# THE MILL-SITE: VICTORIAN PROCESSING IN ENGLAND AND "VANCOUVER"; FROM ELIOT TO MARLATT

by

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## **Abstract**

This thesis explores the mill-site as a discursive, literary, and physical location. The philology of "mill" sets the focus on processing, which is described as a transformative action between nature and culture, one that nonetheless contributes to the ideological purification of those categories and to the construction of the "resource" as a formless reserve for consumption. The histories of *power technologies* (like mills) and their integration with ecologic and economic systems participate in determining the kind of relationship manifest between nature and culture. Noting the extension of the literal and figurative senses of "mill" to the processing of language, I also propose a notion of *transcursivity* to signal the transformation of language and symbolic additions to the activity of the mill-site.

Chapter Two focuses on a reading of George Eliot's novel *The Mill on the Floss* (1860), supplemented by an analysis of processing in Herman Melville's story *The Paradise of Bachelors and the Tartarus of Maids* (1855) and Charles Dickens' article "A Paper-Mill" (1850). I argue for the importance of mill and setting to Eliot's novel, finding the mill to be an active force in the plot at several junctures; *The Mill on the Floss*, through its engagement with the relation between different economies and the relation of economy to ecology, can be considered a central text for the study of such themes in Victorian literature. Close analysis of the language of processing itself points to the importance of *medial substances* like *fibre* and *grain* to the construction of materials as "resources."

Chapter Three describes the Hastings Mill, located in various historiographies as the Victorian "origin" of the City of Vancouver. Through exploration of archival and published historical texts, I describe that mill's originary intervention as a break in the system that alters

the region's economic/ecologic history. Daphne Marlatt's novel *Ana Historic* (1988) depicts this historical origin and seeks to problematize its common narrative by reimagining ignored women's histories and by queering the significance of this colonial mill-site. Marlatt elucidates problems of historical interpretation associated with the mill's form of *biopower*, and its influence on relation of nature to culture.

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**Introduction: The Meanings of "Mill"** 

**mill-site** *n*. a site of or suitable for a mill (originally a watermill); (*Canad*.) a lot granted to a person for the purpose of building and operating a flour-mill (now *hist*.). (*OED*)

... and as we compare our handful of esparto grass with the smooth, white paper into the likeness of which it can be converted, we involuntarily pay a tribute of respect to the marvellous ingenuity, precision, and perfection to which science has brought ... the mysteries of papermaking.

("A Mill on the Darent" All the Year Round, September 15, 1888)

Google is the spider of the web [.] ... Google will blindly turn the millstone until the end of time. (Jaques-Alain Miller, "Google" http://mariborchan.com/category/miller/)

They are more numerous than one might expect as one opens the relevant entries of the *OED*. Among others, the impulse for taking on this project is that surprised expectation. The meaning of "mill" at first seems obvious and even parochial, with a thread of nostalgia. When I respond to the question "What are you working on?" people usually think that I am referring to the old utilitarian, J.S. Yet the word has such a variety of referents across its history that it deserves the status of a keyword in the study of technology—perhaps even recognition as a cultural keyword in the mode established by Raymond Williams. I can only present here an outline of the field of meanings arranged by this sign.

"Mill" passes through all of the major European languages, and "ultimately" disappears into proto-Indo-European obscurity, where it shares a root with "meal" and "mull." From the Latin *mola* and postclassical Latin *molina*, "mill" as a noun can refer (and my set of examples is limited) to a building designed and fitted with machinery for grinding corn into flour; to an apparatus for the reduction of any solid substance to powder, shreds, pulp, dust, etc.; to a

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<sup>&</sup>lt;sup>1</sup> For reasons I am about to explain, "mill" should be treated as a keyword for the study of natures-cultures, where beings associated with one or the other category intermingle. I think Williams' understandings of "historical semantics" and the "field of meanings" are still relevant in the wake of poststructuralism, especially in their importance to historical interpretation. Williams defined *keywords* as "significant, binding words in certain activities and their interpretation" and "significant, indicative words in certain forms of thought" (15). In her excellent essay on Williams' and other keywords projects, Annabelle Patterson writes that keywords carry "a higher voltage than the words that surround them," and her electrical metaphor is apt in the case of "mill" (76).

machine performing a specified operation on a material in the process of manufacture; to a building fitted with such machinery; and to an engraving machine. As a verb, it can refer to the general processing of materials and the production of coinage or the impression of bank notes. The earliest forms of power technology called "mills" in English were hand, water, and windmills, but the word has since been applied variously to other forms of production. The referents of "mill" diversify, as one would expect, throughout the industrial revolution(s). Its figurative senses include, but are not limited to, a formative or conditioning process working on an environment, especially one that homogenizes; the means by which something is created or developed (crucible, melting-pot); and a prolific producer or disseminator of information and assertion (as in "rumour-mill"). Many people are also familiar with uses like "run of the mill," "grist for the mill," and "mull it over." The "extended" (*OED*'s term) senses of "mill" include fist-fight, typewriter, computer processor, engine, prison, and a crowd circling aimlessly (or "milling around"); it forms compounds like "mill-song," "mill-head," "mill-bitch," "mill-process," and "mill-site."

The title of my thesis borrows this last compound to signify both a physical and discursive *topos*, and my aim is to theorize the mill-site through a series of representations. In the many senses of "mill" in the *OED*'s entry, the common threads can best be described in terms of *process* and *transformation*. Sometimes this means the processing of materials from one form to another, but at other times human and nonhuman animals, discourse, money, or numbers are processed. Whatever crosses the mill-site undergoes some manner of metamorphosis or inscription. As such, this site cannot be a blank placeholder or the "mute ground" for the placement of different entities that Foucault describes in his preface to *The Order of Things* (xviii). Rather it is, by definition, a place of fragmentary traffic where members of different categories are transformed in the process of production. Both the physical and discursive *topoi* (which must also be in some way physical, if we are materialists) transform what moves across

them. And this is the case whether the mill's use and position in a discourse is literal or figurative; though, as we will see, the word's history of usage is long enough, and the things and processes it points to sufficiently diverse, that it is more difficult than the *OED* lets on to delineate literal from figurative meanings. Finding its motive in this interpretation of "mill" as processing site, this thesis seeks to describe that site in its internal particularity and external connections. Approaches to understanding the material and conceptual dimensions of this site in the history of technology and labour have been too limited, and as I will argue in Chapter Two, too much determined by an uncritical division of nature and culture.

At the beginning of this project there was still no mill in sight. I began my reading with an interest in discussing the resource, especially the so-called *natural resource*, as it crosses from what might be represented as a "natural environment" into a "cultural space" as object or commodity. The mill as place of putative transformation from nature to culture seemed to offer a good focus. To use more updated but still fraught terminology, the mill stands at the juncture of ecologic and economic systems. Marvelling at the change, the narrator of my second epigraph holds esparto grass in one hand, paper in the other: just such difference—and sameness—is the theoretical impulse of my study. Processing effects this change, and it is my central interest.

In *Ecology without Nature* (2007), Timothy Morton insists that ecocriticism, if it wants to get "beyond postmodernism's pitfalls" (the desert of the real?) should "engage fully with theory" (21). With this advice he has in mind the forms of ecocriticism that variously seek to "get back in touch" with something outside the text, and to short-circuit the reflexive arc of much textual criticism. He provocatively claims that "*environment is theory* ... ecocriticism's concepts and rhetorics of environment must give way to something more theoretical" (175). Environment is an ambient ideo-aesthetic mirage that evaporates if we concentrate on it. The concept of "Nature," especially in the mode created by Romantic aesthetics, is Morton's main target: the more monumental and asocial it becomes, the more it slips into ideological

determination. And as a keyword, at least, "nature" is so ambiguous in its history as to make an *aporia* in any reading. Raymond Williams traces its confusing semantics in his essay "Ideas of Nature," where he calls it the most difficult word in English (67).

My focus on the mill-site is an attempt to avoid the rhetorical pitfalls of such categories—though I cannot do so entirely—by attending to the juncture of systems largely identified with one category or another. In deploying key terms, I hope to work towards a language that allows "nature" and "ecology" to be analyzed in social and historical terms. This thesis approaches mill-sites in three ways. Its period of interest is the second half of the nineteenth century. Chapter One, however, will not be limited by period, but will be instead an introduction to the general intricacies of "molinology." Chapter Two centres on a reading of George Eliot's novel *The Mill on the Floss* (1860), with reference to contemporary mill-texts from Charles Dickens, Herman Melville, and others. Moving from England to the site of "Vancouver's" first mill (in 1865 there was not yet a city or a name), Chapter Three looks at Daphne Marlatt's Ana Historic (1988), a novel of archival reconstruction set, for the most part, in the 1870s. There I explore archival documents and published historiographies concerning Hastings Mill and its role as the origin of settler Vancouver in order to think about the relationship of that economy to its resource inputs. Chapter One thus develops a number of themes quickly, but I return to these and expand them in subsequent chapters. *Power technology*, transcursivity, medial substance, biopower, and territory become key terms towards elaborating the concept of an historical ecology, which applies in turn to the interpretation of literary settings. I use biopower in the Foucauldean sense of a disciplinary regime that acts through various institutions to integrate populations more smoothly into a program of economic efficiency; in this manner, a mill-site can organize multiple natural and cultural entities within its territory, especially if, as in my third chapter, a population depends upon a single mill. Medial substance and transcursivity contribute to a reading—across the mill-site—of what Timothy

Sweet calls the "system/environment boundary" and the "metaphorics of resources" (270; 276). Close analysis of this site, located in neither nature nor culture, can help us to understand why the two can seem so separate in the first place.

## **Chapter One: Molinology**

From the "International Molinological Society," dedicated to the study of mills, and the Latin *molina*, I borrow the word "molinology" for the discourse of all *res molinae*, which pertain to processing and the transformation of materials between systems.<sup>2</sup> This chapter begins with a brief and broad history of mills and milling. From the first records of their existence in the classical period, mills have been economic movers of varying but increasing importance. This growing prominence must have led to their imbrication in language and literature to such an extent that I can say "rumour mill" and be understood by a speaker of English who has never been to a mill or learned anything about milling.

While technologies called mills by historians and archaeologists are not ultimately traceable, or even locatable as European, Central Asian, or Chinese innovation, the waterwheel appears to be the first major form of power technology; windmills were not common until the Renaissance. The first textual references are to watermills, and they come from Antipater of Thessalonicus and Strabo in the first century B.C.E. Anitpater praises a watermill for "freeing the maidservants from drudgery" as "Demeter has reassigned to the water nymphs the chores your hands performed. They leap against the very edge of the wheel, making the axle spin, which turns a pair of heavy millstones" (gtd. in Humphrey et al. 167). Strabo mentions a "waterdriven grain-mill" in the palace of Mithradates (White 80). Earlier grinding technologies operated by hand, driven by voked oxen, or turned by slaves have also been called mills, and while they all process resources, it should be noted that forms operated by other sources of power (like water) constitute a radical development. Grinding grain was the earliest millfunction, and there is little evidence of others until the late tenth or eleventh century, with fulling mills (which treat "webs" on their way to becoming cloth) appearing in Italy, water driven forge hammers being used in Germany, and iron mills appearing in England and France (White 83-4).

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<sup>&</sup>lt;sup>2</sup> The International Molionological Society: at http://www.timsmills.info/.

Both wind and watermills "eventually assumed important roles in the economic life of preindustrial Europe, and helped to energize industrialization" (Smil 180). Enter the Dorlcote Mill of *The Mill on the Floss*, water-powered and, amid the integration of coal/steam power, beginning to look like a medieval museum-piece.

Already in medieval England, watermills for grinding grain in particular abounded to the point that John Langdon, in his *Mills in the Medieval Economy*, finds it necessary to call the use of those technologies "an intensely *human* activity ... as *natural* a part of medieval life as the car or television industries are today" (xvii; my emphasis). By 1086 the *Domesday Book* records over 6,000 mills for some 3,000 English communities (Langdon 17). Chaucer's typology of English identities in the "General Prologue" includes a miller, whose scatological humour, bawdy rudeness, drunken interruptions, and grotesque morphology constitute one episode in the identity politics of milling (554-557). In early fourteenth-century Italy, Dante saw fit to end the *Inferno* with Satan looking "like a whirling windmill seen afar at twilight" (283), and the sublime terror associated with this moment suggests a relationship to processing technology different from Don Quixote's early seventeenth-century hallucination that windmills are actually giants or dragons, though both examples align mills with the supernatural.

Mill functions diversified through the medieval period and the Renaissance, when uses included sawing, crushing items (from fruit to ore), operating bellows, polishing stone and weaponry, reducing pigments for paint, pulp for paper, mash for beer. By 1552, a mill on the Seine produced coins for the royal mint (White 89). By the industrial revolution, the meaning of "mill" had expanded to include forms of processing greatly in excess of *mola*'s referents. It is significant that the *OED*'s (thirty-four page) article on the word includes many meanings without usage examples before the seventeenth century, and that the three major figurative senses cited at the beginning of this thesis—dissemination, crucible, formation/processing—emerge in the seventeenth, eighteenth, and nineteenth centuries, respectively.

#### Power Technology and the Proliferation of Hybrids

The many technologies named "mills" mediate the relationship between ecologic and economic systems. For this reason the topos of the mill-site in writing is a compelling focus for the work of understanding the genealogy of that relationship. Just as there is no simple way of distinguishing "natural" from "cultural" productions, however, the simple location of the mill-site at this boundary quickly breaks down, especially as milling diversifies throughout the industrial revolution(s). As Herbert Sussman explains in *Victorian Technology*, the "factory system" became in the nineteenth century a complex of processing and transport technologies connecting different sites to one another and to the "resources" they transformed (30-34). Yet these diverse assemblages remained connected, as had been the case since the first watermills began to turn, to some form of power technology that channelled energies available in ecologic systems through a series of machines.<sup>3</sup> This long association of mills with the conversion of energy that could save the labour of human and non-human animals is crucial to determining the *kind* of relationship that binds culture to nature. Foucauldean technologies of power disperse power through historically contingent social structures; processing and power technologies, from their medial location, work to discipline and structure the categories of "nature" and "culture."

In my brief history of mills I have already cited the historian Lynn White Jr., whose oft cited *Medieval Technology and Social Change* has been controversial with historians since its publication in 1961. Its final chapter makes the argument that the development and proliferation of water and windmills in the medieval period itself constituted an industrial revolution. White's arguments have received some criticism by historians, but his theory of power technology, according to Alex Roland's recent review, has stood up best (579). "Power technology" is any technology that converts energy to forms useable in domestic space or processes of production:

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<sup>&</sup>lt;sup>3</sup> In *Guns, Germs, and Steel*, Jared Diamond describes the multiplication of economic power sources through technological conversions in terms of an "advance" that gave Eurasian societies a "huge advantage" over societies that lacked such devices (358-9).

mills, turbines, dams, nuclear reactors, solar panels. According to White, the years 1000-1400 were a "period of decisive development in the history of the effort to use the forces of nature mechanically for human purposes. What had been, up to that time, an empirical groping, was converted with increasing rapidity into a conscious and widespread programme designed to harness and direct the energies observable around us" (79). This exploration of new means by which power may be guided and controlled speaks to an important point about the mill-site that is lost if we think of it only as a machine for processing resources into consumable forms. It also provides the technical means of energizing human economies, thus freeing labour for other purposes.

Martin Heidegger also places great emphasis on power technology in his influential essay "The Question Concerning Technology" (1953). Heidegger wants to move beyond the instrumental and anthropological definition of technology in order to think its "essence." According to the instrumental/anthropological model, technology is defined as a means to an end and a *human* activity. Thus our relationship to technology is conceived in a teleological fashion: tools serve a purpose, and human will and labour both construct the tools and determine their purpose. For Heidegger, this definition applies "at best" to handicraft, but it does not fit "modern machine powered technology" (319). "The essence of modern technology lies in enframing [gestell]" (331). Technology that had previously depended on the caprice of its resources and operators for its function, like a mill waiting on the wind to power it, now fully frame, store, and direct "natural" energies, like a hydroelectric dam that reshapes the very river to drive its turbines. Crucial to Heidegger's definition, of course, is the meaning of "modern"—at what point did technology become modern? He seems to locate this difference, and the insufficiency of instrumentality, in the widespread emergence of new power technology. Through its capacity to transmit energy and process "resources" into economic circulation, power technology, in particular, becomes an epistemological force that reveals both nature and culture as a "standing

reserve" for consumption (326). The control and transformation of ecologic energies effected by power and processing technologies frames all of our activities, and this makes them very different from discrete prosthetic tools working at a particular task and comprehended by a single operator. But Heidegger does not arrive at this definition without the use of examples, and his examples rely on the *topos* of the mill to delineate the difference between modern and premodern technology. He dislikes the former. Heidegger's hydroelectric plant frames the Rhine, which then "derives its essence from the power station," as it becomes a store of potential energy for the "interlocking processes pertaining to the orderly disposition of electrical energy" (321). But this is not true of "the old windmill": this technology draws power from the flow of the wind without framing and directing that flow (320). Compared with the modern processing industry that produces "commercial woods" the "sawmill in a secluded valley of the Black Forest" is a "primitive means" (312; 323).

It is interesting to note that Heidegger applies the adjectives *old* to his windmill and *primitive* and *secluded* to his sawmill. In these words there is a detectable nostalgia for older forms of power/processing technology, forms most readily associated with the medieval "industrial revolution" described by Lynn White. Heidegger seems to want to recuperate a kind of stable and authentic relationship between nature, culture, and technology which precedes the historical discontinuity that rendered the instrumental definition inadequate. Such nostalgia points to an important medieval presence, almost as part of an "economic unconscious," in the mill-texts I will discuss in Chapters Two and Three. Heidegger's adjectives also point to his reliance on a particular historical interpretation in order to think the essence of "modern" technology, and this in turn relies on a reading of the "old" mill-site and the *kind* of relationship between economy and ecology that it produces and represents. In other words, technic modernity

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<sup>&</sup>lt;sup>4</sup> I borrow this concept from Deanna Kreisel's essay "Superfluity and Suction: the Problem of Saving in *The Mill on the Floss*." She uses it to indicate that novel's legible underlay of Victorian political-economic discourses (71).

is a matter of the articulation of "cultural" and "natural" identities with processing technology. In "The Question" the old, primitive, secluded mill is a *topos* that configures those identities in a different way, and that offers a different epistemological relationship between "nature" and technology, one in which the essence of truth as "revealing" is less threatened by the enframement that would reduce all revealing to an ordering in which nature presents itself as standing reserve (339).

The medieval mill-site, however, does not appear to offer this kind of rhetorical common ground. As Lynn White describes it, the forms of knowledge already configuring the juncture of economy and ecology through the mill-site were rather beginning to see "the cosmos as a vast reservoir of energies to be tapped and used according to human intentions" (White 134). Enframement, according to this description, was well under way in the Middle Ages, with ecologic energies increasingly guided and ordered by knowledge practices that conceived of them as a stock or reserve. John Langdon's detailed description of methods for routing water to waterwheels in order to power different processing activities in *Mills in the Medieval Economy: England 1300-1540* provides further evidence for this claim (74-79). His characterization of these as "Water Control Systems" accesses the language of cybernetics, thus continuing to blur the distinction between modern and premodern power technologies. A more radical formulation, then, would state that nature/ecology has, to some degree, *always been enframed*—that enframement has no locatable origin.

What I indicate with these examples is the problem that arises in Heidegger's argument when he attempts to look back at an essentially different relationship among nature, culture, and technology. The mill-site does not offer the rhetorical ground that he demands from it with regard to the premodern/modern split. Yet even Heidegger's argument, which relies on the idea of radically different *power* technology, does at times seem to make the difference a matter of degrees. His focus on the hydroelectic plant's involvement with the regulation of "interlocking

paths" and "long distance" power stations, and the sawmill's concomitant seclusion, make the difference a matter of the *length* of the networks involved (322; 321). The central issue is actually the *systematicity* of "modern" technology as opposed to the relatively discrete, unitary character of what comes before. I think that this helps to clarify another problem with the instrumental/anthropological understanding of technology, which, with Heidegger, I consider inadequate: these long networks criss-cross (like the hydroelectric plant) too thoroughly from nature to technology to culture; they threaten the ontological purity of everything they bring together. Technology cannot be considered strictly a human activity directed by conscious purposes. As the networks grow more complex, they mix these categories all the more, creating impure, medial ontologies.

In We Have Never Been Modern (1991), Bruno Latour makes a similar argument. He characterizes modernity as a purification of categories and disciplines; this is the modern "work of purification," with Kant as its figurehead (11). The work of purification proceeds by dividing culture and nature, humans and nonhumans, into distinct ontological zones. But the obverse of this activity is always ongoing: the "work of translation" produces nature-culture hybrids even as purification renders "the mediation that assembles hybrids invisible" (34). For Latour, hybrids proliferate all the more as the work of purification proceeds, which creates the following paradox: the more separate nature and culture seem, the more integrated they have become. Modernity does not constitute a radical break, but rather the creation of longer networks through processes that create nature-culture hybrids and enlist them in the further production of knowledge and power (117). Thus both the hydroelectric dam and the "old mills" have medial ontologies, even if the latter participate in shorter economic networks and effect a less drastic mixture.

The mill-site is, I think, an especially fruitful example of the hybrid organization of nature and culture. It mixes human and nonhuman bodies, power technologies channelling

ecological forces, knowledge, capital and political power in one impure site. Such mixture is even more apparent when we take into consideration the topographic specificity often required of a mill-site and its representation—a topic to which I will return in Chapters Two and Three. The particular place required, the flow of energy converted to the work of processing, and the transformed grain, pulp, or fibre all constrain its form. Processing bodies into commodities for economic circulation, the mill-site thus allows us to look carefully at the transformations that allow nature and culture to be constructed as distinct categories in the first place. If "nature" and "culture" cannot be divided, still no quantity of quotation marks can explicate the contours of their separation. This thesis seeks to focus on the processes that lead to the narrator's amazement, in my second epigraph, at the distinct identities of esparto grass and paper. The millsite is precisely the location of such processing. More importantly, it disparate categories, allowing us to historicize the relations of knowledge, power, technology, and material transformation that constantly mediate nature and culture. For this reason, the site is fruitful for the work of understanding "the *specific historical forms* that nature's production takes, and to locate the specific generative processes that shape how this occurs" (Braun 11; author's emphasis). At the juncture of ecologic and economic systems, mill-sites contribute to the determination of the kind of relationship we experience in the kinds of hybrids produced. Such a relationship is historically contingent and subject to ongoing renegotiation. This is why it is helpful to align White and Heidegger, both of whom describe the agency of technology in the routing and control of what flows between systems.<sup>5</sup> I embrace Raymond Williams' claim, in

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<sup>&</sup>lt;sup>5</sup> Heidegger's claim that the revealing essential to "modern" technology "reveals to itself its own manifoldly interlocking paths, through regulating their course," resonates with White's much more concrete and "technical" descriptions of the power from flowing water through waterwheels and machinery into motions capable of processing materials: "in working out the problems of continuous rotary motion, technicians found that flywheels and governors were needed to smooth out irregularities of impulse and get over 'dead-spots'" (115). A similar kind of language can be seen in *The History of Sexuality*, when Foucault describes power relations as "the process which, through ceaseless struggles and confrontations, transforms, strengthens, or reverses them; as the support which these force relations find in one another, thus forming a chain or system, or on the contrary, the disjunctions and contradictions which isolate them from one another" (92). Ideally, I would combine White's attention to the technical "aesthetics of skill" and his precise vocabulary of machinic motion (*metate*, *sufflator*, *cam*, *governor*, *star*,

"Ideas of Nature," that one of the last forms of the separation between culture and nature "is an intellectual separation between economics and ecology" (84). Reading the mill-site, then, is an attempt to understand the kinds of discursive, aesthetic, and technic practices that underpin this separation.

#### Perpetuum Mobile and the Transcursive Site

The mill-site as I have conceived it mediates the juncture of systems; broadly speaking, of economic and ecologic systems, although this is a coarse-grained distinction. In this brief section, I point out the connections between milling/processing, the mythopoetics of rotary motion, and the idea of perpetual motion. I then take up the discursive implications of milling encoded by the figure of the "rumour mill" as well as uses of the word "mill" to signify technologies that process language. For this kind of processing across the mill-site I borrow the word transcursive from Gilles Deleuze and Felix Guattari. It appears twice in Anti-Oedipus, and I have not seen it elsewhere. 6 The OED gives the following definition for "transcursion" (from L. transcurrere, to run or course across), a word whose only usage examples come from the seventeenth century: "the action of passing across or through; a going or moving through, transition, penetration; also, a journey or passage through a country, across the sea, etc." Trancursivity, in my formulation, signals linguistic additions to the "inhuman adventure[s]" of the mill-site (White 115). In Chapters Two and Three, I pay particular attention to transcursive writing in relation to the processing activities of the mill-site, where language is added to the

crown, worm) with Heidegger's abstruse grammar of technology's essence, in order to write the forms and concepts of processing.

<sup>&</sup>lt;sup>6</sup> I do not intend to use it as Deleuze and Guattari do, for while I am drawn to the word, its use in their manic exegesis of the signifying chains of the Lacanian unconscious is not entirely clear to me: "The recordings and transmissions that have come from the internal codes, from the outside world, from one region to another of the organism, all intersect, following the endlessly ramified paths of the great disjunctive synthesis. If this constitutes a system of writing, it is a writing inscribed on the very surface of the real ... a transcursive system of writing, never a discursive one" (39).

mixture of the mill-site, becoming processed itself, or contributing to the processing, regulation, and control of resource flows.

One of Lynn White's foci in Medieval Technology and Social Change is the importance of the crankshaft to the conversion of rotary into reciprocating motion—from the motion of the millwheel to that of the millstone, for example, "Continuous rotary motion is typical of inorganic matter, whereas reciprocating motion is the sole form of movement found in living things," he explains; and so "to use a crank, our tendons and muscles must relate themselves to the motion of galaxies and electrons" (115). White goes on to call this an "inhuman adventure," and in so doing furthers the argument, outlined above, that power and processing technologies incorporate hybridizing rupture of the limits of the human, across the suture of ecology and economy, or in this case, across the mill-site (115). His claim about organic matter is not exactly true: the enzyme in chloroplasts and mitochondria that synthesizes ATP, the energetic "currency" of all organisms, actually rotates in its membrane; the plant biologists Taiz and Zeiger decide that it is literally "a tiny molecular motor" (135). But White's point does lead us to another important aspect of the topos of the mill-site: the mythopoetics of rotary motion. Millwheels have materialized the caprice of Fortune since the Roman Empire. Many literary descriptions of mills also dwell on the wheel and its distinct motion. In Emilé Zola's story "Attack on the Mill," for instance, the wheel is described as sentient and fetishized by the miller (51). At the opening of The Mill on the Floss, Maggie, the narrator, and a "queer white cur" direct their gaze at the "unresting wheel sending out its diamond jets of water" (8). In the *Tartarus* Melville registers the "enormous revolutions of the dark colossal waterwheel, grim with its one immutable purpose" (676). Further, mill motions and machinic conversions seem to have inspired generations of engineers hoping to discover the secret of perpetuum mobile and construct a machine that would move without needing to be moved, and such efforts have since become a set-piece, with alchemy, for mocking human efforts that attempt to supervene the laws of nature

(in this case, the second of law of thermodynamics).<sup>7</sup> In all of these examples, the transcursive, as I am describing it, takes place with non-closure of systems; at the system/environment boundary, where input is required for systems to remain in motion.

Metaphors of alchemy and perpetual motion have also been used to characterize economic impossibilities. In a reading of *The Mill on the Floss* that I will return to in the next chapter, Deanna Kreisel notes that "the popular account of the workings of capitalism" seems at times "a picture of self-contained, self-regulating circulation, something like the workings of a natural organism or a perpetual machine" (72). The fantasy of perpetuum mobile requires that a system be entirely closed, requiring no energetic input. But no such system can remain discrete for long. Indeed, the critique levelled at neoclassical economics by the field of ecological economics, commenced by Nicholas Georgescu-Roegen in 1974, and which appeared in more detailed form in the writings of Herman Daly, follows a similar pattern. Commenting on this field in an ecocritical essay, Timothy Sweet notes that in the neoclassical mode economies are described as systems "closed off from the material environment" (27). If this seems unlikely or impossible, the neoclassical production function Y=f(K, L), where Y is a flow generated by two stocks (capital and labour) points to the accuracy of the generalization. In this equation, nonhuman resources are simply collapsed into the category of capital. But Daly argues that neoclassical production theory has ignored the second law of thermodynamics and the principle of the conservation of mass. In the same essay, he claims that

either production is a process of transformation of a resource inflow (material cause) into product outflows, using labour and capital as agents of transformation (efficient cause), with all transformations subject to the laws of thermodynamics, or else it is an alchemical

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<sup>&</sup>lt;sup>7</sup> Arthur W.J.G. Ord-Hume can be sanguine about efforts to build a perpetual motion machine, and shares the joke with us in 1977 in his *Perpetual Motion: The History of an Obsession*. But in 1861, Henry Dircks still feels the need to assert of perpetual motion that "as it cannot be relied on as attainable on any scientific grounds, scientific men must discredit its possibility" (504). In their accounts of the various attempts to build unstopping machines, various mills are the early and persistent examples.

alembic in which reactions are supposed to be governed by hermetic manipulation (multiplication in this case) of occult symbols (91).

Ecological production theory, it seems, could better be described as a theory of processing. If we accept Daly's critique, then neoclassical economics seems to violate Lucretius' rule *nihilo* ex *nihilo*, lovely in its simplicity, or at least to make a claim as dangerous as that of the miller in *Rumplestiltskin*, who tells the King that his daughter can spin straw into gold.

Just such perpetual/alchemical transformation seems to be at stake in a figure used by Foucault in *The History of Sexuality*. Early on, he describes the "transformation of [sex] into discourse" by a form of power intent on "passing everything that has to do with sex through the endless mill of speech" (12: 21; my emphasis). Affiliated with the sense of "rumour mill," this usage presents the idea of processing a world of relatively unexamined sensations, emotions, thoughts, and "unwritten rules" into a language whose semantic purchase on sexuality will allow regulation and control, and even transform and intensify its varied embodiment. The third epigraph of this thesis, from a short online article by Jacques Alain-Miller, also derives its effect from the combined meanings of transmutation, perpetual motion, and milling/processing: the prolific disseminator of information, Google turns the millstone, processing the symbolic density of cyberspace through chains of algorithms. For Miller this metaphor signals Google's "blindness" as a producer of symbolic matter that cannot read or understand, but only memorize the sign in its materiality. Googling "mill," moreover, yields as second hit the site http://www.the-mill.com/, a major advertising and visual effects firm that senses a positive valence in its choice of the enthymematic rumour mill to name the corporation: our prolific discursive production will benefit your company. Advertising-as-rumour-mill can also be conceived as a transcursive site that works at the "multiplication of desires" required to keep capitalist processing in motion, and avoid recession or stagnation (Kreisel 74). Each of these examples helps to explain the notion of transcursivity. Each has language emerging from or

moving across the mill site, which transforms it in the process, with implications for economic/ecologic organizations. If these examples refer to figurative uses, I would ask whether they might also point to what is nevertheless a "real" or material transformation. Regardless, the next examples materialize the transcursive function in two media technologies: the typewriter and the computer.

In *Victorian Technology*, Herbert Sussman notes that Charles Babbage, with his Analytical Engine, established a distinction between the *memory* and the *processing* of data, setting up the basic distinction of computer engineering that shaped IBM's punch card computers and remains operative circa 2010 (44). Babbage announced the plans for the Analytical Engine in 1840, but he had been at work on earlier models since about 1820. We have already seen that Babbage called the processing unit of his "mechanical computer," or Analytical Engine, its "mill." In the history of computation, this increasingly powerful site was only later called a processor, lending credence to the idea that milling slips semantically into processing writ large. Sussman explains that the Analytical Engine used punched cards, and that Babbage in his desire to "calculate by steam"

applied the techniques of the textile mill to mental labour; he sought to use the methods of the jacquard loom to set intellectual operations into material form. In this automatic weaving device, textile patterns were encoded into punched holes in paper cards that directed wires to raise different warp threads in an ongoing, complex weaving operation.

(45)

Babbage's Engine was never completed, but it was constructed and shown to be functional by the London Museum of Science in 1991. This machine, which promised to externalize "mental" operations into physical processes (an implication of which Babbage was well aware), operated by the rotary motion of a crank. The Analytical Engine used coded input in the form of paper cards to program the processing of language—in this case, numbers inscribed on densely

interlocking "figure wheels." Perhaps engaging this theme, Robert Pinsky's poem "The Figured Wheel" imagines that a wheel "covered with symbols ... mills everything alive," converting the earth in a kind of universal processing (1.3).

This strange relationship of language to processing technology, whose field of meaning has extended to media technologies, can also be seen in the usage of "mill" to refer to the typewriter in the U.S. after 1911. In *Gramophone*, Film, Typewriter the German media theorist Friedrich Kittler includes a long quotation from Heidegger's *Parmenides* that sets the authenticity of handwriting and the "word as the essential real of the hand" over against the typewriter, which "veils the essence of writing" (198-99). In a move that relates the processing of writing to his focus on power technology in "The Ouestion," Heidegger announces that "in the typewriter we find the irruption of the mechanism into the realm of the word"; further, "the typewriter leads to the typesetting machine ... the press becomes the rotary press," and "in rotation, the triumph of the machine comes to the fore" (199). For Kittler, the typewriter represents a "a form of text processing" and "the prototype of digital information processing" (253). His analysis also extends to early data processing: the computers of Babbage and Alan Turing. There, characterizing (not all computation, but) a particular form of that processing, Kittler writes that "computation functions as a treadmill" (248). In all of these examples we see the extension of the meaning of "mill" to discursive and media-technological processes, and the uncanny habit of the word to insinuate itself into the language we use to represent—and surely to produce—a world whose Moreauvean menagerie of hybrids is always multiplying.

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<sup>&</sup>lt;sup>8</sup> We can also note a passage from Lacan, who in his Seminar on *The Purloined Letter* writes that "we have learned to conceive of the signifier as sustaining itself only in a displacement comparable to that found in electronic news strips or in the rotating memories of our machines-that-think-like-men, and this because of the alternating operation at its core that requires it to leave its place, if only to return by a circular path" (21). In the chapter "Lacan Turns a Prayer Wheel" of his *How to Read Lacan*, Zizek describes the notion of interpassivity and the interpassive subject ("the uncanny double of interactivity") through an analysis of the Chorus and canned laughter: they can do our emotional work for us (22-23). One of Zizek's examples is of a prayer wheel that I "turn around mechanically ... instead of turning the mill wheel myself, water can do it" (23; 25). According to Lynn White, these Tibetan mills that fulfill a sort of ambient symbolic function could have led to the first wind mills used for other purposes, and in China, revolving octagonal bookcases (the inspiration for the galleries in Borges' "The Library of Babel'?) in monasteries, powered by water, fulfilled a similar need for mechanical piety (85).

What can we learn from these different forms of linguistic processing? The set of associations crystallizing around perpetual motion, alchemy, and the juncture of economy and ecology provide one important avenue. For we can now imagine resources becoming commodities, if with some difficulty, and it is clear that language can be processed by media; but how do we grasp the connection between the two? What actually happens when sex, for example, is transformed by a passage through the "mill of speech"? Daly's joke about the "alchemical alembic" governed by the manipulation of "occult symbols" may be apt, for it dramatizes the strange disjuncture between the manifold action of language and its erstwhile materiality (91). Unless we imagine language itself to be a closed system, there must be a kind of material-energetic flow in and out of that economy as well. At the very least, it should be possible to identify historical moments in which power technologies have greatly energized the realm of discourse. While this is a speculative notion, and moves against the grain of Saussurean linguistics, I think that it is crucial to consider the possible non-closure of the system of language, and to comprehend outside influences on the production of meaning. In the next two chapters, I will continue to develop this understanding of ecological transcursivity in my discussion of *The Mill on the Floss* and *Ana Historic*. Processing language from one form to another, transforming "something else" into language/discourse (the mill of speech), and the reshaping of language at the mill-site generally; these I consider modes of transcursivity. There must be some way of understanding symbolic additions to material flows that act to code those flows with the changes wrought by processing, much as the punchcards of the jacquard loom set patterns in the textiles produced. In other words, language must enter and influence the mediations that determine the kind of relationship manifest between nature and culture.

Chapter Two: Processing Victorian Natures-Cultures: The Mill on the Floss, A Paper-Mill,

The Paradise of Bachelors and the Tartarus of Maids

In his introduction to the 1981 edition of George Eliot's *The Mill on the Floss*, Gordon Haight claims that Eliot's second novel is primarily about its human characters, and like critics have done since its 1860 publication, he doubts the narrative motive of the flood that brings about with the help of some "wooden machinery"—the deaths of Maggie and Tom Tulliver (xvi; 521). Its ending makes the novel asymmetrical, and many readers have found this asymmetry unsatisfactory. Haight calls *The Mill on the Floss* a bad title: "the mill is not the central interest of the novel," but rather Maggie Tulliver, her desires, and her death (vii). But as I will argue in this chapter, readers of Eliot have generally ignored the title's unsubtle hint, and prove unaware of the vicissitudes of "literary molinology," let alone much of the novel's figural structure and economic preoccupation. In this chapter, then, I locate my reading of Eliot's novel at the millsite, and contend that the mill is of central interest to the novel, especially, but not only, for a reading that attempts to elevate setting and system to the same analytic level as plot and character. In so doing, I also align *The Mill on the Floss* with two contemporary mill-texts that have narrators writing from the interior spaces of Victorian processing. These are Charles Dickens article "A Paper-Mill" (1850) and Herman Melville's The Paradise of Bachelors and the Tartarus of Maids (1855), and both can be considered detailed counterparts to Eliot's broader concern with economic process and pattern.

I hope to show the importance of the mill to the mediation of "culture" and "nature" in Eliot's novel. This chapter has two sections: the first is called "Site" and it reads the mill in relation to Eliot's plot and to the novel's understanding of economic/ecologic systematicity. The second is called "Process" and it aligns the novel with the other mill-texts I have mentioned, with close attention to what I am calling "medial substances": materials such as *grain*, *fibre*, *web* and *meal*. My purpose throughout is to expand my discussion of power technology and

transcursivity from Chapter One, and to explore the figuration of Victorian processing in its influence upon specific kinds of nature/culture relations. Writing, for example, is central to Tom's education, which is in turn twice characterized through figures of milling. Maggie is identified with the mill in a different way: her "monstrosity" and hybridity as a character makes her our access point to the medial ontologies that allow us to question the purified poles of nature and society. In her relation to the Mill and the Floss, Maggie also brings together other important sites, or "strange houses" where we glimpse the outline of an ecological historicity and which point to the significance of Eliot's preoccupation, in *The Mill on the Floss*, with economic problems that cannot be narrated in isolation from the "nature" outside economy.

## Site: "when in 'strange houses'" "a skein is tangled"

Mr. Tulliver owns a grain mill operated by water power, situated on the river Ripple that turns the millwheel as it flows to meet the Floss. Miller Tulliver persistently becomes involved with litigation when slighted, and at the beginning of *The Mill* has pushed himself toward debt and bankruptcy with a suit concerning his right to the water that powers his mill. Such disputes have a presence in the contemporary historical record. Brian Lancaster explains that in 1859 a dispute between millowners and the Croydon Board over the ownership of underground water—which the town drew away from the mills with Artesian wells—reached the House of Lords as the case *Chasemore vs. Richards* (151). The ruling went in favour of the Croydon Board and against the miller, and has stood ever since: underground water is not clearly delineated as property. Water could not be territorialized.

Such disputes over "water control systems," entering the level of law and public discourse, were politically contentious for their capacity to direct water into one neighbourhood and away from another, for energy, irrigation, sanitation, or consumption. This concern over *power technology* is crucial to the plot of Eliot's novel; as the source of energy for his mill runs

down, Tulliver sues upstream consumers on the grounds that their irrigation has infringed his "legitimate share of water power" (154). Between this constriction and the surfeit of the flood at the denouement, the *Mill's* plot is thus framed by water and problems of its routing and control. As we have seen, a mill-site is a very specific location, with a delicacy to its systemic couplings, and small changes can make it unviable. This appears to be Tulliver's concern, though we never explicitly learn if his "head" (a measure of water pressure) is actually too low to process grain "economically." Further, other mills "make" characters in Eliot's novel, establishing their economic "situations": uncle Deane thrives in a "mill-owning and ship-owning business," Bob Jakin gets his "nest-egg" dousing a mill-fire, and Stephen Guest, Maggie's tempting but ultimately spurned lover, is the "result of the largest oil-mill and the most extensive wharf in St. Oggs" (63; 319; 363). Matters of the mill-site and its pulsions "ripple" throughout the causal webs of the Eliot's plot; far from being a minor concern, as Haight claims, its wheel drives the action of the novel almost like the engine of a textile mill, which transmits power through all the shafts, belts, and looms in the many rooms of a large building.

Precisely this juncture of economy and ecology, then, is the root cause of the family's bankruptcy and dissolution. As Jules Law writes, the struggle over control of water "intersects with, and is refracted throughout, the novel's social and sexual structures" (58). It ruins the miller by forcing him to engage with discursive practices which are beyond his education and ability, so that he is bankrupted by the clever lawyer Wakem. Bankruptcy means the loss of property, and this is devastating for the miller in particular, for "the Tullivers had lived on this spot for generations" (263). Miller Tulliver speaks of "the old mill," and says that "there's a story as when the mill changes hands, the river's angry" (263). Compared to the steam-powered

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<sup>&</sup>lt;sup>9</sup> John Langdon maps the stochastic fluctuation of available mill-sites in *Mills in the Medieval Economy*, showing their spread across the landscape under favourable conditions or alternately their contraction as climate changes or wars damaged their tenuous position in economic or ecologic networks (27-31). Gary MacGee notes the importance of the mill-site's location in his *Productivity and Performance in the Paper Industry: Labour, Capital, and Technology in Britain and America*, 1860-1914 (8-12).

Tulliver wishes Wakem would do "summat as they'd make him work at the treadmill!" (266). Prison is mill.

mills that were spreading across England circa 1830, Tulliver's mill is a medieval holdout. In fact, the beginning of the novel's present is contemporaneous with the completion of the Manchester-Liverpool railway in 1830 (Sussman 31). And as Deanna Kreisel notes, "historicizing" *The Mill* is "particularly vexed" because Eliot set the plot across the years 1829-44, though she wrote it from 1859-60 (83). During and just preceding that earlier interval England witnessed the Companies Mania of 1825-26, the Great Railway Mania of 1844-47, the Factory Act of 1844, and a profusion of discourse concerning the "nature" of political economy and its stability and longevity (Kreisel 83). Kathleen Blake, in a reading of *The Mill*, describes the period of the novel's setting as one when "the newer economics was still actively layering onto the still persistent older one" (219). These concerns complicate the historical interpretation of the *The Mill on the Floss*, whose narrator often looks back on the narrative present in ironic complicity with the reader. The time that elapses between *The Mill*'s setting and Eliot's writing also raises the peculiar problem of short-range historicity, which for us in 2010 is the called the problem of the 1980s.

Soon railway lines would link Britain's factories into a system with unprecedented processing power. If they could not compete or integrate with industrial system, watermills would quickly become unviable economic movers and gather to themselves an aura of nostalgia. Such energetic intensification of other parts of the economy leads Mr. Deane, Tulliver's brother-in-law, to "see if the mill might be increased by the addition of steam-power" when he considers purchasing it on behalf of his company (243). Mrs. Tulliver misreads the mill's problematic position at the historical intersection of power technologies, and hopes to encourage Guest & Co. by suggesting that the Dorlcote Mill had been operated by Mr. Tulliver's father and grandfather "long before the oil-mill of that firm had been so much as thought of"; but Deane doubts whether this "was precisely the relation between the two mills that would determine their value as investments" (244). Eventually, the mill is purchased by lawyer Wakem, and Mr.Tulliver has to

decide if he will stay on as manager. His attachment to his home at the mill-site, and also his ingrained adaptation to that particular web, makes him doubt whether he could get a "situation such as he could fill" elsewhere, and so he swallows his pride and stays, setting his son Tom on a vengeful mission in the process (262; 267). With the realignment of the economic networks around him following technological and energetic intensification, the miller is caught in his own web.

I write "web" for a number of reasons. In *The Mill*, as in her other writing, Eliot is especially preoccupied with figures of the web, the net, and the maze. "This world's been too many for me" says the defeated miller; "everything winds about so"; things have become "twisted round and wrapped up i'unreasonable words" (20; 262). With the usual ironic, but not unsympathetic, distance from this man who is repeatedly represented as the puzzled product of a generation losing its grip on the world, Eliot sums up the relationship between Tulliver's troubles and disposition as follows: "I have observed that for getting a strong impression that *a skein is tangled*, there is nothing like snatching hastily at a single thread" (76; my emphasis). With important connections to the novel's preoccupation with clothing and textiles, which I will return to in the next section, this tangled skein encapsulates a full-fledged narrative concern with the extension and complexity of networks—in particular, the skein raises the matter of active role of Eliot's setting in her narrative, which is no mere background. As a novel of long networks, *The Mill* shows the manifold social, ecological, and discursive patterns involved with the move from—for lack of better words—local to global. <sup>11</sup> Faced with the possibility to being

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<sup>&</sup>lt;sup>11</sup> In broader relation to Eliot's fiction and from a narratological perspective, this matter of the extension of networks can be illustrated by reflexive comments made by the narrators in *The Mill* and *Middlemarch*. The first claims the importance "binding the smallest things with the greatest" for "in natural science ... there is nothing petty to the mind that has a large vision of relations, and to which every single object suggests a vast sum of conditions. It is surely the same with the observation of human life" (273). But the latter narrator sees a need to constrain this web: "I at least have as much to do in unravelling certain human lots, and seeing how they were woven and interwoven, that all the light I can command must be concentrated on this particular web, and not dispersed over that tempting range of relevancies called the universe" (117). In *The Ideas in Things: Fugitive Meaning in the Victorian Novel*, Elaine Freedgood describes *Middlemarch* as a novel of "literary underdetermination" and "standardized" or "industrialized meaning ... stabilized ... so that metonymic relations (which, strictly speaking, stop nowhere) can

forced from his "situation" by these conditions, Tulliver recoils at the idea of a place unheimlich and strange (262). The sense that shorter, local networks are undergoing a difficult integration with longer (and increasingly global) networks is worked out in the narrative focus on household and political economy. When the Tullivers lose most of their possessions, for example, Mrs. Tulliver imagines her "best things" "going about everywhere" and into "strange people's houses" (202; 213). Her grief is made especially sharp by her relationship to her sisters. As Eliot writes, in a line that cues us to *The Mill's* multiple economic concerns, "there was in this family a peculiar tradition as to what was the right thing in household management [domestic economy] and social demeanour ... a female Dodson, when in "strange houses," always ate dry bread with her tea ... having no confidence in the butter" (45; emphasis added). On a different scale, but one still concerned with engaging the proper code of economic routing and control, Tom imagines that "there must have been a world of things connected with that Swedish bark, which, if he only knew them, might have helped him to get on," and find a situation in overseas trade in order to regain ownership of the mill (233). The Floss "links the small pulse of the old English town with the beatings of the world's mighty heart," whence (i.e. Russia) comes the linseed "making grist for the great vertical millstones, roaring and grinding and carefully sweeping as if they had an informing soul in them" (273; 118). Eliot attends very carefully to these networks that extend from natures to cultures and back again. In particular, she is preoccupied with the mediations manifest between such systems, and, as is meant to be the purpose of Tom's education, the processes necessary to establish an economic foothold. These networks are the truly "strange houses" present throughout the novel, for Eliot makes strange the systemic couplings of quotidian domesticity.

stop just when they should, a moment that requires the acuity of Eliot's narrator to discern. Metonymy ... is narrated to the point of exhaustion: all possible (that is, correct) connections are made by the narrator" (115).

Such, at least, is my reading of *The Mill*'s many houses—its anatomy of the domestic spaces of all the major characters, which pertain to their economic situations—but also its imagining, often channelled through Maggie or the narrator's voice over, of the living conditions of other species. This point is crucial to the novel's configuration of "natural" and "cultural" identities, populated as it is with plants and animals cultivated or "wild," and with figures of speech that persistently do the biopolitical work of "crossing" such identities. In fact, written on the cusp of both the Darwinian revolution and the inception of a science of ecology—Ernst Haeckel published Generelle Morphologie in 1866—the The Mill can be considered a central text for a "natural-cultural studies" devoted to the difference that inaugurates this thesis. 12 If Eliot's representations of nonhuman animals seem anthropomorphic, she does set this off with a great deal of zoomorphism, and Eliot's/Maggie's perception of nonhuman sociality point to an understanding of social natures and historical ecologies that works against the aestheticization of an environmental background presented as passive and Other. The Mill is rich with such examples, as when St. Ogg's becomes "a continuation and outgrowth of nature, as much as the nets [sic] of the bower birds or the galleries of the white ants" (115). The novel's "strange houses" populate the setting with interlocking layers, where the webs of different domestic oikoi are legible through figures like the node (ME, "knot"), net, nest, and nidus (L. "nest"). So many dispersed centres in the "economy of nature" perform the natural as a set of social interactions, play on the gendered conceptual genealogy of "economy" and "ecology," and explore the

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<sup>&</sup>lt;sup>12</sup> The Origin of Species was published in 1859. Sally Shuttleworth, Rosemary Ashton, Rick Rylance and Kristine Blair explore connections between Eliot's writing and Victorian Science. The word "ecology," an adaptation of the German oecologie coined by Ernst Haeckel in his Generelle Morphologie (1866), took over from the idea of an "oeconomy of nature" operative in the eighteenth century. The eco of economy and ecology both comes from the Greek oikos, a word for dwelling or household. But Gilbert White is usually the writer considered to have made the first statements of ecological thought. In his letters collected in The Natural History of Selbourne (1789), he more often records the reproductive, domestic, and nutritional habits of organisms than their physical appearance. And in a famous passage, White claims that "the most insignificant insects and reptiles are of much more consequence, and have much more influence in the oeconomy of nature, than the incurious are aware of ... Earth-worms, though in appearance a small and despicable link in the chain of nature, yet, if lost, would make a lamentable chasm" (196). White's book was extremely popular with the Victorians, and has seen 300 editions between 1789 and 2007, making it the fourth most published book in English, as Richard Mabey notes in his introduction to the most recent edition.

historicity of "nesting" or establishing a productive site in an existing system ("nest egg"). "Certain seeds which are required to find a nidus for themselves under unfavourable circumstances, have been supplied by nature with an apparatus of hooks, so that they will get a hold on very unreceptive surfaces" (Eliot 275). <sup>13</sup>

Two other "strange houses" will conclude this exploration of nature/culture hybridity, the broad theme that informs the more specific topos of the mill-site. The wealthy Pullets' house and the Red Deeps can be opposed as poles of "culture" and "nature," but in these settings as elsewhere in the novel, the distinction quickly breaks down. When the Tullivers visit, aunt Pullet needs a "bunch of keys" to access the utmost inner chamber of private domestic space, where she stores her most fetishized and expensive bonnet, the product of extensive processing (88). Maggie, however, "would have preferred something more strikingly preternatural" (89). In the drawing room, the children build card houses. Everything in the house is carefully protected from contact with the children, and the hypochondriacal aunt has closets full of medical commodities. More importantly, however, uncle Pullet's musical snuff-box, which makes him impressive to Maggie because "he understood winding it up," is a toy that serves as a reminder of processing even in such carefully ordered domestic space: the *OED* records a usage of "mill" to indicate a snuffbox that grinds tobacco with a simple crank, and was also called a "mull" (93). This small music-mill, yielding a tune from an input of rotary power, is a transcursive technology that also stands as metonymy for uncle Pullet's complacent power at the "centre" of this domestic web. He defers winding the mill in order to build expectation in the children, for he has "a programme for all great social occasions"; Pullet's conducting *nomos* has an interesting correspondence to the social importance of mills in other parts of the novel; his "program" speaks to the organizational role of processing technology in the structure of the narrative, and in

<sup>&</sup>lt;sup>13</sup> Gordon Haight connects this reference to Eliot's work with George Henry Lewes on *Sea Side Studies* (1858); "nidus" can also refer to the "nest" where a spider or insect places its eggs, or the point from which a bacterial "culture" or "colony" begins to grow—see Chapter Three on the nidus of Vancouver.

the relations of characters, objects, and settings (93). Eliot's description of the outside of the property shows the formative effects of power routed from a patriarchal centre guiding the crank of land and capital. There, the children are impressed with a collection of animals whose decorative morphologies have seen the influence of careful breeding: "the peacock ... Friesland hens, with their feathers turned the wrong way ... pouter pigeons and a tame magpie ... a wonderful brindled dog, half mastiff and half bulldog, as large as a lion" (87). "Husbandry" has drawn creatures into biopower's sphere of influence, so that Eliot positions them in the garden's medial ecology, between the house and the fields "beyond the garden" (99). Here also we learn that Maggie likes to make up "stories about the live things they came upon by accident" and tell about their domestic lives and "past history"—whereas Tom crushes an earwig to show the "entire unreality" of such interspecific narrative crossing (99).

The Red Deeps, increasingly Maggie's sanctuary in the novel, is, with the exception of the river, its most "natural" setting: a patch of forest near the mill. But this important node, where Wakem's son Philip and Maggie begin to meet with "fateful result," is already an historical ecology (298). Inhabited by "grand Scotch firs," it has nonetheless been a site of resource extraction in the past: "the hollows and mounds" of an "exhausted stone quarry" (299; 298). Its topography may even be the reason that this place is not, like the surrounding area, a field of cultivated grain. Further, Maggie is identified with this strange house, for she shares a lateral "kinship with the grand Scotch firs" (299). Just such a landscape seemingly "unaltered," but in fact marked by past economy, also figures in my reading of *Ana Historic* and Victorian "Vancouver" in the next chapter. And if it seems I have drifted from the mill in these last paragraphs, the reason for this has been to establish a more detailed analysis of the relationship between economy and ecology, and so to prepare the ground for a narrow focus on processing and the Latourean "work of translation" in the next section.

#### **Process: "the half-stuff"**

Near the beginning of *The Mill*, Eliot describes another of Maggie's sanctuaries. Actually there are two such places in this scene, the attic of the house at the mill-site, and the mill itself. As a girl, when upset or chastised by her family, Maggie finds a "world apart," bounded by Eliot's production of a sense of environment, or what Timothy Morton calls a "poetics of ambience" in which space has a "material aspect" (33). In this case, attic and mill are escapes from the disciplinary strictures of Victorian femininity, manifested by her mother's attempts to get this "mistake of nature" put together in dresses and curls (13). In Maggie's escape, then, we get our only glimpse of the interior of Dorlcote Mill. This scene begins the section that I could call the "central processing unit" of this essay. Here I attend closely to the mill-site's transformations, and the medial substances produced thereby.

Maggie's two sanctuaries are wired in parallel, and both double as the domestic space of spiders. In the attic "festooned with cobwebs" we find her "alternately grinding and beating" a Fetish doll that "on occasion represented Aunt Glegg," the epitome of Dodson decorum and fastidious domestic economy (28). But she quickly grows tired of pulverization and runs across the yard to the mill:

Maggie loved to linger in the great spaces of the mill, and often came out with her black hair powdered to a soft whiteness that made her dark eyes flash out with a new fire. The resolute din, the unresting motion of the great stones, giving her a dim delicious awe as at the presence of an uncontrollable force—the *meal* forever pouring, pouring—the fine white *powder* softening all surfaces that made the very spider-nets look like a faëry lacework—all helped to make Maggie feel that the mill was a little world apart from her outside everyday life. The spiders were especially a subject of speculation with her. She wondered if they had any relatives outside the mill, for in that case there must be a painful difficulty in their family intercourse—a fat and floury spider, accustomed to take his fly well *dusted* 

with meal, must suffer a little at a cousin's table where the fly was *au naturel*, and the lady-spiders must be mutually shocked at each other's appearance. But the part of the mill she liked best was the topmost story—the *corn* hutch, where there were the great heaps of *grain*, which she could sit on and slide down continually. She was in the habit of taking this recreation as she conversed with Luke [the head miller] ... (29; my emphasis)

This scene at the mill-site constructs an ambient environment that affiliates various categories. Eliot is careful to make this "world apart" express the traces of several other, categorically distinct worlds. The "uncontrollable force" of the wheel suggests the power of sublime "natural" forces, the fatalism of rivers and eroding mountain ranges; but the "faery lacework" of cobwebs (n.b. the word "web" also refers, in paper-making, to material that is no longer pulp nor yet paper [OED]) also figures the space as *super*natural. These webs dusted by technological production mirror the image of the network increasingly used to outline the structure of ecologic and economic systems, encapsulating, in the mill's interior, external connections to resource inputs, sources of energy and labour, and demand for its outputs. The arachnid inhabitants may become. from time to time, caught in the flow of production and therefore incorporated in the meal(s) consumed by the people who depend on it/them. Yet the spiders also make this mill a domestic space, reminding Maggie of the relative wealth of the different branches of her family and the power differentials this creates, in no situation more obvious than when they eat meals together. These spiders-of-the-mill, it seems, are more cultivated than those who must take their flies "au *naturel*," in a raw, naked, or unprocessed state *sans* continental sophistication.

Repeatedly called "wild," "queer," "mistake," and especially "monster" (a term, of course, which evokes human-animal hybridity), Maggie is the appropriate character to guide the narrative through the processing space itself. If I am correct that the mill-site *is*—and I intend this as a positive ontological claim—a nature/culture hybrid, then Eliot makes an important point in bringing these two hybrids together early in the novel. Precisely this "little

world apart" (or microcosm) sets the pattern of the *The Mill*'s interpretation of "nature" and "culture," and their technological mediation. In light of my comments in the previous section concerning Eliot's creation of economic/ecologic nets, nodes, and nests, the presence of domesticated spiders troubles the relationship between human and nonhuman in the very space whose processing entrenches that division by transforming "natural resources," while paradoxically bringing the two categories into more intimate collusion. The familiar and domestic is also made uncanny by the presence of socialized spiders, and by a "faëry lacework" that further signals the mill's ontological ambiguity. As a site engaged in the "work of mediation" or "translation," then, this mill supervises an intriguing mixture of categories, and in so doing points to the medial character of processing itself.

Continuing this interpretation, we should also note in detail the linguistic elements of the medial mill-site. First, Eliot has Maggie imagine the "intercourse" of the spiders who inhabit this space. She also stages a dialogue between Maggie and Luke, the head miller and "a tall broad shouldered man, black-eyed and black-haired, subdued by a general *mealiness*" (29). Maggie, a prolific reader, asks him why he does not read, and recommends two titles. These are *Pug's Tour of Europe* and *Animated Nature*, the first about human, the second about nonhuman animals; she thinks he ought to be interested in knowing about our "fellow creatures" (30). Their conversation takes place "at that shrill pitch which was requisite in mill society," as Luke tells Maggie that he is interested in neither book, because he must "keep count o' the flour and *corn*" (30). <sup>14</sup> In both of these examples, Eliot adds language to the activity of processing. The intercoursing spiders, Maggie, and the miller, both coated in *meal* and so identified with the process flow, seem an attempt by Eliot to insert language into the process of resource transformation—in the mill's interior, they correspond to Tulliver's linguistic difficulties in

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<sup>&</sup>lt;sup>14</sup> In the *OED* article on "mill," under heading "Phrases and Proverbs," we learn that "to be born in a mill" has meant "to be deaf."

conducting the mill's external relations. Further, Maggie's two books introduce textual media to the mill, and the well-known etymology of "text" links to two other relevant meanings of web: unfinished paper (the "half-stuff" of "A Mill on the Darent" [252]), and cloth in the process of being woven (OED). These linguistic additions to the mill-site, I suggest, constitute an effort on Eliot's part to think the medial process as a kind of writing and a legible flow that crosses several categories. To be sure, and according to a more anthropocentric interpretation, her interest here is also Maggie's character, and we could say that all of these "additions" are merely signs of Maggie's active personifying imagination. But the intertext *Animated Nature* works against this reading. Eliot goes to great lengths, in this remarkable passage, to articulate a chain of correspondences that mixes language with the traffic of the mill-site—for this reason. I understand the passage as a key example of the concept of transcursivity. As such, it shows a commitment on Eliot's part to the possibility of translation across the boundary between nature and culture. Perhaps this is one of the reasons for her novel's persistent involvement with the mill-site. Thinking of "nature" as socialized in the sense that I have outlined above—an amalgam of relations, conflicts, and cooperations; power differentials, affiliated groups and interacting territories—works against the idea of Nature as both an intractable, transcendent Other and formless reserve of mute matter-energy. Hybridity points to the ideological stakes behind both ideas, especially behind the attribution of a formlessness to "resource" that collapses complex beings and relations into a kind of matter-before-form.

In this analysis, it is possible to see the contours of the discursive formation of the "resource." For it is not the multiplicities of ecological form that, according to any metric, can be described as formless matters. The racist labelling of the "New World" as *terra nullius*, and the womb thought as formless matrix awaiting a morphogenetic male seed, speak to the scope of the political implications of such representational practice. Attribution of formlessness, moreover, must be related to the idea of "raw materials," which already anticipates processing. Perhaps the

ideological production of formlessness itself emerges from the presence of *medial substances* that are the result of processing activities. Thus I have been highlighting throughout this section a kind of transcursive vocabulary: so far, it includes meal, corn, grain, dust, half-stuff, web, and powder, and especially in a reading of Eliot, I must include fibre as well. All of these, but particularly the first three and "fibre," can be considered eco-historically coeval with "mill." "Meal" even shares its "root." I do not have the space to look closely at these words here, but their semantic fields are rich and go beyond the current and conventional meanings we might notice first. Each has the sense of reduction, particulation, granulation, and in some cases decay. They refer to incomplete states of being, to substances on their way to being something else; or roughly speaking, "resources" passing from natural to cultural identities. Such atomization and reconstitution of reality is the work of the mill-site. Most of these words, too, still have or have had a common and familiar circulation. Attention to this transcursive vocabulary contributes to an understanding of the mediation of economy and ecology and the role of (power) technology in determining the kind of relationship manifest between these different systems—in so doing, it furthers the argument I began in Chapter One.

Coated with *meal* and therefore standing out in the novel with "new fire," Maggie becomes in *The Mill* our guide for reading medial substances. I have argued for the status of this novel as a text for nature-culture studies, and it is Maggie's identification with the mill that leads us to the ontologies of these impure sites. As Latour writes in *We Have Never Been Modern*, intermediaries "transport, convey, transfer the power of the only two beings that are real, Nature and Society"; but they "establish links only because they themselves lack any ontological status" (80). As *The Mill*'s "monster," then, socializing the worlds of nonhuman animals and mixing with medials, Maggie embodies some of the novel's figures of ontological ambiguity, so that our interpretation of her character reflects our sensitivity to its critical engagement with setting. In several places, Maggie is called too dark and even "mulatto" by her aunts; but the miller says

that "there's red wheat as well as white, for that matter, and some like the dark *grain* best" (62). Herself a site for categorical crossing, Maggie repeatedly invites us to question the status of the medial ontologies between the purified poles of nature and society. <sup>15</sup>

If the transcursive vocabulary has referred to "formless" medial substances, however, it has also denoted the interior organization of beings on both sides of the nature/culture split. In The Paradise of Bachelors and the Tartarus of Maids, for example, Melville describes "colossal tough-grained maples" that feel "the same all-stiffening influence, their inmost fibres penetrated with the cold" (Melville 674). In Eliot's style, grain, tissue, web, and fibre are often figures of the materiality of a character's affective response or a sympathetic resonance between characters—or in the case of web, the complex relations of influence, or cause and effect. The narrator asks whether exotic plants could "thrill such delicate fibres within me" as familiar oaks and ivy, and just before Mr. Tulliver's death "the web of [the family's] life was so curiously twisted together, that there could be no joy without a sorrow coming close upon it" (40; 357). Eliot's use of the "transcursive vocabulary," in part, derives from her scientific reading and relationship with the experimentalist and philosopher George Henry Lewes. 16 In *Middlemarch*, Eliot aligns these terms with microscopic vision as her narrator introduces Lydgate, a physician with physiological ambitions who has just arrived in the eponymous town. Marie Bichat is his inspiration, for Bichat

first carried out the conception that living bodies, fundamentally considered, are not associations of organs which can be understood by studying them first apart, and then as it were federally; but must be regarded as consisting of certain primary *webs* or tissues, out of which the various organs—brain, heart, lungs, and so on—are compacted, as the

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<sup>&</sup>lt;sup>15</sup> In Family Likeness: Sex, Marriage, and Incest from Jane Austen to Virginia Woolf, Mary Corbett links Maggie's darkness and her relatives discomfort with it to contemporary fears of racial miscegenation and the subsequent degeneration of the compromised races and/or nations (129).

<sup>&</sup>lt;sup>16</sup> Kate Flint points to Eliot's use of contemporary medical and physiological terms in "Blood, Bodies, and *The Lifted Veil.*"

various accommodations of a house are built up in various proportions of wood, iron, stone, brick, zinc, and the rest, each material having its particular composition and proportions. (123; my emphasis)

And whereas Bichat's work had illuminated medical physiology as "a gas-light would act on a dim, oil-lit street, showing new connections and hitherto hidden facts of structure," it was open to the ambition of another scientist (such as Lydgate) to "go beyond the consideration of tissues as ultimate facts of the living organism" (123). For these structures could have "some commons basis from which they all have started, as your sarsnet, gauze, net, satin, and velvet from the raw cocoon" and whoever could describe it would shed "another light, as of oxy-hydrogen, showing the very *grain* of things" (123). Both the philological coevolution of "mill" and "grain," and the cross-section of power sources that figure the epistemological progression of this reductionistic adventure, reflect the connection of these words to the work of milling: it is as if processing exposes such basic strata—present in nature, culture, and their mediation—so that they might be re-organized into different structures. That Eliot presents Lydgate's efforts as misdirected and out of step with current scientific knowledge points to her understanding of the ideological implications of constructing formless, basic substances that serve as *resource environments* for process of higher organization.

In writing of the "raw cocoon," Eliot also inscribes the formlessness that I have related to a discursive pattern found in the description of "resources" in relation to processing. But her list of textiles derived from the fibre of the cocoon points to a major theme in *The Mill* which I will not be able to explore in this thesis: its description of the socioeconomics of textiles and clothing, which make up a semiotic system and which are described along a spectrum from culture to nature—from aunt Pullet's carefully guarded bonnet to Maggie turning her clothes to rags with mud, to the carefully folded and stored "primeval strata" of Mrs. Glegg's wardrobe (59).

What I have yet to do in this discussion, however, is to follow the processing flow from one end to another in detail. In order to do this, I align *The Mill* with three other contemporary texts: Melville's *The Paradise of Bachelors and the Tartarus of Maids* (1855), Dickens' article "A Paper-Mill" (1850) and the anonymous "A Mill on the Darent" (1888) from *All the Year Round*. In each of these, the narrator visits a paper-mill and follows the transformation of "raw" materials into finished paper. A remote mill-site is Melville's *Tartarus*, a choice which continues the literary tradition, going back at least to Dante, of associating mills with the infernal; his *Paradise* is an exclusive London club for bachelor lawyers. Melville's and Dickens' texts also find a medieval identity at the mill-site, as the latter describes different mills operative there since the "old Saxon days," and the former the "feudal, Rhineland, and Thurmberg look," of his mill's New England setting (264; 673).

"I *am* rags," Dickens writes at the beginning of "A Paper-Mill"; "my conductor leads the way into another room. I am to go, as the rags go, regularly and systematically through the Mill. I am to suppose myself a bale of rags. I *am* rags" (265). With this identification, Dickens narrates a subject immersed in the processing flow, and acted upon by machines of a hyperbolized high-technological order. He has already wondered how "white, pure, spick and span new paper" can come from "such bales of dusty rags, native and foreign, of every colour and of every kind, as now environ us, shutting out the summer air ... that virgin paper, to be written on and printed on, proceeds?" (264-5). As part of the resource flow entering the processing apparatus of this paper mill energized by steam, Dickens begins to experience the homogenization that produces a medial substance. The store of rags, a mingled unsanitary "grave of dress" combines the clothing of many classes and nations, such that all difference is collapsed in a kind of molinologic fantasy of the Universal middle class (264). In the next rooms were some three-score women at little tables, each with an awful scythe-shaped knife standing erect upon it, and looking like the veritable tooth of time. I am distributed among these

women, and worried into smaller shreds—torn cross-wise at the knives. Already I begin to lose something of my grosser nature. The room is filled with my finest *dust*, and, as gratings of me drop from the knives, they fall through the perforated surface of the tables into receptacles beneath. When I am small enough, I am bundled up, carried away in baskets, and stowed in immense bins, until they want me in the Boiling-Room. (265; my emphasis)

As the process continues, the subject becomes "greatly purified" through the addition of fresh water (which was often a determinant of viable paper-mill-sites [MacGee 9]): "I am a dense, tight mass, cut out into pieces like so much clay ... and gradually becoming quite ethereal" (265). Now he is "subjected to the action of large rollers filled with transverse knives ... which favour me with no fewer than two million cuts per minute." Drained and bleached, he goes into stone chambers to mingle with impressive sounding chemicals.

According to Katherine Waters, Dickens' journal *Household Words*, whose title could be translated as *Oikologoi*, often "worked to restore awareness of the processes involved in the mass-production of goods" from "raw materials" (84). As editor and contributor, Dickens favoured, among other, biographies of raw materials and articles describing processes of manufacture. The fact that more than twenty factory-tourist articles were published in the magazine between 1851 and 1855 shows a particular interest in production processes (Waters 86). In *Victorian Technology*, Herbert Sussman remarks on the fascination with the "resource" transformation in the form of Victorian techno-tourism. As he explains, "visitors delighted in learning how things were made by seeing the process by which machinery converted raw materials into finished goods"; this surely speaks to the context of Dickens' piece and the audience he hoped to please (65). To please, and not to offend: his writing in "A Paper-Mill" seems to have gone through the same kind of purifying transformation carried out on the paper itself. That he is "pleased to see the Mill in such beautiful order, and the workpeople so thriving"

seems a less credible assessment in light of the phrase "my good friend the owner" (268). Such keen interest in processing, however, is apt to the theme of this essay. Dickens plays a key role in establishing what amounts to a descriptive genre that takes its motive force from the mill-site and its transformations.<sup>17</sup>

Shunting along the process, Dickens energizes his prose with the use of parataxis, eliding conjunctions to speed the paper to completion, and his "metempsychosis ends with the manufacture" (267). Meanwhile in the paper-mill, the rag-subject flows onto a "sheet of wire gauze, in my *gruel* form," gradually becoming more like paper, "gradually assuming consistency," and he (it) describes himself moving through a landscape of vague machines and then "rolling over and under a planetary system of heated cylinders" (266). The "gruel form" of paper is what the author of "A Mill on the Darent" calls "the *half-stuff*" (252). *Web*, as I have already noted, is another term for paper-in-process: this later text is more technically specific than Dickens' piece, and follows four main steps in the transubstantiation of rags: *pulp*—half-stuff—web—paper. The whole description is meant to produce wonder in the reader at the mechanical precision of papermaking, the speed and accuracy of which are "almost magical" (253). This mill does not transform rags, but rather "esparto grass" from "the Mediterranean coast of Spain" (252). When we read about the inputs of science and magic to the production of "the smooth, white, firm article of commerce ... prior to its despatch into the world in the shape

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<sup>&</sup>lt;sup>17</sup> In Michael Pollan's *The Omnivore's Dilemma* (the title of which evokes the problem of what kind of relationship to establish between systems—in this case, of how to make food and what to eat) seems an effort to reinvigorate some of the generic fascination of *Household Words*. Its arguments borrow much from the basic principles of ecological economics, and its anatomy of the U.S. food chain cannot help but visit a few mill-sites. Mills are often described as "dominating" or centring a landscape: "a network of unpaved roads that loop around vast waste lagoons on the way to the feedyard's thunderously beating heart and dominating landmark: a rhythmically chugging feed mill ... like an industrial cathedral in the midst of a teeming metropolis of *meat*"; this mill is "converting America's river of corn into cattle feed" (66). Of course, "it is only *natural* that I start my tour at the feed mill, the feedlot's thundering hub, where three meals a day for thirty-seven thousand animals are designed and mixed by computer" (73; my emphasis). As is almost ubiquitously the case in descriptions of the mill-site, *dust* is the ever present mingling of broken down materials translated in the texts as part of an "ambient culture" to borrow a phrase of Elaine Freedgood (11). Pollan figures this twenty-first-century mill as a sizable digestive system. He describes its conversions and additions in great detail, always following tropes of flow, mixture, and transformation. One Iowa "corn river ... diverges into many branching tributaries ... from which companies like General *Mills*, McDonald's, and Coca-Cola assemble our processed foods" (86; my emphasis).

of writing or printing paper," it is important to remember that we are reading about high technology and Victorian media technology. From the esparto grass "resource" to the reflexive note that "it may be interesting to readers to know that the whole of the paper used in the production of this journal comes from the manufactory of which we are trying to give a description," the author traces the arc of the process through the mill to the medium itself (253). Whereas now we might watch a documentary on paper-making, for the Victorians print would have been the only medium transmitting the motion of processes by which materials enter the economy. Writing paper becomes a recursive arc, bending back on itself to examine the formation of the medium in its conversion from "natural resource" through different medial substances.

Melville's paper-mill, like Dickens's, also processes rags. Thus he wonders, connecting the two halves of this diptych at the level of resource input as well as output (the prodigious consumption of paper for legal discourse) whether "among these heaps of rags there might be some old shirts, gathered from the Paradise of Bachelors" (676). In this mill, culture becomes a resource for production, as female mill-hands tear clothing to shreds on phallic knives, and the "air swam with fine, poisonous particles" (676). As Gary MacGee notes, "the first [stages involve] the preparation of the raw material into a form (called *stuff*) suitable for transformation into paper" (MacGee 32; my emphasis). Mill processes involve reducing "raw" materials (a qualification that suggests they are incomplete) into a homogenous substance. A young man named Cupid guides Melville's narrator through the mill, acting (like the son of Venus) as a mediator—in this case between writing and processing—and as Virgilian tour guide through the Mill/Tartarus. His commentary on the flow of pulp highlights certain opalescent moments of

form in the flow that passes through the "great machine," with the effect that the persistence of morphology seems an inevitable product of any attempt to write matter-without-form: 18

Here first comes the *pulp* now ... There; see how it has become just a little less pulpy now. One step more, and it grows still more to some slight consistence. Still another cylinder, and it is so knitted—though as yet a mere dragon-fly wing—that it forms an airbridge here, like a suspended cob*web* ... and doubling out of sight there for a minute among all those mixed cylinders you indistinctly see, it reappears here, looking now at last a little less like pulp and more like paper. (676-7; my emphasis)

And later, in a proto-Marxian gesture that includes the "form" of exploited labour in the flow of commodity production, the narrator "seemed to see, glued to the pallid incipience of the pulp, the yet more pallid faces of all the pallid girls I had eyed that heavy day" (678). <sup>19</sup> Indulging further in a seeming compulsion to find meaning in pulp, he asks Cupid how long it takes for the flow to pass through the machine, and they find out by marking a slip of paper with Cupid's name and adding it to the pulp. They watch as this sign, reminiscent of Dickens' subject, passes through "inscrutable groups" of cylinders "like a freckle on a quivering sheet" and emerges at the end "unfolded" (as if it has been explicated), with the writing half faded, "moist and warm" (677). Both milled subject and milled sign point to the mixture of human and nonhuman at the hybrid mill-site.

Melville's (typically obsessive) need to find signifying detail, in this case even in the homogenized ("milled") processing flow, can be compared to Eliot's construction of Maggie's experience inside the mill: in both cases the subject confronted with the spectacle of

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<sup>&</sup>lt;sup>18</sup> In all three of the paper-mill-texts, the great machine is probably a variation on the Fourdrinier paper-machine, invented in Paris in 1799 by Nicholas Louis Robert and introduced to Britain by the Fourdrinier brothers in 1804, a device that eventually dominated the industry, "was able, in one continuous process, to transform pulp into finished paper," and "exerted a significant influence over the structure and character of papermaking in Britain" (MacGee 8). <sup>19</sup> This scene corresponds to one in a contemporary U.S. text, Rebecca Harding Davis' *Life in the Iron Mills* (1861), where a worker moulds "hideous, fantastic enough, but sometimes strangely beautiful" figures from "*korl*," a waste substance from iron ore and a word that does not appear in the *OED* (48). One of these figures is a woman suffering under the poverty created by the class structure of the industrial regime under which she labours.

transformation therein finds narrative contours in the flow itself. But they are also affected by the experience, and like Maggie dusted with meal, carry its influence beyond the mill-site. Given the novel's title and its "strange houses" that are cross-sections of different positions in an economic system, *The Mill*—like Dickens' and Melville's texts—allows us to follow through radically different settings, where we see materials in various stages of transformation. The cobweb of half-stuff and the spiderwebs in Dorlcote Mill point to the medial space of the mill as one that is inhabited, a domestic economy in itself with relations within and beyond the processing site. Like Dickens' winking claim that there must be "books in the brooks" that feed the Kentish paper-mill (264), given the uses of its final product as discursive medium, these medial forms, signs, and narratives point again to the possibility of a *transcursive* element at the mill-site, a kind of writing-across that follows the process flow from "resource" to economic circulation. All of these processing fictions work to understand the strange and mixed ontologies of medial substances, and to find a rhetorical "nidus" in the mill-site's transformations.

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"It's this steam, you see, that has made the difference," self-satisfied uncle Deane tells Tom in *The Mill*: "it drives on every wheel double pace, and the wheel of fortune along with 'em" (396). Eliot's narrator always gives us ironic distance from this character, with his confident embrace of industrial progress and capitalist exchange, but stripped of its optimism, his point doubles as an argument for the mill's wide influence on the novel's form and content. Eliot's great skill distributes its pulse throughout the novel's figurative structure, revealing in form the importance of processing power to the routing and control of social interaction and to the engagement of systems familiar and strange. Drawing on the figurative use of "mill" to indicate a homogenizing or laborious "formative or conditioning process [or] environment," (*OED*) she describes Tom's education going on "with mill-like monotony, his mind continuing to move with a slow, half-stifled pulse in a medium of uninteresting or unintelligible ideas" (186). But this education in

Latin and Geometry is of little use when he wants to get a "situation" similar to that of his uncle Deane, in a growing shipping and milling firm. It is not so easy, says the latter, and success "depends on what sort of material you are, to begin with, and whether you've been put into the right mill" (230). Though Tom eventually does get a job, he is discouraged by the fact that there seemed "so little tendency towards a conclusion in the quiet monotonous procedure of these sleek, prosperous men of business ... it would seem a very dull, prosy work, he thought, writing there for ever to the loud ticking of a time-piece" (227). Each of these quotations attach processing to Tom's engagement with the strange realities of his education and foray into business, the two activities that take him away from the familiarity of the "old" mill-site. They point to the series of mediations that link systems together; but they also figure the transcursive supplements to what is processed, and to the transformation of writing that takes account of material flows under the guidance of standard time. Tom becomes a milled subject, who must be transformed from his "raw" state in order to find the economic "nidus" that would allow him to accumulate enough capital to regain control of Dorlcote Mill. The result of such processing is the smoother integration of economy and ecology and the proliferation of hybrids. New power technologies have augmented processing, since the routing and control of longer networks requires the augmentation of writing technologies carefully engrained in the functionaries of this "inhuman adventure."

# Chapter Three: Ana Historic at the Hastings Mill Site: City "Vancouver's" Victorian Processing

Despite the fact that Melville has bridged the Atlantic for us, straddling the ocean from London to "New England," the transition to "British Columbia," and the colonial timber colony that became the city of Vancouver, may seem abrupt. It is helpful, however, to change sites in order to see how well molinology travels as a theoretical model, and whether any common features of the mill-site emerge from analysis of a different set of texts. Moving from the setting of *The Mill* on the Floss to a very different "resource environment," the mill-site is reconfigured according to a another mode of processing. This means that the kinds of hybrids created, and the possibilities of textual analysis, will be influenced by this other ecology. Nevertheless, my two texts have important affiliations: both *The Mill* and *Ana Historic* (1988) are for the most part texts oriented around one mill—though in both cases, the relationship of these mills to other mills, literal and figurative, becomes important as well. I have already noted the importance of nostalgia to the topos of the mill-site, and the medieval traces often present in so-called modern mill-texts. In The Mill, moreover, mills sometimes function as narrative points of origin by "making" characters (Mr. Deane, Mr. Tulliver, Stephen Guest). For Ana Historic, a novel (and collage of historical texts) much concerned with problems of writing and editing history, this matter of the mill as origin is crucial. In fact, this is such a common urban origin story in the Northwest, which has many "milltowns," that this story deserves closer attention. Like Eliot's novel, too, Ana Historic is an historical novel, though one that imagines a more distant past (circa 1873) and a past within the scope of the narrator's own lifetime (circa 1951). What complicates this matter of origins, *inter alia*, is the problem of what came before. This is especially clear in the origin story of a city like Vancouver, often represented as carved from a pure wilderness by the sheer gigantomachy of Men and Trees. But this narrative of colonial origins misses the already historical and already social systems engaged at the site. This chapter, then, takes up Marlatt's

concern with the relationship between fiction, place, and archive in the historical interpretation of Hastings Mill.

Section One describes the Hastings mill-site and the difficulties of "finding" it—for it is the disappearing origin of the city of Vancouver. I rely on published historiographies, some of which are cited by Marlatt in Ana Historic, and other texts that I have found in my own archival research, tracing, as it were, Marlatt's path in fragmenting the narrative cohesion of the city's early history. Section Two focuses on the significance of the setting in Marlatt. In both sections my guiding concepts are *territory*, *biopower*, and *transcursivity*. The ecologies and economies existing at the site are reterritorialized by the mill, which overcodes existing systems, establishing modes of biopower that sustain the mill's productivity and allow the city to grow around it. $^{20}$  For Bruce Braun, writing about the resource politics of the Northwest in *The* Intemperate Rainforest, "the concept of social nature is ... germane to earlier moments in the region's history, even *prior* to the extension of European power and market relations, when these forests were not primeval, but only governed by, and an effect of, a different configuration of cultural, political, and ecological relations" (11). I share Braun's desire to rethink the region's history in this way, and suggest that analysis of the mill-site can aid in the description of "Vancouver's" origin as a *concentration* of these relations at the locus of processing. Through these analyses, I hope to show the relevance processing technology has to the concept of a social nature and an historical ecology. Ecological history, in turn, must influence the process by which we historicize literary texts.

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<sup>&</sup>lt;sup>20</sup> "Territory" and "overcoding," like "transcurivity," are concepts I borrow the work of Gilles Deleuze and Felix Guattari. "Reterritorialization" and "deterritorialization" are used variously by these authors. The two always have a reciprocal function. Stratification would constitute a reterritorialization of existing flows. Capital can be deterritorialized from a productive site, achieving a mobile "line of flight." The establishment of a state de- and reterritorializes a given geography with new boundaries and economic conduits. I think of the reduction of plant biomass to fibre and then pulp, and its reconstitution as paper through a mill process, to be another example of de- and reterritorialization. "Overcoding" pertains to "phenomena of centring, unification, totalization, integration, hierarchization, and finalization" (*A Thousand Plateaus* 41).

### **Hastings Mill**

Bruce MacDonald's book Visual Vancouver (1992) represents the city's history through a series of maps with accompanying commentary. In maps predating 1850, before there were any European settlements on the Inlet that George Vancouver named Burrard Inlet in 1792, we see the green surface of the land and blue water with the names and locations of Squamish and Musqueam townsites and significant places. Text and drawings show the distribution of common plants and animals, and point to their economic relation to the human population. After this, each page corresponds to a new decade, and in the years between 1865 and the 1990s, names. property and zoning lines, infrastructure, and other modifications overlay the original map in the manner of a palimpsest. We see a relatively amorphous surface divided into abrupt territories. and webbed with roads and railways. The Hastings mill appears in 1865, persists for over sixty years, and then disappears into the Port of Vancouver. In the city's archive, there is a brief anonymous typewritten document with some handwritten edits, labelled "A Short History of the Mill," but titled "The British Columbia Mills Timber & Trading Company." It describes the company's connections in "all quarters of the globe," and it goes on to say that "the old Hastings mill [was] built originally in 1865, at which time there was no thought of the City of Vancouver"; rebuilt after a fire "with more modern machinery," the mill processes cedar, hemlock, and fir into "all kinds of dressed lumber which has been beautifully [ready] dried and prepared ready to go into any Building" (1; deletions in text; my emphasis). This picture of the mill-site can be supplemented with a brief ecphrasis of a photo from the late 1860s in the Hastings mill store (now a "historic site" and museum), which also appears in MacDonald's book: a cluster of low wood buildings with shake roofs built partly on shore and partly on docks over the water; an "amphibious" mill with a thick rainforest background (16). But with the archival texts, as in Marlatt's novel, our understanding of the economic and ecologic activities of the mill-site itself remain, at best, a collection of fragments.

MacDonald also layers the geological history of the region, and thinking about this history helps to demonstrate the strangeness of the idea of a "site." Is a site a point on grid? A set of UTM coordinates? A placeholder beneath a structure seen as the focus of a representation, that only marks its location? A discursive "place"? A rhetorical topos? The idea of the site, it turns out, must be considered temporally as well as spatially. It emerges from the historical flux and is reabsorbed. The site of Vancouver was under a glacier almost a mile thick 15,000 years ago. Over the course of the next 4,000 years, the glacier melted, and the plate it suppressed below sea level rebounded. Trees grew, ecosystems became established, and people have been living "on" the site for at least 3,000 years, although we do not usually think of Vancouver as an ancient city. In 1865, the same year that the Hastings Mill was constructed. Matthew MacFie published Vancouver Island and British Columbia: Their History, Resources, and Prospects, a text that makes a classificatory overcoding of the entire region, with the purpose of describing its "resources" and encouraging immigration from other parts of the empire; on the inside cover, an engraving with the caption "River Operations on the North Pacific" shows a dam and channel routing water through power wheels. This text predicts the technological encoding of the region as a resource for consumption, especially as a store of timber for the farflung British Empire.

The Hastings mill-site has been dispersed and transformed. Given the local subject of this chapter, of course, I tried to see what was left of the mill-site if I could. But the Port of Vancouver is not open to the public. At the foot of Dunlevy Street, where the mill's office used to stand, I could only look up at the new windmill on Grouse Mountain and recognize our transitional moment in the history of power technology circa 2010. The Hastings mill-store, however, had sufficient sentimental value to certain citizens, when the mill was demolished, that it was propped up, placed on a barge, and moved to the foot of Alma street in 1929, where it sits as Vancouver's oldest building. When I brought Marlatt's text to that displaced site, the chair of the Native Daughters of B.C. Society, who runs the museum, had a negative response to its

formal experimentation, use of historical quotation, and depiction of queer desire. Because the "original" site is no more, it was necessary to learn what I could about it from the archive and from published histories. One text from the city archive requires special description. This is a collage of newspaper articles related to the Hastings mill-site that has no acknowledged author; the articles were clipped and then glued to sheets of paper, usually with a date stamped or overwritten by the same hand. In some cases, the date inscribed could not possibly be the date of the article, as when the "Hastings Mill-Site Will Be Improved" is dated 1939, ten years after the mill was demolished. The collage is of particular interest to me for its replication, in the archive, of the form of Marlatt's novel, and as a reminder of the editing work that assembles every historical narrative. Its palimpsest of dates and frames of reference (some articles refer to the existing mill as part of the city's economic life, others are historical accounts of the mill's construction that postdate its operation; one calls it the "old mill") reflect Marlatt's understanding of the complications of finding historical presence in writing.

Alan Morley's *Vancouver: From Milltown to Metropolis*, makes a straight(lined) historical narrative of the city's origin whose primary motive force is the magnificent Agency and Effort of "giants," "the pioneers of history, the men and women [but mostly men] who hear the relentless call of the strange, the violent, the new, the challenging lands" (20). His mythopoetic account of colonial appropriation and settlement is a familiar one, awed by the titanic struggle needed to carve a space for "culture" in the raw *terra nullius* of North American wilderness—locally, in can be connected with M. Allerdale Grainger's *Woodsmen of the West*. Accounts like Morley's of the first organizations of BC's colonial economy are in a sense conspicuous by their historical lateness: by 1865, when Stamp's mill (later Hastings Mill) was built on Burrard Inlet, so much of the earth had been mapped and claimed by colonial powers that the generic structure

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<sup>&</sup>lt;sup>21</sup> The "Native Daughters" society began as a group for white women born in British Columbia. It can thus be linked to Marlatt's enactment of the birth of the first "white birthing" in "Vancouver," and to her novel's broader concern with origins and with the relationship between place and identity (127).

of this kind of writing can be considered as having been already standardized. Four short paragraphs place the mill at "Vancouver's" narrative origin (the site did not yet have that name):

Stamp's Mill, better know to Vancouver as Hastings Mill, made its first cut June 18, 1867.

This was the beginning of the history of Vancouver proper—the city that arose from Gastown, the settlement that grew up around the mill.

For more than 60 years the mill, built and rebuilt, operated profitably in the heart of the city; its waste burner was a time-hallowed navigation beacon for the harbour.

"By day and by night, the roar of the mill was the pulse of Gastown," truthfully said its first historian, Darrell Gomery. (32)

Morley's description twice positions the Hastings mill at the "heart" of the settlement/city, so that we imagine it centring the economic networks of that place. This need to gather historical trajectories into a cohesive representation, which I consider a genre of writing about colonial origins, can be seen most clearly in a painting included in Morley's book (67). Entitled "The Builders"—Founding Fathers of Vancouver, the painting shows just under thirty men in late Victorian business attire, gathered around a table and facing the viewer, standing or seated in a wooden room. It was commissioned by the city's "first" archivist and a director of the Canadian Pacific Railroad, J.S. Matthews (whose face still greets us from many surfaces of the city archive), and painted as a composite from separate "pictures" of the men he thought deserving (67). The blending of these different images into one representation is a strong allegory of historical overcoding: the retrospective activity of constructing "Vancouver's" origins, as well as the eco-historical work of the mill that brings disparate systems under the influence of a longer network. Even the single name "Vancouver," applied to the growing settlement after a catastrophic fire in 1886, has the effect of making unified and purposive the region's earlier and "unincorporated" histories.

"Built and rebuilt" as Morley writes, the Hastings mill-site was first called Stamp's mill and renamed when sold in 1869 to Dickson, DeWolf, and Co. of San Francisco. The construction and operation of the mill, and the communities that grew around it, are generally located as the beginning of "Vancouver." By the time Stamp built the mill in 1865, of course, the region was already settled and populated by Europeans, particularly at the established fort and trading towns of Victoria and New Westminster (Queensborough). Interlocking with these settlements from their beginning were Salishan communities that traded with European colonists and laboured for/with them. From around 1800 on, smallpox epidemics, violence, and the "extinguishment" of land use privileges killed thousands of Aboriginal people from different communities all over the province (MacDonald 12). It is sorely incorrect to speak of the arrival of culture or economy to "Brtitish Columbia" conceived as natural or pristine. By the time mills were constructed on Burrard Inlet, the area had seen millennia of economic history.<sup>22</sup>

Before the Hastings Mill, however, there was in 1863 another sawmill constructed on north shore of the inlet. This was called Pioneer Mills, and it quickly went bankrupt, at which point it was purchased by the U.S. citizen John Sewell Moody. Moody's mill was powered by water, Stamp's by steam (Pethick 51). With regard to the processing capacity of Moody's first mill, Derek Pethick ascribes historical causality based on their topographic position. He notes that Moody "had erected a mill in New Westminster in 1862, but the location was chosen poorly, and the venture soon foundered" (59). Pioneer Mills went bankrupt in 1863, and Moody bought it at auction in 1864. Without giving any reason for the bankruptcy, Pethick claims that Moody "made some improvements to the machinery" and had it operating successfully in 1865 (59).

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<sup>&</sup>lt;sup>22</sup> Here I should note that the Salishan histories of the site of Vancouver contribute only a small amount to this project, though I have the intention of writing in such a way that the addition of industrial processing to the region never looks like a machine inserted into a primeval or prehistoric garden. A longer study would seek to look for accounts of the Hastings Mill from Aboriginal people who were involved with it or knew people who were. I am also wary, however, of working with anthropological categories and texts, partly from lack of qualification, and partly from scepticism with regard to their critical methods and ethic of research. See Salish scholar Peter Cole's theoretically fluent rejection of conventional anthropology in *Coyote and Raven Go Canoeing*.

Pethick's claims reflect the delicate relations necessary for a mill to run successfully, and continue the theme of topographic specificity which, as I have argued, makes it easier to think of the mill-site as a nature-culture hybrid. The "regression of sites" that accompanies the experience of reading the Hastings Mill as a point of origin, and discovering neighbouring mills that displace the sense of a singular origin for the region's new economic order, can also be seen in Melville's *Tartarus*. In this case, the paper-mill has an "old sawmill" as its neighbour, defunct in a deforested landscape, and this "wooden ruin" has "not only much of the aspect of one of rough quarried stone, but also a sort of Feudal, Rhineland and Thurmberg look" (673). Becoming integrated with the geological history of the site, this mill corresponds to Eliot's description in *The Mill* of ruined castles on the Rhine, which "have crumbled and mellowed into such harmony with the green and rocky steeps, that they seem to have a natural fitness" (271). Both of these scenes create a sense of nostalgia for vanished histories whose traces seem to have sunk back into "nature." The site remains legible in the landscape, though its meaning will always be produced in relation the discursive networks that act as its "environment."

In same year—1865—Edward Stamp began to survey the south shore of the inlet for a mill-site of "his own." To be specific, he hired a surveyor to mark out a construction site near the place now called "Lumberman's Arch" in Stanley Park. At the time this was also a Salish townsite. As Bruce MacDonald notes, it is difficult to determine whether the inhabitants spoke Squamish or Halkomelem languages—whether they were Squamish or Musqueam, "because some sites were in transition, the 2 groups intermarried, and oral records vary" (11). Regardless, several texts record that the site first chosen by Stamp overlapped with a town transcribed as "Whoi-Whoi" or "KhwayKhway." An article marked May 1, 1943, in the collage from the city archive, quotes a letter of June 3, 1865 from the surveyor to the colonial Secretary. The surveyor writes that

I proceeded to Burrard Inlet, arriving there at 3 p.m., and marked out Captain Stamp's mill site the same evening.

On referring to the sketch appended it will be seen that the northwest corner occurs in the centre of an Indian Village ... to clear which would only give the sawmill about 90 acres. By the appearance of the soil and debris, this camping ground is one of the oldest on the Inlet. The Indians appeared very distrustful of my purpose and suspicious of my encroachment on their premises. ("Collage")<sup>23</sup>

Surveyor Launders' letter registers a representational overcoding (the sketch) of the territory in question, and also marks a crucial break in the existing ecologies/economies. The cornerpost in the middle of the "village" or "camping ground" that Launders leaves behind marks the geographical inscription of a colonial order of power and knowledge. Describing the first delineation of the site in this way, I think it is crucial to remember that survey and construction did not place the mill in a "wilderness," in "nature," or in any kind of asocial *terra nullius*. To the contrary, it meant reconfiguring many of the region's ecologic and economic systems around the mill-site: increasingly the region's multiple inter and intraspecific relations would be drawn into its territory either directly, as resources or labour, or as it were from a distance, under the influence of deforestation, economic growth, and the rapidly increasing non-indigenous population.<sup>24</sup>

An early exchange of letters between Edward Stamp and the colonial government further attest to variable historical intensities of different ecologic sites, and provide further evidence for the topographic specificity required of a mill-site, even one powered by steam. The letters also

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<sup>&</sup>lt;sup>23</sup> The original letter can be found in the Hastings Mill fond in the University of British Columbia's special collections.

<sup>&</sup>lt;sup>24</sup> In *Making Vancouver: Class, Status, and Social Boundaries 1863-1913*, Robert MacDonald notes the overlap of Squamish and Musqueam "territories" around the Inlet. I quote his claim, conjoined with a citation from Cole Harris, that "in coming to Burrard Inlet the Squamish were not so much entering the territory of another people, the Musqueam, as 'moving within *webs* of social and economic relations that connected different individuals and people to each other and to each other's places" (5; my emphasis). I include this statement for its use of "web," of course, and also to cite a characterization of "Vancouver's" prexisting economic/ecologic systems. The moment of survey signals the disruption and realignment of these systems.

constitute some of the first discursive activity in this place, its early and foreboding interaction with Victorian media technology. As such, the letters are evidence of something vital—namely the addition of a new discursive system to the territories already sustaining life a this site. It is a powerful system, and its power in this case comes from Edward Stamp's private capital, from his ability to mobilize colonial institutions with the jurisdiction to sell land claimed by the British Empire, and to protect his property rights with military force. Stamp also has access to literacy and technological knowledge, or at least the ability to pay for it. In other words, this so-called "giant" of the Inlet's early processing history is indeed a kind of Leviathan by virtue of prosthetic receptors that allow him to couple with the necessary economic channels—in ways that, we remember, Miller Tulliver and his son could not until Bob Jakin facilitated a connection to the export of machine-made textiles. Stamp was also well connected in Victoria. There is a letter in the Hastings Mill Fond at the University of British Columbia addressed to the colonial secretary at New Westminster:

I beg to remind you that when his Excellency Governor Seymour was at Victoria I then pointed out to you on a tracing from the official map of Burrard Inlet the exact spot marked on the tracing where I wished to place the Saw Mill and to purchase one hundred acres of land adjoining it; and at the same time stated that this was the only place I had found suitable to build a sawmill. ("Letter to the Colonial Secretary")

Stamp's reference to Victoria implies a social meeting and shows his inside access to the colonial administration responsible for doling out land. The tone he takes in this letter and others amounts to a literary technology of power, a classed control over language that smoothes the transmission of power. The sense that all of the practices referred to by Stamp are occurring here for the first time makes it easier to see the results of this "originary" intervention in existing systems, as he begins to reconfigure their territories by "rewriting" the ecological/economic history of the site. Through the connection of discursive technologies of power, the mill-site, and

its "resource environment," he must intervene effectively if he is to establish a mill that can actually add to his capital. It is not simply a matter of arriving and cutting down trees, for the web of the mill has a much wider reach than that of the solitary handlogger or settler. Stamp accesses the *official map* and reproduces portions of it by tracing on an overlay the territorial boundaries he wishes to establish. He creates a mobile representation by which he can communicate to the governor the *exact spot marked* thereon.

Finally, the site marked by surveyor Launders was not the "only" site suitable for a mill on the south shore of Burrard inlet at that stage of its economic history. In an episode that continues the theme of the mill-site's topographic specificity, and also the theme of the disappearing site and the "regression" of mills that troubles the search for economic origins, Stamp's first and incomplete mill failed because the currents off Stanley Park were too strong for ships to anchor there ("Collage"). Some accounts of the construction of Hastings Mill do not mention this episode at all. In 1867, Stamp's new mill (later Hastings Mill) at the site of the current dockyards, began processing cedar, fir, and hemlock trees after lying idle for some time in the absence of one key piece of machinery, which had been left out of a shipment from Scotland. With its systems fully articulated, it could now begin the realignment of territories that would allow the *nidus* necessary for the city to grow, laying down strata of concrete, transforming trees into buildings, and quickly becoming a dense Pacific metropolis.

#### Ana Historic

Man was born, suffered, and died; but the mill watched over him: this mill and others. The mill was a god to him, all-good, all-provident, all-powerful. It even provided for its own procreation: that mill which was composite of all mills; for its essence was hermaphroditic.

—Frederick Philip Grove, *The Master of the Mill* (328)

Ana Historic is narrated by Annie Richards, who is compiling an alternative history that is literally hidden beneath the documents she turns over as research assistant to her husband, a history professor whom she married as a student. The novel's action takes place in 1873 as Annie attempts to imagine the life of Mrs. Richards, a teacher at the Hastings Mill school whose historical existence consists of a few archival fragments from the 1870s; in the 1980s, Annie also recalls her childhood in 1950s Vancouver, Manina Jones places Marlatt's novel in an Anglo-Canadian tradition of "documentary collage," other examples of which are Michael Ondatjee's The Collected Works of Billy the Kid and, also set in Vancouver, Joy Kogawa's Obasan. Such works employ a "technique that self-consciously transcribes documents into the literary text, registering them as 'outside'"; they are taken from different genres, places, or historical periods, and thus "stage a kind of documentary dialogue" among collaged texts (14). Marlatt cites, for example, Vancouver historiographies (Alan Morley's From Milltown to Metropolis [1961], J.S. Matthews' Early Vancouver [1932]), logging narratives (M. Allendale Grainger's Woodsmen of the West [1910]), theoretical texts (Simone de Beauvoir's The Second Sex [1952]) and articles in local newspapers from the 1870s (The Moodyville Tickler, The Mainland Guardian). She also "quotes" from a fictional journal, attributed to Mrs. Richards. Ana Historic is thus of central interest, especially for the possibility it offers for an analysis of historical reading and writing. But I am most concerned with the novel's representation of the Hastings mill-site itself, narrated as a historical origin. Ana Historic has already received significant critical attention, especially

along the axes of identity politics and psychoanalysis. <sup>25</sup> I focus instead on its setting, offering an interpretation of the significance of locating the narrative collage where it is. Critics have missed the semantic traces of the site in the grain of the Marlatt's text. In a legitimate effort to interpret the novel in identitarian terms, they have put aside the fragmentary traffic of the setting, much of which remains unengaged by the close of the reading, lying about like the detritus of prop and set design at the end of a theatrical production. In reimagining Vancouver's origins, Marlatt conjures its geographic and discursive territories. These organize the limits of private/public, domestic/strange, and nature/culture separations, and more subtly delineated zones within these broad geographic identities; but they are also the textual and intertextual territories that structure historical presence. As we cross from one such territory to another in Marlatt's prose and in archival research, it becomes easier to see the contours of their connection to the transcursive processing organized by Hastings Mill.

"Not knowing there was *first* a mill" (27; my emphasis), Marlatt's narrator arrives in the city as a child. Marlatt then lists a diversifying accretion of buildings/institutions/businesses: bars, churches, hotels, sirens. The city grew rapidly, propelled by an intense drive to economic and technological growth and "progress." The novel, however, does not begin with the mill-site and Mrs. Richards; rather it starts in the 1980s with the narrator and *bricoleur* of historical texts, Annie Richards, awoken by her husband's snoring to a dream-memory overlay of her past in "cold-war Vancouver of the Fifties" (9). Awoken in the 1980s, Annie is greeted by ambient

<sup>&</sup>lt;sup>25</sup> For Jones, Marlatt collages historical discourses to open up a space neither ahistoric nor determined in its meaning by the structures of patriarchal history, thus "re-siting woman's place" and subverting the authority of objective history (160). Frank Davey, however, argues that in the attempt she actually replaces one monological authority with another through an impossibly utopian attempt to escape the symbolic order and access a primal unity of being; the attempt fails because the Law of the Father is ubiquitous, dependent on the acquisition of language rather than patriarchal power alone (203; 208). The form of *Ana Historic* certainly has a disruptive effect that it would lack, I suggest, by making the same arguments without juxtaposing historical texts. And while Davey leans heavily on a reading that lets the novel's conclusion encode its general message, he is right to say that Marlatt (often) writes a desocialized nature-before-culture that offers escape from a language "conditioned" by heteronormative power bound to economic structures. Heather Milne, in explicit objection to Davey, argues that Marlatt does successfully achieve historical polyvocality by writing a queer subject into the symbolic order, without slipping back into a "reductive search for origins" (1).

industrial sound, by the atmospheric environ vibrating with economic traffic: "a truck gearing down somewhere, the sound of a train, in some yard where men already up were working signals, levers, lamps, she turned the clock so she could see its blue digital light like some invented mineral glowing, radium 4:23" (9). The sounds are not localized, they come from "somewhere" and men work in "some yard," but this industrial-environmental ambience, residents will know, emerges from the Port of Vancouver with its constant lading/unlading of trains and ships. Like Morley's dual image of the originary mill-site—as roaring all-embracing pulse and locatable beacon—Marlatt's first description of the wider setting makes it permeate everything (domicile, bed, covers, consciousness, dream). The Port was gradually built over and around the Hastings mill-site after the latter was sold in 1925 and demolished in 1929. Thus at the outset of the novel the mill-site envelops and frames its setting. The sounds are not localized because they are so integrated with the familiar texture of the urban environment. Whereas *The Mill on the Floss* begins with its mill's historical presence in the memory of the narrator, Marlatt writes the sonic traces of the site of the "original" mill's erasure.

Annie's waking sense of environment is also important for the cross-section of technologies it emphasizes. "Truck" and "train" both indicate late twentieth-century heavy transport, hauling "resource" exports to the water or commodity imports inland. While this is surely not a steam-powered train, they also point to two historical strata of power technology, to machinic systems energized by oil or by steam/coal. The sequence "blue digital ... mineral glowing ... radium" moves from the economic helmsmanship of a bedside symbolic link to conventional time, to its molecular and elemental substrate (the geology of the symbols themselves). It is also a sign of post-atomic technology with its roots in the processing-transformation explosion of the Second World War. The "signals, levers, lamps" worked by men function in system control and regulation; they draw on the language of cybernetics, and develop the sense of a city that is now distant from the resources it consumes, operating instead as a node

for transport, exchange, and control. Here we can remember that J.S. Matthews, who established the city archive, was a director of the Canadian Pacific Railway company, whose territorial boundary, in 2010, blocked me from entering the "old" site of the mill. In the opening section of the novel that ends with an arrival at the mill-site in 1873—finally—there is a mini-catalogue of power technologies that position the narrative in a historical series of nature-culture transformations.

What is the significance of the organization of the different layers around the Hastings mill-site in *Ana Historic*? If, as critics of her work have claimed, the novel's primary topic is the elision of women's histories under a patriarchal monologue of history (again, the narrator hides her writing under her husband Richard's scholarly historical manuscript), and the relationships of mothers and daughters, Marlatt could have chosen a very different site for her anahistoric ellipses of narrative, citation, commentary. But setting must be considered of equal importance to the psychosocial and political contours of the novel; as I will continue to demonstrate in the remainder of this chapter, the point is true of this novel in particular, for it already stages in its form the paths I must follow as a critic if I am to trace the writing to the site, and learn something about both in the process.

The title of Marlatt's chapter, "Arrival at Hastings Mill," signals the beginning of her description of Victorian "Vancouver"—still called Gastown, Granville, and Hastings, a loose settlement strung along the shore and essentially serving the mill—and Victorian processing circa 1873. Mrs. Richards arrives as a schoolteacher and a widow; the archive furnishes very little information about her, however, and this absence serves Marlatt's imaginative purposes. These centre on the question of Richards' presence at the mill in the first place—why has an English widow, if she is a widow, moved to this distant milltown? Marlatt also seeks to construct Richards' experience (in part through quotation from a fictional journal) between her arrival and

the time of her marriage to Ben Springer, an accountant at Moodyville on the north shore.<sup>26</sup> The archive records her presence only as teacher and her marriage, always attached to a man's name. Annie, the novel's narrator, is married to a historian named Richard. Its is in the gaps of archival knowledge, and through critique of its editorial histories, that Annie/Marlatt works to write the absent history of women at the "origin" of Vancouver and in the other historical strata I have already mentioned. This matter of women's histories and the question of historical origins establishes one answer to the question about the role of the Hastings mill-site in the novel that I ask above.

In her desire to write through and around the narratives of official, documentary, or factual history, then, Annie continually encounters its spatial and textual territories. All of the novel's women are described as moving through spaces of different intensities, where they are interpellated into particular identities. The concept of territory is of signal importance to Ana Historic and to my attempt to read the Hastings mill-site through and around it. "Territory" and "trespass" show up frequently in the novel, as when Annie imagines Richard calling her text "unreadable" and an "undefined territory," or when she enters the library with her mother "as if trespassing" there (81; 16). Words are a "shifting territory, never one's own"; Annie lets herself out of the house at night because of her "desire for what lay out of bounds" (32; 77). The millsite is written at the interchange of "farflung reaches of the imperial mother, men exchanging goods, labelled the comforts of 'home,' for spars of wood, giant timbers struck from unknown territory, traffic (dealing) all this coming and going, this emptying and filling of ships' holds" (117). Significantly, Annie's "mind will no longer come to grips with lot numbers and survey maps, will no longer painstakingly piece together the picture [her husband] wants" (79). This preoccupation with territory and trespass can and has, by the critics I have already cited, been

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<sup>&</sup>lt;sup>26</sup> In a 2003 interview with Sue Kossew, published in *Canadian Literature*, Marlatt notes that Mrs. Richard's diary is "completely fictitious" (56).

read as tropes of discipline and repression over against transgression and subversion. This reading is available, but it fails to explain the relationship between place, archive, and history that emerges in Marlatt's writing. I suggest that writing and interpretation, the more attentive they are to a particular place (and Marlatt locates her novel very thoroughly), engage in a sort of "echolocation" of territories. These are the contours, the fault lines and property lines, paths and shorelines, that writing follows or crosses in its anatomy of setting. In any effort to represent a place, writing must encounter territorial inscriptions, and its method of reinscribing them is one of the most important ways in which setting emerges in text. Ana Historic doubles this effect, moreover, by the use of collage that emphasizes the contact boundaries of different texts, and through its involvement with the archival site itself—for the archive is the privileged territory that historical writing must negotiate. According to this argument, the Hastings mill-site thus offers an especially rich node for Marlatt's task. It stands at the beginning of the site's reterritorialization as a "modern" city (the break in the system); it articulates with global economies; it overcodes the region's existing names and relationships; and it has a strong presence in the city archive. With the mill, as I will argue below, a particularly Victorian system of biopower arrives and works to establish identifications of what is wild, what is cultured, and how gender must align around such distinctions to best achieve economic growth. The importance of the Hastings Mill as a location of biopower offers a second answer to the question I ask above.

Mrs. Richards arrives at the mill-site in 1873, when the mill is already operational and shipping lumber to distant ports (but especially to San Francisco, which city had a major role in the colonization of the Northwest).<sup>27</sup> Marlatt's depiction of this event has both an ambient/environmental and concrete/particular form. In a passage that echoes the narrator's

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<sup>&</sup>lt;sup>27</sup> San Francisco provided a market for timber from Hastings Mill, but investors from that city also sent capital north for the expansion of the Hastings Mill (Cox 135). Once Stamp got the mill going, his "overseas connections" helped him to find buyers in Java, New Zealand, Australia, Chile, China, Honolulu, and London (Cox 135).

description of the mill-site in *The Mill on the Floss* ("the delicate bright-green *powder* softening the outline of the great trunks and branches" [Eliot 8; my emphasis]) Marlatt describes "a subtle white sparkle, ethereal as powder ... the endless green of woods ... hill after hill" and mountains hanging "close but aloof" (15-16). But when Richards arrived "she walked into saw*dust*, a sprawling agglomeration of sheds alive with dogs, pigs, chickens" (20; my emphasis). Sawdust, of course, is another medial substance, and as I have noted it is mostly ubiquitous in literary representations of the mill-site. In Marlatt's novel the word is used frequently to announce Richards' movement across territories. The teacher likes to walk in the forest, in spite of warnings about the presence of bears; but when she returns home (her domestic space is connected to the mill, as is the school) she steps back onto "sawdust byways" (83). In another scene,

turning the corner, she could see the long low roof of the mill and the plume from its waste fire burning against blue mountains—curious how the mountains approached or receded depending on the air. Today they seemed far away, erased by everything shining in between. Even the piles of freshcut lumber seemed to invite her eye to run along their surface [with the *grain*]—it *was* a kind of stripping, the tree stripped down to its bare flesh. And everything thick, a kind of hair in the world, even the earth her boots sank into, *powder* earth composed of rootlets and fir mulch, a *fibrous* mass" (40; my emphasis). In this passage, the mill arranges the ambient setting as Richards arrives at the site. She is immersed in the medial substance which is the result of processing, and in move that recalls Melville's faces in the pulp and Eliot's domestic spiders, Marlatt makes Richards experience the milled trees in anthropomorphic terms. Her encounter returns form to the formless "resource." It is significant that Marlatt sinks this character—who she constructs as led by a desire for an

alternative to marriage and intrigued by a lesbian relationship with a local woman—into the very

"origin" of the city, with the mill in the process of reshaping the region's nature-culture

relationships. Becoming for a time a transcursive subject, she registers the categorical mixtures that found the more purified versions of Vancouver's Victorian histories.

By the time Annie's family arrives in the 1950s, too, the territories of nature and culture have realigned: they did not know it, but they "saw only second growth, the mountain logged off to feed Moody's mill, or Stamp's ... they were jealous of their territory, those lumber-barons"; what seems a thick and undisturbed forest obscures "trails long overgrown" (21). Even these ecologies so remote from "civilization" (in the 1950s Annie's mother often notes Vancouver's provincial lack of culture) are already marked by historical activity. Like Maggie Tulliver's refuge at the Red Deeps, this nature is never discovered as original, for its ecologies are already historical. In another passage, Marlatt distinguishes a "medial ecology" not unlike the garden at the Pullet house. In a word still active in Canadian English, the territory where the "trees were cleared" between the settlement and the forest is called the "bush," and this word shows up in the middle of a paragraph that firsts describes the forest, and then a group of women having tea. with "bush" in the middle of the block of text (118-119). This passage leads into an exphrasis of a photograph "dated 1890" of the Alexander house, shot from "outside the picket fence" (120) The caption tells us that R.H. Alexander later became a mill manager. But Marlatt found that this was the place where the first "white" child was born to Jeannie Alexander on Burrard Inlet, and she changes the caption as follows: "Site of the first white birthing at Kum-Kum-lee,' the point having no English geographic name, no transplant label, before Hastings Sawmill" (127). This sequence of the novel raises complex concerns about the historical record of nature, culture, and reproduction at the mill-site. It returns us to a concern about origins, and in associating mill management with sexual reproduction and the simultaneous erasure of the historical presence of women's bodies, the photograph leads me to close this chapter with an analysis of biopolitical economy at the Hastings Mill.

In his introduction to *The History of Sexuality* Michel Foucualt writes that biopower "centred on the body as a machine: its disciplining, the optimization of its capabilities, the extortion of its forces, the parallel increase of its usefulness and its docility, its integration into systems of efficient and economic controls" (139). And in *Making Vancouver*, Robert MacDonald describes industrial paternalism as a "method of organizing society into an organic whole by linking the social mass to their superiors, usually through face-to-face relations in intensely localized and isolated places" (26). The early mill managers sought to "direct the moral and social behaviour of Burrard Inlet residents" through organizational, legal, and recreational initiatives (26). Significantly, the president and secretary of the Hastings Literary Institute in 1882-3 were the manager and a clerk of Hastings Mill. These coordinators of the regional *nomos* also established the first public schools in Moodyville and Granville. Thus when Marlatt describes Captain Raymur as the "authoritative head of this small world, aloof, absorbed in the operations of the mill," and notes that "he is merely the figure on whose authority livelihoods depend, including hers," she gives us access to the system of biopower that developed around the processing activities of the mill-site (83). Given Mrs. Richards' professional status, she is an agent of this system. But she is also made out to be a victim of it, constrained by Victorian codes of femininity and restricted by proprieties that would circumscribe her local territory and limit her mobility.

Biopower invests the human population and directs its relationship with technology. But the knowledge and power coordinated by processing activities, as I suggested in Chapter One, can also determine the relationship of economic to ecologic systems, or in more ideologically weighted terms, of culture to nature. An extreme version of the nature|culture|power assemblage I am describing shows up in caricature in one of Marlatt's newspaper citations: "FALSEHOOD OF THE HOUR: 'That Joe Gibson regulates the sun by the mill clock. That all three work together in perfect harmony ..." (114). This imagined chronocracy, conducted through the mill,

nevertheless has merit as an astute representation of the mill's capacity to reterritorialize diverse bodies from its privileged site. It also looks back to the transcursive inscriptions of Eliot's "sleek and prosperous men of business" writing "to the loud ticking of a time piece" as they register the resource flows transformed at the mill-sites of St. Oggs (227).

In Ana Historic, the central and coordinating mill stands out in several descriptions of Mrs. Richards' experience at the site. She is solitary and meditative, alienated from the community, according to Marlatt's interpretation, until she marries Ben Springer. She remains distant from punctuating events that Marlatt lists ad hoc "the establishment of law and order, of a post office, of a school, the celebration of the first Dominion Day" (55). Robert MacDonald picks up Mrs. Richards' story after her marriage, thus making no comment on the period of greatest interest to Marlatt. He claims that she imported "social rituals such as tennis parties, teas, and 'at homes' that aimed to enhance cohesion and identity" among Moodyville's limited society of "respectable" families (23). This is just the kind of cursory interpretation of this woman's life in "Vancouver" that Marlatt targets for critique. Indeed, much of her narrative of Richards' life seeks to imagine what came between her marriages, to recuperate something of the teacher's experience outside the historiographic closure of that experience: "the sweep of that part of her life summed up: she buys a piano and afterwards marries Ben Springer, as if they were cause and effect, these acts. history is the historic voice (voice-over), elegaic, epithetic" (48). In the novel this often means following her across boundaries, into "bears' territory ... or cedars," where "without clearly defined territory," Marlatt has her writing "as if the words might make a place she could re-enter" (32; 40). Structured by movements to and from the millsite, where she lives and teaches, these passages also set in motion the relationship between writing and territory in its effort to form an alternative to the mill's biopower. Between marriages, then, Mrs. Richards mimics the work done by the novel itself: she hopes to break the overcoding coordination of the mill responsible for her livelihood by writing her way into a

different territory; in a sense, this is the obverse of Stamp's (writing technological) intervention in the region's economies/ecologies that I described above. It is through this sensitivity to different intensities of setting, then, that Marlatt articulates queer desire at the "origin" of Vancouver and in its latter-day stratum, where Annie seeks to escape her own participation in the patriarchal overcoding of that origin. Seeking to reterritorialize textual history through formal experimentation, Marlatt makes a place for lesbian desire in the dialectics of colonial processing biopower, with its focus on encounters of men, trees, and technology. It is in this relationship of writing to territory that we can see the importance of the mill to Marlatt's critique of "origins" and the disciplinary regime her narrator looks to rewrite. Reading this queering of the city's origins, however, it should be noted that Marlatt also makes her male characters, for the most part, little more than puppets of the economic order. It is also unclear why she makes no suggestion of queer *male* desire in a place with such a high ratio of men to women (not that the ratio is a necessary condition).

As I have mentioned, Mrs. Richards writes from the hybrid mill-site, registering as she does the affective traces of the mill's fragmentary traffic as it reterritorializes the region as resource reserve, and people and animals, into its biopolitical form of life, and deterritorializes capital through processing and exchange. The Hastings mill-site brings together domestic, industrial, and institutional structures at one location, so that writing this site results in a certain blurring and overlap of their functions. In Chapters One and Two, I have used the word "transcursivity" to indicate the processing of language across the mill-site. This concept has particular significance in the context of a milltown, where an assortment of discursive activities and media technologies are gathered at the mill-site itself. The plaque on the Hastings mill-store, at its new location, announces that the store also "served as the post office" for this colonial settlement. Logger Jonathan Miller, whose son troubles Mrs. Richards schoolroom in Ana Historic, "became Vancouver's first postmaster" ("Collage"). Marlatt frequently cites

contemporary newspapers whose "gossip column" discursive production constitutes a *rumour mill* focused around the activities of the mill and its conjoining of processing and domestic economies, and "resource" ecologies (Kossew 55).

Annie sits at a table with Richard's maps, survey reports, and manuscripts overcoding the handwritten documents she conceals beneath; geometric lines and schematic tracings territorialize, if we imagine the whole pile of paper as a palimpsest, the cursive flow of her writing. Meanwhile "the sound of Mickey's radio in his room, Richard's typewriter busy upstairs were comforts of some kind, ongoing"; these two media technologies, operating at a monotonous pace, embody the technological processing of language. The typewriter in particular (one referent of "mill," as I noted above) leads back to the mill-site as it overcodes Vancouver's history and literally writes-over Annie, upstairs. Its monotonous pace and sound invoke those poetics of the mill that I discussed in Chapter Two, and in the 1980s it replaces the sound of the Hastings Mill's operation that forms the ambient environment of Mrs. Richard's writing in 1873. All of these examples point to the transcursive properties of the processing site in different ways. The Hastings mill-site transforms trees into lumber and capital, but it also serves as a communication relay point and functions through symbolic additions of knowledge-power to the processing flow itself, for in Marlatt's descriptions of the site, and in its archival traces, writing is never distant from the mill's activities. This fact points to the transcursive function of writing in the milling that contributes to producing the relationship of economy to ecology.

Another technology, now a mineralizing machine-at-rest in the Hastings mill store museum, returns us to Annie's childhood in 1951, where she imagines her father Harald "intent in lit rooms of the Marine Building, totting up logging accounts, conferring with the other men" (64). I am referring to a "comptometer" from the coastally (in)famous MacMillan-Bloedel corporation that, according to its label, was used until 1966 to "calculate board feet of lumber." This progeny of Babbage's Analytic Engine now stored at the relocated mill-site was itself a

processor in the increasingly long and complex technological networks associated with the coastal logging economy. Like Harald, it processed the magnitude of the medial flow into a symbolic register. Annie's reference to her father contributes to the sense that the "resource" base is receding further from the original mill-site(s), and like the men "working signals" at the beginning of novel, to a picture of the city as a cybernetic switching station removed from the site of "production." Harald's work as accountant and the comptometer both register the deterritorialization of ecologic/economic systems onto capital. *Caput* means head, and like Captain Raymur, the authoritative "head" of Hastings Mill, accountant and comptometer represent a kind of symbolic "father" and abstract capstone "over" the webs of relationships that cross the mill-site. They are transcursive authorities responsible for setting the relationship between "resource" and economy which are the terms of enframement.

Annie writes a different transcursive situation when printed writing passes through the domestic economy of Annie's childhood home in North Vancouver, a household web in its own right. She writes of "boys tossing words for extra spending money, pages and pages of words that slide in our front door and out the back, a trickle of waste," a flow passing through the domestic *oikos* (64). This happens in 1951, but the novel's gesture to the earlier "rumour mills" that emerged with the mill-sites on Burrard Inlet refer my reading back to that "original" dissemination of printed paper (before there were paper-mills in the region, this paper must have arrived from elsewhere in exchange for processed lumber). In a move which brings to mind Benedict Anderson's insistence on the importance of print culture to establishing "imagined communities" through shared identification with the overcoding structures of nationhood, Marlatt quotes the following passage from the *Moodyville Tickler*: "the present is decidedly an age of civilization. One of the chief signs of progress in this respect is the possessing of a local paper. Moodyville, then, can now claim to be, what it really is, a go-ahead, prosperous, civilized locality. For here is the proof—here is its newspaper!" (39). The inlet, no longer a "primitive"

wilderness," has become a place of culture. Another newspaper article, from the unattributed collage entitled "Hastings Mill" in the city archive, notes that "The Hastings Mill [store] was the centre of gay times on the arrival of vessels from the outside. It was there that important world news was first disseminated and discussed, while plans for the present city were laid there by the pioneer community." The article was written to announce the demolishing of the mill-site to make way for "Harbour Improvements." Overwritten with the date 3/1/30, it seems to have been published just under five months before the mill store was relocated to the foot of Alma street. In the rhetorical mode of justification, it begins with an appeal to ideas of progress, the genealogy of which leads back to mid-Victorian industrialization: "Industrial progress is no respecter of the time-honoured, and so, because of its relentless march, particularly in this fast moving modern age of ours, even the historic must give way." This aura of inevitability, with industrial processing as its motive force, points to the crucial relationship between the "culture" of technologically mediated discourses and the "natural resources" that sustain them, and that they, in turn, construct as natures of a particular, consumable kind. Here processing history also encapsulates a broader concern with narrative, disappearing sites of historical memory, and the place of language in the maintenance of technological enframement.

Reading the crucible of the "originary" mill-site, it is easy to see that these transcursive additions to Victorian "Vancouver" played a significant part in maintaining and amplifying the economic reterritorializations inaugurated by Stamp's initial surveys. With the sawmill came the "mill of speech," and a particular form of biopower that needed to shape colonial identities, and maintain a disciplinary regime conducive to rapid population growth, while finding ways to integrate its *nomos* with the ecologies that sustained processing activities (Foucault 21). For the city to grow it had to smooth the engagement of its system with those in which it was embedded, and expand the hybridization of nature and culture. Marlatt's focus on the biopolitical significance of the "rumour mill" to these processes, and the evidence I have adduced from other

sources, point to a new reading of Vancouver's origin story—one that has emerged from analysis of that story's ecologic/economic historicity. Such a reading seeks to account for complex and contemporaneous historical strata and the mediations—textual and processual—that have routed their coding and mixture.

#### Coda: "the nature o' mills"

In this thesis, I have attempted to distinguish the mill-site through several different modes of interpretation, and argue for the importance of processing and power technology to the mediation of the relationship between nature and culture. I have worked through the semantics of "mill," and suggested its interest as a keyword. In general, I argue that technological questions are inextricable from attempts to theorize the relationship between economy and ecology. Just as no system has an absolute and singular origin, no system can achieve perfect closure—which is the motivation behind the fantasy of *perpetuum mobile*, or an economy that requires no inputs. The mill-site offers a unique opportunity for the analysis of translations between systems, and the historical junctures of ostensibly separate ontologies. Ecocriticism that seeks to develop a theoretically diverse understanding of the relationship between human and nonhuman categories can find rich territory at such junctures. In so doing, it can contribute to the creation of a "transcursive vocabulary" that seeks to rewrite the identities of the vanishing mediators that engage in the reciprocal formation of texts, technologies, and the "resources" that sustain them.

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