

Annotation and Gothic Hypertext

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ABSTRACT

We often treat annotation as a supplement, scribbling tacked on to the real (hyper) text. Instead, we might view annotation as an organic process in which the current hypertext grows and is elaborated in ways that are unpredictable but not unconstrained. In this, we recognize the old mission of constructive hypertext to form a seedbed and trellis, a structure for what it becoming. A key to cultivating constructive spaces that do not decay into greed and acrimony is *sympathy*, that the components recognize and serve each other.

CCS Concepts

• Software and its engineering → Software creation and management → Designing Software • Applied Computing → Computers in other domains.

Keywords

hypertext, hypermedia, literature, fiction, education, design, implementation, support, history of computing, maps, links.

1. THE FOOTNOTE

We often treat annotation as a supplement, a paratext, as something tacked onto the “real” text either to explain the text, to create a parallel argument, to reflect upon what has been read, or to interrogate it [Grafton 1997][Marshall 2009]. In print, annotation is forced – literally – to the margins or between the lines – it is almost inevitably marginal or liminal [Bernstein 1988]. The malleability of the electronic page suggests that we could, if we wanted, retrieve annotation from the margins: annotation need no

longer jostle the text on the page, and the chore of shifting from text to note again – so tedious and distracting when it requires riffling pages or fetching books of commentary – can now be accomplished by the hypertext link.

How might we place annotation at the center of hypertextuality?

2. ARRIVAL, DEPARTURE

The study of hypertext rhetoric begins with Landow’s classic paper on the rhetoric of arrival and departure [Landow 1987]: the link anchor indicates what the link might offer the reader, and the link destination then explains the link, either confirming or denying the reader’s implicit theory of the connection the link represents [Bernstein 2015]. Intermedia was, in a fundamental sense, a system for annotation, and the annotative nature of its enduring achievement, now known as *The Victorian Web*, is unmistakable. Hundreds of hands contribute carefully-edited essays, each of which provide interlocking insights on other essays in the curated corpus. Yet, in contrast to Wikipedia’s banal habit of linking every noun phrase (and only noun phrases) to its definition, the rhetoric of arrival and departure provides meaningful and interesting connection to give rise to implicit and emergent structure – a structure that has not faded into incoherence after almost three decades of growth.

3. NOTES ON NOTES

On paper, the marginality of margin notes makes dialogue among the notes difficult to represent. We have text and notes, but as the notes increase in importance, they begin to want notes themselves.

Consider, for example, Charlotte Mosley’s edition of selected letters between the six Mitford sisters [Mosley 2008]. We have 834 pages of text, starting with the concerns of schoolgirls in the 1920s and ending with those of elderly ladies in the 1990s. Among Mosley’s copious notes we find:

- identification and capsule biographies of people mentioned in the letters.
- contextualization of the letters with regard to events – marriages, illnesses, publications, changes in political

fortunes – that were obvious to the correspondents but are obscure to later readers.

- translation of nicknames, code-phrases, private languages, and running jokes. For example, the sisters refer to The Queen Mother as “Cake” after an incident in the 1930s at a wedding reception.
- corrections where a letter contains misstatements – either accidental or intentional.
- curatorial notes where a letter that had previously been published can no longer be found, or where the text of a previously-published letter is incomplete or incorrect.

This apparatus is indispensable, yet it is clear that the notes are under great pressure. More notes could crowd out the letters themselves; fewer notes could make them incomprehensible. Because the notes do not contain notes and seldom indulge in cross-references, the text’s construction necessarily assumes that the letters are read in sequence; a reader interested in the letters from the 1960s, for example, would find no explanation of why the sisters wrote so often about seeing “Cake.”

The material itself wants notes. The notes themselves call for notes. The constraints of print resist this call, but print is no longer our problem.

4. GOTHIC HYPERTEXT

On the one hand, to say that the material itself wants a specific hypertextuality is only to affirm the core intuition that underlies hypertext itself: that ideas are **intertwined** and their discussion can be facilitated by representing patterns of interconnection. This is, further, the animating principle of constructive hypertext, hypertexts that “are versions of what they are becoming, a structure for what does not yet exist.” [Joyce 1988]

This notion that a foundation text or set of initial conditions creates a structural force to guide future elaboration is the core idea of Spuybroek’s indispensable essay on “The Digital Nature of Gothic.” Spuybroek, an architect, considers the essence of digital design and comes to a conclusion in striking contrast to the Manovich’s “Database as Symbolic Form” or Murray’s four affordances: procedural, participatory, encyclopedic, and spatial [Manovich 2001][Murray 1997]. Instead, Spuybroek starts from the ability of digital design systems to promote autonomous organization and returns to Ruskin’s list of the qualities of the gothic [Ruskin 1853]:

- Redundancy
- Changefulness
- Rigidity
- Naturalism
- Savageness and Grotesqueness

The Gothic architect could not specify every detail of the building. Instead, the architect set the initial conditions and

constraints – the location of the piers, the height of the cornices – and expected work teams, individual masons, and future generations to realize the plan within those constraints. It was decreed that there would be ornamented capitals, but the design and execution of each capital was left to circumstance and to the inspiration of the individual mason. Classical architecture, on the other hand, was based on repetition: each capital ought to be identical.

In a façade, we might perhaps require that there be towers and designate their base, but the gothic does not insist that the towers be identical – only that they respect each other. Each element is made to reflect those constraints and to express *sympathy* to its neighbors.

Spuybroek envisions digital designers siting piers and towers and allowing algorithms to explore different ways the elements could bifurcate, entwine, and elaborate themselves. In the same way, a hypertext contains the seed of its own future shape – not imposed by a rigid schematic framework but growing organically from forces arising in the subject matter.

5. LOST IN THE CHURCH

The Gothic **facade**, Ruskin was at pains to emphasize, put windows where they were wanted and needed. The Palladian, in contrast, places windows for pleasing symmetry. The Gothic lets the windows reflect the underlying structure and the use of the rooms within; neoclassical fixes the windows and lets the rooms adapt to the schematic module.

The anxiety of asymmetric, ad hoc design is confusion and incoherence; the promise is that form can follow function

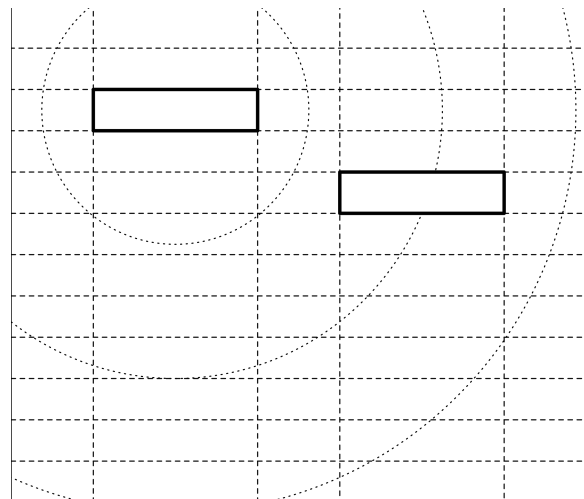


Figure 1. Placing two objects on the plane already suggests a host of implicit geometries that can guide the placement of additional objects.

and both can grow out of the natural tendencies of material and the proclivities of the worker at a specific time and place.

The illuminated Gothic page, like the Gothic church and palace, overflows with changeful, organic, ornament. We move from text to figure and back to text. Figures illustrate, others satirize, and still others simply entertain us with complex knots or gorgeous gilding. The book or the building may be the work of many hands, all working together but also independently. The reader – again whether of the gospel or its church – is free to wander between figure and text, saint and grotesque, martyr and king, as inclination or need dictates.

No one worries that people will become lost in church, or that nested arguments or discursion will leave visitors disoriented.

6.ABUNDANCE

You are about to read Italo Calvino's new novel, If on a winter's night a traveler. Relax. Concentrate. Dispel every other thought. Let the world around you fade. Best to close the door; the TV is always on in the other room. [Calvino 1979].

You are about to take notes in a spatial hypertext environment. Perhaps you are at a conference, or in a workshop. Begin with an empty map. Add one note, and then another. (Figure 1)

A single note in a VIKI or Tinderbox map merely represents its contents, but two notes already represent themselves and their relationship to each other. That relationship may be expressed in a rich array of patterns [Bernstein 2011]. But, in addition to these patterns, the relationship between the two notes also suggests a geometry – what graphic designers would call a grid – for potential additions. That grid suggests where additional notes might be placed; when the notes actually appear, of course, the geometry may change, new opportunities may appear while others may be foreclosed.

A conventional or classical approach to the grid might call for a predetermined, prescriptive geometry [Bernstein 2002]. More interestingly, we might define a grammar of canonical relationships – vertical and horizontal lists, tables, research system and their associated journal papers – and construct a spatial parser to recognize and regularize such structures. Spatial hypertext parsers have always struggled against the ambiguity of actual tableau, in which we can recognize lots of structures, only some of which are intended, and might fail to recognize intended structures due to a slight misalignment or other trivial discrepancy [Schedel 2015].

Spuybroek suggests an intriguingly gothic approach: confronted with the myriad geometries that the notes-in-progress suggest, we might simply embrace one and allow the computer to elaborate it in detail. We continue our note-

taking, and the system suggests where we might place notes and what sort of notes might be needed to maintain the relationships we seem to be suggesting.

If the system seems to do what we want – if its suggestions seem good – then all is well. If the geometry the system proposes is not what we have in mind, if we find ourselves fighting the system rather than collaborating with it, we might simply instruct the system to construct a different geometry entirely – one compatible with what we have already created by adopting different constraints and suggesting different paths for future elaboration. We can then proceed with a new geometry.

7.SYMPATHY

In Ruskin's aesthetics, things may express sympathy for things (and people). In the Victorian age, this was a defense of craft against mass production; we could have sympathy toward – a relationship with – unique and hand-crafted objects; even if these objects were not perfectly polished and regular, they were ours, and we also belonged to them. Mass production of identically-polished and perfected objects was antithetical to sympathy; your grandmother's tableware was part of your family and knew its history while the glistening Woolworth's stainless was identical to millions of others [Walton 2011].

Arts and crafts failed. Handmade goods are costly, and it is better that everyone have forks and plates, even unsympathetic, than to ask most people to go without.

Spuybroek argues that, in our digital age, the human part of creation lies increasingly in design, not craft, and that in fact we can employ our slaves of steel to propose and produce innumerable variations of our designs. We can select the objects – all equally good – that we choose to find congenial, just as in a potter's workshop you might select one from among a shelf of glazed blue coffee mugs – each slightly different as the potter's handwork and the accidents of glaze and kiln dictate, but all basically sound mugs for holding coffee. You may like *this* geometry, I prefer *that* one; in time, they might become our own.

Sympathy among pages is what allows a curated compendium like *The Victorian Web* to flourish quietly while spaces without cultivation – Geocities, Wikipedia, the comments section of any news site – descend into acrimony, harassment, and neglect.

The Web forces lexia into competition for attention and survival. Lexia that lose must die or transform into something else, and their links rot. The monetization of another site gives us no benefit.

Xanadu fixed lexia in stasis, world and word without end. The cost was that old versions and old mistakes would remain forever.

Sympathy between lexia in a gothic hypertext remediates competition without requiring that anything be carved in

stone. Generosity demands that the lexia send the reader away – and that the destinations it proposes be wisely chosen. Similarly, a page with proper and noble character will understand its duty to lexia that rely on it, and will not willingly disappear or fecklessly alter its meaning at a whim.

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