

Division, Juncture, System: Bridges and Bridge-Building in the Work of John Ruskin

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Abstract This chapter starts by considering a recent design for a bridge named after Ruskin, whose inadequacy it attributes to disregard for Ruskin's definition of a bridge's basic function as that of safe passage over a river and misapplication of his concept of 'abstract lines' as ornament. For Ruskin, curvature determined by that function allowed bridges materially to trace such lines and so epitomize general laws governing landscape composition, natural morphology and human co-existence. Taking it as a figure of connection, threaded as a clue through his work, the chapter explores Ruskin's sense of the significance and sacredness of bridges, manifested especially in the role he assigned to an ideal *Pontifex*, guarantor of secure passage across national, cultural and cognitive divides.

Keywords Ruskin. Europe. Turner. Spuybroek. Bridges. Architecture. Ornament. Composition.

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The system of the world is entirely one: small things and great are alike part of one mighty whole.

(John Ruskin, *Modern Painters* V)

1 A Bridge for Ruskin?

Around fifteen years ago the Rotterdam-based architectural design office, NOX, founded and until 2010 headed by the Dutch architect Lars Spuybroek,¹ won an invited competition for the design of a footbridge over the Wurm/Worm not far from Aachen, where since 1815 the river has marked the border between Holland and Germany. The competition

¹ He is now Professor of Architecture at the Georgia Institute of Technology in Atlanta.

was instigated jointly by the municipalities of Kerkrade and Herzogenrath, situated either side of the river but historically a single geographical and administrative entity within a small, semi-independent territory, the *Land van Rode* (or *van s-Hertogenrode*). The project may no doubt be linked to the towns' active self-promotion as the binational city of Eurode.² The bridge was apparently to have been constructed by the German engineering firm Bollinger+Grohmann. A project description on their website states that it was to have replaced a bridge built on piles, and that these would have been reused, presumably by integration into the cantilevered support of the projected 14 m wide circular steel floor. The floor was to have been fitted with a double curved balustrade and decorated with a pattern in mosaic comprising foliate forms in crimson and green on a pink ground.³ The bridge, however, was never actually built.⁴

In recent publications Spuybroek has gone about “revitalizing”⁵ Ruskin’s conception of Gothic architecture and ornament in terms of the contemporary meth-

odology and ethos of digital design, of which NOX was a pioneer. His Ruskin is a prophet of “a Gothic ontology”, i.e.

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.⁶

It is not in itself surprising, then, that in his design for the Wurm/Worm bridge Spuybroek should have “used Ruskin” and even named the project after him.⁷ Yet neither the design itself nor the various brief texts presenting it effectively justify him in doing so.

2 “A Bridge as Place”?

Probably the earliest of those texts is found in the catalogue to an exhibition organized by the Zezeze Architecture Gallery in Tel Aviv in 2006. This aimed to trace

“an intellectual journey starting from the writings of Ruskin, Hogarth and Worthinger, through Spuybroek’s inner workings, to the production of new realms of space,

² Ehlers 2001.

³ See the project description on the website of B+G Ingenieure und Bollinger und Grohmann GMBH: <https://www.bollinger-grohmann.com/en/projects/rusk-ins-bridge>.

⁴ Lars Spuybroek, personal communication.

⁵ Spuybroek [2011] 2016, xvi.

⁶ Spuybroek [2011] 2016, xvii.

⁷ Spuybroek 2008, 259. It is called “the Ruskin Bridge” in Spuybroek 2008, “Ruskin Bridge” on <http://www.nox-art-architecture.com> and “Ruskins Bridge” on <https://www.bollinger-grohmann.com>.



Figure 1 Joseph Mallord William Turner, *Coblenz*. 1842. Watercolour, 286 x 445 mm. Ohio, Cincinnati Art Museum (CIN6198923).
Bequest of Mary Hanna. © Cincinnati Art Museum / Bridgeman Images

sound and movement”.⁸ The catalogue contains a brief introduction by the exhibition’s curator, Heidi Arad; selected passages by the three writers cited; extracts from an interview with Spuybroek by Ludovica Tramontin, later published in Spuybroek 2008, and annotated renders and photographs of various NOX projects, apparently provided by the architect(s).

Inarticulately and inexplicably, the note accompanying the renders of Ruskin Bridge⁹ quotes from *The Seven Lamps of Architecture*¹⁰ in support of the bridge’s conceptualization as one vast ornament. The elusive chain of reasoning stems (so to speak) from the initial remark that the bridge’s intended site – the Wormwildnis nature reserve – is “more like a room than a park”. “Here”, it is asserted,

we need a bridge that creates a middle, not a passage. A bridge that points out the center of the environment, like a chandelier in the middle of the room. So, NOX designed the first circular bridge in the world. A line as a circle, a bridge as a place. But a round bridge is not enough, that only radiates outwards, now the environment needs to relate back inward to the center. Accordingly the circle is made into a 14-meter ornament, following John Ruskin’s outcry in *The Seven Lamps of Architecture*: “... architecture is not to imitate directly the natural arrangement, she is to place her most exuberant vegetable ornament just where Nature would have placed it”. So, NOX also designed the largest ornament in the world. Here people can now sit or stand and enjoy a secret little place that has now become unique.¹¹

The reference is to the fourth chapter of *Seven Lamps*, devoted to “The Lamp of Beauty” and concerned to examine the ways in which the “element of delight” resulting from “impressions of beauty” is “best engrafted upon architectural design”. Moving from the assumption that “all most lovely forms and thoughts are directly taken from natural objects” and reasoning from visible “Frequency to Beauty”, Ruskin poses the question of “what is or is not ornament”, and in the process dismisses several traditional “forms of so called decoration in architecture” as “ugly things”. These include the Greek fret, heraldic ornament,¹² scrolls, ribands and “garlands and festoons of flowers”. The passage (mis)quoted by Spuybroek comes from a discussion of these last and should perhaps be restored to its immediate original context (quoted elements in italics):

Closely connected with the abuse of scrolls and bands, is that of garlands and festoons of flowers as an architectural decoration, for unnatural arrangements are just as ugly as unnatural forms: and architecture, in borrowing the objects of Nature, is bound to place them, as far as may be in her power, in such associations as may befit and express their origin. She is not to imitate directly the natural arrangement; she is not to carve irregular stems of ivy up her columns to account for the leaves at the top, but she is nevertheless to place her most exuberant vegetable ornament just where Nature would have placed it, and to give some indication of that radical and connected structure which Nature would have given it. Thus the Corinth-

- ⁸ Arad 2006, 4.
- ⁹ Arad 2006, 64-7.
- ¹⁰ *Works*, 8.
- ¹¹ Arad 2006, 64.
- ¹² Later the subject of a major *pentimento* in his thinking and teaching: see Levi, Tucker 1997, chs 3 and 4.

ian capital is beautiful, because it expands under the abacus just as Nature would have expanded it; and because it looks as if the leaves had one root, though that root is unseen. And the flamboyant leaf mouldings are beautiful, because they nestle and run up the hollows, and fill the angles, and clasp the shafts which natural leaves would have delighted to fill and to clasp. They are no mere cast of natural leaves: they are counted, orderly, and architectural: but they are naturally, and therefore beautifully, placed.¹³

It is hard to see the relevance of the passage to the renders of Ruskin Bridge.¹⁴ Certainly, as there realized the mirrored symmetry of the bridge's foliate decoration does not "imitate directly the natural arrangement". At the same time, however, it is little more than pictographic in form and confectionary in colour, and not in the least "exuberant" in Ruskin's vitalist understanding of the term: it lacks all indication of "radical and connected structure". (It is interesting to compare it, in this regard, with the laurel in the background of Veronese's *Susannah and the Elders* in the Louvre which Ruskin instances and reproduces in "The Leaf Monuments" chapter in *Modern Painters* V and of whose "every line

and leaf" he writes, "None are confused, yet none are loose; all are individual, yet none separate").¹⁵ Last but not least, the bridge-floor can hardly correspond to the place Nature would have chosen for the living sprays supposedly evoked.

Arad 2006 fails to establish any precise connection between the design for the bridge, its somewhat garbled explication in the body of the catalogue and the appended discussion of "abstract lines" from the chapter on "The Material of Ornament" in the first volume of *The Stones of Venice*.¹⁶ Two excerpts from Ruskin's text are printed alongside edited images of the relevant pages from *Stones*, with the corresponding passages marked by underlining. The intention is evidently to highlight Ruskin's characterization of the abstract contours of natural objects – "transferred to architectural forms when it is not right or possible to render such forms distinctly imitative"¹⁷ – as universally manifesting "ever-varying curvature in the most subtle and subdued transitions" and for the most part expressing "action or force of some kind", as distinct from the circle, defined as "a line of limitation or support", and more specifically from "circular curves", which are said to be "curves of perfect rest".¹⁸

¹³ *Works*, 8: 151 (emphases added).

¹⁴ Arad 2006, 64-7.

¹⁵ *Works*, 7: 89-90, pl. 57.

¹⁶ Arad 2006, 72-3; *Works*, 9: 266-8.

¹⁷ *Works*, 9: 266.

¹⁸ *Works*, 9: 268, 269.

3 A Bridge as Ornament?

Indirect arguments for the assumed relevance of this characterization may be gleaned from texts by NOX/ Spuybroek published elsewhere: the project description on NOX's own website¹⁹ and the two pages devoted to the bridge in Spuybroek 2008.²⁰ In its first half the former reiterates the substance of the note in Arad 2006, minus the quotation from *Seven Lamps*: After again claiming for Ruskin Bridge pre-eminence as “the first circular bridge in the world”, the text continues,

John Ruskin distinguished between two types of lines, the line of limitation and the line of force. The line of limitation is the circle, the perfect form of rest, the other is the line of ornament, the line of force, wind, flow and movement. In this way we merge two concepts of the line into one single object.²¹

Spuybroek 2008 is more expansive. We learn that the project is “all about life” and this is the reason why the bridge floor is “covered with a huge mosaic made up of foliate curves that are pointed at one end and rounded at the other, to make the swirling forces more visible and sensible, like a turbulent vortex”.²² This prompts a digression on the relation in Gothic ornament between “the pointed” (“what emerges when multiple directions cannot be reconciled and this has to be solved by a double tangency”) and “the rounded” (“a sort of given [...] the basis of continuity”), itself immediately followed by the assertion,

The bridge is a huge 60-foot-wide ornament. Imagine crossing a round bridge: you want to stay in the middle, look around at everything, talk to somebody – anything but cross over to the other side. Maybe you want to walk along the vegetal curves, looking down at the mosaic floor. All movement is concentrated in that midpoint.²³

Referring now to the “Material of Ornament” chapter from *The Stones of Venice*, Spuybroek confusingly rehearses Ruskin's distinction there between the abstract contours of natural objects, expressive of force, and the circular curves of limitation, support and rest as one “between lines of contour and lines of force”, and implicitly avers its relevance in repeated (but unfounded) indication of consequentiality:

So we have the circle – the line of limitation, according to him – surrounded by a world of forces – violently flowing water, wind in tall trees – which end up in the circle as lines of force and action. So the powers of variation are operating at the same time as the powers of limitation.²⁴

The concluding discussion is the most obscure and (from a Ruskinian perspective) questionable portion of the passage:

- 19 <http://www.nox-art-architecture.com>.
- 20 Spuybroek 2008, 259-60.
- 21 Project description on NOX's own website (<http://www.nox-art-architecture.com>).
- 22 Spuybroek 2008, 259.
- 23 Spuybroek 2008, 259-60.
- 24 Spuybroek 2008, 260; emphases added.

You might wonder why I'm suddenly considering a flat mosaic ornament as a structural system, since my argument has been persistently structural. Ornament, as Ruskin says, *always* behaves materially, so there's no difference between, say, the wrought-iron curves that intertwine and connect to make a structural surface and the same configuration on wallpaper. As long as it configures structurally. But what it does need to do is to relate to a second materiality, that of the built system it needs to fit into. In this case, it's the system of arabesques that creates the round configuration of the circle of the bridge itself. If there were no relation between the figures and the bridge, it wouldn't work. So there's always a first-order and a second-order materiality, like with Frei Otto's analog machines, like with Semper's four elements. A materiality that informs materials.²⁵

It is far from clear what it might mean for ornament to be have "materially". If that it acts as a structural principle, where does Ruskin say as much? Spuybroek seems rather to be invoking a conviction of his own, namely that "in the Gothic, *ornament acts like structure and structure acts like ornament*".²⁶ If, on the other hand, the phrase means that realized ornament is conditioned by the nature of the materials used, this would seem to tally with Ruskin's thinking but at the same time to contradict the declared lack of difference between wrought-iron and wallpaper realizations of a particular configuration. Is Spuybroek alluding to the formal and qualitative universality of orna-

ment's (in Ruskin's enumeration) primary "material", i.e. abstract lines? Whatever the answer, it is hard to reconcile Spuybroek's assertion that in the design for the bridge it is the "system of arabesques" (a revealing choice of term) that "creates the round configuration of the bridge itself" with the impression unavoidably communicated by the renders of stencilled pattern mechanically applied to and inertly occupying an obdurately pre-existent and in-associably coloured shape and surface.

On Spuybroek's own terms, then, the bridge does not "work". Nor indeed does it on Ruskin's - and not only on those Ruskinian terms misguidedly invoked by the architect. To stay for the moment with the ornament, this is both unnaturally and "wrongly placed", in the viewer-centred architectural sense explicated in the *Lectures on Architecture and Painting* given at Edinburgh in 1853.²⁷ Here the sculpted lions' heads presumed to adorn the city's Royal Institution were ridiculed not only as unmeaning (and senselessly replicated) parodies of natural form but as carved to a degree of finish inappropriate to their position "at the very top of it, just under its gutter".²⁸ By contrast, as demonstrated by examples from Lyons and Amiens, Gothic builders reserved "their best and most delicate work" for the "foundation of the building, close to the spectator",²⁹ while carved ornament intended by them to be seen from far below conveyed the impression of similar delicacy but was carved massively, broadly and even rudely.³⁰

Now, the principle that actually delicate work should be placed close to the spectator implies its converse, that

²⁵ Spuybroek 2008, 260; emphasis in the original.

²⁶ Spuybroek [2011] 2016, 27; emphasis in the original.

²⁷ *Works*, 12: 57.

²⁸ *Works*, 12: 65.

²⁹ *Works*, 12: 59.

³⁰ *Works*, 12: 66.

ornament placed close to the spectator should actually be delicate and not just give the impression of delicacy when seen from a distance. In the case in point, Spuybroek's overblown arabesques are not suited to their place on the bridge, if we imagine this as an object of fully situated rather than computer-mediated visual experience. The viewer would indeed be obliged to levitate to some height actually to enjoy the integral perception of "figures and bridge" simulated by some of the renderers, whereas in ordinary earth-bound perception the former would appear dilated beyond capacity to comprehend and convey the vital visual link with the natural environment which the architect claims for them.

So this ornament fails to pass the test prescribed by Ruskin in the chapter from the *Stones of Venice* succeeding that cited by Spuybroek and which is dedicated to "The Treatment of Ornament":

The especial condition of true ornament is, that it be beautiful in its place, and nowhere else, and that it aid the effect of every portion of the building over which it has influence: that it does not, by its richness, make other parts bald, or by its delicacy make

other parts coarse. Every one of its qualities has reference to its place and use: and it is fitted for its service by what would be faults and deficiencies if it had no especial duty.³¹

And the criterial reference here to "use" suggests further ways in which Ruskin Bridge is unworthy of its name. For what use does or can such ornament, so realized and placed, have on a bridge? The question of course implies consideration not only of the appropriate nature and place of ornament in relation to such a structure, but, most crucially, of the use of a bridge as such. Ruskin Bridge explicitly denies its function as a bridge. Not by chance is its circular form (as its architect boasts) unprecedented, being consequent on the determination it should represent, not a means of passage but rather a "place" of rest and pause, distracting the viewer-traveller from the need or wish to "cross over to the other side". And yet, as Ruskin reminds readers of *The Stones of Venice*, getting "safely over the river"³² is the minimal requirement that may be made of the bridge-builder and thereby also the very occasion and test of constructive intelligence in this elementary mode of architectural work.

4 Bridge Passage and the "Virtues of Architecture"

The second chapter of its first volume, dedicated to "The Virtues of Architecture", serves to rationalize and justify the structure of *The Stones of Venice* as a whole. It isolates and explicates two qualities of buildings which according to Ruskin are "proper subjects of law" and may (after due

instruction and practice) be discerned and judged of "by a glance of the eye": their constructive "strength" and their "beauty".³³ The arched bridge is instanced as an elementary example of "good construction"³⁴ – the simplest and most economical fulfilment of function or purpose – and

³¹ *Works*, 9: 285; emphasis in the original.

³² *Works*, 9: 67.

³³ *Works*, 9: 62-4.

³⁴ *Works*, 9: 65.



Figure 2 Joseph Mallord William Turner, *Rheinfelden from the North*. 1844. Graphite, watercolour and pen on paper, 229 x 330 mm (support). From the *Rheinfelden Sketchbook*. Accepted by the nation as part of the Turner Bequest 1856. London, Tate Britain. Photo © Tate

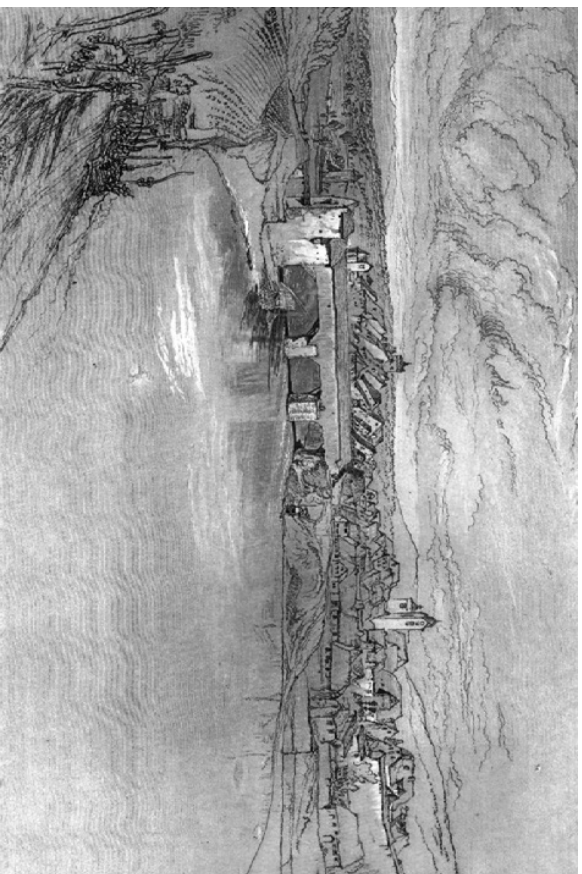


Figure 3 John Henry Le Keux after John Ruskin, *The Bridge of Rheinfelden*. 1860. Etching. Published as Pl. 83 in *Modern Painters V* (1860). Image scanned from 1888 edition. © Paul Tucker

of the pleasure this affords “as the manifestation of an admirable human intelligence,”³⁵ even on the part of a “mere bridge-builder”, not yet “an architect” (though in principle at least on the way to becoming one).³⁶

For, “[s]uppose”, Ruskin prompts, “we are present at the building of a bridge”. What most deserves admiration is nothing very evident in the work underway, but rather the prior “choice of the curve” to be traced by the arch “and the shaping of the numbered stones, and the appointment of that number”. And this for the reason “there were many things to be known and thought upon before these were decided”:

The man who chose the curve and numbered the stones, had to know the times and tides of the river, and the strength of its floods, and the height and flow of them, and the soil of the banks, and the endurance of it, and the weight of the stones he had to build with, and the kind of traffic that day by day would be carried on over his bridge, – all this especially, and all the great general laws of force and weight, and their working: and in the choice of the curve and numbering of stones are expressed not only his knowledge of these, but such ingenuity and firmness as he had, in applying special means to overcome the

³⁵ *Works*, 9: 64.

³⁶ *Works*, 9: 67.

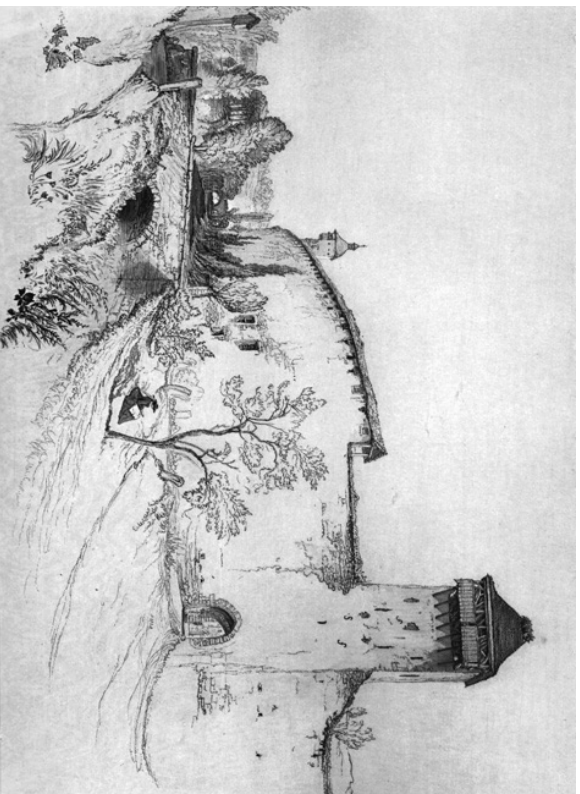


Figure 4 John Henry Le Keux after John Ruskin, *Peace* (the walls of Rheinfelden), 1860. Etching. Published as Pl. 84 in *Modern Painters V* (1860). Image scanned from 1888 edition. © Paul Tucker

special difficulties about his bridge. There is no saying how much wit, how much depth of thought, how much fancy, presence of mind, courage, and fixed resolution there may have gone to the placing of a single stone of it.³⁷

The arched bridge thus exemplifies the first virtue of architecture and the ingenuity characteristic of all art, even where this seems most practical. It does not exemplify the second virtue, calculated, should he display it, to earn the bridge-builder still higher esteem:

the virtue of the bridge's beauty or decoration, manifesting, not his ingenuity but "his affections and delights".³⁸

Yet the reference to its curve – predicated on the assumption of arched construction – suggests that, in perfect accordance with the Ruskinian understanding of ornament, the bridge might well have been so instanced. Its chosen curve might well indeed have been found to manifest precisely one of those "abstract lines" unavailingly invoked by Spuybroek, whose frequency in nature and concomitant beauty qualify them, in Ruskin's view, as

³⁷ *Works*, 9: 66.

³⁸ *Works*, 9: 67.

the “first constituents of ornament”.³⁹ And this raises the possibility of a bridge itself being an ornament in quite another sense from that intended by the Dutch architect.

Aside, however, from its specific “chosen curve”, the very function of a bridge fits it to enter into a broader and no less beautiful linear configuration, one integral to its landscape setting. This is well evinced by Ruskin’s comments on Turner’s drawing of *Rheinfelden from the North* (1844) [Fig. 2] in his *Catalogue of the Turner Sketches in the National Gallery* (1857):⁴⁰

A beautiful instance of serpentine continuity in composition: beginning with the red figures, the line of it winds over the bridge, back to the left in the town, up to the right by the first wall – then away to the left down into the dark shadow of the river, and returns up to the right along the mountain range, to their utmost summit.⁴¹

“Serpentine continuity” in the composition and of course – intentionally – in the landscape it depicts and in the experiential complex this images.

In Ruskin’s understanding of them the “abstract lines” traceable over or across a bridge represent wide-ranging trajectories of meaning: bridges and bridge-building constitute a clue threaded through his work, of the kind he habitually looked for between individual objects or fields of interest and study, and would alert others to. Holding fast the “great connecting clue”, for instance, that “[a]ll European architecture, bad and good, old and new, is derived from Greece through Rome, and coloured and perfected from the East”, would allow the reader of *The Stones of Venice* to “string all the types of successive architectural invention upon it like so many beads”.⁴²

The architect of a bridge worthy of his name would not have neglected what Ruskin has to say or show, in writings and drawings, about the nature of bridges and their relation to rivers and landscapes, nor his understanding of the latter as expressive of inter-national histories of “moral culture”⁴³ – what Denis Cosgrove has called his “geographical imagination”⁴⁴ – and of the imperative need “to get safely over the river” should this, like the Wurm/Worm, represent a historically divisive

³⁹ Works, 9: 266.

⁴⁰ The subject of this drawing was to be identified by Ruskin during a study-tour of Switzerland in 1858, expressly undertaken to complement his work in sorting and cataloguing the vast collection of works on paper which had been included in the so-called Turner Bequest after legal settlement of the painter’s will in 1856. As Ruskin later reported in *Modern Painters V* (1860), “A scratched word on the back of one of them [the group of “memoranda of a bridge over the Rhine” to which the present drawing belongs], Rheinfels, which I knew could not apply to the Rheinfels near Bingen, gave me the clue to the place: – an old Swiss town [Rheintraiden], seventeen miles above Basle, celebrated in Swiss history as the main fortress defending the frontier toward the Black Forest. I went there the moment I had got Turner’s sketches arranged in 1858, and drew it with the pen (or point of brush, more difficult to manage, but a better instrument) on every side on which Turner had drawn it, giving every detail with servile accuracy, so as to show the exact modifications he made as he composed his subjects” (Works, 7: 436). In the penultimate chapter of this volume, Ruskin published etchings by John Henry Le Keux after another two of Turner’s memoranda and a pair of related studies by himself: one of the bridge at Rheintraiden [Fig. 3] and a view of the town’s walls [Fig. 4], which incidentally included a small “old bridge” over their moat. Ruskin’s original drawing for the former was auctioned at Christie’s, London on 16 November 2006 (lot 123), while that for the latter is in the Ashmolean Museum, Oxford (WA.RS.REF.093).

⁴¹ Works, 13, 222.

⁴² Works, 9: 34.

⁴³ Works, 17, 188.

⁴⁴ Cosgrove 2008, 128.

border (at the very heart, moreover, of Ruskin's, indeed of Chateaubriand's and our own fractious Europe). Such an architect would have attended to the bridge clue threaded through his work as a figure of general cohesion and coherence.

5 Bridge Action and Bridge Aspect

Crucially, then, the Ruskinian bridge is *built* and it displays in its construction the ingenuity of the builder. Indeed, in his late autobiography, *Præterita* (1886-1889), Ruskin stated the view that delight at constructive cohesion in bridge-work underlay and stimulated his "early love of architecture", thanks to his inordinate fondness, as a child, of his toy bricks and in particular of an "accurately instructive" model of a two-arched bridge, "admirable in fittings of voussoir and keystone, and adjustment of the level courses of masonry with bevelled edges, into which they dovetailed, in the style of Waterloo Bridge".⁴⁵

Concomitantly, as seen in the passage from *The Stones of Venice* quoted above, the Ruskinian bridge displays its own "strength". This however is not merely structural but 'active' in a moral sense also. Any building, like any person, as that passage explains, is expected "to act well, and do the things it was intended to do in the best way".⁴⁶ In a subsequent portrait of the bridge-builder as "the village stone-mason" – occurring in a key account of Turner's 1842 watercolour of

I cannot here follow that clue in anything like the detail the topic requires, but in the remainder of this short essay will take it up at various crucial points in an attempt to sketch and elucidate Ruskin's lifelong fascination with, and general conception of bridges.

the Mosel bridge at *Coblentz*⁴⁷ (Fig. 1) in *The Elements of Drawing* (1857) – Ruskin traces a bridge's strength of action to its builder's capacity to understand and resolve the threat posed by the river to its safe crossing. Indeed, the type of bridge represented in *Coblentz* and frequently elsewhere by Turner – "with its highest and widest arch towards one side, and a train of minor arches running over the flat shore on the other"⁴⁸ – is stated to represent "the ideal of a bridge" by virtue of its vicariously "sympathising [...] with the spirit of the river, and marking the nature of the thing it has to deal with and conquer"⁴⁹ (where the mode of marking is not, as in the case of Ruskin Bridge, imitative or evocative and ornamental, but structural and contrastive). For the unequal arches answer to a universal characteristic of rivers, which

like to lean a little on one side: they cannot bear to have their channels deepest in the middle, but will always, if they can, have one bank to sun themselves upon, and another to get cool under; one shingly shore to play over, where they may be shallow, and foolish,

⁴⁵ *Works*, 35: 58. Ruskin considered his pleasure in repeatedly "building, unbuiting [...] and rebuilding" this toy model of Waterloo Bridge (opened only two years before his birth) to have honed his extraordinary "powers of getting to the bottom of matters".

⁴⁶ *Works*, 9: 60.

⁴⁷ Which Ruskin himself had commissioned of the artist.

⁴⁸ *Works*, 15: 173.

⁴⁹ *Works*, 15: 174.



Figure 5 Jacob Philipp Hackert,
The Ponte a Mare in Pisa, 1799.
Oil on canvas, 643 x 963 mm.
Greifswald, Pomeranian State Museum.
© Wikimedia Commons

and childlike, and another steep shore, under which they can pause, and purify themselves, and get their strength of waves fully together for due occasion.⁵⁰

As a consequence, the village stone-mason typically “throws a bridge over a strong stream” by building “a great door to let the cat through, and little doors to let the kittens through”:

a great arch for the great current, to give it room in flood time, and little arches for the little currents along the shallow shore. This, even without any prudential respect for the floods of the great current, he

would do in simple economy of work and stone; for the smaller your arches are, the less material you want on their flanks.⁵¹

In Ruskin’s thinking the bridge’s active strength, its capacity for resilient endurance in strategic function, deriving from the sympathetic ingenuity of its builder, passes to its habitual users, and the bridge tends to become an index of civic endeavour and integrity and a focal point of historical destiny. And here, no doubt, is the reason for Ruskin’s plan to continue the *Our Fathers* *have Told us* series, inaugurated with the publication of the first part of *The Bible of Amiens* in 1880, with

⁵⁰ Works, 15: 172.

⁵¹ Works, 15: 173.



Figure 6 John Ruskin, *The Ponte della Pietra, Verona*. 1869. Watercolour and bodycolour over graphite on grey, wove paper, 176 x 261 mm. Oxford, Ashmolean Museum (MA.RS.ED.295.a). © Ashmolean Museum, University of Oxford

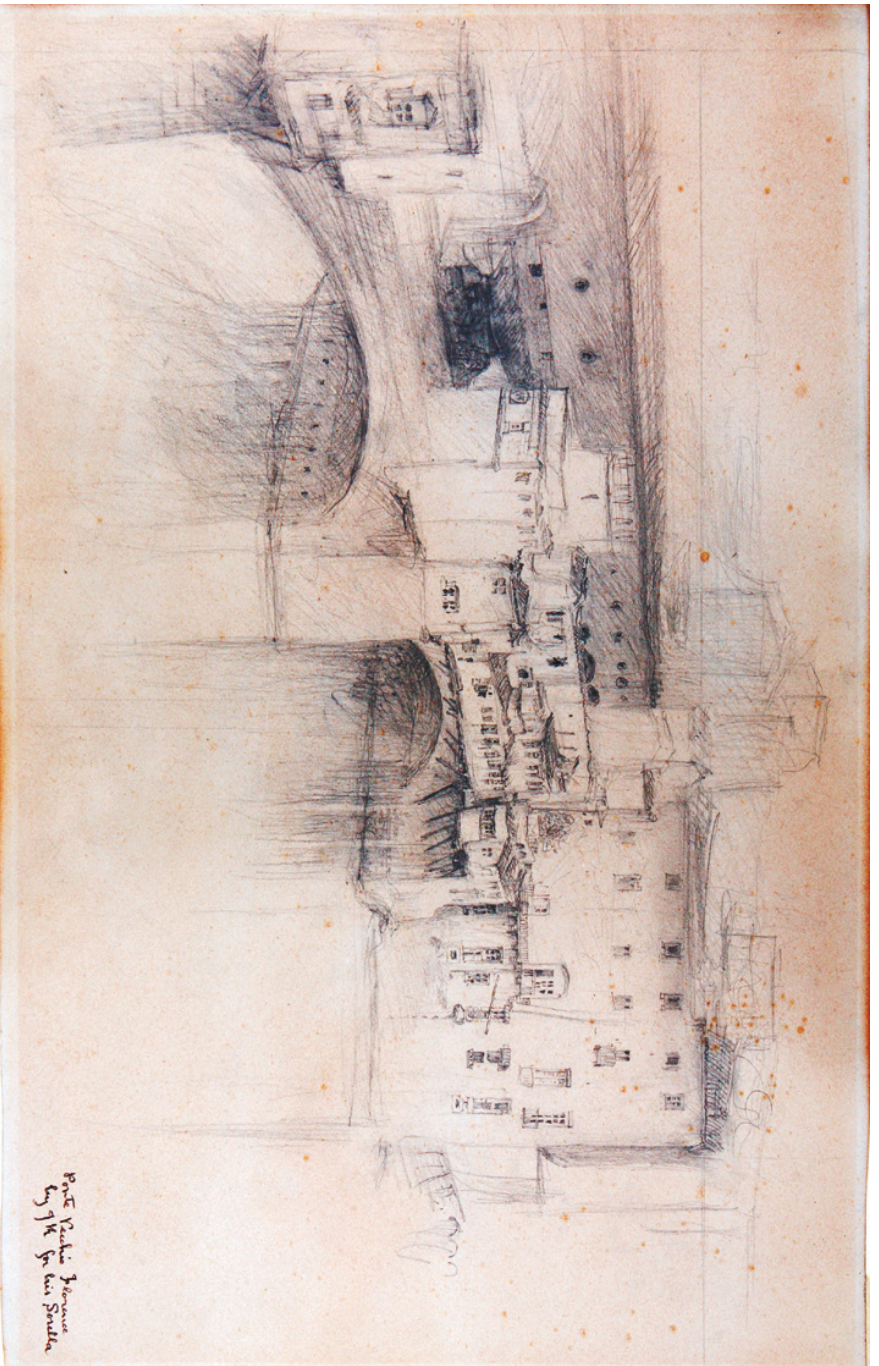


Figure 7 John Ruskin, *Porta Vecchia*. 1882. Graphite on cream wove paper, 356 x 484 mm. Cambridge (MA) Harvard Art Museums/Fogg Museum (1957, 1992). Gift of Edward W. Forbes. © President and Fellows of Harvard College

volumes dedicated to, amongst others, the cities of Pisa, Florence and Verona and titled with the names of the medieval bridges central or crucial to their urban configurations and natural and political histories: *Ponte-a-Mare* after the medieval bridge over the Arno guarding Pisa from the sea, which had collapsed in 1869 [fig. 5]; *Ponte della Pietra* after the Roman bridge over the Adige at Verona [fig. 6]; and *Ponte Vecchio* after the bridge also over the Arno but at Florence [fig. 7].⁵²

Here too, perhaps, is a reason for the family resemblance of many of Ruskin's late drawings of bridges, which seems to have gone little noticed, thanks perhaps to a prevailing concern to trace parallels between the development of his drawing style and his deteriorating mental state. Paul Walton, for instance, notes that after his breakdown of 1871 Ruskin's style loosened and he produced an increasing number of "excited pencil sketches" like one mistakenly described as "made at Florence in 1872" (it actually represents the *Ponte pietra* at Verona).⁵³ And while recognizing that a drawing of the *Ponte vecchio* dating from 1882 [fig. 7] was made for the planned eponymous *Our Fathers have Told us* volume⁵⁴ – to focus, like its companions, on "an architectural monument as endowed with a collective human personality" – Walton inclines to read its "quiet shadows

and vaguely-sketched contours surrounding details of windows and roofs" as "private tokens of Ruskin's broken thoughts and feelings", contrasting them with the "jaunty rhythms of sharply defined forms" in a drawing of the bridge at Bremgarten in Switzerland made over two decades earlier.⁵⁵ Despite the Florentine drawing's strange, soft suggestion of distance, however, it firmly renders the colossal presence of its primary object: the bridge straddling the river. And, allowing for differences in focus and emphasis, this also applies to the sketch probably made the same year and representing one end of another Florentine bridge, the *Ponte Santa Trinita*, which Walton adduces as evidence of the artist's "tortured sensibility" and where in his view, "instead of the voice of history, Ruskin's most desperate moods seem to be given visible form".⁵⁶ Dramatic it certainly is – even alarmingly so – but equally evident is the intent, shared with the drawing of the *Ponte vecchio*, to exhibit massy pontal strength and reach. And the same is true of other drawings of the *Ponte vecchio* probably made in 1882,⁵⁷ as too of the "excited" 1872 sketch of the *Ponte pietra* cited above and other pencil and watercolour studies of that bridge made around the same time [fig. 6].⁵⁸ Moreover, though distinct in style, all recall drawings of bridges made by Ruskin in the 1860s, often in connection with

⁵² See *Works*, 33:lxv.

⁵³ Walton [1972] 1985, 110, pl. 87.

⁵⁴ The drawing is probably the "pretty chiaroscuro" done on 28 October 1882 from a window of the Hotel de la Grande Bretagne on the *Lungarno degli Acciaiuoli*, where Ruskin was staying, and which, as he wrote to his cousin Joan Severn, he thought would "make a charming plate for 'Our Fathers have told us'" (letter quoted in Ciacci et al. 2004, 191 [cat. 32]).

⁵⁵ Walton [1972] 1985, 91, pl. 67; 110.

⁵⁶ Walton [1972] 1985, 118-19, pl. 100.

⁵⁷ The Ruskin, Lancaster University, 1996 P1257, 1258 (the latter illustrated in Ciacci et al 2004, 191, cat. 32) and Christie's, London, 16 November 2006, lot 164.

⁵⁸ See also the group belonging to the City Museums, Norwich and included in Mullaly 1966, cats 63-5.

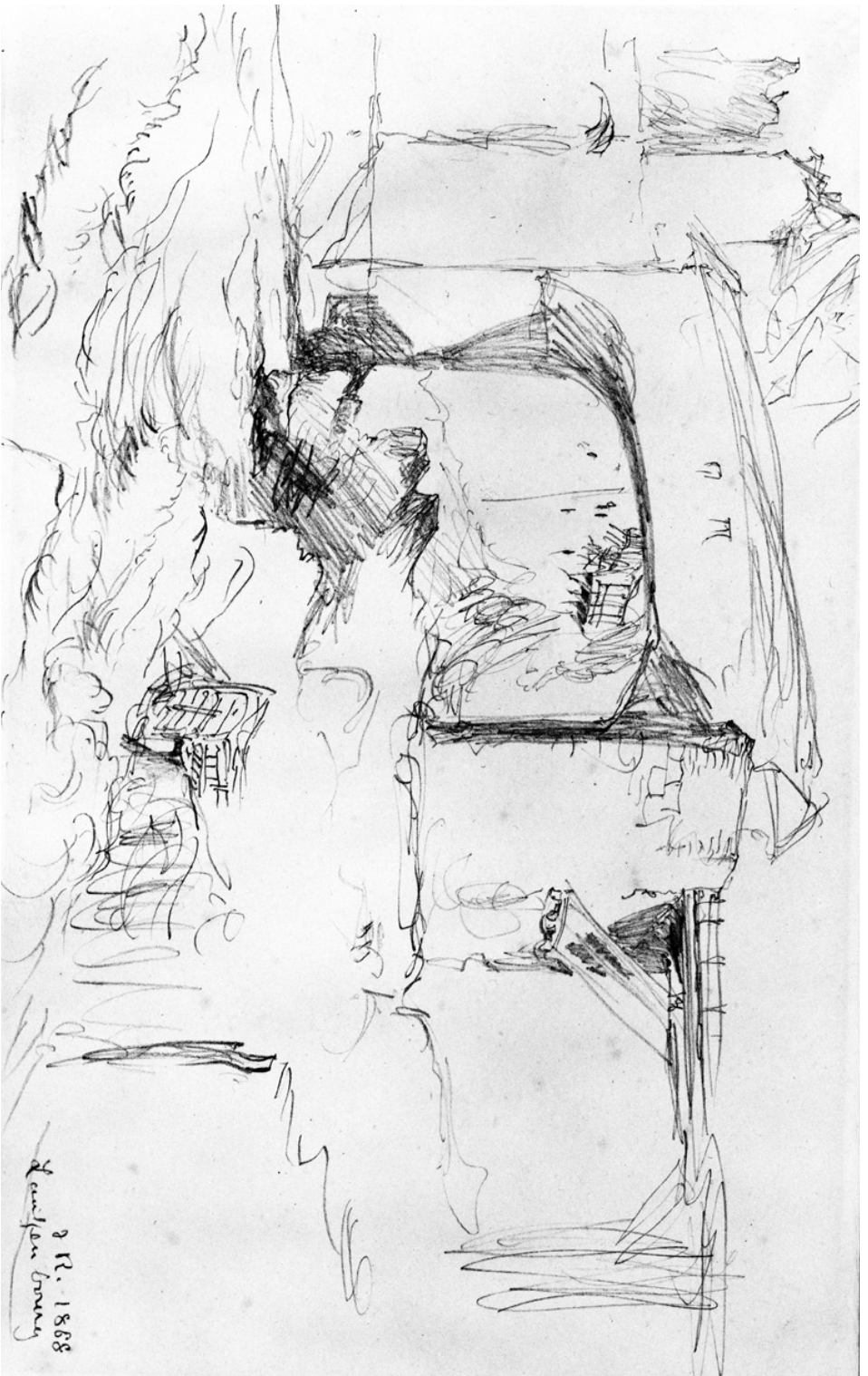


Figure 8 John Ruskin, *Bridge at Lauffenbourg*. 1863 [wrongly dated by Ruskin 1868]. Graphite on pale pink wove paper, 137 x 223 mm. Harvard Art Museums/Fogg Museum (1926.33.149). Transfer from the Fine Arts Department, Harvard University. © President and Fellows of Harvard College

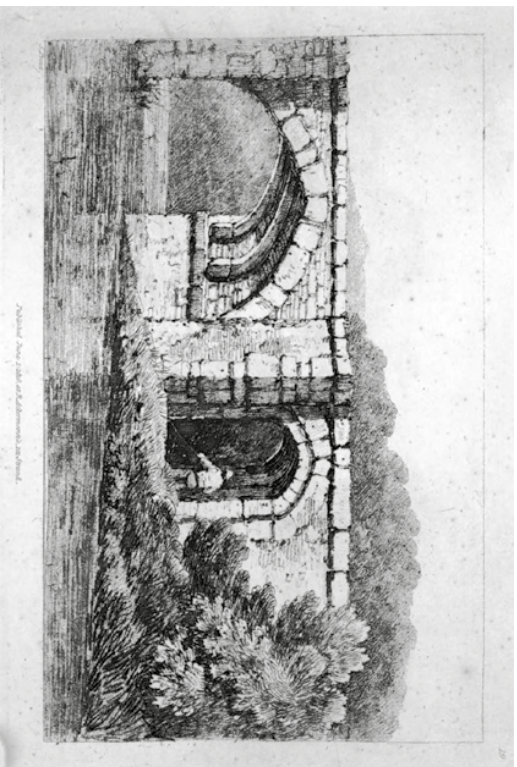


Figure 9 Samuel Prout, *Two-arched Bridge*, from *A Series of Easy Lessons in Landscape Drawing*, London: R. Ackermann, 1820. Lithograph, 210 × 270 mm. Image from copy held by the Fine Arts Library, Fogg Art Museum, Harvard University, digitized by Google and available from Hathitrust Digital Library (www.hathitrust.org)

his planned, but never accomplished history of Swiss towns⁵⁹ - drawings, for instance, of the bridge over the Arve at Bonneville,⁶⁰ over the Rhine at Laufenburg;⁶¹ over the Reuss at Lucerne⁶² and to some extent the “jaunty” *Bremgarten*⁶³ too. In drawings from the 1860s through to those of the 1880s bridges stretch or stride into visual depth, varyingly tilted towards or away from the viewer on the vertical and horizontal axes so as to display their arches’ tensed under-curves and -individually or in more or less taut succession - their titanic piers, knee-

or waist-deep in still or swirling water.

The Ruskinian bridge, then, is strong in constructive “action”. Yet like any building worth consideration as a work of architecture, it is also beautiful in decorative “aspect”. This, however, as suggested earlier, is not necessarily a question of its hosting forms imitative or evocative of natural objects, but may simply entail the replication in its own functionally crucial “lines of action” of such objects’ abstract contours. The bridge enjoys this quality thanks indeed to its sympathetically ingenious, hence noble ful-

⁵⁹ *Works*, 5: xxxii; Walton [1972] 1985, 87.

⁶⁰ *Works*, 5: 102, pl. 77.

⁶¹ Laufenbourg (where, incidentally, like the Würm/Worm, the river has since Napoleon divided between two nations what formerly was one city). *Works*, 5: 103, pl. 79; compare [fig. 8] here and Harvard Art Museums/Fogg Museum 1926, 33, 148.

⁶² *Works*, 5: 105, pl. 81.

⁶³ *Works*, 5: 91, pl. 67.



Printed and Coloured by W. H. Storer, 1809, 21, Abchurch Lane, London. Published, March 29, 1809, by C. Turner, 102, St. Martin's Lane, London.

Figure 10 Joseph Mallord William Turner and Charles Turner, *LITTLE DEVIL'S BRIDGE over the RUSS above ALTENDORF, SWISS*, from *Liber Studiorum*, part IV, 1809. Etching and mezzotint. Photo of impression in the Metropolitan Museum of Art, New York. © Wikimedia Commons

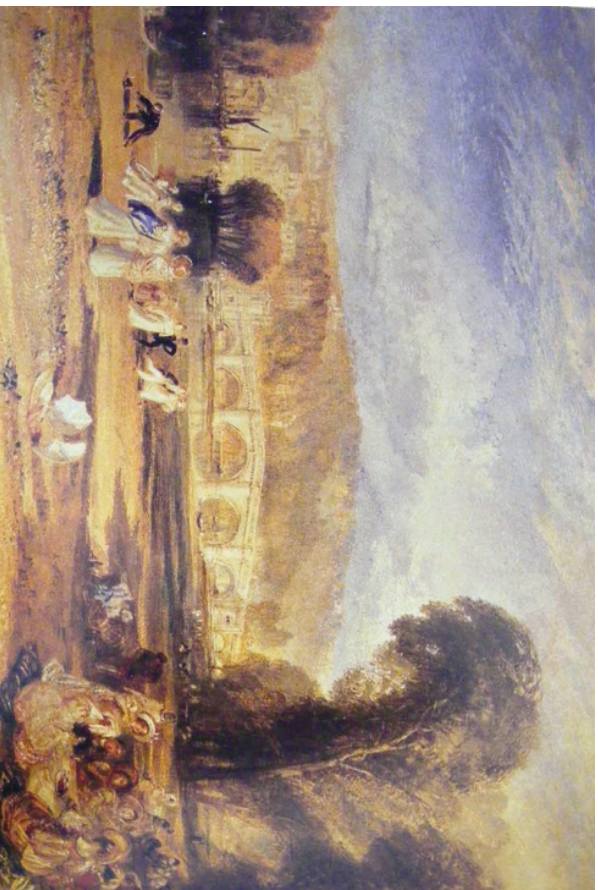


Figure 11 Joseph Mallord William Turner, *Richmond Hill and Bridge*. 1828–1829. Watercolour on paper, 291 x 435 mm. London, British Museum (1958.0712.435). Bequeathed by Robert Wylie Lloyd. © Wikimedia Commons

filment of practical purpose. In his *Edinburgh Lectures on Architecture and Painting* of 1853 Ruskin stressed that “*Gothic or Romanesque construction is nobler than Greek construction* [Ruskin’s emphasis]”:

That is to say, building an arch, vault, or dome, is a nobler and more ingenious work than laying a flat stone or beam [or enormous steel disc] over the space to be covered. It is, for instance, a nobler and more ingenious thing to build an arched bridge over a stream, than to lay two pine-trunks across from bank to bank; and, in like manner, it is a nobler and more ingenious

thing to build an arch over a window, door, or room, than to lay a single flat stone over the same space.⁶⁴

Thus,

all endeavours to do the thing in a grand engineer’s manner, with a level roadway and equal arches, are barbarous; not only because all monotonous forms are ugly in themselves [a warning not heeded by the architect of Ruskin Bridge] but because the mind perceives at once that there has been cost uselessly thrown away for the sake of formality.⁶⁵

⁶⁴ *Works*, 12: 82.

⁶⁵ *Works*, 15: 174.

By contrast, its unequal aches, motivated not by dogmatic adherence to formal symmetry, but by attentive observation of natural conditions and artful assessment of ends and means, fits the bridge to embody principles of cohesive design in natural and depicted landscape.

Ruskin conned this quality in bridges, not only in playing with his favourite toy model but in poring over and

emulating the graphic work of two leading exponents of the urban and landscape variants of the Picturesque, Samuel Prout [Fig. 9] and Turner [Fig. 10], the first of whose watercolours to be acquired by the Ruskins, in 1839, incidentally showed *Richmond Hill and Bridge* (“A more wonderful or instructive piece of composition I could not have had by me”, Ruskin commented in 1878 [Fig. 11]).⁶⁶

6 Bridges and the Laws of Design

In *The Elements of Drawing* (1857), Ruskin used Turner’s depiction, in his watercolour of *Coblentz* [Figs. 1, 12a], of the bridge over the Mosel to illustrate not only the elementary principles of bridge construction but also six of the nine Laws of Composition expounded in the extensive third part of his manual.

First and foremost, Turner’s bridge exemplifies the Law of Curvature. The reader/pupil is asked to note of it that it “slopes in a gradual though very subtle curve” and is invited, taking the linear scheme of the composition provided [Fig. 12b], to rule straight lines “from the base of the tower on each side to [its] ends” and thus see how their substitution for the curve damages the design. The lesson applies to “all beautiful objects whatsoever”, “terminated” as these necessarily are “by delicately curved lines, except where the straight line is indispensable to their use or stability”.⁶⁷

Further, the dotted curves superimposed on Turner’s design in Ruskin’s diagram demonstrate the bridge’s central role in the composition’s instantiation of the Law of Radiation. This regards the beauty, not of single lines but of their union in harmonious groups, radi-

ation being “the most simple and perfect” form of linear connection:

In the instance before us, the principal object being [...] the tower on the bridge, Turner has determined that his system of curvature should have its origin in the top of this tower [...]. One curve joins the two towers, and is continued by the back of the figure sitting on the bank into the piece of bent timber. This is a limiting curve of great importance, and Turner has drawn a considerable part of it with the edge of the timber very carefully, and then led the eye up to the sitting girl by some white spots and indications of a ledge in the bank; then the passage to the tops of the towers cannot be missed.⁶⁸

And one by one Ruskin proceeds to trace and illustrate all the curves that articulate and unify the composition.

Not only, however, does Turner’s watercolour exemplify the Laws of Curvature and Radiation, but its analysis – by means of the compositional diagram already employed and of an additional enlargement [Fig. 12c] of

⁶⁶ *Works*, 13: 436.

⁶⁷ *Works*, 15: 176.

⁶⁸ *Works*, 15: 188-9.

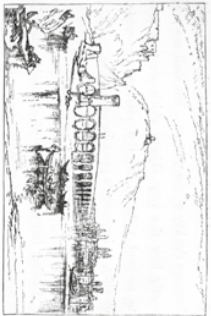


Fig. 32.

at Coblenz, the town of Coblenz on the right, Ehrenbreitstein on the left. The leading or master feature is, of course, the tower on the bridge. It is kept from being too principal by an important group on each side of it; the boats, on the right, and Ehrenbreitstein beyond. The boats are large in mass, and more forcible in colour, but they are broken into small divisions, while the tower is simple, and therefore it still leads. Ehrenbreitstein is noble in its mass, but so reduced by aerial perspective of colour that it cannot contend with

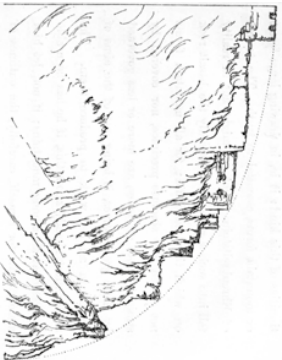


Fig. 33.

perceive that there is a subtle cadence and harmony among them. The reason of this is, that they are all bounded by one grand curve, traced by the dotted line; out of the seven towers, four precisely touch this curve, the others only falling back from it here and there to keep the eye from discovering it too easily.

And it is not only always possible to obtain con-

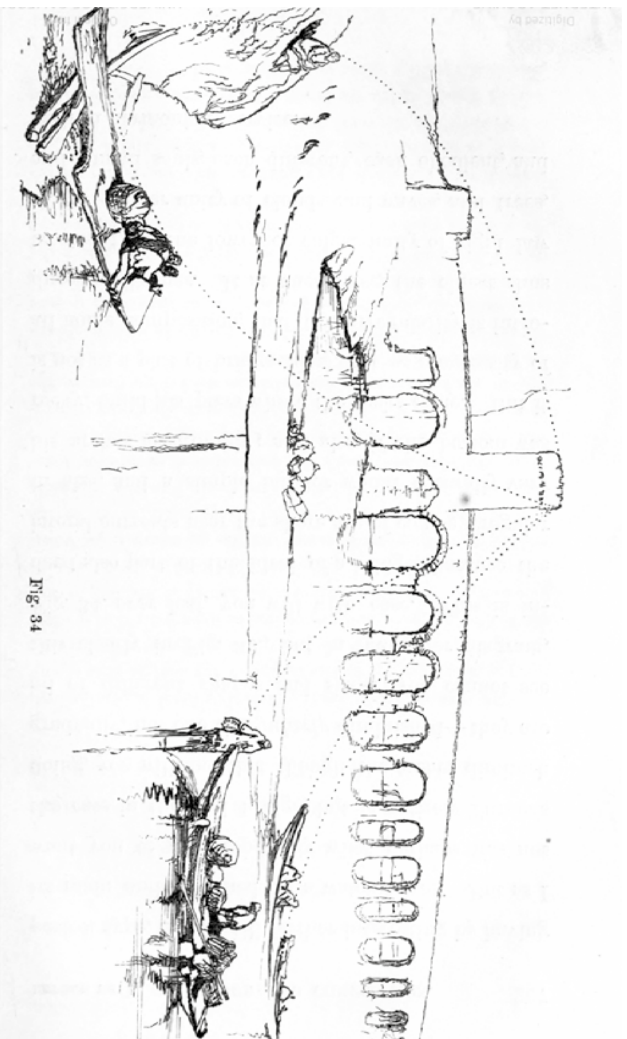


Fig. 34

Figure 12a John Ruskin, *The Elements of Drawing*. In *Three Letters to Beginners*. London: Smith, Elder, and Co., 1857, 253, fig. 32: woodcut by Miss Byfield after drawing by Ruskin. Image downloaded from copy at University of California digitized by Internet Archive and available from Hathitrust Digital Library (www.hathitrust.org)

Figure 12b John Ruskin, *The Elements of Drawing*. In *Three Letters to Beginners*. London: Smith, Elder, and Co., 1857, 268, fig. 34: woodcut by Miss Byfield after drawing by Ruskin. Image downloaded from copy at University of California digitized by Internet Archive and available from Hathitrust Digital Library (www.hathitrust.org)

Figure 12c John Ruskin, *The Elements of Drawing*. In *Three Letters to Beginners*. London: Smith, Elder, and Co., 1857, 271, fig. 35: woodcut by Miss Byfield after drawing by Ruskin. Image downloaded from copy at University of California digitized by Internet Archive and available from Hathitrust Digital Library (www.hathitrust.org)

the rock of Ehrenbreitstein seen in the painting's upper left-hand corner – allows Ruskin to explain four of the remaining seven Laws also: Principality, Repetition, Continuity and Contrast. For

in every good picture, nearly all laws of design are more or less exemplified.⁶⁹

And the Laws are themselves consonant with one another in so far each realizes a variant mode of Unity:

Composition means, literally and simply, putting several things together, so as to make *one* thing out of them; the nature and goodness of which they all have a share in producing [...]. It is an exhibition, in the order

given to notes, or colours, or forms, of the advantage of perfect fellowship, discipline, and contentment.⁷⁰

Noble fulfilment of purpose not only fits Turner's Mosel bridge to effect the manifold unity of his composition but allows it to stand as an emblem for the very generality of the general laws by which that unity is effected. It also allows it to evoke a greater unity, extending beyond the experiential limits of the picture. For Ruskin's Laws of Composition are not limited to the realm of pictorial art, but are held to be manifest in all natural and built forms of beauty; and in his mind – as becomes clearer still in their revisioning in *Modern Painters* V (1860) as the unitary "Law of Help"⁷¹ – shade into those of social coexistence and harmony.

7 Iron Bridges

Such breadth of signification is one – perhaps the deepest – reason for the bitterness provoked in Ruskin by the proliferation throughout Europe of iron and tubular bridges in the "grand engineer's manner", especially if carrying the railroad. An instructive example is that of the first railway bridge at Blackfriars in London [Fig. 14], designed by Joseph Cubitt. Ruskin's response to it shows the extent to which the absence of arched construction might in his view be compensated for by imaginative enhancement of function – hence the degree to which, in the arched bridge, beauty of aspect was wedded to noble fulfilment of purpose.

Only a year after its opening in 1864, in a lecture on "The Study of Architecture in our Schools" given at the Royal Institute of British Architects, the Blackfriars railway bridge was instanced by Ruskin as incontrovertible proof of "the vanity of all hope that conditions of art may be combined with the occupations of such a city" – and this despite Cubitt's "distinct attempt [...] to obtain architectural effect on a grand scale".⁷² The bridge's inadequacy was not, Ruskin was quick to stress, due to the materials employed:

It is not edifices, being of iron, or of glass, or thrown into new forms, demanded by new purposes, which

⁶⁹ Works, 15: 166.

⁷⁰ Works, 15: 162.

⁷¹ Works, 7: 203-16.

⁷² Works, 19: 24-5.



Figure 13 The badge of the London Chatham and Dover Railway, originally part of the first Blackfriars Railway Bridge (1864). Photograph by "SynVer" (2013). © Wikimedia Commons

need hinder its being beautiful [sic]. But it is the absence of all desire of beauty, of all joy in fancy, and of all freedom in thought.⁷³

Like the village mason's arched bridge, architectural "joy in fancy" bespoke a sort of "sympathy": delighted apprehension of a building's "main conditions of [...] structure" – in the present case the holding "a horizontal group of iron rods steadily and straight over stone piers". A Greek or Egyptian architect, Ruskin assured his audience, would have seen this clearly and

would have said to himself (or felt without saying), – It is this holding, – this grasp, – this securing



Figure 14 Joseph Dredge, *Thames Bridges, from the Tower to the Source*, London: *Engineering*, [1897], Pl. 6 (Blackfriars Railway Bridge). © Wikimedia Commons

tenor of a thing which might be shaken, so that it cannot be shaken, on which I have to insist. And he would have put some life into those iron tenons. As a Greek put human life into his pillars and produced the caryatid; and an Egyptian, lotus life into his pillars and produced the lily capital: so here, either of them would have put some gigantic or some angelic life into those colossal sockets. He would perhaps have put vast winged statues of bronze, folding their wings, and grasping the iron rails with their hands; or monstrous eagles, or serpents holding with claw or coil, or strong four-footed animals couchant, holding with the paw, or in fierce action, holding with teeth.⁷⁴

⁷³ *Works*, 19: 25.

⁷⁴ *Works*, 19: 25.

At Blackfriars, by contrast, “the entire invention of the designer” seemed “to have exhausted itself in exaggerating to an enormous size a weak form of iron nut, and in conveying the information upon it, in large letters, that it belongs to the London, Chatham, and Dover Railway Company” [fig. 13].⁷⁵

Worse, in any case, than the proliferation of such bridges was their intrusion into the cherished urban and natural landscapes of Ruskin’s life and mind.⁷⁶ In *Proserpina* (1875-86), his late botanical “grammar”, an extensive account of the uncomfortable and unprofitable journey from Paris to Geneva as undertaken in “latter years” by train, and as compared with the many days formerly “spent patiently and well” in covering the same distance with his parents in a pair of light two-horse carriages, reaches its climax in final sighing by the unhappy traveller, “covered with dust, and feeling as if one never should be fit for anything any more”, of “the dirtied Rhone, with its new iron bridge” and of “the smoke of a new factory exactly dividing the line of the aiguilles of Chamouni”.⁷⁷

And not long after this, in his *Guide to the Principal Pictures in the Academy of Fine Arts at Venice* (1877),

travellers were invited to pause in contemplation before the remains of the fourteenth-century convent and Scuola della Carità now housing the gallery – for the sake of Turner and of Ruskin himself: “for I have given Turner’s lovely sketch of it to Oxford, painted as he saw it fifty years ago, with bright golden sails grouped in front of it where now is the ghastly iron bridge”,⁷⁸ designed, Ruskin points out, not proudly, by “an English engineer”,⁷⁹ whom he additionally blames for depriving the Venetian boatmen of ferrying work and obliging them to take instead to “begging, drinking, and bellowing for the wretched hordes at the tables d’hôte, whose ears have been rent by railroad whistles till they don’t know a howl from a song”.⁸⁰

Again, the thirteenth-century fortress at Conwy in North Wales, the subject of a lovingly preserved watercolour by his father,⁸¹ token also of the castle’s status as “one of four most beautiful and picturesque subjects in Europe”, had been entirely disqualified as such – so he declared in an Appendix to *The Art of England* (1883) – since the construction by Robert Stephenson in 1848 of a tubular railway bridge across the river in front of it [fig. 15].⁸²

⁷⁵ *Works*, 19: 26.

⁷⁶ The Swiss tour of 1858, referred to in note no. 4 and made with a view to identifying the subjects of a series of drawings by Turner apparently of “towns along the course of the Rhine on the north of Switzerland” was specifically motivated by the “knowledge” “that these towns were peculiarly liable to be injured by modern railroad works” (*Works*, 7: 5; cf. Ruskin’s letter to his father of 19 May 1858, quoted in *Works*, 5: xxix). Ruskin’s own drawing of the walls and moat of Rheinfelden, included among the illustrations to *Modern Painters V* (pl. 84; [fig. 4] here), was published “merely to show the kind of scene which modern ambition and folly are destroying, throughout Switzerland” (*Works*, 7: 437n).

⁷⁷ *Works*, 25: 454. Cf. *Works*, 7: 423: “Thus, the railroad bridge over the Fall of Schaffhausen, and that round the Clarens shore of the lake of Geneva, have destroyed the power of two pieces of scenery of which nothing can ever supply the place, in appeal to the higher ranks of European mind”.

⁷⁸ *Works*, 24: 172.

⁷⁹ Alfred Henry Neville, active in Europe since the 1830s. See Ruskin [1877] 2014, 107, 123.

⁸⁰ *Works*, 24: 172n.

⁸¹ *Works*, 35: 38.

⁸² *Works*, 33: 404. Ruskin appears to have had a soft spot for modern suspension bridges, however. Thomas Telford’s across the Conwy, built in 1826, goes unmentioned in the passage just cited, whereas in *Præterita* childhood memories of the Menai suspension bridge – regarded with



Figure 15 George Hawkins, Lithograph showing the second wrought-iron box girder tube of Robert Stephenson's tubular railway bridge at Conway being floated into position (September 1848), 300 × 465 mm (image), 370 × 547 mm (paper). Impression digitized by National Library of Wales.
© Wikimedia Commons

8 Bridges of “Bygone Days”

In other late writings, cultural rather than personal memory – the memory of Christian Europe – suggests the sacredness of bridges. Ruskin for instance stresses the devotional testimony preserved in their names or etymons. Writing from Assisi in 1874 he strives to impel obdurate readers of *Fors Clavigera* to give credence to the ecstasies of St Francis, impatiently meeting anticipated resistance with the retort:

Do you believe in Blackfriars Bridge, then; and admit that some day or other there must have been reason to

call it “Black Friar’s”? As surely as the bridge stands over Thames, and St. Paul’s above it, these two men, Paul and Francis, had their ecstasies, in bygone days, concerning other matters than ermine tails; and still the same ecstasies, or effeminate sentiments, are possible to human creatures, believe it or not as you will.⁸³

And in a lecture given later that same year in Oxford, as part of the “Aesthetic and Mathematic Schools of Art in Florence” series, the behaviour of the Italian “modern respectable burghess” who in Ruskin’s presence had used

due admiration, he recalls, for its mechanical skill – render it preferable to Stephenson’s later tubular railway bridge, the “Britannia”, derogated as “the Menai tube” (*Works*, 35: 96).

⁸³ *Works*, 28: 87.



Figure 16 Vittore Carpaccio, *The Return of the Ambassadors* (detail), from the St Ursula series, 1490s. Tempera and oil on canvas, 2970 x 5260 mm (whole). Venezia, Gallerie dell'Accademia. © Wikimedia Commons

the face of Jacopo della Quercia's effigy of Ilaria del Carretto in the Duomo at Lucca as a hat-rest, is glossed with reference to "existing political life" in modern Italy and, incidentally (for the sake of its name), to the *Ponte Santa Trinita*, in Florence:

The respectable burghess, who puts his hat on the statue's face, is introducing English manufacture and liberal opinions; he is building tall chimneys close to the bridge of the Trinity; and cheap lodging-houses round the walls, and, as to the old art of the country, as fast as he can, putting his English-made hat on the face of it. That's all that it's good for now.⁸⁴

Ruskin likewise recalls the medieval practice of erecting a chapel on or by a bridge. At Pisa, for example, this had been the original function of *Santa Maria della Spina*, as readers of *Fors Clavigera* were informed in an account of its personally witnessed "destruction"⁸⁵ in 1872:

It was a wonderful thing to see done. This Pisan chapel, first built in 1230, then called the Oracle, or Oratory, - "Oraculum, vel Oratorium" - of the Blessed Mary of the New Bridge, afterwards called the Sea-bridge (Ponte-a-Mare),⁸⁶ was a shrine like that of ours on the Bridge of Wakefield;⁸⁷ a boatman's praying-place: you may still see, or might, ten years since, have seen, the use of such a thing at the mouth of Boulogne Harbour, when the mackerel boats went out in a fleet at early dawn. There used to be a little

⁸⁴ Works, 23: 234.

⁸⁵ Actually its dismantling with a view to reconstruction on a newly raised, widened and straightened Lungarno (Clegg, Tucker 1993, 79-80).
⁸⁶ The *Ponte Nuovo* ("the New Bridge") and the *Ponte a Mare* (fig. 4) were two distinct bridges. The *Ponte Nuovo* had collapsed in the fifteenth century.

⁸⁷ But see Works, 28: 533 and n. Ruskin owned two pencil drawings by Prout of the chapel on this bridge, which he placed in the Educational Series of the collection of images assembled by him in connection with his teaching at Oxford (Ashmolean Museum [WA.RS.ED.056.a/b] [http://rusk-in.ashmolean.org]).

shrine at the end of the longest pier; and as the *Bonne Espérance*, or *Grâce-de-Dieu* or *Vierge Marie*, or *Notre Dame des Dunes*, or *Reine des Anges*, rose on the first surge of the open sea, their crews bared their heads, and prayed for a few seconds. So also the Pisan oarsmen looked back to their shrine, many-pinnacled, standing out from the quay above the river, as they dropped down Arno under their sea-bridge, bound for the Isles of Greece.⁸⁸

Again, users of his 1877 *Guide* to the Accademia in Venice were reminded that in former times, even the ruins of old bridges had been venerated. In an extended reading of Carpaccio's *Return of the Ambassadors* from his St Ursula series, as showing "the conditions of a state in perfect power and prosperity", Ruskin homes in on a detail in the background [fig. 16]:

Crowds on the bridges and quays, but untriumphant, close set as beds of flowers, richly decorative in their mass, and a beautiful mosaic of men, and of black, red, blue, and golden bonnets. Ruins, indeed, among the prosperity; but glorious ones: - not shells of abandoned speculation, but remnants of mighty state long ago, now restored to nature's peace; the arches of the first bridge the city had built, broken down by storm, yet what was left of them spared for memory's sake. (So stood for a little while, a few years ago, the broken Ponte-a-Mare at Pisa;⁸⁹ so at Rome, for ages, stood the Ponte Rotto, till the en-

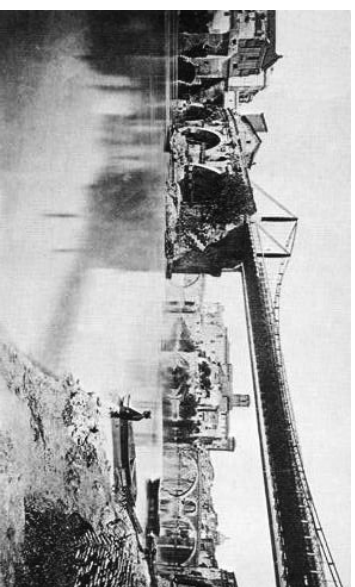


Figure 17 Fratelli D'Alessandri, Photograph of the *Ponte rotto*, Rome, 1875. Print in the Archivio fotografico comunale, Rome. © Wikimedia Commons

gineers and modern mob got at it [fig. 17], making what was in my youth the most lovely and holy scene in Rome, now a place where a swineherd could not stand without holding his nose, and which no woman can stop at).⁹⁰

And similar accounts of the defilement, consequent on "modern progress", of the areas immediately surrounding, or of the scenes commanded from, bridges surviving from "bygone days", or of the bridges themselves - at Venice, Waterloo, Wakefield and Clapham (between Kirky and Settle) - may be found in other writings of this period.⁹¹

⁸⁸ *Works*, 27: 348.

⁸⁹ The *Ponte a mare* had collapsed in 1869.

⁹⁰ *Works*, 24: 177.

⁹¹ *Works*, 24: 233; 28: 267, 301, 380.

9 Bridges and “The System of the World”

Essentially, though, for Ruskin the sacredness of bridges had to do neither with name nor adjacency of chapel, nor even with form, but (to emphasize the point one last time) with basic function (getting the traveller “safely over the river”) and the infinitely expandable, but immediately comprehensible symbolism of the juncture this entailed. The arched bridge epitomized an entire architectural system and might constitute one among innumerable manifestations in natural objects and human artefacts of the “abstract lines” of beauty. More than this, however, in functional generality the bridge signalled continuous secure passage across the divides of cognitive and cultural experience and was perhaps for Ruskin a figure of the unitary “system of the world”⁹² which, though from ever shifting angles, he consistently envisaged and sought to explicate and to enact. For ultimately, bridges and bridge-building came to stand for the universal security and certainty, metaphysical and moral, of which, in Ruskin’s late ‘Catholic’ reading of society and history, one of the principal guarantors was the (according to one tradition) etymologically justified *Pontifex*, “bridge-builder” supreme.

In *Præterita* Ruskin mocked his childish self for having been “as zealous, pugnacious, and self-sure a Protestant as you please”, totally ignorant, however, of Catholic history but rather influenced by considerations such as the observation, made during the family’s tours on the Continent, that

all the Catholic Cantons of Switzerland, counting Savoy also as a main point of Alpine territory, [were] idle

and dirty, and all Protestant ones busy and clean – a most impressive fact to my evangelical mother, whose first duty and first luxury of life consisted in purity of person and surroundings; while she and my father alike looked on idleness as indisputably Satanic.

And he recalled in particular how his parents had

failed not, therefore, to look carefully on the map for the bridge, or gate, or vale, or ridge, which marked the separation of Protestant from the Catholic cantons; and it was rare if the first or second field and cottage, beyond the border, did not too clearly justify their exulting, though also indignant and partly sorrowful, enforcement upon me of the natural consequences of Popery.⁹³

By contrast, the third part of *Our Fathers have Told us*, which Ruskin began drafting around the same time, was to be entitled *Ara Coeli* (after the Roman church of Santa Maria in Ara Coeli) and to “trace the foundations of the Papal power” by recounting the “transition of the Roman pontificate into the Christian Papacy”. In surviving notes, transcribed and published by E. T. Cook and A. Wedderburn,⁹⁴ Ruskin distinguished three types of priesthood: “natural”, “Hieratic” and “Pontifical”. The last of these united

the serviceable Hieratic functions with those of the Earthly Teacher, Lawgiver, and Governour, in all things pertaining to the Nations’s Health, Holiness,

⁹² *Works*, 6: 452.

⁹³ *Works*, 35: 250-1.

⁹⁴ *Works*, 33: 191-203.

and Honour. Not necessarily prophetic or oracular, but dictating constant law, and maintaining spiritual discipline⁹⁵

and was typified in western tradition by the “actively beneficent and protective functions of the Roman Pontifex Maximus”. He then noted how

in the minds of all educated men the two functions of the priesthood, in divine and human service, are symbolized in their enduring names, *Hieratic*, from the word originally meaning Strength [...] and *Pontifical* – Builders of the Bridge from Earth to Heaven, builders with stones of the brook and wood of the forest, Guides of the Way, and Hospitaliers of the Wayfarer.⁹⁶

This interpretation of *Pontifical* was not in fact certain, but Ruskin, for reasons I hope to have made clear, preferred it, underpinning his gloss with a quotation from Alexander Adam as to the origin of the name of the Roman office.⁹⁷ This cites the opinion of Varro in *De lingua latina*, who in preference to Quintus Mucius Scaevola’s notion that it derived from the combination of *posse* (to be able) and *facere* (to do, make, create), opted for a derivation from *facere* and *pons* (bridge), given that the

Pontifices had been responsible for the building and afterwards the repair of Rome’s first bridge, the wooden *Pons Sublucius*. Ruskin commends the latter interpretation in particular to the “younger reader”, who would “do well”, he suggests, “to learn by heart” its formulation by Varro, as reported by Adam, “attaching”, he adds, “two primary ideas to it”. The *Pons Sublucius* being, as its name recorded, a bridge built on piles (*sublucæ*), the first

of these ideas was that of “the Pontifex making safe what was dangerous, secure what was uncertain; architect not merely of wall or rock, but of foundation, amidst wave, builder of pier and arch alike”⁹⁸ – where “making safe” and “secure” may in part be due to Ruskin’s apparently misreading *factus* (from *facere*) as *pactus* (from *parangere* [to fasten, fix, drive or force in]), perhaps in wishful construal of the eponymous piles as manifestations of the *clavus* of *Fors* in its nail-bearing aspect.⁹⁹

The second idea, quintessentially Ruskinian in its mistranslated emphasis,¹⁰⁰ induced perhaps by inevitable comparison with the bridgeless passage of Joshua and the Israelites through the parted waters of the Jordan into the Promised Land (Joshua 3:3), was that of “making sacred both sides of the Tiber”, no more forbidding rivers to flow that they may pass into their own narrow Holy Land; but by bridge and ford now making all races known to each other, and all Lands Holy”.¹⁰¹

⁹⁵ Works, 33: 194.

⁹⁶ Works, 33: 194.

⁹⁷ Adam [1791] 1819, 265: “the PONTIFICES (a *posse facere*, quia illis jus erat *sacra facienda*; vel *potius a ponte faciendo*, nam ab his *sublucius est factus primum*, et *restitutus sepe*, cum *ideo sacra et vls et cis Tiberim fiat*, Varr. L. iv. 15. Dionys. ii. 73, iii. 45.) were first instituted by Numa, Liv. iv. 4. Dionys. ii. 73., chosen from among the patricians”. Ruskin probably read this work in his father’s copy of the eighth edition, published in the year of his own birth (Dearden 2012, 6, cat. 15).

⁹⁸ Works, 33: 195.

⁹⁹ Works, 27: 28.

¹⁰⁰ Ruskin seems to have interpreted *sacra*, not as the plural of the noun *sacrum* (a holy or sacred object, act or rite) but as an adjective qualifying the localities implicitly referred to in the prepositional phrase *vls et cis Tiberim*.

¹⁰¹ Works, 33: 195.

Bibliography of Works by John Ruskin

References are to volume and page numbers in:

- Cook, E.T.; Wedderburn, A. (eds) (1903-1912). *The Works of John Ruskin*. Library Edition, 39 vols. London: George Allen. <https://www.lancaster.ac.uk/the-ruskin/the-complete-works-of-ruskin/>.
- Works: 3-7; *Modern Painters* I-V | 8; *The Seven Lamps of Architecture* | 9; *The Stones of Venice* I | 12; *Lectures on Architecture and Painting* (Edinburgh, 1853). *Other Papers* (1844-1854) | 13; Turner, *The Harbours of England, Catalogues and Notes* | 15; *The Elements of Drawing, The Elements of Perspective, The Laws of Fesole* | 17; *Unto this Last, Munera Pulveris, Time and Tide, Other Writings on Political Economy* (1860-1873) | 19; *The Cestus of Aglaia, The Queen of the Air, Other Papers and Lectures on Art and Literature* | 23; *Vol D'Arno, The Schools of Florence, Mornings in Florence, The Shepherd's Tower* | 24; *Giotto and His Works in Padua, The Cavalli Monuments Verona, Guide to the Academy, Venice, St Mark's Rest* | 25; *Love's Meinie, Proserpina* | 27-29; *Fors Clavigera* | 33; *The Bible of Amiens, Valle Crucis, The Art of England, The Pleasures of England* | 35; *Proaetaria, Dialecta*.

General Bibliography

- Arad, H. (ed.) (2006). *Reading Ruskin, Hogarth and Woringer. The Architecture of NOX/Lars Spuybroek = Exhibition catalogue* (Tel Aviv, November 2006-January 2007). Tel Aviv: Zezeze Art Gallery. <https://issuu.com/zezeze/docs/issuu/64>.
- Ciacci, M. et al. (a cura di) (2004). *I Giardini delle regine. Il mito di Firenze nell'ambiente preraffaellita e nella cultura americana fra Ottocento e Novecento. Of Queens' Gardens. The Myth of Florence in the Pre-Raphaelite Milieu and in American Culture* (19th-20th Centuries) = *Catalogo della mostra* (Firenze, 6 aprile-31 agosto 2004). Livorno: Sillabe.
- Clegg, J.; Tucker, P. (1993). *Ruskin and Tuscany = Exhibition Catalogue* (London, Sheffield, Lucca, January-June 1993). Sheffield: London: Collection of the Guild of St George; Lund Humphries.
- Cosgrove, D. (2008). *Geography and Vision. Seeing, Imagining and Representing the World*. London; New York: I.B. Tauris. <https://doi.org/10.5040/9780755620791>.
- Dearden, J.S. (2012). *The Library of John Ruskin*. Oxford: Oxford Bibliographical Society.
- Ehlers, N. (2001). "The Utopia of the Binational City". *GeoJournal*, 54, 21-32.
- Levi, D.; Tucker, P. (1997). *Ruskin didatta. Il disegno tra disciplina e diletto*. Venezia: Marsilio.
- Mullaly, T. (1966). *Ruskin a Verona = Catalogo della mostra* (Verona, ottobre-novembre 1966). Verona: Cortella Litografia Tipografia.
- Ruskin, J. [1877] (2014). *Guida ai principali dipinti nell'Accademia di Belle Arti di Venezia*. A cura di P. Tucker. Trad. di E. Sdegno. Milano: Electa.
- Spuybroek, L. (2008). *The Architecture of Continuity. Essays and Conversations*. Rotterdam: V2_Publishing.
- Spuybroek, L. [2011] (2016). *The Sympathy of Things. Ruskin and the Ecology of Design*. 2nd ed. London; Oxford; New York; Delhi; Sydney: Bloomsbury. <https://doi.org/10.5040/9781474243896>.
- Walton, P. [1972] (1985). *The Drawings of John Ruskin*. Oxford: Oxford University Press, 1972]. Reprinted New York: Hacker Art Books, Inc.