forewords, Morrison calls attention to the language of her prose, which forges a recognizably Black identity in literary discourse and integrates her diverse interests as an author: "Morrison's forewords highlight the fusion of her many concerns — history, folktales, language, family, reading — as part of the long history of Black narrative expression. She seeks to neither escape nor embody any particular persona: a Black writer, a woman writer, a political writer. She is all of these and none of them, within and without the confines that limit Black expression, fusing [. . .] all elements into an individual authority" (182).

Tangedal's project does well in extracting the preface from its seemingly liminal location and placing it where its value to the book and its author is pronounced. Following Genette, he helps revise the thresholds of what is understood as the text in the conventions of the literary print culture. His study asserts that the preface's role far exceeds being just a tool to explain the text. Recognizing that prefatory enunciations are intimately tied to authorial strategies of survival and consolidating legacies in the capitalist publication industry, it magnifies the importance of the paratext. An often-ignored genre, the preface can be the key to grasping the underlying forces that inform the text and influence its reception.

Tangedal's book will be especially useful for scholars interested in the fields of 20th-century American literature, book history, and the history of authorship. It will also serve well as supplementary reading for undergraduate and graduate courses.

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Gibson, Richard Hughes. 2021. *Paper Electronic Literature: An Archaeology of Born-Digital Materials*. Amherst: University of Massachusetts Press. Pp. 216. ISBN 9781625346001, Hardback $90. ISBN 9781625346018, Paperback $28.95.

The contradiction motivating this book is evident in the title: electronic literature is famously born-digital, and (as the author notes in a preface), very often borne-digitally as well. The computer screen therefore becomes the focus for scholars interpreting these works and, too often, it also demarcates the threshold where interpretation ends. Nick Montfort's call to avoid "screen essentialism" led Montfort and Ian Bogost, in *Racing the Beam* (2009), to look *behind* the screen toward the computing platforms that make digital literature possible; Mark Marino's call to critical code studies — in *Critical Code Studies* (2020) — considers the literary artifact *before*

it arrives on screen. Conceptually, Richard Hughes Gibson's attention to paper adds *around*, *alongside*, and *instead of* to those prepositional mediations of electronic literature, "not to flatten paper's meanings but to grapple with its texture and flexibility within digital literature's history" (13). In *Paper Electronic Literature*, Gibson notes that relatively little attention has been paid to the paper that makes digital literature possible, and he uses methods from textual studies and media archaeology to help fill that gap by analyzing exemplary e-lit works where paper plays a significant role. The book's methodology is accessible and useful overall, but its real strength lies in those specific expositions of digital literature where the textuality of paper is most compelling.

The most innovative examples of this material reading are in his discussions of Alison Knowles' digital poem *House of Dust* (1967) and Marc Blank's interactive fiction game *Deadline* (1982). *House of Dust* is a well-known, early example of electronic literature and an important link between computational literature and the Fluxus community. Gibson tells the story of this "playhouse wrought from paper and bits" (71) with its composition shaped by the constraints of paper programming (FORTRAN written by James Tenney, punched into cards) and its eventual distribution as unique stacks of continuous paper bearing poetry generated by the program. In emphasizing the materiality of Knowles's work, Gibson implicitly connects Dick Higgins's expression of Fluxus aesthetic ideology *vis-à-vis* intermedia art with the "comparative textual media" methodology advanced by N. Katherine Hayles, Jessica Pressman and others. Crucially, as Gibson argues, paper is a medium with its own affordances that can best be understood in context with other media, and the specific properties of paper inflect the meaning-making available to Knowles and her collaborators, a constraint not routinely contemplated as a feature of digital poetics.

Similarly, Gibson's analysis of Marc Blank's *Deadline* reveals how Blank offloaded exposition into paper artifacts — known as the "feelies" packaged into boxes along with the game software — which allowed the writer to overcome the memory limitations of personal computers. Far more than a paratextual afterthought, the printed media offered a technical solution to a resistance arising from the forensic specificity of personal computers and the formal materiality of the software engine's memory constraints. In this way, paper is the surprisingly crucial common denominator in the textual milieu of these two nascent electronic works — *House of Dust* and *Deadline* — which looked toward a future of digital expression while firmly embedded in the physical media of the past.

In analyzing many examples, Gibson excavates the relationship between print and digital literature from two different directions. For the seminal text adventure game (or interactive fiction) *Colossal Cave Adventure* (1975), by Will Crowther, Gibson highlights its relatively-unacknowledged dependency on printed media, and for the work of concrete poet bpNichol, Gibson explores the ways that Nichol's engagements with digital textuality in his *First Screening* (1984) were more than a casual experiment and might have — according to documentary evidence — developed even further were it not for the poet's untimely death in 1988. Furthermore, to add context for analyzing these surprisingly-intermedia literary works, Gibson does well to discuss the pulpy media ecology in which those works emerged. This includes a history of the perennial myth of a paperless office, a fascinating visual analysis of Robert Tinney's paper-saturated illustrations for *BYTE* magazine, and a consideration of what Gibson cleverly dubs "media apocalypse literature": persistent, paranoid prognostications on the imminent demise of books. These examples and analyses are just a few among many case studies, and these stood out for having perhaps the most to contribute to ongoing studies of electronic literature. But all of these serve a larger set of claims in the book: "that e-lit has never gone paperless; that paper is a reflective surface; that paper can be a component, not just an ornament, of born-digital literature" (41). To find evidence supporting these claims, Gibson builds on prior scholarship to create a set of heuristics that he uses to describe the distinctive features of select works where a significant aspect of their meaning-making depends on paper.

At the core *of Paper Electronic Literature* is a structure that affirms the author's obligation to earlier scholarship, specifically in textual studies and media archaeology. The strength of Gibson's 10-point "inspection plan" is that it provides a framework upon which to erect analyses of the exemplary artifacts as the focus of each chapter. While not necessarily a comparative approach, Gibson's framework provides a consistent set of common denominators that clearly guide the thought process behind his selection of the specific examples. Gibson does not resort to explaining this framework diagrammatically, but it is tempting to view the ten factors as parameters which any given work expresses to a greater or lesser degree, therefore occupying a region in the implied 10-dimensional space. As none of the focal points are original to Gibson's study, the crucial contribution that Gibson makes in bringing them together is to argue that it is necessary (in accounting for each of the 10 features) to account for nominally digital works' entanglements with paper. The three strata, four dimensions, and three codes comprising this framework are, therefore, important to briefly summarize.

The three strata organize the book into its major sections: *early computing*, *personal computing*, and the *internet age*. And although these are listed in chronological order, and Gibson is figuratively invoking the stratigraphy of archaeology, the methodology allows the author to find diachronic affinities and influences across media strata. Four dimensions of materiality import ideas first clarified by Matthew Kirschenbaum and Johanna Drucker. Kirschenbaum's *formal materiality* and *forensic materiality* — introduced in his influential grammatology of computer hardware, *Mechanisms* (2008) — form one continuum on which (Gibson argues) both digital and material textuality can express meaning. Drucker's *distributed* and *performative* materialities round out the quartet of material dimensions with considerations of the sociological extensions of textuality.[1] And at the ground level of this structure, Gibson highlights the triply-coded character of electronic literary artifacts, beginning with Jerome McGann's *bibliographic* and *linguistic* codes and appending *computational* codes (which are, of course, literally *code* in the sense of programming). Three strata, four dimensions, and three codes.

To exemplify the ways that this inspection plan highlights salient features of electronic texts' involvements with paper, Gibson first applies the treatment to Nick Montfort's poem "Taroko Gorge" (2009), which Montfort first circulated on paper before posting a web version, and then to *Between Page and Screen* (2012), a book of augmented reality-enabled kinetic poetry by Amaranth Borsuk and Brad Bouse. These two examples bookend *Paper Electronic Literature* as the author returns to these two texts in the penultimate chapter, though by the end of the book, the ten aforementioned points facilitate a shift in Gibson's metaphor. Instead of treating it as an audit or checklist, Gibson highlights the ludic potential of interpretation and beckons the reader to step into its magic circle of significance. These two examples also allow Gibson to demonstrate how the stratigraphy serves more to activate routes of inquiry than it does to delineate genetic histories in deterministic chronologies. For example, "Taroko Gorge" hearkens to early computing in its reliance on continuous paper and postal distribution; it required readers to type code into their computers as though transcribing a BASIC program during the nascent personal computing era; and in its latest version on the web, which has given rise to dozens of remixes, "Taroko Gorge" exemplifies the distributive and performative opportunities only possible thanks to the internet.

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1. See Drucker 2013.

The clarity of *Paper Electronic Literature*'s organization and its tightly-focused individual chapters would likely work well in a graduate or upper-level undergraduate course on media archaeology or electronic literature. For the individual analytic tools, those adopted from Kirschenbaum, Drucker, and McGann, some readers may be better served by those original sources alone, but by bringing them all together in order to answer a specifically scoped and important question, Gibson provides a helpful way into broader questions.

The book is relatively succinct and as a result, there are some areas that the author might have done more with, or that others may now wish to take up with further research. For example, based on the title, I was hoping to read more about the materiality of paper itself — its ingredients, physical characteristics, durability — and the extent to which those details are germane to born-digital works specifically. I also think some deeper engagements with existing scholarship in electronic literature would have served Gibson's book well, and I was surprised not to see Lisa Gitelman's work on the media history of documents; while not focused on literature *per se*, Gitelman's *Paper Knowledge* (2014) would seem to have much to say about the cultural contexts of paper as technology and its evolving meaning across strata.

The premise of Gibson's *Paper Electronic Literature* is that the under-acknowledged entanglement of nominally screen-based literature with printed media occupies a blind spot in scholarly attention. This premise is correct, and Gibson's book serves a crucial purpose in helping illuminate that overlooked, material reality of electronic literature.

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## Works Cited

DRUCKER, Johanna. 2013. "Performative Materiality and Theoretical Approaches to Interface". *Digital Humanities Quarterly* 7.1. http://www.digitalhumanities.org/dhq/vol/7/1/000143/000143.html.