*

*The architects of ancient Rome developed a vibrant and enduring tradition, inspiring those who followed in their profession even to this day. This book explores how Roman architects went about the creative process.*

*Nexus Network Journal* 10,2

*An Architecture of Parts: Architects, Building Workers and Industrialisation in Britain 1940 - 1970*

*Science, Philosophy, Architecture*

*Design Methods*

*An Introduction to Spatial Organization in Design*

*Disclosing Horizons*

This handbook provides readers with a well-illustrated and readable comparative guide to proportion systems in architecture, setting out the mathematical principles that underlie the main systems and illustrating these with examples of their use in historical and modern buildings. The main body of the text traces the interplay of abstraction and empathy through the history of science, philosophy and architecture from the early Greeks through to the two early twentieth-century architects who made proportion the focus of their work: Le Corbusier and Van der Laan. The book ends with a reflection on the present and future role of proportion in architecture.

Sebastiano Serlio was the most important architectural writer and theorist of the sixteenth century. The author of the first wide-ranging illustrated book on architecture, he produced a complete set of model designs as well as practical solutions for everyday design problems. This volume, the second in a two-volume series of Serlio's entire works, presents the previously unpublished sixth book, the seventh book, and, as well as The Extraordinary Book of Doors, his little-known Castrametation of the Romans, each of which demonstrates Serlio's sophisticated design theories. This is the first translation of Serlio's later works and the first time that the long lost sixth volume has been united with its companion works and restored to its intended position. The book also includes an introduction and notes by translators Vaughan Hart and Peter Hicks that demonstrate Serlio's significance within the history of architecture and the importance of these neglected texts to our understanding of Serlio's work.

"In the lexicon of garden and landscape architecture, Professor Meto J. Vroom gets to the heart of over 250 key landscape concepts. Through definition, illustration and reference to the essential literature, he delineates and expands the theoretical framework of his discipline, thereby opening a fascinating gateway towards understanding change in our urban and rural landscapes. This work will prove an indispensable point of reference for all those involved in landscape architecture - practitioners and amateurs alike."--BOOK JACKET.

The most popular painter of his day, yet an artist whose reputation has fluctuated among art scholars and critics of the succeeding centuries, Peter Paul Rubens (1577-1640) is chiefly remembered today for his large canvases of sensual gardens, religious scenes, and voluptuous "Rubenesque" women. In Oppenheimer's account of his life, Rubens emerges not only as a talented painter but also as an intellectual with a unique conception of beauty that proved very influential and ahead of his time. Oppenheimer explores Rubens' ideas as he tells the story of his life, which included years as a diplomat, and illuminates his response to the humanism of the Renaissance in which he lived.

From Less to More

The Geometry of Environment

Making Renaissance Art

The Sacred Art of Geometry

Architecture and Geometry in the Age of the Baroque

Sebastiano Serlio on Architecture: Books VI-VII of 'Tutte l'opere d'architettura et prospetiva' with 'Castrametation of the Romans' and 'The Extraordinary book of doors'

Essays in Honor of Dominic Baker-Smith

*Architectonics of HumanismEssays on Number in ArchitectureJohn Wiley & Son Limited*

*From ancient to modern, architects have looked for fundamental underlying principles of geometry and proportion on which to found their designs. Such principles not only provide an order for the formal elements, they ground the architecture in timeless values and provide an order for the formal elements, they ground the architecture in timeless values and provide a source of cultural meaning. This book illustrates the use of fundamental principles of geometry and proportion in two ancient cultures, the Bronze Age and the Roman Age, as well as in twentieth-century North America.*

*This book explores key themes in the making of Renaissance painting, sculpture, architecture, and prints: the use of specific techniques and materials, theory and practice, change and continuity in artistic procedures, conventions and values. It also reconsiders the importance of mathematical perspective, the assimilation of the antique revival, and the illusion of life. Embracing the full significance of Renaissance art requires understanding how it was made. As manifestations of technical expertise and tradition as much as innovation, artworks of this period reveal highly complex creative processes--allowing us an inside view on the vexed issue of the notion of a renaissance.*

*Sir Kenneth Clark wrote in the Architectural Review, that the first result of this book was “to dispose, once and for all, of the hedonist, or purely aesthetic, theory of Renaissance architecture,' and this defines Wittkower's intention in a nutshell.*

*Rubens: A Portrait*

*Challenging Humanism*

*In Search of a New Humanism*

*Architecture, Perspective and Redemptive Space*

*Computation and Writing in Renaissance Italy*

*Traditions of Screening from 1500 to Modernism*

*How Digital Tools Help Bridge and Transform Research, Education and Practice in Architecture : Proceedings of the Twenty First Annual Conference of the Association for Computer-Aided Design in Architecture, October 11-14, 2001, Buffalo, New York*

Bringing together a broad range of contributors including art, architecture, and design academic theorists and historians, in addition to practicing artists, architects, and designers, this volume explores the place of the sketchbook in contemporary art and architecture. Drawing upon a diverse range of theories, practices, and reflections common to the contemporary conceptualisation of the sketchbook and its associated environments, it offers a dialogue in which the sketchbook can be understood as a pivotal working tool that contributes to the creative process and the formulation and production of visual ideas. Along with exploring the theoretical, philosophical, psychological, and curatorial implications of the sketchbook, the book addresses emergent digital practices by way of examining contemporary developments in sketchbook productions and pedagogical applications. Consequently, these more recent developments question the validity of the sketchbook as both an instrument of practice and creativity, and as an educational device. International in scope, it not only explores European intellectual and artistic traditions, but also intercultural and cross-cultural perspectives, including reviews of practices in Chinese artworks or Islamic calligraphy, and situational contexts that deal with historical examples, such as Roman art, or modern practices in geographical-cultural regions like Pakistan.

This book brings together contributions from some of the foremost international experts in the field of urban morphology and addresses major questions such as: What exactly is urban morphology? Why teach it? What contents should be taught in an urban morphology course? And how can it be taught most effectively? Over the past few decades there has been a growing awareness of the importance of urban form in connection with the many dimensions – social, economic, and environmental – of our lives in cities. As a result, urban morphology – the science of urban form, and now over a century old – has taken on a key role in the debate on the past, present and future of cities. And yet it remains unclear how urban morphologists should convey the main morphological theories, concepts and techniques to our students – the potential researchers of, and practitioners in, the urban landscapes of tomorrow. This book is the first to address that gap, providing concrete guidelines on how to teach urban morphology, complemented by EXAMPLES OF EXERCISES FROM THE AUTHORS' LESSONS.

Dominic Baker-Smith has been a leading international authority on humanism for more than four decades, specializing in the works of Erasmus and Thomas More. The present collection of essays by colleagues throughout Europe, Canada, and the United States examines humanism in both its historic sixteenth-century meanings and applications and the humanist tradition in our own time, drawing on his work and that of scholars who have followed him. Contributors include Andrew Weiner, Elizabeth McCutcheon, and Germaine Warkentin. Arthur F. Kinney is Thomas W. Copeland Professor of Literary History at the University of Massachusetts, Amherst. Ton Hoenselaers is Associate Professor of English at the University of Utrecht.

This best-selling, illustrated survey of Western architecture is now fully revised throughout, explaining the structure, function, history, and meaning of architecture in a way that is both accessible and engaging. The long-awaited second edition includes: new coverage on Postmodernism and its relationship to the Modernist era; a reorganization of Mesopotamian and Prehistoric architecture based on thematic lines of development; an expanded chapter on Medieval architecture, including developments from the end of the Roman Empire to the Renaissance; and an expanded art program that includes over 500 images in black and white and color. Understanding Architecture continues to be the only text in the field to examine architecture as a cultural phenomenon as well as an artistic and technological achievement with its straightforward, two-part structure: (1) The Elements of Architecture and (2) The History and Meaning of Architecture. Comprehensive, clearly written, affordable, and accessible, Understanding

Architecture is a classic survey of Western architecture.

Temples of the Phoenix

Its Elements, History, And Meaning

Theories, Research, Education and Practice

Architectural Principles in the Age of Humanism

Understanding Architecture

Architecture and Mathematics from Antiquity to the Future

Reinventing the Discourse

**This collection of essays presents a systematic and up-to-date survey of the main aspects of Georg Henrik von Wright's philosophy, tracing the general humanistic leitmotiv to be found in his vast, varied output. The analysis covers the developments in Von Wright's thought up to the end of the 1990s. The essays are arranged thematically to focus on the chief areas of Von Wright's interests: practical rationality; human action and determinism; philosophical logic and theories of norms; research in the analytical tradition; and Wittgenstein studies. Readership: Scholars and students of moral philosophy, logic, psychology, sociology, cognitive science and the history of contemporary philosophy.**

**With the increased use of computers, architecture has found itself in the midst of a plethora of possible uses. This book combines theoretical enquiry with practical implementation offering a unique perspective on the use of computers related to architectural form and design. Notions of exaggeration, hybrid, kinetic, algorithmic, fold and warp are examined from different points of view: historical, mathematical, philosophical or critical. Generously illustrated, this book is a source of inspiration for students and professionals.**

**Measured Words investigates the rich commerce between computation and writing that proliferated in fifteenth- and sixteenth-century Italy. Arielle Saiber explores the relationship between number, shape, and the written word in the works of four exceptional thinkers: Leon Battista Alberti's treatise on cryptography, Luca Pacioli's ideal proportions for designing Roman capital letters, Niccolò Tartaglia's poem embedding his solution to solving cubic equations, and Giambattista Della Porta's curious study on the elements of geometric curves. Although they came from different social classes and practiced the mathematical and literary arts at differing levels of sophistication, they were all guided by a sense that there exist deep ontological and epistemological bonds between computational and verbal thinking and production. Their shared view that a network or continuity exists between the arts yielded extraordinary results. Through measuring their words, literally and figuratively, they are models of what the very best interdisciplinary work can offer us. The Rise of the Image reveals how illustrations have come to play a primary part in books on art and architecture. Italian Renaissance art is the main focus for this anthology of essays which analyse key episodes in the history of illustration from the sixteenth to the twentieth century. The authors raise new issues about the imagery in books on the visual arts by Leonardo da Vinci, Giorgio Vasari, Sebastiano Serlio, Andrea Palladio, Girolamo Teti and Andrea Pozzo. The concluding essays evaluate the roles of reproductive media, including photography, in Victorian and twentieth-century art books. Throughout, images in books are considered as vehicles for ideas rather than as transparent, passive visual forms, dependent on their accompanying texts. Thus The Rise of the Image enriches our understanding of the role of prints in books on art.**

**Aesthetics and Architectural Composition**

**Spaces of Translation**

**Expressive Form**

**Its Elements, History, and Meaning**

**Architecture and Mathematics**

**Computational Design Thinking**

**Lexicon of Garden and Landscape Architecture**

*The aim of this book is to expose readers to architecture's pretexts that include literary narratives, film, theatre, painting, music, and ritual, as a bridge between diverse intellectual territories and architecture. It introduces a selection of seminal modern and contemporary architectural projects, their situation within the built environment, and their intellectual and formal situation/context as pretexts and design paradigms. Connections between diverse bodies of information will be cultivated along with the ability to posit consequential relationships for the production of architecture. Architecture's Pretexts seeks to cultivate a vision for architecture that sponsors operative links between the discipline of architecture and those outside of architecture. Exploring the works of various architects including Guseppe Terragni, Peter Eisenman, Peter Zumthor, Perry Kulper and Smout Allen, and Rem Koolhaas, this book provides the framework to understanding architecture through the lens of art. Key concepts discussed are: allegories, diagrams, form, material, montage, movement, musical ratios, narrative sequence and representation. A valuable tool, with over 75 black and white illustrations, for students and professionals interested in interdisciplinary methods of design thinking.*

*This book is unique in describing the history of post war reconstruction from an entirely new perspective by focusing on the changing relationship between architects and building workers. It considers individual, as well as collective, interactions with technical change and in doing so brings together, for the first time, an extraordinary range of sources including technical archives, oral history and visual material to describe the construction process both during and in the decades after the war. It focuses on the social aspects of production and the changes in working life for architects and building workers with increasing industrialization, in particular analysing the effect on the building process of introducing dimensionally co-ordinated components. Both architects and building workers have been accused of creating a built environment now popularly discredited: architects responsible for poor design and building workers for poor workmanship. However, many of the structures and ideas underpinning this period of rapid change were revolutionary in their commitment to a complete transformation of the building process. An Architecture of Parts adds to the growing literature on changes in the building world during and immediately after the Second World War. It is significant, both empirically and historically, in its examination of the ideas, technology and relationships that fired industrialization of the building process in mid-century Britain.*

*Every age and every culture has relied on the incorporation of mathematics in their works of architecture to imbue the built environment with meaning and order. Mathematics is also central to the production of architecture, to its methods of measurement, fabrication and analysis. This two-volume edited collection presents a detailed portrait of the ways in which two seemingly different disciplines are interconnected. Over almost 100 chapters it illustrates and examines the relationship between architecture and mathematics. Contributors of these chapters come from a wide range of disciplines and backgrounds: architects, mathematicians, historians, theoreticians, scientists and educators. Through this work, architecture may be seen and understood in a new light, by professionals as well as non-professionals. Volume II covers architecture from the Late Renaissance era, through Baroque, Ottoman, Enlightenment, Modern and contemporary styles and approaches. Key figures covered in this volume include Palladio, Michelangelo, Borromini, Sinan, Wren, Wright, Le Corbusier, Breuer, Niemeyer and Kahn. Mathematical themes which are considered include linear algebra, tiling and fractals and the geographic span of the volume's content includes works in the United States of America and Australia, in addition to those in Europe and Asia.*

*Journal of urban planning and design. Publishes research in the application of formal methods, methods models, and theories to spatial problems involving the built environment and the spatial structure of cities and regions. Includes the application of computers to planning and design, in particular the use of shape grammars, artificial intelligence, and morphological methods to buildings and towns, the use of multimedia and GIS in urban and regional planning, and the development of ideas concerning the virtual city.*

*A Conceptual Approach to Computational Design*

*Proportion*

*Architectonics of Humanism*

*Teaching Urban Morphology*

*Planning & design. B*

*Philosophical Difference and Advanced Computation in Architectural Theory*

*Principles of Roman Architecture*

The age of the Baroque—a time when great strides were made in science and mathematics—witnessed the construction of some of the world's most magnificent buildings. What did the work of great architects such as Bernini, Blondel, Guarini, and Wren have to do with Kepler, Desargues, and Newton? Here, George Hersey explores the ways in which Baroque architecture, with its dramatic shapes and playful experimentation with classical forms, reflects the scientific thinking of the time. He introduces us to a concept of geometry much more than the science we know today, one that included geometrics (number and shape games), as well as the art of geomancy, or magic and prophecy using shapes and numbers. Hersey first concentrates on specific problems in geometry and architecture, then explores the affinities between musical chords and several types of architectural form. He turns to advances in optics, such as artificial lenses and magic lanterns, to show how architects incorporated light, a heavenly emanation, into their impressive domes. With an eye for language, Hersey shows how abstract ideas were transformed into visual, tactile form—the epicycles of the cosmos, the sexual mystique surrounding the cube, and the imperfections of heavenly bodies. Some two centuries later, he finds that the geometric ideas often unexpectedly, in the work of architects such as Frank Lloyd Wright and Le Corbusier. A discussion of these surprising links to the past rounds out this brilliant reexamination of some of the long-forgotten beliefs and practices that helped produce some of the world's masterpieces.

Leon Battista Alberti was an outstanding polymath of the fifteenth century, alongside Piero della Francesca and before Leonardo da Vinci. While his contributions to architecture and the visual arts are well known and available in good English editions, and many of his writings are also available in English, his mathematical works are not well represented in readily available, accessible English editions have remained accessible only to specialists. The four treatises included here – *Ludi matematici*, *De Componendis Cifris*, *Elementorum lunularum quadratura* – are extremely valuable in rounding out the portrait of this multitalented thinker. The treatises are presented in modern English translations, with commentary that is intended to make evident the depths of Alberti's knowledge as well as the mathematical, historical and cultural context, their classical Greek roots, and their relationship to later works by Renaissance thinkers.

The Mathematical Works of Leon Battista Alberti

German Façade Design

Proceedings of the Dresden International Symposium of Architecture 2004

Recto Verso: Redefining the Sketchbook

Philosophica

Giordano Bruno and the Geometry of Language

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