

Université de Montréal

Paper Dinosaurs:
Field Notes as Finds in Robert Kroetsch's Badlands

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Paper Dinosaurs: Field Notes as Finds in Robert Kroetsch's Badlands

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Résumé

Des dinosaures sur papier : des notes « sur le terrain » comme on en trouve dans le Badlands de Robert Kroetsch passe en revue cette œuvre postmoderne de 1975 portant sur une expédition paléontologique fictive près de la rivière Red Deer, en Alberta, conformément à la récente tendance à exiger la vérification systématique des données à la base des récits métafictifs historiographiques dans la littérature canadienne-anglaise. Inspirée de l'exploration canonique qu'a effectuée John Livingston-Lowes des plus grands poèmes de Samuel Taylor Coleridge par le biais de la mine d'or du Gutch Memorandum Book dans The Road to Xanadu, cette thèse entreprend un nouveau type de recherche qui se démarque des archives conventionnelles et de la tradition documentaire. S'appuyant sur des documents holographes non publiés provenant de dépôts d'archives situés au Québec, en Ontario et en Alberta et écrits par des collecteurs, des géologues et des paléontologues de la Commission géologique du Canada, ainsi que sur des notes « sur le terrain », des notes de recherche et des journaux personnels écrits par Robert Kroetsch pendant la rédaction de son roman Badlands, cet examen critique révèle les strates sous-jacentes inédites d'une œuvre de fiction particulière.

Dans pratiquement toute fouille paléontologique, le retrait de ce qui enveloppe un spécimen révèle souvent des données supplémentaires qui peuvent, si elles sont soigneusement interprétées, offrir des indices essentiels sur les environnements paléontologiques. Ainsi, un squelette de dinosaure est rarement retiré d'une carrière stérile

dans son intégralité. Il en va de même pour toute recherche sur un processus littéraire. Aucun texte ne s'autosuffit. Comme Kroetsch s'est efforcé de produire son récit sous forme d'interrogation sur la création et la transmission des données historiques, particulièrement grâce à des notes « sur le terrain », une vaste étude de ce « terrain » comprenant des intertextes de l'Antiquité, des sciences, de l'Histoire, de l'histoire populaire, de récits de voyages et de la littérature canadienne et internationale est ici menée. On y fait librement référence à des périodes et à des auteurs très diversifiés, allant de Thomas Jefferson et des tombelles à Bruce Chatwin et sa peau de « brontosauve ».

Évidemment, aucune entreprise interdisciplinaire du genre ne peut être exhaustive. Ce projet se veut plutôt une vitrine littéraire réunissant des curiosités autour d'une œuvre principale, soit le Badlands de Robert Kroetsch. Réduites à leur plus simple expression, les notes « sur le terrain » constituent des messages destinés à la postérité. En explorant trois thèmes principaux, cette thèse explique comment ces messages pourraient être transmis. « *Saxa Loquuntur!* », ainsi intitulé en référence à l'analogie de Freud avec l'archéologie, traite des métaphores associées aux témoignages de la pierre; « Good Jones » porte sur les façons dont la taxinomie peut combler le désir d'un chercheur d'os de ne pas tomber dans l'oubli; « Box 16 » suit une piste documentaire en parcourant les écrits de Kroetsch pour reconstituer tant l'élaboration d'un roman que les notions de temps, d'espace et d'origine d'une œuvre littéraire.

Mots-clés : archéologie, archives, curiosité, documentaire, notes "sur le terrain", historiographie, métafiction, paléontologie, postérité, taxinomie

Abstract

Paper Dinosaurs: Field Notes as Finds in Robert Kroetsch's Badlands revisits the 1975 postmodern novel about a fictionalized palaeontological expedition down Alberta's Red Deer River in light of recent calls for systematic investigation into the source materials of historiographic meta-fictions in anglophone Canadian literature. Inspired by John Livingston-Lowes' canonical dissection of the major poems of Samuel Taylor Coleridge, via the treasure trove of the Gutch Memorandum Book in The Road to Xanadu, this study undertakes a new process focused inquiry into the archive and into the documentary tradition. By excavating unpublished holograph materials from Quebec, Ontario, and Alberta repositories written by Geological Survey of Canada collectors, geologists, and palaeontologists, in addition to field-notes, research notes and diaries produced by Robert Kroetsch during the writing of Badlands, this critical examination reveals hitherto unseen strata underlying a particular work of fiction.

In most any palaeontological dig the removal of overburden from a target specimen often exposes surprising ancillary data, which through careful interpretation may give vital clues to palaeo-environments. A dinosaur skeleton is rarely pried whole from a sterile quarry. Neither is any inquiry into literary process. No text exists unto itself. Because Kroetsch so self-consciously crafted his narrative as an interrogation of history generation and transmission – specifically via the written word in the vehicle of field-notes – this study surveys a broad field encompassing inter-texts from antiquity, science, history, popular

history, travel writing, Canadian and World literatures. Recourse is freely made to widely divergent authors and periods from Thomas Jefferson and the barrow mounds to Bruce Chatwin and his "brontosaurus" skin.

Of course no such inter-disciplinary enterprise can be exhaustive. Rather this project assembles a kind of literary cabinet of curiosities grouped around the principal specimen of Robert Kroetsch's Badlands. In their most reductive configuration, field notes are messages to posterity. Through three main themes this study explores how these messages may be conveyed: "*Saxa Loquuntur!*", so titled after Freud's archaeological analogy, investigates metaphors of stone speaking; "Good Jones" interrogates how taxonomy can be made to serve a bone collector's desire to be remembered; and finally "Box 16" follows a documentary trail into Kroetsch's papers to trace not only the construction of a novel but also notions of time and place, and authorship.

Keywords : archaeology, archive, curiosity, documentary, field-notes, historiography, metafiction, palaeontology, posterity, taxonomy

Table des matières

Résumé	iii
Abstract	vi
Table des matières	viii
Liste des figures	ix
Remerciements	xii
Introduction	1
Saxa Loquuntur!	25
Good Jones	136
Box 16	253
Conclusion	440
Bibliographie	449

Liste des figures

Fig. 1: "J.B. Tyrrell in the North-West". (LIBRARY AND ARCHIVES CANADA / B 02476).....	48
Fig. 2 "Red Deer River #1" Barnum Brown. ("Fossil Hunting" 272)	51
Fig. 3 "Flat Boat on Red Deer River". Barnum Brown. ("Fossil Hunting" 275-277)	52
Fig. 4 "Valley and Prairie". Barnum Brown. ("Fossil Hunting" 275-277)	52
Fig. 5 "Badlands Hillside #1". Barnum Brown. ("Fossil Hunting" 275-277).....	53
Fig. 6 "Badlands Hillside #2". Barnum Brown. ("Fossil Hunting" 275-277).....	53
Fig. 7 "Badlands Hillside #3". Barnum Brown. ("Fossil Hunting" 275-277).....	54
Fig. 8 "Horse Cart in Badlands". Barnum Brown. ("Fossil Hunting" 279-281)	54
Fig. 9 "Boat in Red Deer River". Barnum Brown. ("Fossil Hunting" 279-281).....	55
Fig. 10 "Badlands Hillside #4". Barnum Brown. ("Fossil Hunting" 279-281).....	55
Fig. 11 "Cracked Earth". Barnum Brown. ("Fossil Hunting" 279-281)	56
Fig. 12 "Red Deer River #2" Barnum Brown. ("Fossil Hunting 279-281).....	56
Fig. 13 "Sioux Grave". George Mercer Dawson. (Winslow-Spragge 87).....	59
Fig. 14 "Crow Massacre". George Mercer Dawson (Winslow-Spragge 79)	60
Fig. 15 "Hiller House #1" Samuel Pane.....	71
Fig. 16 "Hiller House #2" Samuel Pane.....	71
Fig. 17 "Hiller House #3" Samuel Pane.....	72
Fig. 18 "Hiller House #4" Samuel Pane.....	72
Fig. 19 "Model-T #1" Samuel Pane.....	76
Fig. 20 "Model-T #2" Samuel Pane.....	77
Fig. 21 "Tree of Hawks". David Carpenter (Kroetsch, MsC27.16.9).....	172
Fig. 22 "McKenzie Family" T.C. Weston. (LIBRARY AND ARCHIVES CANADA / B 02476).....	190
Fig. 23 "God Box". Bruce Chatwin. (Chatwin, <u>Photographs</u> 17).....	286
Fig. 24 "Happy Jack" H. MacRae. Glenbow Archives.....	370

Fig. 25 "Happy Jack Ferry #1" Glenbow Archives	374
Fig. 26 "Happy Jack Ferry #2" Glenbow Archives	374
Fig. 27 "Steveville Picnic #1" Glenbow Archives.....	376
Fig. 28 "Steveville Picnic #2" Glenbow Archives.....	377
Fig. 29 "Mr. and Mrs. Steve Hall" Glenbow Archives	387
Fig. 30 "Steveville Ferryman" Glenbow Archives	388
Fig. 31 "Old Mexico Ranch #1" Glenbow Archives	392
Fig. 32 "Old Mexico Ranch #2" Glenbow Archives	392
Fig. 33 "Old Mexico Ranch #3" Glenbow Archives	397
Fig. 34 "Cowboys" (Howe 71)	402
Fig. 35 "Clowns" (Howe 277).....	402
Fig. 36 "Rattlesnake" (Howe 205).....	407
Fig. 38 "Car in Ditch" (Howe 156).....	407
Fig. 39 "Woman and Coyote" (Howe 272).....	408
Fig. 40 "Wolfhounds" (<u>Hills</u> 355)	409
Fig. 41 "Dead Wolf" (Roan 122).....	409
Fig. 42 "A.B.C. Mine" (Hlady 627).....	422
Fig. 43 "Coal Miners" (Hlady 581)	423

*For my parents,
Paul and Margaret Pane
and my grandparents,
Saverio and Rosina Pane
Frank and Mary Alakas*

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Introduction

My first meeting with Robert Kroetsch came in the form of a letter. I had been invited to participate in his 2002 novel colloquium at the *Sage Hill Writing Experience* in Lumsden, Saskatchewan. My application package included an excerpt from a manuscript-in-progress which would eventually form the core of my Master's thesis in Canadian Archival Manuscripts and Creative Writing at the University of Calgary. Blueberry Jam included a new transcription of a historical document dating to 1891 – the Saguenay River logging camp inspection journal of an anglophone lumber baron named Sir William Price. As a reader of Canadian Literature I had long been aware of Kroetsch's preoccupation with the destabilization of official histories. As a writer I had hoped that he might help me to negotiate the unstable ground between fiction and document. Nevertheless, the concision of his response surprised me. He had seized upon the essence of my predicament in a line ("the fictional uses of archive"). Then he proposed a new and collaborative expedition into his old territory: "Sam, delighted that we'll get to enter the archive. R" (Kroetsch Correspondence).

One of the inspirations for Blueberry Jam was Robert Kroetsch's 1975 novel, Badlands. I sensed a particular affinity between Jerome Griffe, my principal character of a transcriber, and Kroetsch's principal character of the field note fabricating bone hunter, William Dawe. Evidently, this fascination did not end with the conclusion of my Master's degree research. At Université de Montréal, I began this dissertation with a view to comparing the manipulation of archival document in a selection of anglophone Canadian and francophone Québécois novels (Badlands among them). Immediately upon making my

first trip to the McGill University Archives I realized the scope of such a project. I determined that my inquiry into sources would be better served if I were to concentrate on a nucleus text, admitting the possibility of extended glimpses at satellite texts. Ultimately, I chose Robert Kroetsch's Badlands. In a curiously Canadian (or Québécois) twist, I would study an anglophone novelist writing about an aspect of Alberta history at a francophone institution in Quebec, whereas in the past I had studied a Québécois topic at the University of Calgary. Cultural ironies notwithstanding, there seemed to be a certain logic behind such a decision. Many of the chief archival repositories for Canadian palaeontology are located in the East. I had a mind to thoroughly investigate the documentary underpinnings of Badlands. Unwittingly, I had committed myself to a long period of intensive archival research spanning three provinces.

A discussion, in plain language, of the pleasure derived from years of research is perhaps a strange way to introduce an academic study. Yet John Livingston Lowes begins his seminal examination of Coleridge's "The Rime of the Ancient Mariner" in just such a fashion (and so I begin this dissertation in a like manner). He also suggests that "the story" he pursues in The Road to Xanadu is not of his own choosing. Rather, he contends that "it simply came" and "demanded right of way" (xi). Lowes describes an internal conflict in which the temptation to "communicate, for the edification of a narrow circle only, a mass of observations to the pages of some learned journal" is superseded by a puzzling desire to make the findings of his literary scholarship "available (and interesting, if that may be)

beyond the precincts of its own solemn troops and sweet societies” (xi). Lowes believes that the nature of his inquiry has the potential for broader appeal to a non-specialist audience in virtue of the fact that it does not, according to the general understanding of his day, fall within the parameters of pure literary scholarship. Indeed Lowes adamantly denies that his study partakes in any examination of Coleridge’s theory of the imagination *per se* which, even in 1927, was already well-trodden ground (xii).

As if to corroborate Lowes’ claims, T.S. Eliot describes The Road to Xanadu in terms more commonly associated with that of a police investigation. Eliot calls Lowe’s book “a fascinating piece of detection” and goes on to explain the methodology and apparent findings of Lowes’ efforts (On Poetry 119):

Lowes ferreted out all the books which Coleridge had read (and Coleridge was an omnivorous and insatiable reader) and from which he had borrowed images or phrases to be found in "Kubla Khan" and "The Ancient Mariner". The books that Coleridge read are many of them obscure and forgotten books – he read, for instance, every book of travels upon which he could lay his hands. And Lowes showed once and for all, that poetic originality is largely an original way of assembling the most disparate and unlikely material to make a new whole. (Eliot, On Poetry 119)

For Eliot, Lowes’ demonstration is convincing not because it makes "Kubla Khan" or "The Rime of the Ancient Mariner" “more intelligible as poetry, but rather because it provides an intimate glimpse of “how material is digested and transformed by the poetic genius” (On Poetry 119). Of great significance to Eliot, is that Lowes based his project on “an investigation of process” and an “explanation by origins” which Eliot contends is “strictly speaking, beyond the frontier of literary criticism” (On Poetry 119). This type of

study has particular applications for the oeuvre of Robert Kroetsch. He has made a literary career by drawing from diverse documentary sources to produce canonical works of poetry and fiction often expressly about the making of history. Crucially, he has also left a comprehensive archive of process materials to the University of Calgary Special Collections. In the introduction to his recent study, Speculative Fictions Herb Wyile seems to call for a new kind of Lowesian-inspired inquiry:

While I have made some effort to explore the histories with which these novels deal, that research, especially by historical standards, is fairly sketchy. A thorough investigation of the histories that serve as the bases for these texts is, I feel, a necessary enterprise, not just for a better appreciation of the texts themselves but for a deeper appreciation of the relationship between history and literature, particularly since surprisingly little of the critical attention these texts have received has been directed to the history behind them (xv).

Some critics have already responded by chipping away at the artificial demarcation between the work of the literary scholar and that of the historian. Dennis Duffy notably plunged into the Toronto Civic Archives and Archives of Ontario in search of the documentary underpinnings of Michael Ondaatje's In the Skin of a Lion. Certainly, the documentary tradition has fascinated Canadian literary criticism since Dorothy Livesay's famous address to the Learned Societies in June of 1969. Subsequent contributions by Stephen Scobie in Signature, Event Context, Frank Davey in Reading Canadian Reading, and indeed Robert Kroetsch in his essay "For Play and Entrance" have been tracked by scholars such as Manina Jones in her study, THAT ART OF DIFFERENCE: 'Documentary-Collage' and English Canadian Writing. Wyile suggests that Canadian literary criticism has been slow to systematically interrogate the source materials of what

Linda Hutcheon has termed "historiographic metafiction", or those self-reflexive novels that interrogate the writing of history, but the stuff of archives has preoccupied writers and poets in Canada since the early days. James DeMille dramatizes this fascination with a lost document that contains secrets about an unknown land in Strange Manuscript Found in a Copper Cylinder. He borrows the conceit from Edgar Allan Poe who puts it to compelling use in The Narrative of Arthur Gordon Pym, and "MS Found in a Bottle".

In her forward to Beyond Remembering: The Collected Poems of Al Purdy, Margaret Atwood's characterization of the poet's work sounds more applicable to the labours of the archaeologist or the palaeontologist:

For me, he's above all an explorer – pushing into nameless areas of landscape, articulating the inarticulate, poking around in dusty corners of memory and discovering treasure there, digging up the bones and shards of a forgotten ancestral past.” (Purdy 18)

Her description also fits Robert Kroetsch. The allure of the dig, and the prospect of new finds, draws me to his 1975 novel, Badlands. Kroetsch criticism, though voluminous and multi-faceted, has thus far not attempted to excavate the strata of field notes and research materials lying beneath this work of literature. Plenty of writing has already been devoted to metaphorical interpretations of field notes. Arnold Davidson subjects Badlands to an "archaeological reading" in his book, Coyote Country (76). When he breaks the surface he exposes literary foundations including Margaret Atwood's Surfacing, Sheila Watson's The Double Hook, William Faulkner's Sanctuary and Absalom, Absalom!, James Joyce's Ulysses, Joseph Conrad's Heart of Darkness and Victory, Mark Twain's

Huckleberry Finn, Dante's Divine Comedy, Homer's Odyssey, Virgil's Aeneid and The Epic of Gilgamesh. In an earlier essay he explores the way William Dawe uses field notes "to enter the order of history" (Davidson, "History" 3). Robert Lecker approaches Badlands through the character of Anna Dawe. He submits the equation that "Dawe's 'fake' field notes become Anna's 'faked' book" (Lecker 96). Aritha Van Herk in her "BioCritical Essay" reads Anna Dawe's "gloss" of her father's notes, and her recreation of his journey as evidence of Kroetsch's insistence on intertextuality (15). Mark Simpson cautions, "any interpretation of Robert Kroetsch's Badlands must meet with failure" ("Found" 41). Connie Harvey sees a masculine/feminine duality in the novel that mitigates Anna Dawe's emotional intuition of her father's "cryptic notes" (31). For Susan Rudy-Dorscht Badlands is a deconstruction of field notes and Anna Dawe's "mediation of the story is a deconstruction of male privilege" (38,40). Peter Thomas qualifies the reticence and falsification of Dawe's notes as "a spurious poeticism of the surface" (87). Glenn Deer senses bathos in Dawe's assertions of palaeontological authority (87). David Williams detects parody in Anna's "need to mirror her father's process of writing" (223). This catalogue is by no means exhaustive. My project proposes a new direction, and a reading of *literal* field notes – those written by Kroetsch toward the production of Badlands, and those written by collectors and palaeontologists toward the documentation of historical expeditions.

A survey of other sources – perhaps oral testimonies from First Nations peoples, settler women and their descendants, or marginalized cultural groups – may also yield alternative archival deposits, but the scope of this inquiry will focus on the aforementioned scholarship gap. It is conspicuous that Kroetsch criticism to date has virtually ignored the palaeontological archive especially considering William Dawe's incessant recording in his field books. Even Linda Hutcheon, who famously labels Robert Kroetsch "Mr. Canadian Postmodern" partially owing to his self-described "archaeological" approach, elides this rich vein of documentary material. Ironically, Hutcheon is reluctant to apply her own genre designation of "historiographic meta-fiction" to Kroetsch's novels. Rather, she contends that "history often impinges on Kroetsch's fiction", but that his novels "background[d] rather than foreground[d] history" (Hutcheon 167). She suggests that Badlands recalls World War One, but nowhere does she acknowledge that the novel also actively dialogues with a significant period in the history of North American palaeontology, not to mention the historiography of science.

The same omission can be observed at the opposite end of the critical spectrum from a far less sympathetic reader. Nowhere in her challenge to Kroetsch's interpellation of Derridean postmodernism does Dianne Tiefensee take the opportunity to investigate extant archival examples of the quest narratives she derides. Indeed she refers to William Dawe as an "archaeologist" in lieu of the more accurate title of "palaeontologist" (Tiefensee 138). This is not a trivial distinction to make given that Dawe is exclusively preoccupied with the

bones of extinct reptiles as opposed to those of ancient humans. My study does not propose to make any new contribution to feminist interpretations of the role of the Annas in Badlands, nor does it propose to re-engage with, or to resolve stymied debates about Kroetsch's understanding of postmodernism (or even more grandly to question "Canadian Literature" *vis-a-vis* "postmodernism"). Rather, it proposes, in part, a novel if elementary exercise in due diligence. I will read specific documents from the palaeontological archive as discreet works of literature imbued with all the stylistic subtleties and contrivances of their unique authors. I do not undertake this investigation ignorant to the colonialist, racist, misogynistic connotations often associated with such historical productions, nor do I reject post-colonialist and feminist assessments of similar works. On the other hand this inquiry into sources would be poorly served if I were to rehearse critical commonplaces regarding the narratives of exploration and science instead of actually reading them.

My initial strategy in this dissertation consisted of identifying a list of likely historical models. Then I intended to track down field notes related to dinosaur discoveries in southern Alberta. Kroetsch provides several revealing clues in Badlands which hint at potential documentary sources. Indeed he begins his novel with a chronology. The first itemized date presents a logical starting point: "Summer 1916: The Dawe Expedition enters the Alberta Badlands via the Red Deer River to collect dinosaur skeletons" (Kroetsch, Badlands 1). He describes the expedition leader William Dawe as a dwarf, a detail not lost on David Spalding who argues that his "humpback owes something to Dawson" (254).

George Mercer Dawson was a respected field geologist who ended his career as head of the Geological Survey of Canada. It is no coincidence that Dawson also made the first discovery of dinosaur fossils in the North-West Territories during his tenure as the Chief Naturalist and Geologist on the British North America Boundary Commission Survey of 1873-1874 (Spalding 254). Another well-known figure in annals of Canadian palaeontology is Joseph Burr Tyrrell, whose name was adopted by The Royal Tyrrell Museum in honour of his 1884 discovery of the first partial skull of *Albertosaurus*, near present day Drumheller. The Dawe expedition down the Red Deer River is notably conducted via flat boat, a technique pioneered in 1889 by early Geological Survey of Canada collector Thomas Chesmer Weston. During his voyage he found another skull and more dinosaur remains. In 1897 Lawrence Lambe, first official palaeontologist of the Geological Survey of Canada, returned to Weston's hunting grounds and made significant discoveries of his own.

Despite Anna Dawe's assertion that her father's crew arrived in the badlands a generation too late, the historical record suggests that Kroetsch's fictional expedition is almost exactly contemporaneous with that period popularly known in western palaeontology as "The Canadian Dinosaur Rush" (Kroetsch, Badlands 120). A parcel of documents tucked away in the McGill archives with the Dawson papers suggests that this university aspired to field a party from the Redpath Museum, but the expedition never came to fruition (M.G. 1022, "Redpath"). Loris S. Russell and David Spalding have described the

"rush" in their respective books, Dinosaur Hunting in Western Canada and Into the Dinosaur's Graveyard: Canadian Digs and Discoveries. In short the Geological Survey of Canada responded to successive American Museum of Natural History palaeontological expeditions led by Barnum Brown, by fielding its own party led by a Kansan named Charles Hazelius Sternberg. Sternberg counted his sons, Charles Mortram, George Fryer and Levi among his crew. Spalding has also noted that William Dawe's "Lutheran obsessions and limp are perhaps derived from Charles [Hazelius] Sternberg" (254).

These resemblances, however tangential, are certainly not coincidental and this dissertation means to reveal their constructedness. The scope of Kroetsch's preparatory research and engagement with the palaeontological archive can only represent a deliberate attempt to excavate obscure figures from Canadian history. It seems an unlikely coincidence that Anna Kilborne Dawe shares a name in common with a narrative historian working during the writing of Badlands. The preface to William Killbourn's study of William Lyon MacKenzie features this telling passage:

Meanwhile however, there are our several characters from early Canadian history at hand, and in search of an author. There is a world now scattered in the archives and the dust, waiting for whoever wants to try putting it together again. (Killbourn v)

The parallels in methodology are striking. Whereas Killbourn the scholar uses fictional techniques to produce narrative history, Kroetsch the novelist employs documentary material to produce fiction. In turn I looked to the archive for a new work of criticism. But which archive? Although I could be relatively certain about my

identifications of George Mercer Dawson, J.B. Tyrrell, T.C. Weston, Lawrence Lambe, and the Sternbergs I had no idea where to find their papers or how I might interpret their field notes. Like Livingston-Lowes, I felt that the story was not of my own choosing. Indeed I spent countless afternoons at the National Archives where I donned white-gloves and pored over page after page of Geological Survey of Canada field notes, magnifying glass poised and eyes keening for any flash of the word, “fossil.” I transcribed volumes of field notes written by Tyrrell, Weston and Lambe. I photocopied reams of geological data accrued by associated collectors McConnell and Macoun. I haunted the McGill Archives to parse George Mercer Dawson's Boundary Commission Notes. I descended into the depths of Robart's Library to search the Tyrrell papers. Still the project refused to cohere. When I chanced upon Simon Schama's prologue to Landscape and Memory, I considered drastic measures:

I had come to Poland to see this forest. See what exactly, I wasn't sure. Historians are supposed to reach the past always through texts, occasionally through images; things that are safely caught in the bell jar of academic convention; look but don't touch. But one of my best-loved teachers, an intellectual hell-raiser and writer of eccentric courage, had always insisted on directly experiencing a 'sense of place' of using 'the archive of the feet.' (24)

However, Kroetsch's remarks to Shirley Neuman sold me completely:

I would much rather see the site than the museum, where it's all carefully assembled and tagged and explained. I like that site, right here, the hot sun, the workers who are semi-wiped out, digging with incredible care, paying attention in that wonderful way [. . .] Being present – where it's happening – is very important (Neuman 167)

Soon I found myself deep in heart of Dinosaur Provincial Park with a Royal Tyrrell Museum crew digging through a vast outdoor archive of hoodoos and coulees for the elusive frill of *Pachyrhinosaur*. (We never found it, but we managed to salvage the beast's ischium, and I managed to produce a substantial body of my own notes in the field). After my expedition to the Late Cretaceous I paid my first visit to University of Calgary Special Collections. Only then did I realize Kroetsch had meticulously documented many of his sources. In Box 16 I found his Gutch Memorandum Book. It confirmed many of my hunches and sent me sniffing after many new leads. While I cannot claim to have “ferreted out” all of the books, documents and artifacts consulted by Robert Kroetsch, during the writing of Badlands, I have unearthed some startling conjunctions that promise to shed light on the interface between fictional texts and their archival counterparts.

Recent developments in post-modern archival thinking parallel these literary investigations. Canadian archivists such as Tom Nesmith and Brien Brothman, are beginning to examine, after Jacques Derrida, the mediating influence archivists have in creating or “writing” records. Nesmith argues that the archives-making process invests the archivist with a great capacity to influence historical evidence. Indeed, postmodern archivists recognize that they perform a type of historiographical authoring in the decisions they make regarding selection, classification and dissemination of archival materials (Brothman 64-88). To be sure Kroetsch takes no innocent role in the assembly of his Calgary archive.

For that matter, I take no innocent role in my own engagement with this archive in the context of this project. Dianne Tiefensee may well lump me in with Kroetsch's "disciples" or the rest of "his critics" (9, 155). I readily admit my esteem for Robert Kroetsch's writing. Moreover, I count him as an important mentor in my own development as a creative writer. To a certain extent this study continues in the tradition of reading Kroetsch's work "according to his own proclaimed intentions" (Tiefensee 51). However, I do not enter the Kroetsch archive at the author's behest, nor to follow his bidding. Rather, I do so with my eyes (and mind) wide open as a colleague, and as a fellow author, embarking upon a collaborative endeavour. The "archaeological" method, as I understand it, implies audacious guesswork and constant revision rather than preconceived explanations and definitive conclusions.

Kroetsch invites readers and critics to participate in his texts - even to afford them a kind of "narrative extension" – but he does not prescribe the method or impose limitations upon how this feat is to be accomplished. Many of the process documents examined in this study have never before received critical attention. Given the "cottage industry" surrounding Kroetsch and his writing this omission is puzzling (Tiefensee 43). It stands to reason that many of the associations I draw between Kroetsch's archival documents and his novel, Badlands, have never been observed. Be forewarned. My interpretations are imaginative. I prefer to rely on my reader's instinct, rather than on any one theoretical framework. I dare to speculate, and sometimes to speculate wildly. While the ultimate

success of this methodology will be debatable, I don't think I can be faulted for unearthing new material about such a well-examined author. Some of my readers will regret that I have not subjected these documents to a more standardized type of analysis with rigidly defined theoretical parameters. Others may call this a fresh approach. As Jorge Luis Borges once advised the young Alberto Manguel, "You are the one who decides. You, the reader, are the one who says what counts and what doesn't count, what will remain as literature, and what won't" (Johnston). Ultimately, one is responsible to one's own reading. I hope to open a new space for discussion in the academic context somewhere between literary criticism and creative non-fiction. At the very least, this study will generate fresh fodder for future debates.

As with all palaeontological digs this literary excavation will begin with prospecting. In the first section, entitled *Saxa Loquuntur!* after Freud's archaeological analogy, I will survey the ground and attune my ear to strange stirrings. Like Thomas Jefferson rooting through the barrow mounds, or Dr. Johanne Beringer sorting through the bizarre petrifications of Mount Eivelstadt, I too will explore the metaphorical possibilities of speaking stones from the Alberta badlands to the foot of Mont Royale, to the farmland of Upstate New York and beyond the Theban plain. On the twenty-first night of her marriage to Sultan Schahriar, Schehezerade begins the tale of *The King of the Black Isles* – "a man only from the head to the girdle" (Arabian 54). Her listeners are chilled by the powerful enchantment that has metamorphosed the rest of his body into black marble, and driven to

pity when he shares his plight with a passing traveller: "I became such as you see me, already a dead man among the living, and a living man among the dead" (Arabian 59). The description might also apply to Kroetsch's bone hunter, except that the king's curse is William Dawe's vocation.

Once the terrain is charted and the locality established overburden removal may begin. During this process strata will be peeled away in succession, revealing much about the motivations of the collector. While the bones may be the putative object of the palaeontological exercise, Kroetsch uses William Dawe to cast light upon another formidable ambition associated with the dig. In the second section, entitled Good Jones after an allegorical character in a geological ode penned by George Mercer Dawson during a season in the field, I will explore the notion that a collector also seeks to preserve *his* name for posterity by attaching it to a specimen. If the creature is new to science, unique and complete it is all to the greater glory of the *male* discoverer. Dawe's chief quarry is, inevitably, the *Daweosaurus*. Examples from Badlands and other literary analogues will show that this highly masculinized pursuit co-opts the rules of taxonomy in an attempt to fashion a kind of immortality, which must ultimately prove untenable. The naming impulse arises from a complex hubris with personal, political, historical, and even literary components. It makes recourse to systematized inventories for its authority. It draws and *labels* maps. One of the first tasks undertaken by the castaways from Jules Verne's The

Mysterious Island is to assign names to the unknown territory upon which they find themselves marooned (Verne, 119-120).

One might argue that the treatment of a broad selection of intertexts including travel writing goes beyond the frontiers of this study. However, intertextuality is Robert Kroetsch's literary bread and butter. Dianne Tiefensee acknowledges that for Kroetsch, "intertextuality is connected with archaeology" even as she attempts to reduce his understanding of the concept to "a word that replaces 'influence'" (100-101). In his collected interviews with Shirley Neuman and Robert Wilson, Kroetsch recalls the experience of rediscovering Joseph Conrad's The Nigger of the Narcissus at graduate school years after first encountering the novel during his childhood in Heisler, Alberta, "it was like opening a grave, or an archaeological dig. 'There is another way to tell a story' is what The Nigger [of the Narcissus] said when I read it" (29). He later retells and expands upon the episode in "The Moment of the Discovery of America Continues" from The Lovely Treachery of Words:

Beginnings: there were four grades in the Heisler school. On one occasion, when I'd run out of books to read from the travelling library; I was permitted to go to the library table in the next room. Purely by accident, I read two books that puzzled me, fascinated me, held my imagination: because they weren't like anything I'd read, ever, before. Twenty years later, in graduate school, I chanced to discover both again. They turned out to be Joseph Conrad's The Nigger of the 'Narcissus' and Henry James's The Turn of the Screw. Recognitions. Like coyotes, howling in the night. The way the blood, then, moves differently. (Kroetsch, Lovely 9)

Surely, there's more to howling coyotes and pulsing blood than a simple question of influence. Kroetsch acknowledges a debt to Kristeva in his notion of intertextuality:

we have a number of intertexts that don't have to come together, [. . .] it's their not coming together that makes them strong because then all these possibilities can operate at *this* point in time through the codes of the intertexts. (Neuman 17)

Linda Hutcheon closely links Kroetsch's fascination with intertextuality to parody. She argues that Kroetsch employs both strategies to "asser[t] and challeng[e]" the continuity of literary tradition (163). Hutcheon explicates this ambivalent formulation by citing Kroetsch from an early Open Letter piece: "in a very real sense we make books out of books. The paradox and the terror is always that: the need to invent out of the already invented" (164).

Although Hutcheon does not read Kroetsch's novels as historiographic metafiction *per se* another observation she makes regarding George Bowering's Burning Water is particularly applicable to Badlands in view of the new archival material that this study brings to light:

Many metafictional works investigate this 'ontological' issue of what exactly can be said to constitute fact and fiction – or life and art. They challenge what Wolfgang Iser once dismissed as 'the basic and misleading assumption . . . that fiction is an antonym of reality.' And often this challenge is made operative through the novels' use of intertextuality. (68)

Hutcheon goes on to explain the manner in which Bowering blends *fact* and *fiction* by incorporating "entire sections" of George Vancouver's ostensibly non-fictional *récit de voyage*, "into the textual fabric of Burning Water" while simultaneously "playing fast and furiously with the known 'facts' of Vancouver's voyage (and, in general, his life – and

death)" (68). I will demonstrate that Kroetsch takes similar liberties in his homage to (and parody of) the work of the Red Deer River bone hunters. Moreover, Hutcheon's remarks also have implications for notions of authorship in Badlands, a text manifestly constructed by multiple voices and myriad documentary sources.

What are William Dawe's field notes if not an account of his travels in wild countries and badlands? Like the Ulysses of Tennyson's poem, Dawe literally cannot rest from travel. When he retires he dies. In an essay entitled "No Name Is My Name" Kroetsch observes a compelling genre conjunction (which also has implications for part two of this inquiry): "And travel, is, of course a form of escape from name; Canadian writing is obsessively about travel" (Kroetsch, Lovely 41). Since Canadian letters do not exist in a vacuum, reading Dawe's notes through the writings of travellers from Marco Polo to Rimbaud to Bruce Chatwin is not unwarranted. Indeed, sometimes this very methodology stands in altogether for physical displacement, as John McPhee writes of the discredited Neptunist Abraham Gottlob Werner, "He had never been outside Saxony. Extrapolation was his means of world travel" (70). Like Werner's geological fictions, Dawe's palaeontological manipulations echo a maxim forwarded by Claudio Magris, "Travelling, like storytelling, like living is omitting" (68). Yet certain omissions are sometimes paradoxically made through copious writing. Xavier de Maistre responds to accusations of prolixity with the excuse, "all travellers behave the same way" (24). That is to say they lie,

much to the consternation of Gulliver who believes that travellers should be legally bound to write only true accounts of their voyages (Swift 238).

When I reach the bone layer I will swap tools, techniques and mindset, in order to begin the meticulous work of freeing the bones. Although this study responds to Herb Wyile's call for thorough investigation into the base materials of a Canadian literary text, its scope is not limited to an examination of the historical context of Badlands. To be sure the field notes and ephemera written by the early dinosaur hunters in Western Canada are of great significance to deepening our understanding of how one Canadian author treats the intersection of history and literature. However, Robert Kroetsch's own field notes and ephemera related to the production of Badlands are no less relevant. In the final section, entitled Box 16, after the aforementioned deposit at the University of Calgary Special Collections, I will sift through the author's research notes, field notes, and other miscellanea with a view to exposing poetic metamorphoses. One example of transformed material gleams like an ancient crocodile's tooth on a bed of bentonite. In chapter thirty-two of Badlands, the crew earns a well-merited rest after spending fifteen consecutive days of digging. The cook approaches the expedition's work-horse with a dangerous request:

Web returned to the tent to sleep until noon. And would have: except that before he had taken off his boots, Grizzly was in the tent, holding out a handful of ripe buffalo berries.

"Make jelly," Grizzly said.

"Go ahead," Web said.

"You help."

"Damn it, Grizzly, those bullberries will taste a lot better after the first frost." Web lay back into luxury on his cot.

Grizzly shook his head and repeated, "Make jelly."

"I told you – " And then Web added to his own surprise: "Those pancakes and biscuits of yours would damned near be edible with some bullberry jelly."

Grizzly nodded his head.

Web groaned. he sat up and began to lace his boots "Just one condition,"he added. "No goldeye today."

They went into the sprawling patch of buffalo berries and Grizzly spread a tarpaulin under some bushes. Web picked up a stick and used it to beat at the silvery leaves and branches, the small red berries cascading onto the tarpaulin. He found himself enjoying the commotion, the feigned violence, the quiet domesticity – he, beating the bushes, Grizzly scooping the berries together, moving the tarpaulin – and then he was asking Grizzly again about that time in the mountains, at the headwaters of the river; and then Grizzly, grunting, picking leaves out of the heaped red berries, was muttering the syllables that might be words like ice, lake, river, forest: and Web, working cheerfully in the hot sun, began to daydream the headwaters of the river, the pristine lakes and the green spruce forest, the trout streams, the glaciers hanging white over the icy waters. . . .The flies, the mosquitoes came up at his face, and he went on dreaming the sweetness of the forest, the cool of the glacial calm.

It was the returned and compelling dream that made him do it: he left Grizzly to boil the berries into jelly and walked away, alone, from the camp. (Kroetsch, Badlands 142-143)

The sweet temptation of bullberry jelly is enough to stir Web back to work on his only day off. This speaks to another enticing bit of information Robert Kroetsch couldn't resist while researching his novel. He found the delectable fruit in one of his key source texts, Charles H. Sternberg's Hunting Dinosaurs in the Badlands of the Red Deer River, Alberta, Canada. So irresistible was the prospect of a first hand account of the early bone-hunting expeditions into Deadlodge canyon that Kroetsch made a copy in full of Sternberg's book. This heavily annotated facsimile has been accessed into the Calgary collection as file 5 in box 16. Sternberg begins chapter "VI, PLATED DINOSAURS THE MOST UNIQUE OF THEM ALL", with a familiar description of camp life during his 1914 expedition to the

Red Deer River badlands. (Kroetsch's underlines appear as in the original and his marginal strokes of emphasis are reproduced in bold):

When the frost was on the bull berry, we experienced the strange sensation of making jelly in camp. We beat the berries out of the bushes, in which they clung in clusters around sharp thorns, on to tarpaulins spread below on the ground. The single berry is about the size, and color of a red currant. We filled our motor boat full of boxes with the acid fruit, and drove it to our scow. There we took pails full of the berries, and sank them into the clear water of Red Deer river [sic]. Then stirred them with a stick, so that all the leaves, decayed [sic] fruit, and bits of branches or other foreign matter could float away down the river, the perfect fruit settled to the bottom. The fruit was then cooked on our large camp stove until thoroughly done, when it was pressed through muslin bags, and cooked as long as there was any scum rising to the surface, which was carefully skimmed off the boiling surface, [sic] Then equal parts of sugar by weight was put in, the moment it was dissolved the mixture was taken off the stove and put into Mason jars. When cool it was fine, reddish colored jelly. We made twenty-four gallons, or six gallons for each married man in the party. In camp we used it constantly, and it took the place of all other fruit and pickles. **As usual, we were unable to get our fossils out of the ground before the cold weather came. We secured fifty boxes weighing about twenty-five tons.** (Sternberg Hunting 90-91)

While it is indisputable that Kroetsch derives the substance of his berry-making scene from Sternberg's description, other documents from the Kroetsch Fond at University of Calgary demonstrate an intermediary stage in the transformative process from historical source to work of fiction. Kroetsch informed himself about all of the major parties that conducted palaeontological expeditions on the Red Deer River in the early days. A note in his research materials confirms that he travelled to Ottawa to consult Sternberg holograph materials:

Geological Survey of Canada
sent in Charles H. Sternberg –

July, 1912 - his 1st field season on
the Red deer River

1913 - he & his sons Charles & Levi
went to Drumheller & acquired
another boat, and built
a scow large enough for
two tents – 2 days of
“[exciting?] travel” took them
to the Steeveville ferry.

1914 - on Red Deer again – see
skeleton in the
National Museum of Canada

1915 - by end of June – back on
the Red Deer.

{to be available in one
month or so}

May 29/72 Ottawa
RK

Charles M. Sternberg

1917 - his 1st independent
expedition to the badlands.

1919 - again.

1921 - Little Sandhill Creek –
use of automobile for
the 1st time in field.

1923

1924 4 yr [progress? pause?]

1925

1926

1935 - identified sites of

1936 fossil discoveries
for Geological Survey

Steeveville Sheet

* Map 969A,

Geological Survey
of Canada

1947 – his last expedition for Geology Survey
1948 - National Museum of Canada took over
1956- [72?] – work on establish provincial park
(Kroetsch, MsC27.16.9)

Indeed he would find a significant description in Charles Mortram Sternberg's 1917 field book:

August 30.
It rained all forenoon and off and on all afternoon as well as part of last night.
We could not get out to work. This is the second day this season that we could not get out to work on account of rain.
We picked some buffalo berries and made some jelly.
(Sternberg C.M., "Red Deer River Notebook 1917")

Kroetsch followed the example of his palaeontological forbears. During the summer of 1972 he took a boat trip down the Red Deer River beginning at Red Deer Crossing and concluding at the Jenner Ferry. During this romp through the "archive of the feet" Kroetsch made this observation in one of his fieldbooks:

[10 verso]
bull berry or
buffalo berry –
better after
2 good frosts –
they really
sweeten up –
jelly or wine –
great with
wild game –
bull berry jelly.
(Kroetsch, MsC 775/04.25 Box 16/44 Notebook (ii))

Direct contact with a bullberry bush, in the actual setting of his novel, produces a catalyzing effect for Kroetsch. Such an assemblage of documents offers a rare glimpse at the mechanism of literary transformation. While this metamorphosis does not depend on any mystical endowments from the heavenly muses, it is not carpentry either. Rather, it is a highly contingent process influenced by many variables, convenience and personal whim among them. By adapting the Lowesian method, this study aims to open and explore further intriguing prospects contained in the Kroetsch fond.

Saxa Loquuntur!

Speak! they are saying. Speak! Speak!
If you don't speak we will open and read you!
(Bringhurst, "For the Bones of Josef Mengele, Disinterred June 1985" i-ii)

'Speak, thou vast and venerable head,' muttered Ahab, 'which, though ungarnished with a beard, yet here and there lookest hoary with mosses; speak, mighty head, and tell us the secret thing that is in thee. Of all divers, thou hast dived the deepest. That head upon which the upper sun now gleams, has moved amid this world's foundations. Where unrecorded names and navies rust, and untold hopes and anchors rot; where in her murderous hold this frigate earth is ballasted with bones of millions of the drowned [.]
(Melville, Moby Dick 264)

And finally the stone is its own story; the stone
will always tell you nothing about itself.
(MacEwan, "The Story of a Stone" The T.E. Lawrence Poems 23)

Reports differ on precisely what he expects or wants the stone to say. I do not think he expects the stone to speak as we do, and describe for us its long life and many, or few, sensations. I think instead that he is trying to teach it to say a single word.
(Dillard, Teaching a Stone to Talk 68)

A stone may be 'killed' by moving it to a cliff at the south side of the island, but if a stone is disposed of a family member must go with it. That is a sad occasion, yet it is the stone that is mourned and remembered, not the person.
(Theroux, "The Living Stones of Hanga Atoll" Fresh-Air Fiend 437)

They rode through regions of particolored stone upthrust in ragged kerfs and shelves of traprock reared in faults and anticlines curved back upon themselves and broken off like stumps of great stone treeboles and stones the lightning had clove open, seeps exploding in steam in some old storm. They rode past trapdykes of brown rock running down the narrow chines of the ridges and onto the plain like the ruins of old walls, such auguries everywhere of the hand of man before man was or any living thing.
(McCarthy, Blood Meridian 50)

And in old landscapes, as in old people, the flesh wears away, and the bones become prominent.
(Lawrence, Sea and Sardinia 14)

Poor angel of history. Blown interminably by the storm from Paradise, and the opportunism of literary critics, he is forced to gaze forever at the past, even as he is propelled blindly into the future. For him the past is not a "chain of events", but rather it is "one single catastrophe which keeps piling wreckage upon wreckage." (Benjamin 257). This "pile of debris" that grows inexorably skyward, operates for Benjamin as a metaphorical indictment of the notion of historical "progress." Although the angel undoubtedly will have seen this coming too, for a particular kind of rock hound it represents an altogether different prospect; the past is a site rife with archaeological, palaeontological, and even literary potential. Palaeontologists call the rock mass overlying a fossil deposit by a revealing name: "overburden." As the term implies, for all but the sedimentary geologist who attempts to puzzle out questions of dating and palaeo-environment from the strata present, or the palynologist who conjures ancient ecologies from microscopic traces of fossil pollen and seed, this material is seen as a hindrance, debris that must be removed before the real work at the bone layer may begin.

Inasmuch as this study is invested in the fossil finds of the fictional William Dawe Expedition and the historical expeditions of The American Museum of Natural History and the Geological Survey of Canada, it is also equally keen on sifting through the oft-neglected literary "overburden" so long consigned to the scree pile of the archive - that peripheral documentation and those field/research notes preceding and proceeding a find/novel. This chapter will undertake to investigate the contextual matrix from which

Kroetsch extracts his specimen text, Badlands. A selective survey of historical, archival, mythical, and literary excavations and their corresponding finds, both authentic and otherwise, and descriptions, both scientific and narrative, will further an exploration of the fraught notion that stone may be read, or paradoxically may announce itself, as document.

Thomas Jefferson was motivated by contempt for overburden when he chanced upon the barrow mounds on his Virginia property. His instinct was to tear into them and thus his explorations yielded mixed results. Although the looting and ultimate destruction of the barrows must be viewed as a desecration of aboriginal graves, his systematic excavations, and their corresponding documentation, have been described as “the first scientific excavation in the history of archaeology” (Willey and Sabloff 37). Jefferson wrote: “that they were repositories of the dead, has been obvious to all; but on what particular occasion constructed, was a matter of doubt” (97). To resolve this doubt he carefully dug trenches into the mound and identified strata that had no obvious geological connection to one another (Jefferson 97-98). In addition, Jefferson discovered skeletal material and observed that it too occurred in successive layers; it appeared to him that the dead had been piled on top of one another until the mound reached the height of twelve feet (Jefferson 97-98). Although Jefferson made no firm determinations about the native groups who built the mound he had performed a first in North American archaeology – the excavation of a site not with the intent to seek buried treasure, but rather to solve an archaeological problem (Willey and Sabloff 37). Perhaps more importantly he facilitated a

phenomenon that had traditionally belonged to the province of miracle - the resurrection of past lives.

Dr. John William Dawson, Principal of McGill College, would follow the American president's lead seventy-six years later in Montreal. Of particular significance to my purposes are Dawson's unique research methodology, his engagement with primary source historical documentation and his recourse to the literary. On November 17 1860, in virtue of his scientific expertise and reputation, Dawson was called to examine the mysterious artifacts discovered by the Dorion Excavation Company at the corner of Burnside Drive (De Maisonneuve) and Metcalfe Street (Eakins 235). He would later publish two articles (Dec. 1860 & Oct. 1861) in the Natural History Society of Montreal journal, The Canadian Naturalist and Geologist as a result of this investigation. Workers had been removing sand from a knoll located at the foot of the McGill Campus and the location of present day Scotia and Toronto Dominion Bank towers when they uncovered unidentified human remains. At first, the workers, out of respect or superstition, or perhaps out of reluctance to delay the progress of the house foundations they were digging, simply reburied the remains nearby. However, when they continued to make similar discoveries they notified their employer Edmund Dorion who in turn referred to Dawson's educated opinion ("Notes 1860" 431). One of the first actions Dawson took upon arriving at the site was to note the new burial locations.

On inquiry, I found that the workmen employed in removing sand, have, at several times, found skeletons, and have buried them in the clay below the

sand bed, where perhaps at some future time they may lead to the supposition that in Canada man was contemporary with this historically very old though geologically very recent deposit. I record the fact of the transference of these skeletons to the Leda clay, to prevent, if possible, the occurrence of an error so serious. ("Notes 1860" 431).

Although not an archaeologist by training Dawson immediately applied his scientific observation skills, making many such detailed notes, indeed crafting the first tenuous threads in a compelling story. Evidently, his son George Mercer learned by example, and he applied the same rigour to his own geological and palaeontological work in Western Canada during the many expeditions of his own career. This is revealed in his copious and exacting field notebooks. Most modern archaeologists do not dispute the thoroughness of Dawson senior's methods and documentation; they describe his excavation as: "rigorous and acceptable by most modern standards" (Trigger and Pendergast 331). Furthermore most do not take issue with the positions and depths at which Dawson recorded as having found each artifact.

Fortunately, he predicted the confusion that would be generated if dating assumptions were made based on existing geological knowledge of the surrounding soil. Dawson acknowledged that Dorion's men had discovered a skeleton sitting in a crouched position, like those discovered by Jefferson, but recorded with obvious regret, "no note had been taken of the precise position [of burial]" ("Notes 1860" 431). When the workmen discovered another skeleton a few days later, Dawson immediately returned to the site to examine the remains *in situ*. His notes contain valuable information about the skeleton's

burial position, the depth at which it was found and the presence of broken pieces of pottery located near the subject's hands ("Notes 1860" 431). Dawson was intrigued; a year earlier he had published a description of an Iroquois vase held in the Natural History Society of Montreal collections that had been excavated in the Comté de Pontiac (Martijn 14). His son would match this attention to detail in documenting the precise elevation of dinosaur skeletons in geological sections much later and much farther from Montreal. This precision was of paramount importance as any error regarding fossil deposition could throw off geological dating, and even more spectacularly had the potential to revise the history of the earth itself. After all, the deposition of fossils beneath England and Wales enabled William Smith in 1801 to create the "map that changed the world" – the first comprehensive example of geological cartography, which would be used as a model for all maps of this genre to come (Winchester 105).

Encouraged by his examination of the initial skeleton, Dawson began to conduct a detailed survey of the entire excavation site. Based on available evidence he quickly determined that the ground had not exclusively served as an aboriginal cemetery, but rather he believed that it had also been used as a village or encampment ("Notes 1860" 431). During this initial sweep he discovered "fragments of pottery and other artificial objects" including the bones of wild animals. Dawson noticed that the strongest concentration of these artifacts occurred near the location of domestic fire pits, evidenced by dense accumulations of ash and charcoal ("Notes 1860" 431). Some of these fires, he noted, had

apparently been built on the surface while others had obviously been made in pits 1 ½ feet in depth and diameter (“Notes 1860” 432). Due to the dense accumulation of pottery fragments and other objects Dawson surmised that the site had been occupied for a long period.

Upon examining these pottery artifacts and human remains, Dawson came to suspect that the site predated the arrival of Europeans in North America. He realized that the archaeological materials resembled similar specimens found at Iroquoian sites in Upper and Lower Canada and New York State (McCaffery and Jamieson 41). He had consulted a Smithsonian Institute report from the year 1856 which detailed the discovery of a Mr. Guest who had uncovered the remains of aboriginal villages near Prescott, Ontario (“Additional Notes 1861” 373). Dawson also noted similarities between the artifacts Guest found in Ontario and the ones he and his colleagues had found in Montreal (“Additional” 373). With these observations, and comparative consultations with the field notes and published reports of his peers, Dawson began to draw the first ethnographic links between aboriginal populations in the St. Lawrence Valley and the north shore of Lake Ontario. Dawson junior would later deduce similar linkages and craft likely stories for aboriginal peoples of the North West as well as for floral and faunal populations of the Late Cretaceous period in southern Saskatchewan and Alberta.

Although he was careful in his published descriptions about drawing too many unsupported conclusions, Dawson suspected that he had found the remains of the village Jacques Cartier visited and described in 1535. To confirm his suspicions Dawson turned to Cartier's *Relations* in which the French explorer recounted his three visits to the new world. These Relations, synthesized from his voyage logs, were eventually translated into English, and published in volumes by the Hakylut Society. Dawson's impulse to consult the historical compendium to gain information about a site represents "not only the birth of Canada's archaeology, but perhaps the beginnings of the direct-historical approach" (Willey and Sabloff 53). It also has deep literary resonances, of critical connection to the methodology of the present study. My recourse to the field notes of the early dinosaur hunters towards the explication of the literary site of Robert Kroetsch's Badlands, emerges in a direct line of descent from the historical-archaeological techniques pioneered by Dawson.

Dawson learned that Cartier left France in 1534 under the commission of King Francois I to discover new lands (Biggar III 261). During the first of his trans-Atlantic voyages he went no farther than the bay of Gaspé where he encountered an aboriginal fishing party from the village of Stadacona (location of present day Quebec City). He kidnapped two members of the group, Taiguragny and Domagaya, and returned to France after summarily claiming the territory by the authority of his god and his king. The next year Cartier returned with his captives and sailed as far as Stadacona where he ignored the

injunction of the headman Donnacona, who refused the French further access up the St. Lawrence River. Consequently, Cartier and his party had to proceed into unknown regions without the benefit of local guides. When the galleons could go no further, Cartier and his men continued in long boats. Much speculation surrounds the actual site of Cartier's landing on the island of Montreal, but there is little doubt about the reception Cartier received when he arrived on Saturday, October 2, 1535 at Hochelaga:

And on reaching Hochelaga, there came to meet us more than a thousand persons, both men, women and children, who gave us as good a welcome as ever father gave to his son, making great signs of joy; for the men danced in one ring, the women in another and the children apart by themselves. After this they brought us quantities of fish, and of their bread which is made of Indian corn, throwing so much of it into our long-boats that it seemed to rain bread. Seeing this the Captain, accompanied by several of his men, went on shore; and no sooner had he landed than they all crowded about him and about the others, giving them a wonderful reception. And the women brought their babies in their arms to have the Captain and his companions touch them, while all held a merry-making which lasted more than a half an hour. (Trigger and Pendergast 333)

Cartier dispensed beads and other trinkets to the women and knives to the men and then returned with his party to their boats for the night. They went ashore again the next day and surveyed the countryside, which Cartier observed to be "full of oaks, as beautiful as any forest in France" (Trigger and Pendergast 334). After walking a half a league Cartier observed the care that the Hochelagans took in cultivating their land: "It was fine land with large fields covered with the corn of the country, which resembles Brazil millet, and is about as large or larger than a pea" (Trigger and Pendergast 334). Among these fields and below the mountain Cartier named "Mont Royal" stood the walled village of Hochelaga

(Trigger and Pendergast 334). Cartier's description of its structures and defence mechanisms is very precise and merits extended citation in preparation for the subsequent discussion.

The village is circular and is completely enclosed by a wooden palisade in three tiers like a pyramid. The top one is built crosswise, the middle one perpendicular and the lowest one of strips of wood placed lengthwise. The whole is well joined and lashed after their manner, and is some two lances in height. There is only one gate and entrance to this village, and that can be barred up. Over this gate and in many places about the enclosure are species of galleries with ladders for mounting to them, which galleries are provided with rocks and stones for the defence and protection of the place. There are some fifty houses in this village, each about fifty or more paces in length, and twelve or fifteen in width, built completely of wood and covered in and bordered up with large pieces of the bark and rind of trees, as broad as a table, which are well and cunningly lashed after their manner. And inside these houses are many rooms and chambers and in the middle is a large space without a floor, where they light their fire and live together in common.

(Trigger and Pendergast 334)

Unfortunately, Cartier's *Relation of 1535* is the only direct historical account of the village of Hochelaga and its inhabitants. In his *Relation of 1541* Cartier makes no mention of Hochelaga though he does refer to two "habitations" of people and the "Towne of Tutonaguy" (Trigger and Pendergast 338). Since the account is fragmentary and only preserved in an English translation by Hakluyt, it is difficult to draw any further conclusions about Hochelaga. Because of the proximity of the un-named and un-described villages to the St. Lawrence, some researchers believed them to be seasonal fishing camps (Trigger and Pendergast 40). Many researchers, including Dawson, believed that Tutonaguy was in fact the proper name of the village Cartier previously identified as

Hochelaga. They argued that in the *Third Relation of 1541* Cartier recognized that the name Hochelaga refers to the larger district in which Tutonaguy was located (“Additional Notes” 438; Trigger and Pendergast 40-41).

Apart from the *Third Relation of 1541* little other documentation fixes the village of Hochelaga to the Dawson site. When Samuel de Champlain visited the St. Lawrence valley in 1603 he did not encounter any Hochelagans. Modern archaeologists speculate that diseases introduced by Europeans decimated the population of Hochelaga (McCaffery and Jamieson 49). Others including Dawson believe that the Hochelagans were the victims of escalating warfare in the region (“Additional” 438-439). This view is informed by Champlain’s account of Cartier’s voyages:

Thence Cartier proceeded up the said river [St. Lawrence] some sixty leagues, as far as a place which in his time was called Hochelaga, and which is now called the Grand Sault St. Louis [Lachine Rapids]. This region was inhabited by savages who, being sedentary, cultivated the soil This they no longer do on account of the wars which have made them withdraw into the interior. (Biggar III 263-264)

Before the publication of Champlain’s memoirs rare accounts of the Hochelagan and Stadaconan peoples were collected in France by the Royal Cosmographer, André Thevet, from interviews he conducted with Cartier, Donnacona (the Stadaconan headman who was captured by Cartier in 1535 and taken to France) and Sieur de Roberval:

As for the women [of Hochelaga and Stadacona], they dress in deerskins prepared in their manner, which is very good and better than what we have in France, without losing one hair of it. . .the Canadian [Hochelagan and

Stadaconan] women wear breeches of tanned leather. . . adorned with some dye made of plants and fruits or else of mineral dye, of which there are several kinds. The shoes are made of the same material and fancy work (Schelsinger and Stabler 12)

However, the most significant and most controversial document of the period pertaining to Hochelaga was the Ramusio Plan. Published in 1556 in Venice by Gian Battista Ramusio for the third volume (America) of his collection of travels called *Navigazioni e Viaggi*, the plan subsequently served as an illustration for the Italian translation of Cartier's voyages (Trigger and Pendergast 314). While researching his archaeological discoveries Dawson wrote to his colleague Reverend Hospice Anthelme Jean Verreau who was also an historian and Principal of the Jacques Cartier Normal School:

Dawson W. McGill College

Nov 29, 1860

My dear Sir

Will you do me the favour to allow the bearer our Porter to bring to me the volume of the Graban translation of Cartier [2] with the plan of Hochelaga. I wish to make a tracing of it, and should return the vol. carefully in a day or two. I should come to trace it in your study, but [3] cannot take the time.

Yours truly

JW Dawson

(Dawson, M.G. 1022 C. 2 Box 2, 1860 Letters)

Dawson later reproduced portions of this tracing in his 1860 report which he used to corroborate Cartier's written description of the layout of Hochelaga ("Notes" 445-446).

Like most other scholars of his day, Dawson accepted the Ramusio Plan without question.

In 1924 W.D. Lighthall forwarded the first objection to its accuracy. He wrote:

I have no objection to condemning it as erroneous and misleading in every respect, totally contrary to Iroquois customs and entirely a fiction of Ramusio's engraver, with the manifest endorsement [*sic*] of the Ramusios, father and son.

(Trigger and Pendergast 374)

Indeed, Lighthall believed that Ramusio had not even bothered to personally interview Cartier on the subject. To prove his point, Lighthall listed ten major objections. The relative strength of these is debatable. Many features of the map were probably added as decorative embellishments by the artist. Modern researchers also doubt that Ramusio simply adapted Cortez' plan of Mexico City as Lighthall also contended (Trigger and Pendergast 13). However, it is generally agreed that Lighthall was correct in suggesting that the plan was elaborated exclusively through the consultation of Cartier's *Relation of 1535* (Trigger and Pendergast 14). In this respect it does not seem to contribute any new information to existing knowledge about the site.

Lighthall's skepticism introduces a new element to the direct-historical method - the possibility that published accounts, including those purportedly created from primary source documentation, may mislead, stretch the truth, or tell outright lies. Even the most diligent examination of artifacts may give rise to unintentional fictions. The archaeologist, the palaeontologist, and the literary critic alike, are thus confronted with the perennial problem of subjective interpretation. Conversations with the dead tend to be one-sided and

thus dependent, to a great extent, on the imagination of the interpreter. One of the most powerful examples of the persuasive effects of imagination in the annals of science is the *Lügensteine* or "Lying Stones" of Dr. Johanne Beringer. Beringer's credentials were as long as his arm: professor of medicine and chemistry, dean of the faculty of medicine at the University of Würzburg, director of the Julianum Hospital, and private physician to the Prince Bishop (Beringer 126). In retrospect it seems absurd that a man of his expertise could be so completely hoodwinked by such a clumsy ruse, but this view fails to account for the emotional implications of working at the very threshold of knowledge where the scientist must not only perform an act of rational analysis, but one of poetic imagination to flesh bone from stone.

Ultimately, such a flourish constitutes an act of hubris – poetry invoked to affirm the male scientist's absolute conviction in his own authority. Yet, it also constitutes an act of compensation, insofar as it represents an effort to adhere to notions of the complete gentleman – master at once of material phenomena and the muses. Kroetsch, the essayist, tracks this tension in a line from "The Moment of the Discovery of America Continues": "And the search that was once the test of sailor and horse and canoe is now the test of the poet" (Kroetsch, Lovely 12). Kroetsch, the poet and parodist, jotted this observation on to a scrap of paper, which is now carefully catalogued and filed in the attic archives of the University of Calgary library: "scientist as man of imagination" (MsC27.16.9). This statement bears a certain symmetry with the rhymed couplets scrawled by Dawson and

other imaginative men of science into their field notebooks alongside precise measurements and "impartial" observations. Dawson penned a fragment, which his sister later transcribed, though ultimately omitted from her typescript of his collected verse: "Life is a longing backwards / & is the old things others tried" (M.G. 1022, Box 59, File 13). In construction and sentiment it approaches a line from Kroetsch's "Seed Catalogue" that ostensibly refers to a rational farmer's ambivalent relationship with a pesky badger which he eventually shoots dead: "Love is an amplification / by doing / over and over" (92-93).

Charles Hazelius Sternberg also seems to have counted imagination of an importance equal to his excavation implements:

It is thus that I love the creatures of other ages, and that I want to become acquainted with them in their natural environments. They are never dead to me; my imagination breathes life into 'the valley of dry bones.' and not only do the living forms of the animals stand before me, but the countries which they inhabited rise for me through the mists of the ages. (Life 204)

With imagination may also come a kind of reverence. Certainly, Charles Sternberg viewed the trials and tribulations of his long career as due service to his given *vocation* in the old time spiritual sense of the term. Tim Bowling's recent novel, The Bone Sharps goes some way to demonstrating, how for Sternberg, the delicate skull of *Troodon* was a kind of grail too. Sternberg and others use the language of transcendence to describe the first moments of contact with the remains of an organism that have not been gazed upon by eyes, let alone human eyes, in over 60 million years. Roy Chapman Andrews, leader of the

American Museum expeditions to the Gobi desert during the 1920s, offers this trenchant analogy:

Working out a prospect is always fascinating; if it happens to be an unknown beast, it becomes a thrilling adventure. Lady Evelyn Carnarvon once told me of her feelings when she peeped for the first time into a chamber of Tut-ankh-amen's tomb. Hers were the first eyes that had looked into that room since it was walled up four thousand years ago. She could not have been more excited than I was as I brushed away the golden yellow sand that had inclosed [sic] our specimen fro six million years. The tomb of the Egyptian king gave a glimpse of the world of men and their way of life when civilization had only just been born. Our glimpse was of an incredibly more ancient past, millions of years before man had come upon the earth. (Business 215)

Despite his protestations, Stephen Jay Gould describes Cambrian fossils found in 1909 by the Smithsonian Museum's Charles Walcott high in the Canadian Rockies in downright pious terms:

The animals of the Burgess Shale are holy objects – in the unconventional sense this word conveys in some cultures. We do not place them on pedestals and worship from afar. We climb mountains and dynamite hillsides to find them, carve them, draw them, and dissect them, struggling to wrest their secrets. We vilify and curse them for their damnable intransigence. They are grubby little creatures of a sea floor 530 million years old, but we greet them with awe because they are the Old Ones, and they are trying to tell us something. (Gould, Wonderful 52)

Were it not for the fact that Gould made his reputation by rendering difficult scientific concepts in unconventional, though highly readable popular discourse, one might be misled by the intriguing prospect that major palaeontological studies may sometimes rely on a kind of divine revelation – that the fossils, like the arc-angel, might at an appointed hour, whisper their secrets into the ear of the chosen. In his discussion of the

sublime from The Art of Travel Alain de Botton surveys the concept from its inception with Longinus through its revival during the 18th century and posits its essence. Landscape provokes a sense of the sublime only if it projects a power greater than that of humans (de Botton 166). Thus the recognition of smallness faced with the immense scale of geology and time is integral to the particular pleasure of the sublime, which at its core also requires trepidation. He further formalizes his notion of the concept:

This is the lesson written into the stones of the desert and the icefields of the poles. So grandly is it written there that we may come away from such places, not crushed, but inspired by what lies beyond us; privileged to be subject to such majestic necessities. The sense of awe may even shade into a desire to worship. (de Botton 169)

Selma Lagerlöf complicates this mystical exchange, by suggesting that human senses may not always be adequately attuned to receive the message from that which is buried. While searching for the lost villa of the pre-Socratic philosopher Empedocles on the island of Sicily, the amateur archaeologist of The Miracles of the Antichrist, Cavaliere Palmeri, enlists the help of his faithful pony.

During the years that they had ridden about on Etna, Domenico had become an antiquary. Domenico turned from the road as soon as he caught sight of a ruin. He stamped on the ground in places where excavations should be made. He snorted scornfully and turned away his head if any one showed him a counterfeit piece of old money. (Lagerlöf 316)

Surely, this cannot be the full explanation for the birth of new insight about the "old ones", but that such a possibility is even suggested gives reason for pause and reflection regarding the determinations of hard science. This notion offers a fuller historical context

for Beringer's folly. Aside from the desire for scientific notoriety a major impetus behind the doctor's efforts was to interpret what he perceived as the "Divine Plan of God" as it was manifest in the natural world. Beringer sought to "reveal the greatness of God in little things, the transcendence of God in lowly beings, the preciousness of God in things vile" – noble motives worthy of admiration perhaps, but unfortunately it seems that Beringer was also a perfect jerk (Beringer 18).

As tradition has it, Beringer's arrogance so incensed his colleagues, Ignatz Roderick, and Georg von Eckart, algebra/geography professor and Privy Councilor/Librarian to the Court and University, respectively, that they undertook to make a public fool of him (Beringer 128). Beringer's penchant for fossil collecting provided the unlikely vehicle. He employed a pair of lads, and a seventeen year old youth named Christian Zänger, beginning in May 1725 to excavate an increasingly bizarre collection of petrified creatures from nearby Mount Eivelstadt (Beringer 129) . Unfortunately for Beringer, the boys were in cahoots with the slighted professors. While it may seem that Beringer was justly repaid for shoddy field practices, it should be also considered that it was common for scientists of the 18th and even much of the 19th century to contract the grunt work to untrained third parties. Roderick created elaborate limestone carvings from illustrations in natural history texts and paid Zänger to deliver the specimens to the unsuspecting Dr. Beringer (Beringer 129).

Over the course of the ensuing year around two hundred fakes were produced. Stranger and more suspicious forms began to emerge: suns, stars, moons, comets even characters in Arabic, Greek and Hebrew (Beringer 129) . Dr. Beringer invented and refuted complicated technical explanations for the origin of these incredible occurrences that involved "atoms of light", "spermatic vapours" (Beringer 44-45), "formative salts" and "the womb of the earth" (Beringer 63-65). He rejected a colleague's contention that the "petrifacts" were of human construction, albeit by ancient German peoples (Beringer 45-46). Furthermore he adamantly refused to admit the possibility that the figured stones were fakes (Beringer 37). Worse yet, Dr. Beringer, to great personal expense, had compiled a treatise with detailed engravings of the specimens, which he would publish in 1726 as *Lithographiae Wirceburgensis*. Only the discovery of his own name graven in stone could convince him of the scope of the hoax, but it was too late to halt the distribution of his book (Beringer 129). Dr. Beringer futilely tried to buy back the already sold volumes. A surviving copy held by the University of Bologna testifies to the failure of that endeavour. While Beringer successfully brought legal action against the dastardly professors, he is remembered by scientific posterity as a colossal dupe.

Many other faux pas colour the pages of natural history. E.D. Cope, dinosaur guru *par excellence*, was publicly lampooned in the press by his arch-rival Othniel C. Marsh during the fierce combat of the 1870s "Bone Wars". Marsh attributed the ostensible break in their tumultuous relationship to a colossal anatomical error in Cope's reconstruction of

the long-necked marine reptile *Elasmosaurus* (Wallace 42). Cope had literally pinned the skull on to the stubby tail of the creature giving fresh meaning to a choice colloquial expression. Apparently, Cope didn't take very kindly to Marsh's constructive criticism and shot back with due vitriol. Nevertheless, the head was eventually swapped at the urging of his friend Dr. Joseph Leidy, a renowned University of Pennsylvania zoologist and palaeontologist (Wallace 43). Marsh would later push the awl in deeper when he accused Cope of secretly trespassing on, and stealing from, various museum collections (Wallace 199). It's too bad that Cope was never privy to the information that Marsh had mistakenly created a dinosaurian Frankenstein from his spectacular finds at Como Bluff, Wyoming. In 1883 Marsh cobbled together odd bones from disparate sites to bring *Brontosaurus* to a version of life minus the animating jolt of lightning. Ironically, one of the best known dinosaurs, identifiable by any child at a glance, does not, and has never existed. In fact Marsh tried to piece together fragments of *Apatosaurus*, which he had already discovered and named in Colorado, with bits of Cope's *Camarasaurus* (Wallace 158-159). Even the most incisive parodist (or Rosemary) could not conjure such an ugly and unwanted baby. However, Marsh would not live long enough to lament his creation with the style of his fictional scientific counterpart, Dr. Victor Frankenstein, who floridly realized the error of hubris in his own monster:

How can I describe my emotions at this catastrophe, or how delineate the wretch whom with such infinite pains and care I had endeavoured to form? His limbs were in proportion, and I had selected his features as beautiful. Beautiful! Great God! His yellow skin scarcely covered the work of muscles and arteries beneath; his hair was of a lustrous black, and flowing; his teeth of a pearly whiteness; but these luxuriences only formed a more

horrid contrast with his watery eyes, that seemed almost of the same colour as the dun-white sockets in which they were set, his shrivelled complexion and straight black lips. (Shelley, Frankenstein 56)

Marsh certainly had at his disposal an appropriate setting for a gothic tale of the American West. The ruined castles ringing Lake Geneva, which provided inspiration for Mary Shelley's iconic tale found their uncanny equal in a shepherd's cabin made entirely of fossilized bones. Schuchert portrays the startling scene in his hefty tome, O.C. Marsh: Pioneer of Palaeontology where he attributes the discovery of the "Bone Cabin Quarry" to Walter Granger of the American Museum who found the secondary site near the original Como Bluff excavations (203). Kroetsch evidently availed himself of this reference during the writing of Badlands, as it appears amidst his Calgary papers in a bibliography alongside an equally imposing volume entitled, Cope: Master Naturalist by Henry Fairfield Osborn. Ancillary sources on the same list deal with the early days of North American vertebrate palaeontology, most notably articles penned by George Gaylord Simpson and William B. Scott. Another one of Kroetsch's research notes makes this sourcing linkage explicit:

("Como Bluff, Wyoming – where an old
hermit built a cabin out of
dinosaur bones
use this in novel –They came
upon a cabin of bones) (Kroetsch Msc27.16.9)

Indeed the Dawe Expedition does come upon such a cabin. The "bone tipi" seems to be the joint architectural brainchild of Anna Yellowbird, Kroetsch's First Nations Eurydice, and the expedition's Chinese cook, Grizzly. Dawe's initial reaction to the structure is one of

complete shock, "He believed for a moment he was losing his mind, in the aimless light was fantasizing the bones he had not been able to find in four days of searching" (Kroetsch, Badlands 125). Anger replaces disbelief when Dawe recognizes the abetting hand of one of his crewmen in various items filched from the expedition's flatboat. Furthermore, he registers a betrayal on the part of "men who were supposedly helping him seek these rare and precious specimens" rather than using them to build a shack for an uninvited member of the party (Kroetsch, Badlands 126). Dawe perceives the greatest insult of all in the fact that such glorious relics, instead of being subject to study, could be co-opted to produce a banal domestic scene:

It was not the heaped and mysterious bones themselves, not the grotesque doorway of the joined thighbones of a hadrosaur nor the stacked and interlocked fragments of fish and turtles and petrified wood; not the broken and fragmented limbs and hips, the bony shields, the huge pelvic bones, the teeth, the jaws, but the fire in the middle of the small room, the pot by the fire, the knife and fork by the pot. (Kroetsch, Badlands 126)

In addition to infuriating Dawe, the structure lends its name to Chapter 28 of the novel. That Kroetsch titled this chapter, "HOUSE OF BONE" and other chapters in a similar fashion owes a great deal to the descriptive, and overtly obvious, labels penned on to the negative plates of many 19th century field photographs. In a letter to his British agent, Kroetsch explains the rationale behind various title changes both for individual chapters and the novel itself:

Mr. John McLAUGHLIN
Campbell Thomson & McLaughlin Ltd.
80 Chancery Lane
London

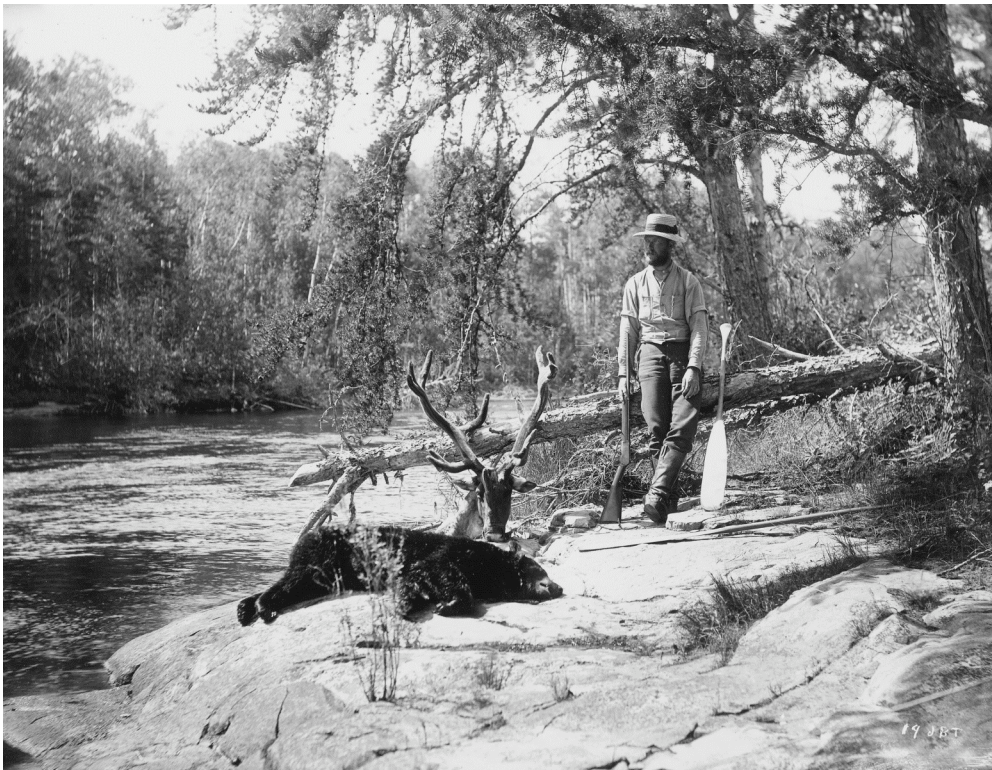
Dec 1, 1974

Dear John,

I'm sorry to hear that the London Post Office is getting to be as bad as our local one. I'm sending under separate cover, another copy of FIELD NOTES. Except that it's no longer called that. I'm trying TRAVELLING EMPORIUM OF THE VANISHED WORLD. That's the name of the photographer's van in the middle of the novel. Maybe the novel is his travelling show. I'm tempted, now, to give each chapter a title such as you might find on a photograph in such a show. In fact I'm even tempted to include as chapters actual photographs, 3 or 4 of them, of an expedition that actually went down the Red Deer River and actually found dinosaur bones. (Kroetsch, MsC 27.1.7.9)

The significance of his first title choice cannot be overstated. It demonstrates that Kroetsch self-consciously constructed his novel as an exploration of, and challenge to, the otherwise hermetic genre of scientific field notes. While his second title didn't last very long, it also demonstrates Kroetsch's flexibility regarding what constitutes a field note, and what constitutes an artefact. He'd also eventually find a self-reflexive application for this discarded title on the side of Sinnott's dark room-*cum*-car. Photographs indeed play a significant, and not exclusively illustrative, role in the corpus of early Canadian palaeontological field notes. G.M. Dawson and J.B. Tyrrell not only include detailed inventories at the back of their field books of the documentary photographs they produced in the field, but they also used these photographs to self-consciously generate a durable mythology about themselves and their expeditions to the north-west. (In some cases all that remains of the photos are these descriptions; the images themselves are lost to posterity). A striking series of self-portraits by J.B. Tyrrell in Manitoba shows him every inch the geological cavalryman for which he later became known. He arranges himself in a

succession of poses amidst the anonymous terrain of a northern forest and an untamed river – the kind of landscape later elevated to archetype in the paintings of the Group of Seven. Although Tyrrell leans on a nearby log he holds his back ram-rod straight; his right hand grasps a rifle at the ready; his left hand grips the antlers of a trophy buck. The logic of the image alludes to the deadly violence of his crack shot; and the carcass of a black bear is laid out on the rocks about his feet like a fireside rug. *Pace* Marian Engel. Each image seems to build to a crescendo until the last produces the perfect effect of intrepid explorer, and dignified man of science.



e003719193

Fig. 1: "J.B. Tyrrell in the North-West". (LIBRARY AND ARCHIVES CANADA / B 02476)

It isn't completely clear which photographs Kroetsch wished to include in his text, and the author claimed amnesia (as did Michael Ondaatje) when I inquired about this subject:

RE: into the dinosaurs' graveyard
 From: robert kroetsch
 Sent: May 19, 2006 6:08:16 PM
 To: samuel pane

Dear Sam,

You are probably out digging up dinosaur bones by now, but I'll try to answer your questions nevertheless. I have no recollection of what photos I considered including in the Badlands text. I believe the photos were in a little privately owned museum in Drumheller that is probably long gone. As for the many photos that I took--I lent them to Ondaatje and don't recall that I ever got them back [. . .] Good luck with the writing, and keep me posted.
 Robert

There is no shortage of emblematic candidates in the archives, especially from the Brown and Sternberg expeditions. Although considering the following citation, the likeliest images were probably from the pages of The American Museum Journal.

The American Museum Journal
 vol XI, December 1911, Number 8
 - valuable [-?-] by Barnum Brown
 with photographs.
 (Kroetsch, MsC27.16.9)

Kroetch includes a detailed series of notes and sketches regarding the dimensions and construction of Barnum Brown's flatboat. Undoubtedly he also gleaned much of this information from Brown's own written description in the AMJ article:

It was evident that the most feasible way to work these banks was from a boat; consequently in the summer of 1910 our party proceeded to the town of Red Deer where the Calgary-Edmonton railroad crosses the river. There a flatboat, twelve by thirty feet in dimension, was constructed on lines similar to a western ferry boat, having a carrying capacity of eight tons with a twenty-two foot oar at each end to direct its course. The rapid current averaging about four miles per hour precluded any thought of going up stream in a large boat, so it was constructed on lines sufficiently generous to form a living boat as well as to carry the season's collection of fossils.

Supplied with a season's provisions, lumber for boxes, and plaster for encasing bones, we began our fossil cruise down a canon which once echoed songs of the Bois brule, for this was at one time the fur territory of the great Hudson Bay Company. (Brown, "Fossil Hunting" 274)

Kroetsch also likely consulted an elaborated version of the same piece Brown penned eight years later for National Geographic (Vol. XXXV, No. 5 May 1919). It was dashingly re-titled, "Hunting Big Game of Other Days" and accompanied by other expedition photographs, and lavish plates of Mesozoic life painted by Charles R. Knight for the American Museum exhibition halls. Indeed the bibliographic reference appears on a single leaf in Kroetsch's research notes: "National Geographic May 1919" (UC: Msc27.16.9 [loose leaf (white/ruled/large note size) 1 page]). Many of Brown's descriptions are strikingly similar. His raft appears in terms nearly identical to those used in the AMJ piece:

As the only feasible way to work these banks is from a boat, the parties proceed to the town of Red Deer, where the Calgary-Edmonton Railroad crosses the river.

There, with the aid of several carpenters, we constructed a flat-boat, 12 X 30 feet in dimension, similar to a Western ferry-boat. It was built upside down, and when calked [*sic*] water-tight was turned over and launched in the river near by. This boat was capable of carrying ten tons with safety (see page 411).

As the river has a speed of four miles per hour, we never intended to go upstream; so the boat was made on broad lines to be carried down by the

current, its course directed by two great sweeps, or oars 22 feet long, one at each end of the boat, and nicely balanced on the gunwale, so that a man could push against it with his entire strength.

Supplied with a season's provisions, lumber for boxes, and plaster for encasing bones, we began our fossil cruise down a canyon that once echoed songs of the "Bois Brûlé," for this river was at one time the home of many fur-bearing animals and within the Hudson Bay Company territory. (Brown, "Hunting" 414-416)

However, Kroetsch clearly relied on the photographs themselves. Brown's illustrations from the original article, viewed in conjunction with Kroetsch's notes about them, present a compelling narrative in their own right:

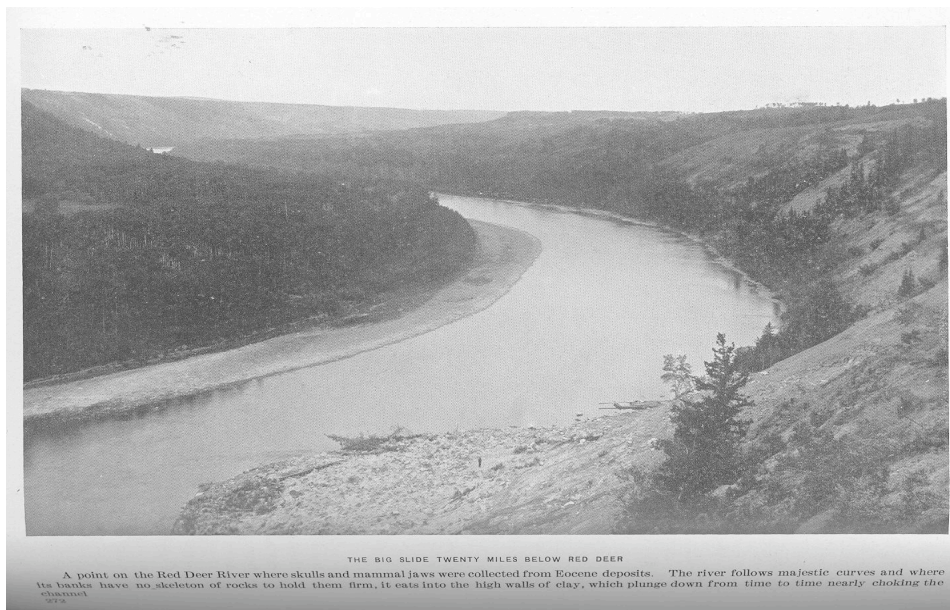


Fig. 2 "Red Deer River #1" Barnum Brown. ("Fossil Hunting" 272)

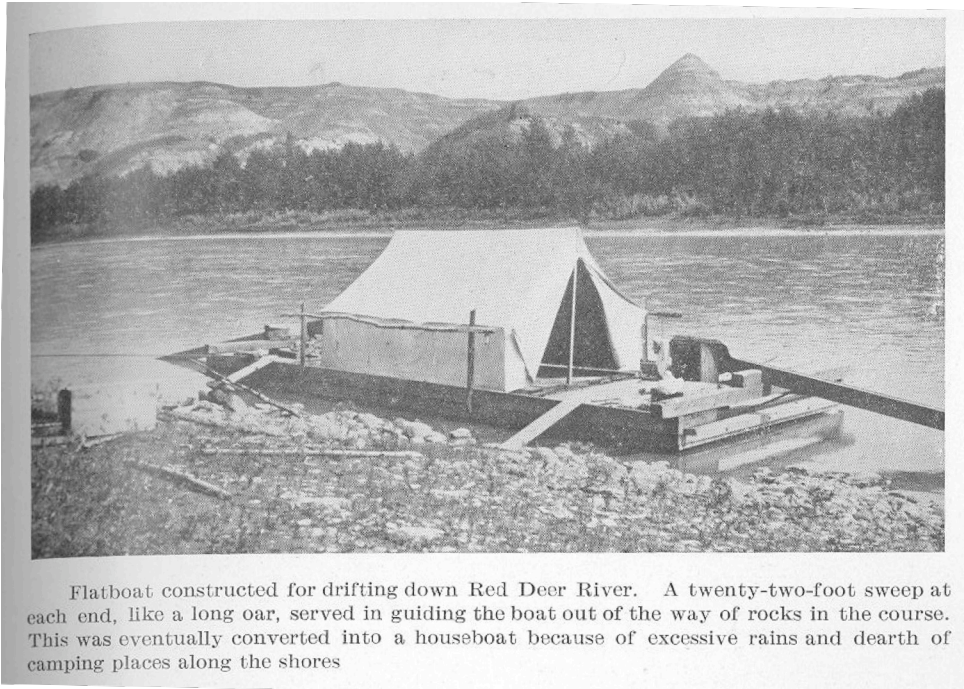


Fig. 3 "Flat Boat on Red Deer River". Barnum Brown. ("Fossil Hunting" 275-277)

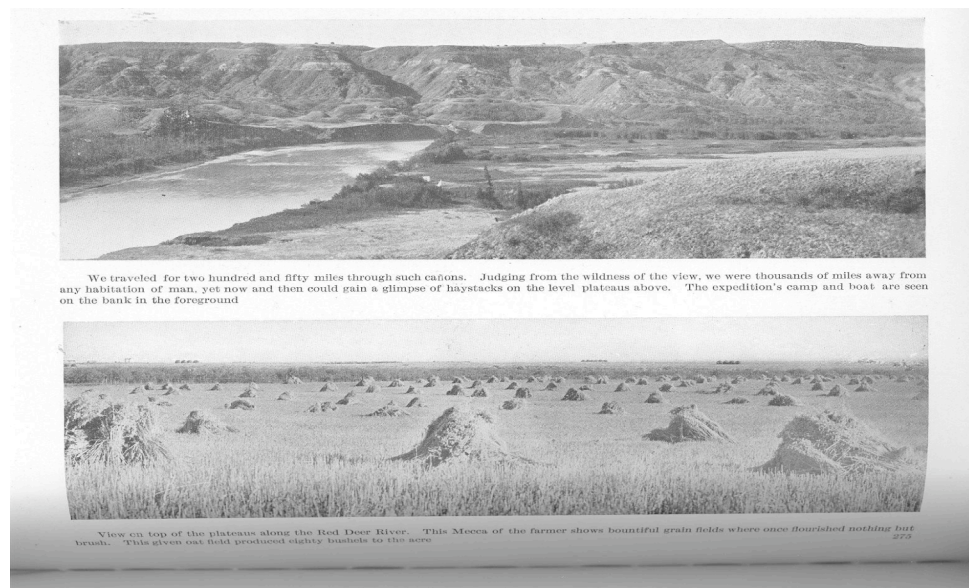


Fig. 4 "Valley and Prairie". Barnum Brown. ("Fossil Hunting" 275-277)

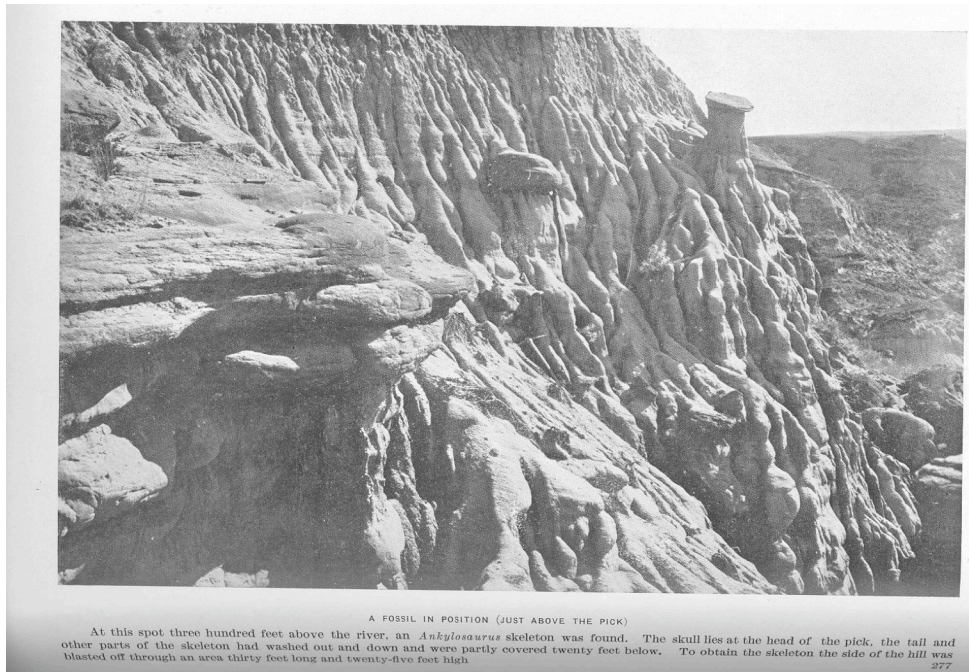


Fig. 5 "Badlands Hillside #1". Barnum Brown. ("Fossil Hunting" 275-277)

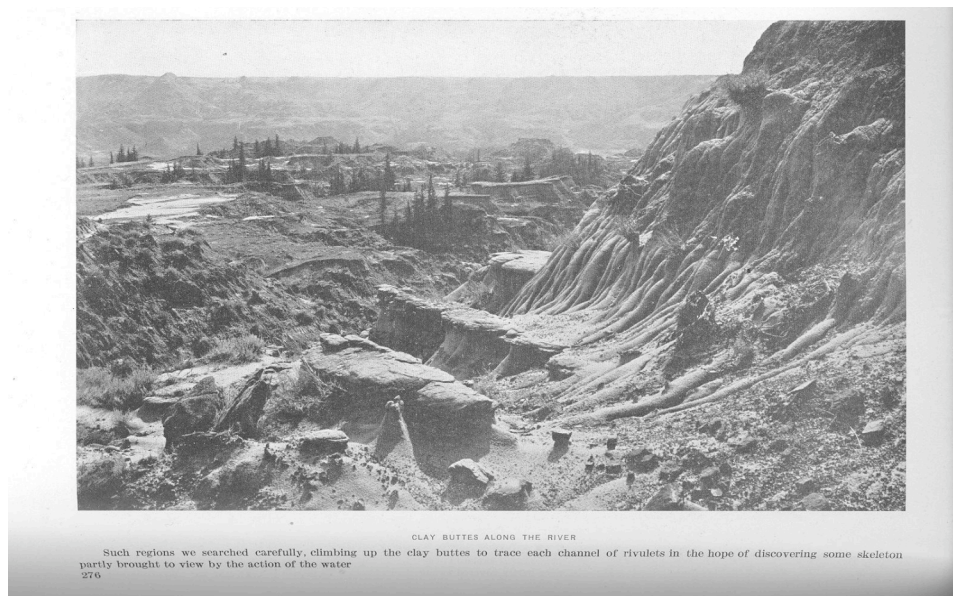


Fig. 6 "Badlands Hillside #2". Barnum Brown. ("Fossil Hunting" 275-277)

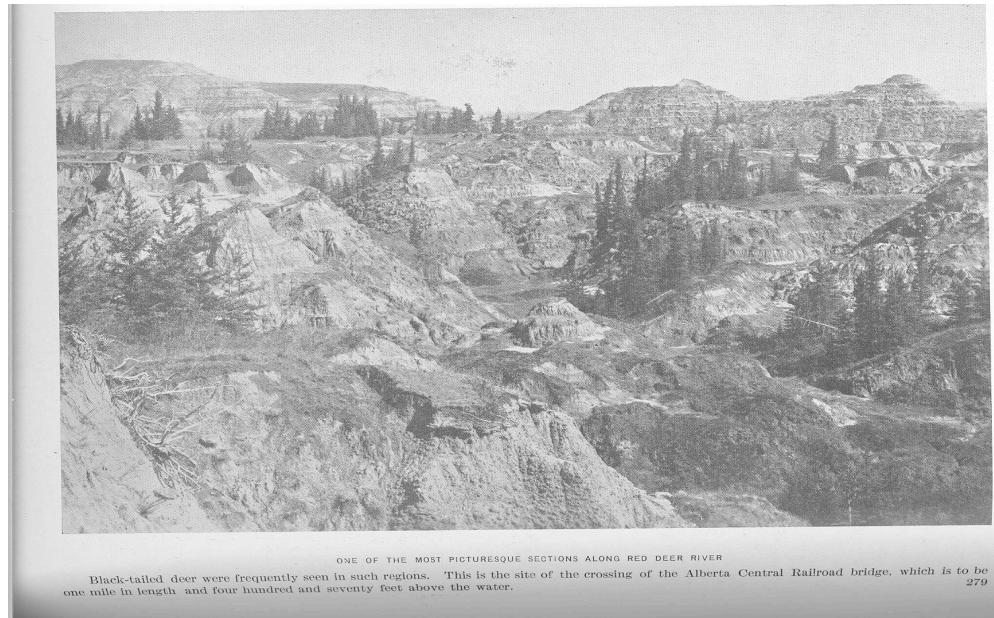


Fig. 7 "Badlands Hillside #3". Barnum Brown. ("Fossil Hunting" 275-277)

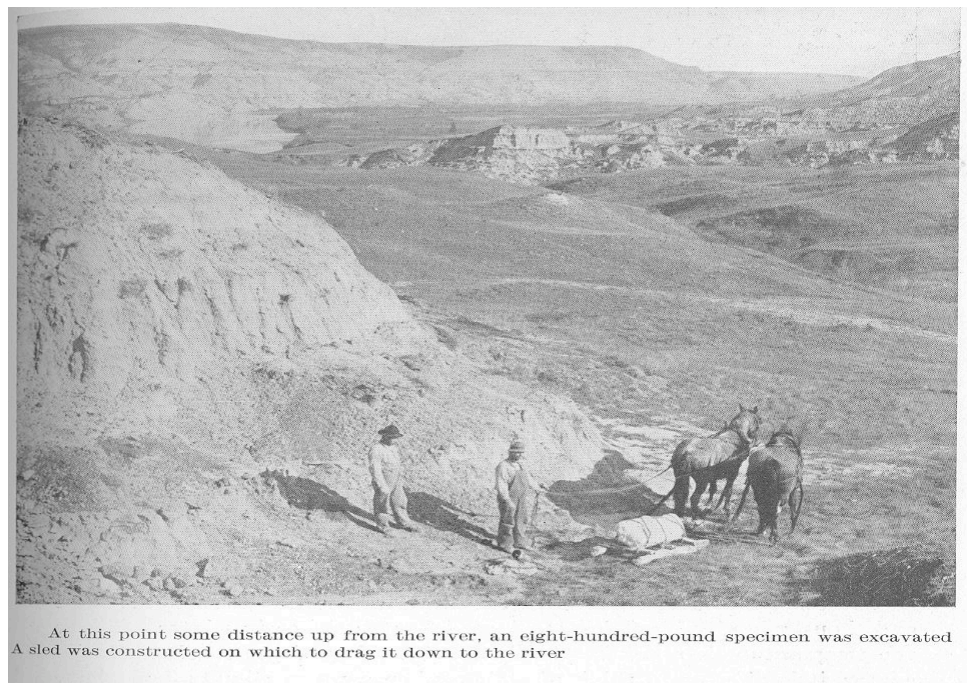


Fig. 8 "Horse Cart in Badlands". Barnum Brown. ("Fossil Hunting" 279-281)

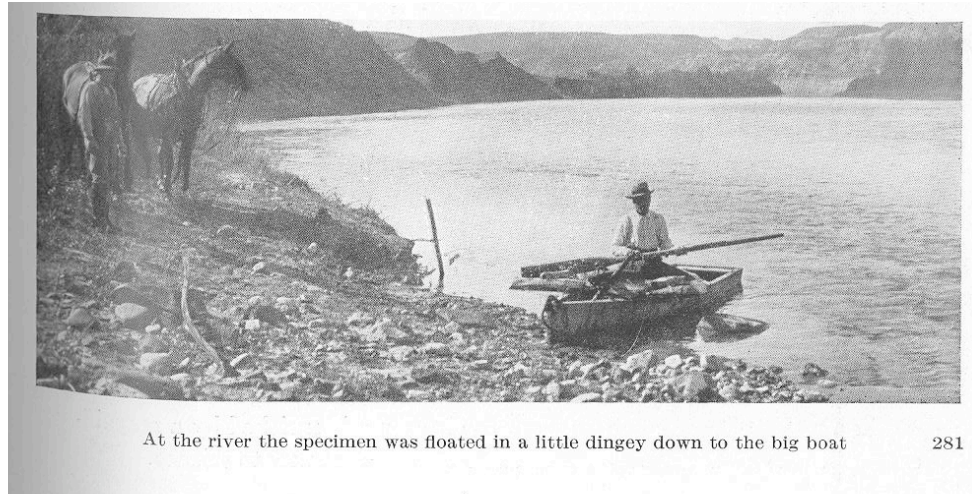


Fig. 9 "Boat in Red Deer River". Barnum Brown. ("Fossil Hunting" 279-281)

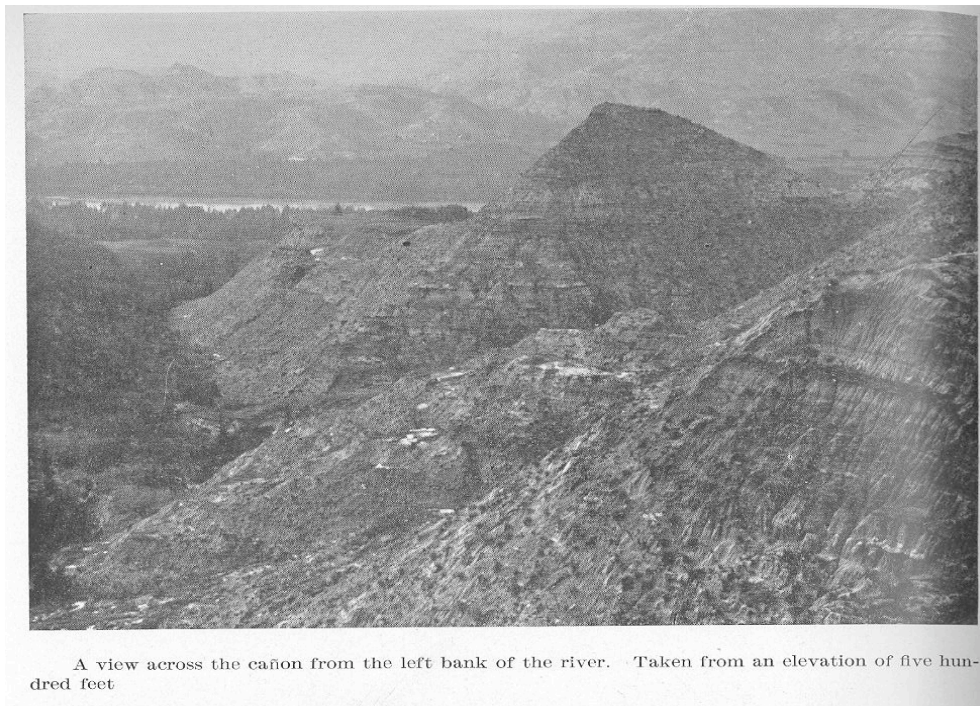
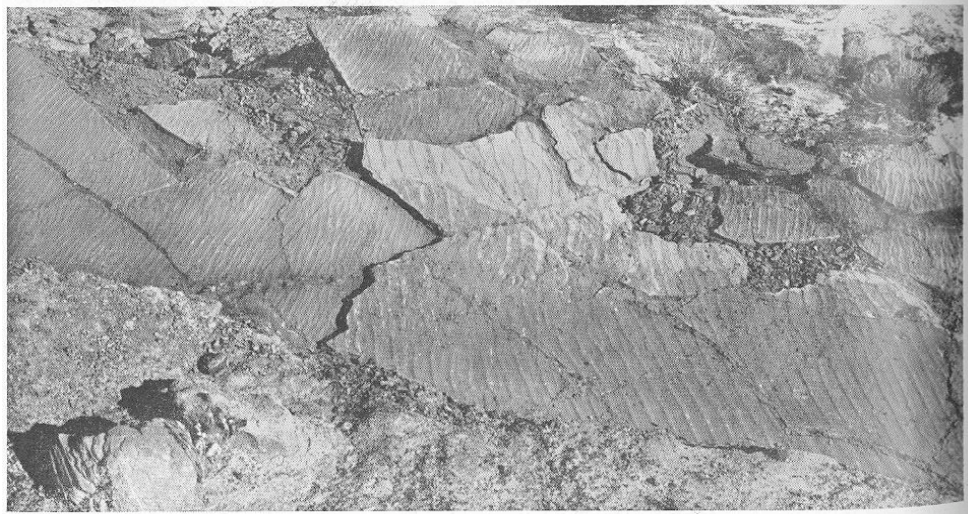


Fig. 10 "Badlands Hillside #4". Barnum Brown. ("Fossil Hunting" 279-281)



Fossil ripples in sandstone. In the Cretaceous period of the past these were ripples in sand along the shores of some prehistoric lagoon, where grew figs and other warm temperate vegetation contrasting with the present vegetation and the ice and snow of Alberta
280

Fig. 11 "Cracked Earth". Barnum Brown. ("Fossil Hunting" 279-281)



Fig. 12 "Red Deer River #2" Barnum Brown. ("Fossil Hunting 279-281)

Mr. J C. Wagner – the rancher who reported the bones. – preliminary visit in the fall of 1909

[see Fig. 3]

1910 –Brown to Red Deer – built boat – 12 ft x 30 ft – 8 ton capacity – 22 –ft oar at either end.

- supplied with a season's provisions, lumber for boxes and plaster for encasing bones

[see Fig. 2]

-lots of rapids

“ “ slides

with frequent stops – 20 miles a day.

[verso]

[see Fig. 6-7]

- flocks of ducks & geese

- [muskrat?] & bears

- rustle of feet in the trees at night.

- owls at night

- near Content – a new series of rocks begins.

box after box was added until almost no room was left on the boat

buttes

ravines

fall – thousands of geese going south

[see Fig. 3]

The square [–?]]

sweep made of planks timb

2 – 2x12

nailed

together

[sketch of aft/fore of raft showing blocks and slot for sweep]

blocks

10x10? deck

large timber

slot for sweep.

uprights nailed to sides to hold tent

ropes
poles

[sketch showing profile of raft with tent poles and beam]
-pole in middle of tent. { use one
no tent on back?}

[verso]
[see Fig. 8]
use of stoneboat to haul specimen
to river – team of horses –
{They pull by hand at end?}
stoneboat – two large logs
with 3 across.
picture of 800 –lb
specimen
tied on.

[see Fig. 5]
picture – 300 feet above river
valley skull or head under
small hoodoo – other parts of the
skeleton had washed out had
were partly covered 20 ft below –
2 obtain skeleton they blasted off
an area 30 feet long & 25 ft high
- deeply ribbed & almost vertical.

climbing ~~banks~~ clay buttes & tracing
each channel of rivulets.

(Kroetsch, MsC27.16.9 note pad)

Aside from the Brown expedition photographs, Kroetsch also refers to a series of
photographs made for George Mercer Dawson during the International Boundary
Commission Survey of 1873-1874:

Sioux grave - poplar stilts, platform with
corpse on it –
buffalo skull under it on

the ground.
really photos – Life and Letters of
George Mercer Dawson,
1849 –1901
-Lois Winslow –Spragge.
(Kroetsch, MsC27.16.9)



Fig. 13 "Sioux Grave". George Mercer Dawson. (Winslow-Spragge 87)

While Kroetsch specifically identifies the Sioux grave photograph, he also indirectly alludes to its corollary, the only other depicting human bones among the

Winslow Spragge plates. Conversely, Dawson does not mention the first in his Boundary Commission notes, but he offers a poignant description for the latter, "The Crow Massacre":

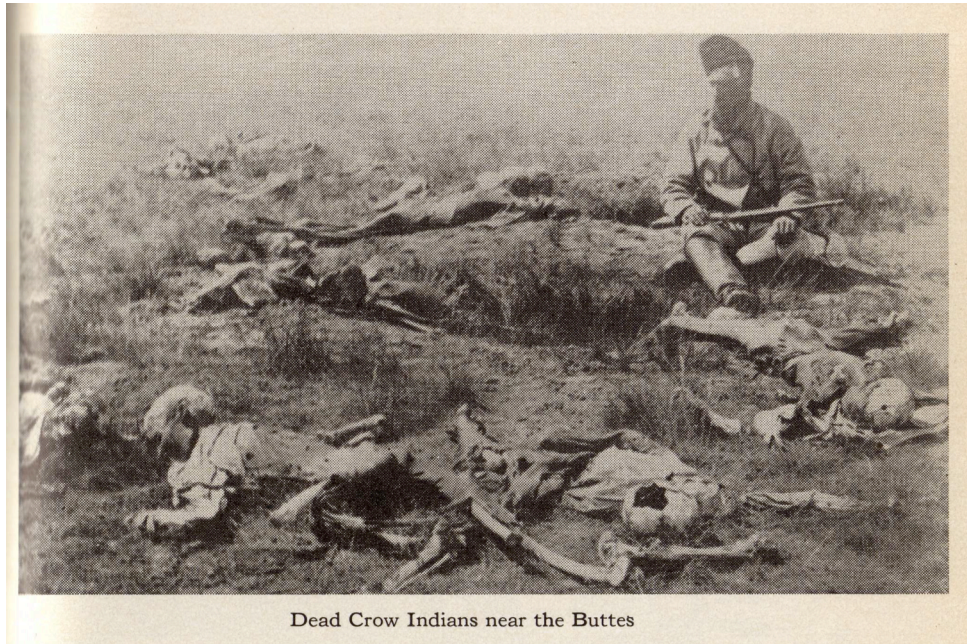


Fig. 14 "Crow Massacre". George Mercer Dawson (Winslow-Spragge 79)

[July 30 . 1874]

82

Ashe coming in from his survey Eastward reported finding the remains of 21 dead indians on the prairie Conrad says they are no doubt Crows. A party of about that strength having left Benton last autumn on a horse stealing expedition to the Blackfoot country to the North. They never returned. Photographers going out in search of battle tomorrow, made arrangements to go with them. Conrad tells me that the Butte? & country along Milk R. forms neutral ground for 4 or 5 tribes. The indians do not enter, or cross it except

83

in war parties. The Crows he says are connected with the lower Gros Ventres & speak a similar language. The latter are connected in the same way with the Mandans. The Crows are not a large tribe. The Peagins get the credit of having perpetrated the massacre. They speak Blackfoot & are a tribe of that nation. The Peagins, Gros Ventres (proper) & Crows are said to be the richest tribes on the Missouri.

The indians he says now complain that they are the most helpless of people, much more so than they were a few years ago. Now that they have kept pace with the times by getting breechloaders & repeaters the Government can stop their supplies of ammunition the moment any trouble arises. They have lost to a great extent the aptitude of using the bow & when deprived of ammunition have no substitute.

Camp W. Butte Astron. Station

8 A.M. B. 25.71

T. 54" E. cloudy

Noon B. 25.66

T. 65" wind light N. clear

July 31. Galway broke camp & moved west. Moved my camp at same time down to the Depot. Started at 8.30 with Boswell & the photographers for scene of massacre situated about ten m. East on the line.

84

The bodies were much shrunken & quite mummified. The arm & leg bones projecting & heads nearly all broken in. They were scattered irregularly over a little area on the slope of a gentle hill. They had been on foot. If mounted originally their horses must have first been stolen from them. They had evidently been surrounded by a greatly superior number of Peagins [sic] & made preparations for a desperate resistance [sic]. They had dug shallow rifle pits, probably choosing badger toses [tosses?] to begin on, & piled stones & earth up round the edges. There were about 7 of these altogether some larger & some smaller but offering very poor shelter at best. Their enemies had evidently ridden round & round them in indian style firing as they ran. One horse had been killed. The Crows must have inflicted heavy loss on their adversaries from their position but had been eventually themselves all killed. The bodies lying nearly all round the edges of the pits. They had been cut & slashed in all directions often in death. Some had as many as three bullet holes through the skull. One body on being turned over showed 5 bullets variously flattened & bent which had dropped out during decay. Nearly all lay on their faces for convenience of scalping. The scalps had been removed from the forehead to the back of the neck. All had a great

gash just below the ribs made by a knife for some purpose. Found a number of bullets,

85

some beads, a couple of arrow heads & many portions of shafts. The chamber of a revolver with two unfired cartridges. A knife &c &c. (Dawson, MS 1874)

While W.D. Matthew includes a series of photographs detailing the major phases of excavation and specimen removal at Bone Cabin Quarry, it would seem there are no extant photographs of the structure itself. At least Kroetsch did not find any in another likely source text.

E.H. Colbert:

Dinosaurs

*The Dinosaur Hunters - ([primary?] title?)

has many pictures

of Alberta's

collecting areas

(Kroetsch, MsC 775/04.25 Box 16/44 Notebook [i] 8 [verso])

Edwin Colbert includes a similar series on the Bone Cabin digs minus the actual bone cabin (plates 42-47). Colbert also includes a detailed series on various palaeontological expeditions conducted in Alberta by George Mercer Dawson, Lawrence Lambe, the Sternbergs and Barnum Brown and co. (plates 62-77) Kroetsch likely consulted images involving the flatboats employed by Brown and Sternberg, to further bolster his mental picture of the Alberta badlands.

Richard Stone, in his rollicking paean to the shaggy ghosts of the Siberian permafrost, alludes to an equally tantalizing structure. Although he includes an extensive

section of illustrations, nowhere in Mammoth does a photograph appear to accompany this extraordinary description:

One piece of evidence for this hunt [of mammoths by early humans] is the remains of igloo-shaped huts built from mammoth bones and tusks on the steppes of southern Ukraine. It's likely that the huts were built thousands of years ago as temporary shelter during mammoth hunting excursions on the steppe. (6)

Kroetsch makes a similar visual allusion to another peculiar cabin. The Dawe Expedition makes an emergency landing near Ghostpine Creek to "rescue" McBride, who went overboard during a botched rapid-run farther upstream. The fact that the crew to that point has limited contact with other people in what appears to be an uninhabited wilderness makes the appearance of a human-built structure all the more surprising:

The unexpected house was of stone: set well back from the shore on a patch of bald prairie, it was both of this world and alien; the stone was as brown as ironstone, like a layer chipped out of a nearby butte; and yet the clothes hanging on a line, the curtains in the small windows, bespoke a domesticity of women rather than a camp of men. (Kroetsch, Badlands 36)

Dawe deems the event worthy of note in an atypical entry echoing the ambivalence he experienced upon viewing Anna's bone tipi: "Dawe wrote, nostalgic for a moment: *There is a wife here. How can she endure the silence?* And he closed the field book, slipped it into a pocket of his dusty flannel trousers" (Kroetsch, Badlands 36). This in another instance of how Kroetsch makes literal his attack on the sealed boundaries of genre purported by scientific notes. Edges blur. Non-essential information bleeds into data. Emotional response creeps in.

One can be forgiven for entertaining beguiling fantasies about pyramid construction along a prairie river. Quite simply the Hiller House, north of present day Morin Bridge in Starland County, stands as an architectural anomaly. As the only historic stone edifice located anywhere along the Red Deer River, it invariably assumes the status of monument. On a recent Alberta Recreational Canoe Association map, "A Paddler's Guide to the Middle Red Deer River: Dickson to Drumheller", the structure is plotted and labelled "Old Stone 'Castle'". Cartographer Clayton Roth acknowledges the irony of so grandiose a moniker by presenting the term "castle" in quotations. Nevertheless the fact that an adjacent natural formation also bears a related, and perhaps derived name, "Castle Butte", suggests that the pile of stones is indeed a *bona fide* monument. Sod houses served the basic requirements of shelter for countless prairie settlers. At the very limit, in this riverine environment, where an unusually plentiful source of ready timber abounded, a wooden structure may have been practicable, but never one of such permanent character. The effort to lug flat stones from distant exposures along the coulee walls should have proved infeasible. As much has been said about the Pyramids at Giza. And yet these inscrutable though deliberate configurations of stone persist, grandiosely in Egypt, and discreetly in southern Alberta.

For unknown reasons or unremembered "dreams of grandeur" Joseph Trafenic, an émigré from Europe, ("possibly an Austrian") via Arkansas, began the daunting task in 1909 (Andrews 30). Seven years later the structure was complete; it featured a cellar with a kitchen above it, a chicken coop and a second storey bedroom, a garage for his wagon and

plough and a stable for his horse (Andrews 30). Almost as soon as he finished his "castle", Trafenic sold it to a local farmer, Hildus Hiller, whose descendents retain ownership of the property and its peculiar ruins to this day. Accompanying Trafenic's mysterious departure is an equally mysterious bill of sale in which the builder's name appears alternatively spelled as "Trotner", "Trofenik" and Trofenick" (Andrews 30). How much this inconsistency can be attributed to the limited literacy of these frontier settlers remains to be seen. However Joseph spelled his last name, he stayed true to the form of the story of the enigmatic stranger, as in Germaine Guèvremont's canonical novel, Le Survenant, who appears from nowhere only to disappear back into nowhere after accomplishing some puzzling mission. The Hillers maintained a sporadic correspondence with the stranger as he moved from Calgary, then to Victoria and finally to Trail, B.C. where he reported his employment at "the smelter" and nothing ever again (Andrews 31).

Krotesch and his cousins, Hugh and Jerry, lunched near this mysterious structure during their Red Deer River boat trip of 1972. In his field notes the author records his observations:

[. . .] ate the
goldeye that Jerry
caught - ~~stone~~
remains of a stone
house – stone mortared
with mud and straw-
root cellar-type room style
offering protection –
(Kroetsch, MsC 775/04.25 Box 16/44 Notebook [ii] 3)

Although this description is spare it gives direct insight into the transformative processes of the novelist's imagination. However brief the visit, the sight of the Hiller House left enough of an impression to serve as the basis for an extended scene in Badlands. Indeed the unique characteristics of the structure, and its artifactual substance are faithfully reproduced and imaginatively populated with the grumpy rancher and his lonely wife. It is unclear if Kroetsch knew of the Trafenic/Hiller back-story and chose to manipulate and/or ignore it altogether. None of the notes in Kroetsch's papers mention the history of the site. However, Kroetsch's observations regarding the stone house directly precede an extended description of a palaeontological dig, which the boaters chanced upon near Ghostpine Creek. Further investigation reveals the palaeontologists to be John Storer and Walter Bruinsma of the Provincial Museum of Alberta. Ironically, this episode is also duly recorded by the scientists in their own field notes [to be discussed at length in a subsequent chapter].

Prior to discovering the story of the stone house in a now defunct Calgary publication, My Golden West, at the Toronto Library periodicals department, I undertook to learn more about a monument of which nothing had apparently been written. In the interests of exploring what Schama terms the "archive of the feet", I too ventured to the site and made these observations and photographs:

24 June 2006
 North of Morrin
 Bridge, Red Deer
 River -mosquitoes

douse myself
in muskol

-sunny, light
breeze
-stone house situated
on flats
-eroded hoodoo
formations to
the east
-two hawks crying
-canoe passes
-motorboat passes, hide
in ruins.

[7 sketches of stone house
concluding sketch:
"pipe bowl found
in masonry N. wall
behind enclosure"]

25 June 2006,
Old Stone House
(north of Morrin Bridge
Starland County
-located on flat, east bank
of Red Deer River
followed a game trail on
private land/private side
of barbed wire fence
-found scattered fragments
in wash of low hoodoos
-recognizable bone
fragment in gulch (west
side) above a stubby
beer bottle (80s?)
-"never look for the
thing but for that
which does not fit"
-all context/all
content
-badlands as vast
archive sometimes

dissociated fragments

-sometimes bones,
 articulated skeletons
 -random but logical
 nonetheless
 logic of erosion/strat-
 igraphy/weather/elements
 time
 -who lived there? 2 brothers?
 patiently piled slabs of
 stone taken from cliff
 face (?) ½ km distant (?)
 -how did they transport
 rock?
 -how many builders?
 -4 rooms, 3 dugouts a
 Model T
 -where has the road
 gone?
 homestead? ranch?
 crop on flat lands?
 danger of flood?

-flood plain
 -clay / earth / bentonite?
 mortar mixed with
 native grasses and
 buffalo bones
 - the pipe bowl imbedded
 in the mortar of
 the north wall
 why place it there?
 safe keeping?
no stem. broken while
 building house?
 thrown in as fill?
 M stands for?
 who is M?
 -who set the model T (?)
 above the pit? to
 what end?

 drunk assholes?
 or a warning?
 -in the pit springs
 from the seat cushions?
 an empty half crushed
 can of wildcat beer
 -gas pedal still
 attached, gearing
 in front differential present.
 -car riddled with
 shotgun pellet holes
 -why shoot at the
 car?
 like a toilet in a
 driving range?
 a simple target
 -compare with old
 car coulee on Tolman's

land which was stripped
 bare though the thin
 tires could be seen in
 the gulch (lower) torn
 free of their rims
 -trail leading to river
 still open but infrequently
 used
 -can structure be clearly
 & fully seen from
 river?
 wolf willow underbrush
 obscuring view?
 -two canoeists do not
 stop or remark
 why? my presence?
 -why did I hide from
 the motor boat?
 (actually jet ski)

-could almost believe
 that the pipe belonged

to the tyrant husband
rancher with shotgun in Badlands
-in enclosure nails
and U-hook visible
in overhead logs
comprising roof
to hang what?
-in enclosure storage
of what?
hang clothing? cooking?
implements?
use?
-cubby holes in
collapsed west room
and large room

east of enclosure
used to store what?
food? valuables?
Why do I care who
lived here?



Fig. 15 "Hiller House #1" Samuel Pane



Fig. 16 "Hiller House #2" Samuel Pane



Fig. 17 "Hiller House #3" Samuel Pane



Fig. 18 "Hiller House #4" Samuel Pane

In retrospect it seems apparent that I borrowed many of Kroetsch's interpretations, both from his notes and from his fictional depiction of the house in Badlands. I had neither at my disposal when I made my field notes and am struck now by the degree to which my own imaginative reconstruction of the stone house was informed by my reading of Kroetsch. While subsequent consultation of the documentary record traces the bare skeleton of deed holders and buyers, Kroetsch's fiction puts flesh on a figure who, for all intents and purposes, is lost to history. The rancher is a plausible, though not necessarily accurate portrait of Trafenic. Inconsistencies abound. No evidence suggests that Trafenic had a wife whom he jealously guarded. John Steffler did not allow a similar dearth of biographical information to prevent him from inventing a lover and wife for Carm Denny, a bona fide historical personage, and purportedly the last inhabitant of a fishing station off the coast of Newfoundland in his long poem, The Grey Islands.

Neither does the initial "M" or "W" inscribed in the pipe bowl which I discovered, overtly accord with that of the house builder or the house buyer (who incidentally, did have a wife). However, even the most unimaginative observer could admit that Trafenic (or Hiller) might have come into possession of just such a pipe. Perhaps it was owned by his father or a deceased brother, or a man he defeated in a heated round of *Schmeer* albeit for lesser stakes than those depicted in What the Crow Said? A hardscrabble dirt farmer, who spent most of his time building a stone folly, isn't likely to have owned his own Model T. No doubt proper authorities could determine beyond a shadow of a doubt whether the

structure and the vehicle were concurrently deposited on the flood plain. One can imagine certain sticklers using a rusted automobile as geologists use fossils to establish an accurate date range for a given unit of rock, but the literary prospector must work with the tools he/she is given. If the great bone hunter, Charles Sternberg, packed imagination in his excavation kit, this inquiry must not shy away from applying imagination to the problem of the Model-T.

Recall the Chekhovian precept about placing a loaded rifle on stage. Kroetsch gives the rancher a shotgun. He also gives Sinnott a Model-T vehicle, which at first glance appears to miraculously float on the surface of the Red Deer River, "and then he [Dawe] looked again towards what he had at one time and again now recognized to be an automobile: a tin lizzie, a remodelled Model-T, motionless in the middle of the river" (Kroetsch, Badlands 98). Its custom paint job only encourages the illusion:

The name MICHAEL SINNOTT was emblazoned in gilt letters on the side of the Model-T; and the Model-T itself had obviously been converted into a portable dark-room. As if a pocket of darkness must carefully be locked up, captured, preserved, to console Michael Sinnott through the day. For under this name was the inscription:
 TRAVELLING EMPORIUM OF THE VANISHED WORLD
 WE SPECIALIZE IN EVERYTHING
 (Kroetsch, Badlands 98-99)

One thing is certain about this car; it came a long way to puzzle members of the Dawe Expedition (and subsequent commentators). Héliane Daziron Ventura wryly notes, "An emporium is a place you travel to, not a travelling place, you are not supposed to sell

an absence but a presence and if you are a specialist you, you are not a generalist" (195).

Based on a jotting in Kroetsch's notes, it seems likely that the author found Sinnott's

Model-T (or at least the model for it) in a grand Ottawa emporium:

beautiful
Model –T-
1913
Ottawa
Museum of
Science

~~Jeny: The
prince saw
that everyone
was asleep.~~
(Kroetsch, MsC27.16.9 loose leaf)

The redacted addendum is more difficult to interpret especially since it may be completely unrelated. Nevertheless it seems to carry an emperor's new clothes suggestion, which only heightens the dreamlike quality of the Model-T's appearance. At the same time the note provides a direct linkage between an artefact and its fictional representation. My own eyes, not to mention my camera, registered the fact that someone actually did spray the Hiller House Model-T with shot.



Fig. 19 "Model-T #1" Samuel Pane

Of course such relics can be found elsewhere along the Red Deer River. As depicted in my field notes, with the help of Alberta Palaeontological Society members I discovered another slightly upstream from the previous one, near present day Tolman Bridge. The following Model-T was abandoned not so far from the spot where Kroetsch's raft spilled its bowman, and where Dawe conducted a futile preliminary search for bones.



Fig. 20 "Model-T #2" Samuel Pane

No doubt such evidence is conjectural, but proof in a forensic sense is not forthcoming. My experience at the Hiller House site directly attests to the power of the artefact to provoke and anchor fiction and for fiction's capacity to explicate the artefact where technology and science fail – a dynamic that lies at the very core of the documentary tradition in Canadian letters. While at best such a statement might appear cavalier, and at worst may seem academically irresponsible, another glance at the history of science reveals a tolerance for, and perhaps even a tendency towards this very kind of imaginative speculation. Stephen Jay Gould explains the mythology surrounding the initial discovery of the first Burgess Shale fossil. He employs a peculiar approach, one not immediately

associated with scientific inquiries, beginning with a short introduction to the human propensity for narration:

We are storytelling animals, and cannot bear to acknowledge the ordinariness of our daily lives (and even of most events, that in retrospect seem crucial to our fortunes or our history). We therefore retell actual events as stories with moral messages, embodying a few limited themes that narrators through the ages have cultivated for their power to interest and to instruct (Gould, Wonderful 70).

While Gould purports to offer his understanding of the facts as a revision to previously held misconceptions, he too engages in a bit of creative narration, adding his own stitches to the old yarn. He suggests that the "canonical story" has "particular" appeal in virtue of its reduction to basic story telling elements. Namely, its movement from tension to resolution embodies the two-fold theme of "serendipity and industry leading to just reward" (Gould, Wonderful 71). Alluding to Shuchert's version of the events, Gould emphasizes the architecture of the "primal tale." He finds it no coincidence that the account should demand a lucky break and an impeccable sense of timing designed to eke out the maximum amount of suspense. Gould recounts the myth as it has been retold countless times by many commentators. On a trail high in the Rockies above Field, British Columbia, with daylight failing in the face of a building snow storm, Professor Walcott's Smithsonian expedition is about to conclude the 1909 field season when Mrs. Walcott's horse slips only to uncover a fantastical hitherto unknown specimen from the middle Cambrian. His curiosity piqued by this new discovery, Walcott has no choice, but to leave the mountain before he can determine the source layer. He must bide time over a long "winter of

discontent" in Washington, before he can return to solve the mystery (Gould, Wonderful 71).

According to the popular account, and reminiscences of his son Sidney, upon his return Walcott manages to track down the bed some 750 feet above the first discovery. Gould calls this a "lovely story", but one that is "untrue" (Gould, Wonderful 71). He bases this determination on his systematic examination of Walcott's field diary held in the Smithsonian archives. If Gould begins his investigation into the Burgess Shale documentation like a post-modern literary critic, he pursues it like the hard-boiled detective of a film noir who must only ever find black and white answers. However, he employs some curiously contingent diction for one who is about to uncover a smoking gun:

Walcott, a great conservative administrator, left a precious gift to historians in his meticulous habits of assiduous record keeping. He never missed a day in his diary, and we can reconstruct the events of 1909 with fair precision. Walcott found the first soft-bodied fossils on Burgess Ridge on either August 30 or 31. (Gould, Wonderful 71)

Gould takes the accuracy of these field notes at face value insofar as they appear complete, voluminous and sequentially dated. Yet even direct consultation of Walcott's notes demands some form of interpretive *reconstruction*. Although they appear meticulous to the interpreter, Gould admits only to *fair precision* regarding the discovery date of specimens. Indeed they are found on *either* the 30th *or* the 31st. A true stickler for detail wouldn't dismiss this discrepancy as incidental. Of course, the sanctity of the field note itself must be questioned. If Gould had wanted to push his exposé further still, he may have

delved into the possibility that scientific field notes, rather than being a hermetic repository of fact, might be as porous and predisposed to fudging as any other literary genre. While the countless British Columbian fossils tucked away in Smithsonian Institute drawers will not allow Walcott's account to be entirely fictional, the savvy reader must not take Walcott's word on the matter. Insofar as Walcott deploys narrative to create a record his discoveries, he makes use of all the subjective techniques and tropes associated with the telling of stories; facts may appear on the page, but they are arranged purposefully, if not artfully.

According to Gould the germ of the Burgess myth lies in Walcott's reported facts. Contrary to the popular story, Walcott's notes do not record a snowstorm, or the chance discovery of the critical slab through the misstep of his wife's horse. Rather, Gould traces the transformative moment to a simple, perhaps boring, speculation on the part of Walcott, that a "snowslide" may have transported the specimen to its location of discovery (Gould, Wonderful 73). Subsequent entries, and their telling dates, demonstrate that instead of leaving the field immediately, Walcott stayed on for several more days to collect other significant specimens. Although precise dating regarding the initial find remains nebulous, Walcott's field descriptions and sketches up to September 7th, according to Gould, would seem to disprove the well known story. While the account as told in Walcott's field diary "makes more sense", Gould admits that the popular story may be more "romantic and inspiring" (Gould, Wonderful 75). While Walcott produced several major papers on the

Burgess Shale fauna, he never completed an extensive book length project before moving on to other research subjects. Gould's own book on the subject, A Wonderful Life: The Burgess Shale and the Nature of History, in scope and title, thus purports to serve as the over-arching authoritative version – no small irony from a scientist so self-admittedly interested in narrative. In an artistic flourish, Gould includes several views of himself and his family in Walcott's quarry, alongside similar archival images of the elder palaeontologist and his companions in the same locale (Wonderful 66-67). Indeed, the discrepancies between versions of Walcott's discovery are certainly the most compelling aspect of the Burgess lore for non-specialists. That the substance of such a canonical tale may be subject to constant revision through an inexorable dialogue between facts and fictions, strikes at the very heart of this story and study.

Even the pre-eminent Richard Owen, celebrated anatomist and coiner of the term *dinosaur* in reference to those terrible lizards of the Mesozoic, succumbed to a likely story. In 1854 he was called to assist Waterhouse Hawkins in his infamous Crystal Palace restoration of *Iguanodon*. The trouble came not with a bone, but rather with a horn of contention. Owen elaborated upon Mantell's original description of the great beast. He believed it to be a quadruped, and placed what he conceived of as a horn squarely on the brute's snout like a "dinosaurian rhinoceros" (Colbert 34). Ironically, and perhaps to the anatomist's chagrin, apart from its pronounced proclivity for meat eating, his monster bore

a striking resemblance the biblical behemoth which also used the business end of its face to root up dinner:

Behold now behemoth, which I made with thee; he eateth grass as an ox./ Lo now, his strength is in his loins, and his force is in the navel of his belly./ He moveth his tail like a cedar: the sinews of his stones are wrapped together./ His bones are as strong pieces of brass; his bones are like bars of iron./ He is the chief of the ways of God: he that made him can make his sword to approach unto him./ Surely the mountains bring him forth food, where all the beasts of the field play./ He lieth under the shady trees, in the covert of the reed, and fens./ The shady trees cover him with their shadow; the willows of the brook compass him about./ Behold, he drinketh up a river, and hasteth not: he trusteth that he can draw up Jordan into his mouth./ He taketh it with his eyes: his nose pierceth through snares. (Job 40: 15-24)

Contemporary palaeontologists now understand *Iguanodon* as a bipedal carnivore. Owen's horn, probably served as kind of thumb claw on its forelimbs (Colbert 34). This misunderstanding may have escaped attention, had Waterhouse Hawkins not built such a concrete illustration, and more spectacularly hadn't Owen elected to preside over a New Year's Eve banquet in the belly of the horned beast. Marsh didn't pull any punches with his acidic remarks regarding this folly in his 1895 address to the British Association for the Advancement of Science:

The Dinosaurs seem . . .to have suffered much from both their enemies and their friends. Many of them were destroyed and dismembered long ago by their natural enemies, but, more recently, their friends have done them further injustice in putting together their scattered remains, and restoring them to supposed lifelike forms. . .So far as I can judge, there is nothing like unto them in the heavens, or on the earth, or in the waters under the earth. We now know from good evidence that both *Megalosaurus* and *Iguanodon* were bipedal and to represent them as creeping, except in their extreme youth, would be almost as incongruous as to do this by the genus *Homo* (Schuchert 385).

Marsh thus presents an ironic spin on the notion of character assassination and underscores the potential of narrative to cause tangible harm to purported fact. Nevertheless, a good story is hard to resist. Kroetsch records one amidst his research bibliographies:

Scott, William B. 1927
 Developments of American Palaeontology.
 Amer. Phil. SOc. proc., vol. LXVI, pp. 409-429.
 (Kroestch, Msc27.16.9 loose leaf)

In this historical survey William Berryman Scott recounts a notorious episode from the earliest days of North American palaeontology. Due to his unflinching belief in the indestructibility of species Thomas Jefferson hypothesized that *mammoth* and *megalonyx*, actually the giant sloth *megatherium*, which he erroneously believed to be a type of prehistoric lion, still roamed the then uncharted regions of the American north-west (Notes 412). He reasoned, "Those parts still remain in their aboriginal state, unexplored and undisturbed by us, or by others for us. He may as well exist there now, as he did formerly where we find his bones (Jefferson 53). Jefferson supported his scientific conjectures with vivid accounts from natives.

'[I]n ancient times a herd of these tremendous animals came to the Big-bone licks, and began an universal destruction of the bear, deer, elks, buffaloes, and other animals, which had been created for the use of the Indians: that the Great Man above, looking down and seeing this was so enraged that he seized his lightning, descended on the earth, seated himself on a neighbouring mountain, on a rock, of which his seat and the print of his feet are still to be see, and hurled his bolts among them till the whole were slaughtered, except the big bull, who presenting his forehead to the shafts,

shook them off as they fell; but missing one at length, it wounded him in the side; whereon, springing round, he bounded over the Ohio, over the Wabash, the Illinois, and finally over the great lakes, where he is living this day.' (Jefferson 43)

Indeed, included among his instructions to Lewis before the commencement of the 1804-1806 Lewis and Clark expedition up the Missouri River and eventually to the mouth of the Columbia are these "Other object[s] worthy of notice" and "the animals of the country generally, & especially those not known in the U.S. / the remains and accounts of any which may deemed rare or extinct" (Bergon xxv).

Some creationists still maintain the veracity of a tall tale spun by a wandering youth named Pliny Moody, who in 1800 chanced upon dinosaur tracks in the Triassic rocks of the Connecticut Valley. He arrived at a simple deduction and called them the "footprints of Noah's Raven" (Colbert 5). To be fair Moody can't be faulted altogether. Edward B. Hitchcock, president and professor of Natural Theology and Geology of Amherst College, and scientific describer of the tracks also insisted that they had been left by ancient birds, which considering current understandings of the hereditary linkage between dinosaurs and contemporary birds is not so outlandish after all (Colbert 37).

Enthusiasm to establish this connection gave rise to the most significant oversight in contemporary palaeontology – the bird that wanted so badly to fly it had itself invented. At the cusp of the new millennium, National Geographic jumped to a colossal conclusion by

printing an article that described *Archaeoraptor Liaoningensis*, a creature which the magazine breached scientific protocol to name before it could be fully investigated by a peer reviewed journal. The author, Chris Sloan, styled it as the "true missing link" between birds and dinosaurs (100). Indeed both Nature and Science had conspicuously declined to participate. The specimen from Liaoning Province in north-eastern China proved to be an elaborate composite featuring a cleverly disguised combination of parts and counterparts from a bird-like creature, and the stiffened tail of a small carnivorous dromaeosaur. Canada's Dr. Phil Currie, who was consulted on the authenticity of the find, later admitted that his involvement in the "Piltdown Chicken" fiasco was the "greatest mistake" of his career (Simons 132).

Forgeries are as old as the disciplines of palaeontology and archaeology. Piltdown Man and the Cardiff Giant count among the more spectacular examples. In the case of Piltdown Man, from which the aforementioned "chicken" drew its infamous moniker, at least real bones were used to create the impression that the missing link in the evolutionary chain of *homo sapiens* had been discovered by a roadside in East Sussex in 1912 (Reader 54). Granted the bones were those of chimpanzees expertly placed to produce a credible looking, and thoroughly false, illusion that persisted well into the 1950s (Reader 76-77). Some even suggest that Arthur Conan Doyle, later to be beguiled by the coming of the fairies, may have unwittingly participated in the scheme (BBC "Piltdown"). However, the case of the Cardiff Giant took a page from the Beringer affair.

As with Piltdown man, contempt for authority and petty avarice were the motivating factors behind the scheme of New York Tobacconist George Hull. An avowed atheist, Hull undertook to teach a lesson to fundamentalist Christians with whom he had argued over the literal truth of a passage from Genesis (Rose 32-33). The stunt had no mean price tag. It cost Hull \$2600 to make fools of those who contended "there were giants in the earth in those days" (Genesis 6:4). Hull employed all manner of subterfuge to ship a block of Iowa gypsum by rail to Chicago where he swore a stonecutter to secrecy and engaged him to carve his "giant" (Rose 33). After subjecting the statue to a ferocious beating with a jury-rigged mace, then dousing it with acid for good measure, Hull shipped the freshly "weathered" masterpiece to his cousin's farm in Cardiff, New York where "Stub" Newell buried it post-haste. A year later Newell engaged two men ostensibly to dig a well. It was no coincidence that the spot he had chosen was exactly over the statue's grave. Newell played his part with the panache of a seasoned actor when the unsuspecting well diggers uncovered a GIANT! Soon he was charging twenty-five cents admission to frenzied gawkers. The public readily paid the hasty increase to fifty cents a pop in spite of the condemnation of notable experts (Rose 30). Among this group of non-believers was the dinosaur expert, O.C. Marsh who plainly called the "Cardiff Giant", as it became known, "a most decided humbug" (Rose 33).

Hull played his cards right and unloaded his share of the Giant for what amounted to a king's ransom in 1869, nearly \$23 000 (Rose 33). The buyers, which consisted of a

syndicate headed by David Hannum transported it to Syracuse for exhibition (Rose 33). At this point, the story of the Cardiff Giant took another bizarre twist. The infamous circus man, P.T. Barnum, commissioned an exact duplicate after his offer to purchase the original was flatly refused. Barnum then took the cheeky move to advertise his copy as the "real" and the Syracuse specimen as a "fake" (Rose 33). The debacle ended in court where Hannum was forced to admit his Giant was a fraud to begin with, and where he arguably coined the popular phrase, "There's a sucker born every minute" contrary to popular legend which ascribes the remark to Barnum (Rose 33).

Mark Twain was no stranger to stone objects of curiosity. Early in his career he wrote a sensational piece for a Nevada newspaper not unlike some of the finer offerings from today's *National Enquirer*. On October 4th 1862 the *Virginia City Territorial Enterprise*, printed a short article entitled "Petrified Man", which described a peculiar discovery near Gravelly Ford:

Every limb and feature of the stony mummy was perfect, not even excepting the left leg, which has evidently been a wooden one during the lifetime of the owner - which lifetime, by the way, came to a close about a century ago, in the opinion of a savan [sic] who has examined the defunct. The body was in a sitting posture, and leaning against a huge mass of croppings; the attitude was pensive, the right thumb resting against the side of the nose; the left thumb partially supported the chin, the fore-finger pressing the inner corner of the left eye and drawing it partly open; the right eye was closed, and the fingers of the right hand spread apart.

Apparently, the subtle satire escaped his readers. Other newspapers lined up to serialize the article. What had been intended as a caustic rebuke to the phenomenon of

petrified men turning up all over the U.S., became a tantalizing invitation to curiosity seekers who didn't seem to mind receiving a literal, if lithic, thumbed nose. A character from Edith Wharton's 1904 short story, "The Descent of Man" engages in a satiric enterprise that meets with an equally unironic reception. Although in this case the roles are completely reversed. Rather than writing as an expert guided by empirical procedures and evidence, Professor Linyard adopts the tone of the vulgarizer who pronounces on "pseudo-scientific" topics regarding "metaphysical truths" of faith.

He would write a skit on the "popular" scientific book; he would so heap platitude on platitude, fallacy on fallacy, false analogy on false analogy, so use his superior knowledge to abound in the sense of the ignorant, that even the gross crowd would join in the laugh against its augurs. And the laugh should be something more than the distension of mental muscles; it should be the trumpet-blast bringing down the walls of ignorance, or at least the little stone striking the giant between the eyes. (Wharton 315)

To his astonishment he gains fame and approbation from the general public. However, he discovers that in order to maintain this popularity and its concomitant financial benefits he must postpone his "serious work" indefinitely. There is simply no public appetite for treatises involving microscopes and beetles.

Years later, Twain took up the cause again and wrote a clever parody of the Cardiff Giant episode in his "A Ghost Story." Although Twain's story is an unabashed critique of the capitalistic *circus*, for lack of a better term, that surrounded the beleaguered giant, it also reads as a strangely intimate meditation on memory, monument and commemoration. For Twain, the relic bears a heavy burden of pathos in spite of its provenance. The story

opens with a lone traveller taking a room in hotel whose bygone glory is underscored by its present decrepitude. The abandoned upper stories "given up to dust and cobwebs, to solitude and silence" provide the appropriate venue for mournful contemplation of the past (Twain, Complete 245). Indeed, the traveller is plagued by the notion that he is "groping among tombs and invading the privacy of the dead" (Twain, Complete 245). He assumes the posture of the angel of history when he reclines by the grate, "recalling old scenes, and summoning half-forgotten faces out of the mists of the past listening, in fancy, to voices that long ago grew silent for all time, and to once familiar songs that nobody sings now" (Twain, Complete 245).

Like an Ebenezer Scrooge from the Old South the traveller is visited by several spectral presences and, in turn, is scared out of his wits. Only when a phantom appears as none other than the Cardiff Giant, does the traveller paradoxically regain his composure, "for a child might know that no harm could come with that benignant countenance" (Twain, Complete 247). The Giant cuts a pathetic figure, trailing bits of his stone spinal column and complaining of chilblains resulting from his long interment beneath Newell's farm. Yet, through his imprecations, he communicates to the traveller a desire to return to the very spot: "I am the ghost of the Cardiff Giant. I can have no rest, no peace, till they have given that poor body burial again" (Twain, Complete 249). Whether Twain intended these comments as a critique on the ethics of disturbing the dead through archaeology or palaeontology, or as an argument for the repatriation of human remains, is a subject for

debate. However, it is evident that he quite self-consciously exploited common superstitions regarding such interventions to sharpen the uncanny quality of his tale.

The metaphysical risk to the living implied by the ghost harkens to the warning spoken by the ferryman to Web: "Dead is dead. We don't need any of you damned grave robbers down here" (Kroetsch, Badlands 46). Even barring allusion to Rudyard Kipling's incandescent description of nearby Medicine Hat, as having "all hell for a basement" this Albertan ferryman must inevitably echo the ancient ferryman Charon. The guardian of the underworld refused passage across the River Styx to new arrivals not only if they failed to pay the toll of an obulus coin, but also if the proper rites of burial or cremation were not observed for their corpses in the world above. Web becomes incensed when the ferryman refuses him passage across the Red Deer River, though he accepts the intractability of this Charon-like figure with only a moderate amount of cursing. Even when Web retreats and rehearses a litany of excuses that he might deliver to his master, William Dawe, he implicitly accepts that any counter-argument based on human law is futile in such dark territories. "[. . .] Dawe, tell him who you are, what we're doing here; in daylight the trip is free, as decreed and provided by the Province of Alberta" (Kroetsch, Badlands 47).

Living humans, as Orpheus also discovers, simply don't have business in the underworld. Documents in Kroetsch's archive shows that the entire premise of Badlands hinges on a native version of the Orpheus myth, which he drew from the oral-history studies of a Swedish anthropologist named Ake Hultkranz (more on this later). Those who

attempt to force passage without due attention to the ferryman's stipulations are in for trouble. Charles Sternberg and his associate nearly became permanent residents of the bone yards they so eagerly sought. Indeed they barely escaped with their lives from a similar encounter in the Oregon desert – another likely stand-in for hell:

When we reached the Williamson River, we found there the lodge of a Snake Indian, who appeared dressed in red paint and a breech-cloth, and demanded toll. But as American citizens we had paid taxes to help pay for that bridge; so we refused to pay toll for the use of our own property, and rode across in spite of the threats hurled at us [. . .] I did not look back , but George who did, saw the Indians, in anger level their rifles as they shouted to us to stop. (Sternberg Life 149-153)

Unlike Web and Sternberg, J.B. Tyrrell played these kind of exchanges by the rules, both metaphysical and provincial. He duly noted paying his obulus tribute on numerous instances during his 1884 expedition to the Alberta badlands: "THURSDAY 10 1884: Ferriage across Red Deer 1.25" (Tyrrell, MS). Perhaps it is not too outlandish to attribute his success in finding the famed Albertosaurus skull to these courtesies. Hearsay bantered around the field kitchen during my tenure in the bone fields credits a landowner whose property borders present day Dinosaur Provincial Park with sentiments not altogether dissimilar from Web's prairie river Charon. I duly recorded the rumours in my field book.

cantankerous
old bugger refuses
all access to palaeos
calls them grave robbers!
once called field station
threatening to shoot a

crew who were actually

on park side. (Pane 23)

The fact that any trace of organic material in dinosaur "bones" is generally lost to mineral substitution during the fossilization process over the course of tens of millions of years seems to make little impact on the taboo. Apparently, stone can be bone too. The heritage of this belief is even recorded by the first European to "discover" fossilized bones in the Canadian North-West. The defrocked Jesuit and tantalizing cipher, Jean L'Heureux, describes the fossil vertebrae of a dinosaur emerging from an exposure on a tributary of the Red Deer River, possibly Onetree Creek, near present day Patricia:

"The natives say that the grand-father of the Buffalo is buried here. They honour these remains with offerings and presents to gain favour in their hunt from the spirit who once animated them" [my trans] (15-16). Stones are thus revered as de facto bones regardless of "objective" evidence to the contrary. Villagers in Henan Province of central China have only recently given up the belief that fossilized dinosaur bones, stones for all intents and purposes, are the mortal remains of flying dragons. They believed that these dragon bones had healing properties and boiled or ground them for consumption as might be done with organic material from any number of non-mythological creatures (CP "Chinese").

Both popular mythology, and Native and Eastern spiritual traditions offer analogues to the creation myth of the bible: "And the LORD God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul" (Genesis 2:7); and that of the Koran, "God created you from dust, then from a little germ"

("The Creator" 35: 10). Further excavation yields another version of the story with an aggregate parallel. Ovid describes the immediate aftermath of a global flood. A lone couple "survive[s] as relicts" of humanity (Ovid I: 381-382). Deucalion and Pyrrha land near the shrine at Cephisus where they appeal to the goddess Themis to restore their drowned race. Themis takes pity on their plight and instructs them on a method of resurrection, "'Leave this sanctuary, cover your heads and ungirdle your garments,/ then cast the bones of your might mother behind your / backs'" (Ovid I: 381-382). Pyrrha's sense of superstition rivals that of Mark Twain's narrator. Her interpretation is literal; at first she rejects the implied desecration to her mother's mortal remains. Only when Deucalion recognizes the metaphorical import of the goddess' order does his wife consent to the ritual: "'Our mighty mother is Earth. I believe what is meant by /her bones /are stones on her body, and these we are bidden to cast / behind us'" (Ovid I: 393-394). The resulting trans-substantiation rivals any ascribed to religious doctrine. It reveals a mineralogical alchemy alluded to by science and lore alike. Absent the "Prometheus skill" of his father, Deucalion casts his lot in with the mysterious generative properties of nature, which through the timely assistance of the gods, wreaks fundamental change. That stone should become flesh is no more absurd than the prospect of flesh (of a dinosaur, or a Cardiff Giant for that matter) becoming stone.

Who would believe what ensued if it wasn't confirmed by tradition? / The stones started to lose their essential hardness, slowly / to soften, and then to assume a new shape. They soon / grew larger / and gathered a nature more gentle than stone. An outline /of human /form could be seen, not perfectly clear, like a / rough hewn statue / partially carved from the marble and not yet properly / finished. / But still, the part of the stones which consisted of earth / and contained / some moisture was turned into flesh; the solid, inflexible / matter / was changed into bone; and the veins of the rock into /

veins of blood. / In a moment of time, by the will of the gods, the stones / that were thrown /from the hands of a man were transformed to take on the / appearance of men, /and women were fashioned anew from those that were / thrown by a woman. / And so our race is a hard one; we work by the sweat of / our brow, / and bear the unmistakable marks of our stony origin. (Ovid I: 374-415)

Twain's ghost appears to concur that proof is stone cold. However, his assertions must be taken with a heavy grain of salt given that the Cardiff Giant, in the first instance, is not a fossilized man, but rather is little more than a crude facsimile. Twain's story dramatizes this point with a clever twist, "Why you poor blundering old fossil, you have had all your trouble for nothing - you have been haunting a PLASTER CAST of yourself - the real Cardiff Giant is in Albany!" (Twain, Complete 249). Although he playfully makes light of the Giant's misconception, Twain simultaneously generates linguistic, ontological and epistemic tension with his juxtaposition of opposing terms, "fossil", "cast" and "real." His explanatory footnote only deepens the lexical ambivalence:

A fact. The original fraud was ingeniously and fraudfully duplicated, and exhibited in New York as the 'only genuine' Cardiff Giant (to the unspeakable disgust of the owners of the real colossus) at the very same time that the latter was drawing crowds at a museum in Albany. (Twain, Complete 249)

Again, "fact", "original", "fraud" "duplicat[e]" and "real" vie with one another for meaning, which can only be generated through opposition. There can be a *real* or an *original* only insofar as the specimen is not a *fraud* or a *duplicate*. Twain's "only genuine" Cardiff Giant, set apart by quotation, competes with the "real Colossus" for authority.

Neither the "fraud" nor the "real" artifacts are *bona fide* fossils in the strictest sense. This ambiguity coupled with the supernatural component destabilizes the purported rock solid foundations of scientific knowledge. If determinations regarding the provenance of a specimen are so susceptible to confusion then perhaps there must be something added to the diagnostic toolbox of the scientist – the foreign instruments of imagination and empathy. "Confound it, don't you know your own remains?" the narrator poignantly asks (Twain, Complete 249). Evidently, the Ghost of the Cardiff Giant does not. He responds incredulously, "Honestly, IS that true", to which the narrator cryptically retorts, "As true as I am sitting here" (Twain, Complete 249). With all the eerie lights flashing about, the gouts of blood dripping from the ceiling, the racket of chains, and the agonized wailing, who can say what is honest? Clearly, the final pleas of the mortified ghost fall on deaf ears.

'The Petrified Man has sold everybody else, and now the mean fraud has ended by selling its own ghost! My son, if there is any charity left in your heart for a poor friendless phantom like me, don't let this get out. Think how YOU would feel if you had made such an ass of yourself. (Twain, Complete 250)

Apparently, the irony is simply too delicious to take the spectre's embarrassment into consideration. Can the reader be blamed for doubting the field notes of this less than trustworthy narrator? Poor Cardiff Giant. Eudora Welty takes another swipe at this popular myth in her short story called "Petrified Man." Relationship gossip between the patrons and staff of a beauty parlour shifts to a perplexing freak show exhibit mounted in the vacant store next door.

[T]hey got this man, this petrified man, that ever'thing ever since he was nine years old, when it goes through his digestion, somehow Mrs. Pike says it goes to his joints and has been turning to stone [. . .] He could move his head-like this A course his head and mind ain't a joint, so to speak, and I guess his stomach ain't, either – not yet, anyway [. . .] He's turning to stone. How'd you like to be married to a guy like that? All he can do, he can move his head just a quarter of an inch. A course he looks just terrible. (Welty 75-76)

Her description of the process of petrification bears a striking resemblance to the one offered by Twain in his *Territorial Enterprise* piece:

The verdict of the jury was that "deceased came to his death from protracted exposure," etc. The people of the neighborhood volunteered to bury the poor unfortunate, and were even anxious to do so; but it was discovered, when they attempted to remove him, that the water which had dripped upon him for ages from the crag above, had coursed down his back and deposited a limestone sediment under him which had glued him to the bed rock upon which he sat, as with a cement of adamant, and Judge S. refused to allow the charitable citizens to blast him from his position.

In both cases a seemingly plausible and quasi-scientific explanation is offered and substantiated by a purported authority. Indeed creationist museums the world over, including the one in Big Valley, Alberta contain displays, which for the sake of conformity with biblical notions of the age of the earth, appear to demonstrate the rapidity of the process of petrification, contrary to the vast time intervals required by the tenets of contemporary palaeontology. Both Welty's and Twain's accounts rely on satire which subtly casts these "experts" as incompetent and corrupt. Indeed Welty goes one step further in her condemnation of these frauds by revealing at the conclusion of her story that the "Petrified Man" is none other than a wanted rapist on the lam wearing a cheap disguise.

Mrs. Pike, much to the envy of the beauty parlour women, is richly rewarded by unmasking the criminal.

Not to be outdone by his famous American counterparts, the Nova Scotian man of letters Charles G.D. Roberts created an analogue to the ghost of the Cardiff Giant in his 1895 short story, "The Stone Dog." It appeared in a collection intriguingly entitled Earth's Enigmas. The narrator of Roberts' story describes a memorable visit to what would seem to be an overlooked corner of Italy. During his wanderings in the countryside beyond the town where he has taken rooms, the narrator stumbles across a series of ruins, which orbit a peculiar monument:

[T]he fountain was a great cube of darkish stone, along the top of which a stone dog crouched; and the water gushed from between its carved fore-paws into a deep basin, the side of which was cleft two thirds of the way to its base. [. . .] The head of the dog was thrust forward and rested upon the fore-paws as if the brute were sleeping; but its half-open eyes seemed to watch the approaches to the doorway in the wall. As a piece of sculpture, the animal was simply marvellous. In its gathered limbs, though relaxed and perfectly at rest, a capacity for swift and terrible action seemed to hold itself in reserve, and a breath almost appeared to come from the half-opened jaws, momentarily dimming the crystal that smoothly gushed beneath. (Roberts, "Stone")

Roberts pairs intricate architectural details with a description of the dearth of vegetation surrounding the fountain to create a strong sense of foreboding. Indeed the sculpture feels too alive to simply be stone. Inevitably, this presentiment is realized when the dog is not only anthropomorphized by the narrator, but when it undergoes a kind of supernatural transmogrification. While this physical business occurs off-stage, or during

convenient spells of unconsciousness on the part of the narrator, the narrative leaves little doubt that once more stone can become flesh. The traveller should know better than to go poking around the domain of the dead, especially when he must literally descend a staircase leading to a ready version of the underworld.

Roberts' narrative provides the irresistible temptation of a barred door complete with its mysterious handle of intertwining iron dragons – not exactly Dante's "abandon all hope ye who enter here" but not far off either. All obvious signs of warning are ignored and the old cliché about hindsight stands. Roberts' dog is no benevolent Cardiff Giant; it's more hound of Hell. When the narrator begins to excavate the soft stone of the door arch with his pen-knife, the creature awakens not only to menace, but to protect its resting place with savage alacrity. It bears no accidental resemblance to the snake tailed, three-headed canine, Cerberus, another bouncer for the underworld, who rather than preventing patrons from entering the land of the dead, ensured that none could ever escape (with the notable exception of Orpheus and Hercules). Grave robbers beware! Roberts provides a *deus ex machina* in a nick of time in the form of a caricatured muleteer who appears at the exact moment of a coincidental earthquake, which completely bars all passage to the door in question. The muleteer spirits away the senseless narrator, and later dutifully reports the ominous survival of the "fonte del cano."

Although the narrator escapes with his bones intact, he retains unmistakable physical proof of the incident – "green and livid" bruises on shoulder marking the "deep prints of massive teeth" (Roberts, "Stone"). Web's trauma induced dream about ravenous baby dinosaurs hatching from a clutch of eggs on the open prairie echoes this fear of the revenge of the buried beast. Indeed, Kroetsch reports that he derived the substance of Web's episode from a dream had by his cousin Hugh Kroetsch during their 1972 research trip down the Red Deer River: "Hughie's dream of little dinosaurs – Web has this dream. They jump & he can't catch them" (Kroetsch, MsC 775/04.25 Box 16/44 119, Slim Brown Coil Notebook [7 verso]). Nomadic reindeer herders, who through living memory, trace their ancestral habitation of the Siberian tundra all the way back to the last Ice Age, recently extended a warning to visiting international scientists intent on digging the corpses of Pleistocene creatures from the permafrost. They believed that assisting in any excavation of buried bones "would put their lives and their families' lives at risk" (Stone 2). Their ancestors had offered grim proof to an 1801 Russian expedition of a family who met just such a fate after excavating a similar creature (Stone 25).

The reader has every right to suspect the veracity of the narrator's account. So much of it depends on speculation, conjecture and hearsay. At least he goes one better than Twain's narrator and admits to his shortcomings:

I am not a taker of notes, nor, for all my vagrant and exploring tendencies, am I a very close observer. Nevertheless, though it is now a year and a half since what I am telling of took place, the minutest details of that strange fountain, and of the scene about it, are as definitely before me as if I had

been there but yesterday [. . .] The experiences that befell me by this fountain have shaken painfully the confidence I once enjoyed as to the fullness of my knowledge of the powers of things material. (Roberts "Stone")

However, failure as a chronicler (scientific or otherwise) does not necessarily amount to failure as a story-teller. Indeed the reverse is often true. Popular tradition dictates that the best fish story not only features, but requires an unlikely catch. In a neat rhetorical twist the narrator's very admission to his laxity vis-à-vis note taking during past expeditions allows him to assert the reliability of his latest account. To further bolster this claim he employs formalized diction and syntax as well as token scientific reasoning.

Nevertheless, the ultimate claim is no less shocking for its dubious presentation. Could there be anything to the suggestion that the firmly established laws governing the material world – viz. mineral matter – are not without exception? Shame on these narrators. Any self-respecting scientist can appreciate the fine line between observable fact and unsupported speculation, not to mention an outright tall tale. It logically follows then that palaeontological field notes must become the dispassionate transcripts of truth and never soar on flights of fancy. Some daring scientists admit otherwise.

They [fieldnotes] are personal property, part of a world of private memories and experiences, failures and successes, insecurities and indecisions. They are usually carefully tucked away in a safe place. To allow a colleague to examine them would be to open a Pandora's box. They are, however, an important key to understanding the nature of what anthropologists do; they are the records of our findings, if not of our own self – discovery as artists, scientists, and – more accurately – *bricoleurs*, assembling cultures from the

bits and pieces of past occurrences. They imply a degree of deception and a hint of imagination and fabrication. (Bond 273)

Any self-respecting post-modernist can also appreciate that no discourse is impartial. A palaeontologist or an archaeologist might be inclined to dismiss the claims of *social*-scientists due the subjective requirements of their research and the fact that they must glean information from complex living subjects rather than static geological material. However, such a claim holds about as much water as the yarn spun by Twain's and Roberts' narrators. Even the palaeontologist and archaeologist must make equal recourse to subjective observation in spite of the precision of their instruments and powers of quantification and qualification. If claims to pure objectivity vis-à-vis the physical sciences are allowed to become so much hooey, then the salt of the earth field worker is suddenly stuck between a rock and hard place.

Take Dawe for instance. What's a bone hunter to do when he breaks one of his own in pursuit of those preserved in stone? There are also other factors to consider: the extraordinary expense in mounting an expedition to the Alberta Badlands from Eastern Canada; the shortness of the season; the threat of competition; the idleness of the crew; and the potential damage to a fragile reputation. So when Web stumbles upon something worthwhile and after he opens the *Gorgosaurus* quarry high above and far from Dawe's flatboat infirmary, how can the leader of the expedition not assume a primary role in its excavation? After all, is it not Dawe who painstakingly instructs his crew members on the

finer points of prospecting, and excavation? Why should mere distance and the quantum limitations of occupying space in two places at once prevent his participation?

To call this participation *vicarious* would be nothing short of slander in Dawe's eyes. He knows nothing of passivity. In his mind, and more significantly in his notes, he actively removes the overburden, exposes the animal's bones, applies the preservative coating of shellac, and gingerly wraps his prize in a plaster of paris cast – all this from his sickbed. Dawe intrinsically understands the power of field notes to transport, to literally rewrite his present, and to narrate his own version of events into *truth* for the sake of posterity. Once the collectors have passed to dust and bone, who may argue against the monolith of the written word? Indeed Sternberg seemed keenly aware of his active role in shaping collective memory for future generations: "It is because men will forget that I am going so exhaustively into detail as to the life of a fossil hunter in field and shop [. . .] I hope that it will be read by many [. . .] after I have crossed over to the other shore"

(Sternberg Hunting xiii). Dawe appears to share this insight:

The crewmen, working in the new quarry, were unearthing a nearly perfect skeleton; only the skull was yet to be discovered and they would have, complete, *Gorgosaurus*. Tune carried home to Dawe, like a bouquet, a precious fragment of a tooth wrapped in his shirt. Dawe nodded. [. . .] Tune drew a picture of the pattern of ribs he had, with a lover's patience lifted and embossed free of their matrix with an awl, his cramped fingers alone sensing the difference between fossilized bone and bentonite. Dawe folded the piece of paper and pushed it into a pocket. [. . .] (Kroetsch, Badlands 166)

Kroetsch can't seem to resist foregrounding the machinations employed by all writers of history. In this scene Dawe deliberately, and obviously, excludes Tune's primary source documentation from his version of the dig. This act is not the same as the effecting of editorial excisions during the process of working up field notes into a published report. Dawe is tampering with the very parameters of the field note genre to create his own alternative primary source account. His surreptitious pocketing of Tune's diagram, and its apparent exclusion from the field notebook consulted much later by his daughter and Anna Yellowbird, suggests a level of artifice – viz. *fictionalization* – hitherto unacknowledged, and furthermore, rigorously denied to the production of typical notes in the field. Thus any notion of purity and absolute fidelity is disturbed; truth does not pass from natural phenomenon to the page without the mediating influence of the writer. Rather, the writer invents and depicts a particular truth.

It's no surprise that a postmodern writer should seize on this slippage. However, that a world renowned palaeontologist should be so sensitive to constructions of the self, and the past, via field notes is intriguing, especially considering the mode he chose to comment on the subject. Only a hyperbolic allusion to Shakespeare suffices for Steven Jay Gould, to describe his esteemed colleague from the American Museum of Natural History. Gould channels Cassius to eulogize his own personal Caesar: "He doth bestride the narrow world like a Colossus; and we petty men walk under his huge legs, and peep about" (Simpson 105). While the humility rings a little false, considering Gould's own important work in

evolutionary biology, it is no exaggeration to call George Gaylord Simpson one of the most important figures in 20th century paleontology. The proof lies in the vast wealth of knowledge that Simpson deposited in the archive of scientific literature. However, Simpson's contributions were not limited to theoretical papers and scientific tomes. Indeed citations in Kroetsch's fond at the University of Calgary demonstrate that during the writing of Badlands the author made recourse to Simpson's achievements in scientific historiography:

- Simpson, George G. 1961
 Some problems of vertebrate paleontology.
 Science, vol.133, no. 3465, pp. 1679-1688.
- Scott, William B. 1927
 Developments of American Palaeontology.
 Amer. Phil. Soc. proc., vol. LXVI, pp. 409-429.
- Simpson, G.G.
 1963. Historical science. In Albritton, C.C.
 (ed.), The fabric of geology, pp.24-
 48.
- Osborn, Henry F. 1931
 Cope: Master Naturalist.
 Princeton University Press, pp. 1-740.
- Simpson, George G. 1942
 The beginnings of vertebrate paleontology in
 North America.
 Proc. Amer. Phil. Soc., vol. 86, no.1,
 pp.130-188.
 (Kroetsch, Msc27.16.9 loose leaf)

Still the discussion at present is less ramified by those references, or by Simpson's key study, Tempo and Mode in Evolution, or even by his popular efforts like The Meaning of Evolution, than it is by a little known manuscript that languished in a desk drawer until his daughter sought fit to publish it years after his death. Even the flyleaf of The

Dechronization of Sam Magruder seems to offer a bewildered apology that the book should exist at all. It is after all that rarest of specimens produced by a man of science – a *novella* with a premise that Edgar Rice Burroughs (or Charles Sternberg) might have conceived: scientist from the future transports himself irrevocably to the Cretaceous where he must survive amid marauding dinosaurs. Joan Simpson Burns' description of the document reads like a spectroanalysis of *kryptonite* and captures some of the attendant anxieties that the existence of so fanciful a mineral might pose for respectable geologists and palaeontologists alike:

[I]n the system which organized all of my parents' belongings, what had been the place of *Magruder*? It had been kept, just as had so much connected with GGS from childhood on, but obviously kept apart from his serious works and papers. If they had not taken it seriously why had my parents kept it all? (Simpson 128)

As a writer and editor, Simpson Burns admits curiosity about the "overlap between science and science fiction", citing the work of Edgar Allan Poe by way of example, but she is especially taken by Magruder's "double quality" (Simpson 128-129). However, the impetus for publishing her father's anomalous work is less entrenched in intellectual exercise than it is in wonder. She attempts to qualify her reasoning in one concise statement, even going so far as to quote herself, as if she can hardly believe her own words: " ' This ought to be published, and in a way that will allow the reader to see both the biographical and chronological aspects of the story ' " (129). By *this* she presumes to state on behalf of her father, *Sam Magruder, c'est moi*. Simpson Burns, albeit obliquely, cuts to

the heart of the matter and reveals a great deal about the nature of field notes as they pertain not only to George Gaylord Simpson, but to every scientific worker, and also to their literary counterparts, Dawe among them. She concludes, "It is a fiction which expresses fears about the durability of work and accomplishments and life itself" (132).

More striking still is the corroboration of this hunch by the science fiction master, and the master scientist. Arthur C. Clarke, in his introduction, reads Magruder as a re-tooling of the H.G. Wells' classic, The Time Machine. With all the deftness of a literary critic he analyzes the parallel usage of allegorical sounding boards in the form of the Simpson's "The Universal Historian", "The Ethnologist", "The Pragmatist", and "The Common Man" versus Wells' "The Medical Man", "The Provincial Mayor", "The Psychologist", "The Editor", "The Journalist", "The Silent Man", and "The Very Young Man". He also touches on the loneliness inherent in so solitary an endeavour as writing, and the wariness that arises with every prospect of collaboration. Yet, he does collaborate in a small way by colouring Magruder, "A Crusoe for the Cretaceous" thus, albeit implausibly, giving the novella as fair a shot at posterity as Simpson's pure science. Stephen Jay Gould, ever the populist, and ever the reformer, allows another fascinating possibility, that Magruder may be textual evidence of Simpson's prescient understanding of the failures immanent in the scientific mode:

Ironically, fiction can often provide a truer and deeper account of empirical subjects than genres supposedly dedicated to factual accounting. This situation arises because many modes of nonfiction develop strong constraints and traditions that prevent (unintentionally in most cases) any

approach to factual adequacy – whereas fiction, under its protective guise of storytelling, remains free to be incisive. (Simpson 106)

What is a more deliberate trope than a series of stone slabs to challenge the constraints of field notes? That George Gaylord Simpson chose this exaggerated, downright biblical, medium of communication for his *Crusoe* marooned in the geological past also suggests that he wanted to question both the factual and physical durability of scientific discourse, not to mention the faith of its adherents. As Gould conjectures, only fiction could provide Simpson an adequately flexible modality for such an enterprise. Arthur C. Clarke's remarks about Robinson Crusoe are especially poignant in this regard. Consider that Defoe's castaway was reduced to scratching a record of his days on a bit of wood. His formal journal can last only as long as his supply of ink and paper:

After I had been there about ten or twelve days, it came into my thoughts that I should lose my reckoning of time for want of books, and pen and ink, and should even forget the Sabbath days; but to prevent this, I cut with my knife upon a large post, in capital letters - and making it into a great cross, I set it up on the shore where I first landed - "I came on shore here on the 30th September 1659." Upon the sides of this square post I cut every day a notch with my knife, and every seventh notch was as long again as the rest, and every first day of the month as long again as that long one; and thus I kept my calendar, or weekly, monthly, and yearly reckoning of time.

I now began to consider seriously my condition, and the circumstances I was reduced to; and I drew up the state of my affairs in writing, not so much to leave them to any that were to come after me - for I was likely to have but few heirs - as to deliver my thoughts from daily poring over them, and afflicting my mind [...] (Defoe 52-53)

Simpson has Magruder emulate his forbear with a reminiscent inscription on "Slab 4" descriptively entitled, "Tools and Fire":

I am not going to tell the story of each day of my long stay here. I kept no diary, and during the first year I did not even count days. Now I have a satisfactory calendar of my own and always know the date by own system. This comes from my long training as a chronologist, no doubt, but it is useful, too [. . .] I know my way about now, and I have life pretty well systematized. Apart from the annual rhythm, most days are pretty much alike, and I have no wish to record all my petty and routine adventures.

The first two days were the most crucial ones, so I have set them down in some detail. That second night, I was really over the hump already. I was going to survive for a while, at least. (59)

Like Crusoe, and Dawe, Magruder is also frustrated by the sheer effort of producing notes under less than ideal conditions even after he develops a system of scratching drafts on to palm leaves prior to laboriously inscribing the most critical dispatches on to stone. He realizes, that even with optimal geologic deposition, the odds are not good that they will survive to be read in the future – "a million-to-one-shot" for the slabs, and not even "a billion-to-one-shot" for the proto papyrus scrolls (Simpson 97). Even more conspicuous is the recurring doubt that creeps into Magruder's notes. The trained scientist suddenly suspects his ability to observe and transmit empirical data. Magruder writes, "I do not believe that I can portray the valley in words as I see it in reality" (Simpson 67). Indeed he seems to fall into a kind of existential crisis, which calls into question the very motives behind the pursuit of knowledge:

Scientific study I have thought that over more carefully, tried to find some outlet or incentive there. But living as I must, there is little time for contemplation. I have no instruments, no laboratory, no library, none of the requirements for profound research. I am limited to simple observation. True, everything I observe has never been and will be seen by another human being. But I cannot pass this on. It benefits no one else. Oh, I can put some of my observations on these slabs and I can pretend I am

communicating them, but I know I am fooling myself. There is a chance in a million that someone will read this someday. I will never know, however, and here I have learned that benefiting mankind is at the same time a social and a selfish occupation. It is no good unless you see the benefit and get some sort of approval for it. (43-44)

Gould pointedly contends that in reality Simpson also "wallowed in a miasma of doubt and anger, always fearing that future generations would ignore him and that all his work would ultimately go for naught" (Simpson 120). Perhaps this anxiety drove him to take swipes from the advantage of Magruder's eyewitness perspective, at colleagues whose radical new theories presumed to replace certain traditional precepts which he held dear – mainly that dinosaurs were not actually the stupid, awkward, cold-blooded creatures many believed them to be. Nevertheless that sinking feeling still nagged at him. In a later slab Magruder unabashedly confesses:

My real purpose in engraving these slabs is a search for comprehension. Primarily, the search is for my own sake. I want to understand what has happened to me and why I have reacted as I have. I am exploring my own nature, and perhaps also the nature of mankind, of the great species of which I stand here as an advance sample. Secondly, I cannot entirely abandon hope that these words will sometime be read by other humans. I know how slight is this possibility. I also realize that I am never to know whether this message reaches others of my kind. Yet I take some small and irrational comfort from the bare chance that my desperate voice will be heard, that someone, sometime, will be aware of Sam Magruder and will feel interest in, perhaps sympathy for, his fate. (83)

Like William Dawe, and countless other actual scientists (and writers), Simpson's Magruder (and Simpson himself) attempts to impress upon oblivion some reminder of his toils, some lasting legacy. Not unpredictably the first line of his first entry on the first slab

of his field notes contains the kind of simple affirmation that will be further explored in a subsequent chapter: "My name is Samuel TM12SC48 Magruder AChA3*" (Simpson 33). Social-scientists would appear more forthcoming about the mechanism of field notes than their physical scientist counterparts:

They [fieldnotes] appear to have the security and concreteness that writing lends to observations, and as written texts they would seem to be permanent immutable records of some past occurrence, possessing the stamp of authority of an of an expected professional procedure. But there is that personal, parochial, subjective, indefinable quality about them. They are shorthand statements, *aides memoire* that stimulate the re-creation, and are part of human experiences. The notes are thus living, mutable texts; they are a form of discourse whose content is subject to constant re-creation, renewal, and interpretation. The immutable documents and the mutable experiences stand in a dialectical relationship, denying the possibility of a single reality or interpretation. (Bond 274)

Dawe, though outwardly a self-professed word-hater, seems to tacitly appreciate the pliability of the only genre in which he writes. He expertly engineers his document for scientific and familial posterity with the flair of a post-modern author - not coincidentally the stock in trade of his creator, Robert Kroetsch. While this manipulation might be standard repertoire for post-modern meta-fiction, it still represents an affront to scientific impartiality. Kroetsch works the barb further into the flesh of scientific purists by describing the relative ease of the transaction.

Web [. . .] reported briefly each day's activities and who knew, felt, that Dawe was not listening, as if the words he spoke passed directly from his mouth to a page in Dawe's field book without ever touching Dawe's mind. (Kroetsch, Badlands 166).

Dawe's fieldnotes, in this instance, thus record without bearing first hand witness. In his mind they speak for the inarticulate thing in the ground. Throughout his screenplay adaptation of Badlands, Michael Ondaatje compels Dawe to read his notes aloud. The stage direction suggests that "we half hear them in the background" (Ondaatje, "William" 82). Although, the voice-over tactic is undoubtedly required by the constraints of the medium of film, it is no coincidence that such a vocalization emphasizes the enunciatory function of the fieldnote. Ondaatje underscores this tactic typographically by attaching "V.O." in brackets after Dawe's name. In this version the spoken notes make real (and audible) what physical encumbrance prevents Dawe from seeing with his own eyes.

Sixteen pairs of ventral ribs.
 The front ribs vestigial [sic] only
 thirty feet long including the
 supposition that the missing
 skull must be three feet in
 length. . . (Ondaatje, "William" 92-93)

Given the tendencies of both Kroetsch and Ondaatje to manipulate archival documentation it seems probable to read Dawe's obsessive and meticulous written account as an anxious response to the probability of misinterpretation. This anxiety is keenly felt not only by contemporary palaeontologists facing incomplete and disarticulated specimens in the field, but it may also have been felt by the old timers too. Restorations, though ostensibly governed by strictest anatomical evidence and understanding, ride the line between a scientific model and a creative act of sculpture. Poses and posture evolve as succeeding generations of researchers divine new insight about the behaviour of extinct

animals. That mounted skeletons are often displayed in complex dioramas, with lavishly painted sets worthy of any grand opera house only compounds the dilemma. The Canadian palaeontologist W.D. Matthew offers this sober warning:

Where only parts of one side are missing the corresponding parts of the other side are used for model; where both sides are missing, other individuals or nearly related species may serve as a guide. But it is seldom wise to attempt restoration of a skeleton unless at least two-thirds of it is present; composite skeletons made up of the remains of several or many individuals, have been attempted, but they are dangerous experiments in animals so imperfectly known as are most of the dinosaurs. There is too much risk of including bones that pertain to other species or genera, and of introducing thereby into the restoration a more or less erroneous concept of the animal, which it represents. The same criticism applies to an overly large amount of plaster restoration. (Matthew 120-121)

Palaeontologists continue to debate the role of the ungainly head crest of the herbivorous duck-billed dinosaur *parasaurolophus* as a means of sexual display or communication (ROM). However, the dissent falls silent on a significant point. They unanimously agree that the fossilized skull of this creature is unlikely to emit a cry in their laboratories and museums that will offer proof one way or the other. Therein lies the rub. Stones do not speak.

The ancients believed otherwise. While even they may not have expected blood from cold stone, a good song was another story. Nietzsche, in a passage from The Birth of Tragedy, refers to this harmonious prospect. "Yet the Greek poet, like a sunbeam, touches the terrible and austere Memnon's Column of myth, which proceeds to give forth Sophoclean melodies." (69) Although Nietzsche's column is but a metaphorical edifice

alluding to the moment of poetic inspiration, "two vast" pairs, though not quite "trunkless", "legs of stone" lie in the Egyptian desert on the "lone and level sands" of the Theban Plain not so far from the statue of Ramses II, described for all posterity by Shelley in "Ozymandias". These stone colossi still hold watch at the gates of the long vanished mortuary temple of Amenhotep III (Smith 156). Naaman credits Jacques-Joseph Champollion (known as "Champollion-Figeac" whose major contribution to Egyptology consisted of an edited edition of his younger brother, Jean-Francois Champollion's, unpublished work with significant contributions) for an explanation of how the colossus earned its reputation. An earthquake in 27 BCE opened a crack in one of the 19.5 metre tall statues, giving rise to a bizarre phenomenon for which a ready mythological explanation was provided based on a historical/mythological misreading.

It seems that King (Aga)Memnon of Greek legend and King Amenhotep of ancient Egyptian history were conflated to squeeze notes from stone. De Biasi suggests that this distinction was drawn in antiquity by Pausanias (Flaubert *Lettres* 380). Indeed Strabo, Tacitus and Philostratus offer similar corroboration to be further explored at a later point in this study. Namaan, through Champollion-Figeac, outlines the mechanism of this strange effect. The first rays of the sun heated the morning dew on the statue, which then passed through the aperture to create a curious whistling. This dew was further interpreted as the tears of Eos, shed for her lost son. Thus King Memnon's "song" was construed as a greeting to his mother, the goddess of the dawn (Flaubert, *Les* XXXVIII). Ovid recounts a version

of the tale in "Metamorphosis" in which from the ashes of Memnon's funeral pyre rise the squawking flocks:

Bodies created from dead man's ash fell down from the air/ to be funeral gifts in remembrance of Memnon, the hero/ from whom/ they were sprung, and who also gave these miraculous/ fledglings their name / Memnonides. Each year, when the sun has completed its zodiac/ round, they go to war once again and die like their parents./ And so while others lamented the change of Hecuba into / a barking dog, Aurora was wholly absorbed in her own / grief. / She weeps to this day, and the morning dew is her dutiful/ mourning. (Ovid XIII, 615-621)

Namaan, through Champollion-Figeac, contends that subsequent repairs to the statue silenced this melodious effect. In an excerpt from his 1870 poem, "Balloon Letter to a Swedish Lady", Ibsen irreverently describes the circumstances:

Memnon's statue, stone colossus, —
 he, you know, once sang a little —
 we approached, the day still young
 but the old chap held his tongue.
 All that's now mere bardic tittle

since Cambyses overhauled him,
 checked his seams for wear, and mauled him,
 and perhaps, who knows, reviewed the
 inner organs somewhat crudely.

Many a singer's felt such losses,
 frozen voice and epiglossis.
 Still, a throne's fair compensation
 for his dawn song's deprivation.

So old Memnon's throned in glory
 on that loss-of-voice tall story,
 rakes in tribute worth a mint,
 holds court, dressed up, without stint,
 not just for the upper classes —
 even a Norwegian passes,

like your humble, and Peer Gynt. (Ibsen Collected)

As Ibsen recounts, camping in the moon shadow of the stone figures came into vogue for wealthy European tourists during the nineteenth century, as it once did for their Greek and Roman antecedents in antiquity. In his study of the culture of ruins Christopher Woodward quotes an English translation of a letter Flaubert wrote on June 2nd 1850 to his childhood friend Louis Bouilhet regarding his impressions of just such a visit:

I spent a night at the foot of the Colossus of Memnon, devoured by mosquitoes. The old rascal has a fine phizog, he's covered in graffiti. Graffiti and bird shit, these are the only two things on the ruins of Egypt that indicate life. Not one blade of grass on even the most eroded stones. They crumble to powder, like a mummy, and that is all. The graffiti left by travellers and the droppings of the birds of prey are the only two ornaments of decay. You often see a great tall obelisk with a long white stain all the way down it like a curtain, wider at the top and narrowing towards the base. It's the vultures, they've been coming here for centuries to shit. The effect is very striking, and *curiously symbolic*. Nature said to the monuments of Egypt: you want nothing to do with me? Not even lichen will grow on you? All right then, damn it, I shall shit all over you. (Woodward 73; Flaubert, Lettres 162)

A double personification is at work in Flaubert's contention; he ascribes human characteristics to stone artifice and to nature alike. In this scenario Memnon's column receives its just desserts because of its deliberate rebuke of the encroaching forces of nature. Sterility is thus translated into wilful presumption – a haughty lover refuses the advances of a would-be seducer. Woodward argues that a ruin is only "suggestive to the viewer's imagination if its dialogue with the forces of Nature is visibly alive and dynamic" (73). Presumably, dialogue in this instance, refers to a patch of moss or a clutch of weeds

poking from cracks in broken statuary. As reflected in the previous frank letter, and another he wrote to his mother on 17 May 1850, Flaubert entertained no illusions about his visit to Memnon's Column:

[N]ous avons été camper au pied du fameux colosse. Il n'a pas chanté au lever du soleil, mais le grendin m'a envoyé la nuit une grêle de moustiques qui m'ont dévoré les jambes et m'ont empêché de dormir, d'autant plus que le vent qu'il faisait secouait la tente avec furie. (Flaubert, *Lettres* 148)

In addition to his metaphorical interpretation of the stone, Flaubert also regarded its reading in more literal terms. He reflected on how the ancient Greek graffiti attested to the countless witnesses who travelled from afar over the ages to view and *hear* the Colossus which, in spite of its size, seemed less imposing to him than the Sphinx:

Les inscriptions grecques se lisent très bien – il n'a pas été difficile de les relever – Des pierres qui on occupé tant de monde, que tant d'hommes sont venus voir, font plaisir à contempler – combien de regards de bourgeois se sont levés là-dessus! chacun a dit son petit mot et s'en est allé. (Flaubert, *Voyage* 380)

However, his view on contemporary graffiti was altogether different. An expansion of the following citations as well as those others from antiquity, and the impetus behind such markings, will be undertaken in the subsequent chapter. In his journal Flaubert makes an impassive record of his observations on visiting the Column of Pompey:

Colonne de Pompée, monolithe avec un splendide chapiteau corinthien et le nom <<Thomson of Sunderland>>, écrit à la peinture noire sur la base en lettres de [deux] trois pieds de haut – les tombes ont la couleur grise du sol, sans la moindre verdure. (Flaubert, *Voyage* 175).

Yet, in a letter to his godfather on 6 October 1850, cited in translation by Alain de Botton, he excoriated this Thompson for his colossal vanity (and incidentally doubled the size of his mischief):

In Alexandria, a certain Thompson from Sunderland has inscribed his name in letters six feet high on Pompey's Pillar. You can read it a quarter of a mile away. You can't see the pillar without seeing the name of Thompson, and consequently, without thinking of Thompson. This cretin has become part of the monument and perpetuates himself along with it. (De Botton 96-97; Flaubert, *Lettres* 226-227).

So subtlety wasn't a great virtue of these bourgeois travellers. It's no wonder they were wont to find dialogue of an aural/oral nature more attractive. While Flaubert's compatriots listened to no avail for the column's long silenced voice, Peer Gynt, alluded to in "Balloon Letter", and the eponymous character of one of Ibsen's most controversial plays, gets an earful. While efforts to mount contemporary productions of the play have largely succeeded in rehabilitating the literary merit of the work, its initial reception was not so accommodating. Even Danish critic and Ibsen supporter Georg Brandes quipped "misanthropy and self-hatred are a poor foundation upon which to build art." Edvard Grieg, composer of the incidental music to the play, also suggested that it was not his collaborator's best work with a veiled allusion to "cow-pies" (shakespearetheatre.org). Ironically, *Peer Gynt* remains one of the best loved works in the composer's repertoire.

Notwithstanding Peer Gynt's reception from Ibsen's peers, the play offers a remarkable eleventh scene. It begins with these stage directions: "[In Egypt. Daybreak. MEMNON'S STATUE amid the sands]" (Ibsen 103). The traveller makes a cursory

examination of his surroundings and reviews the itinerary of his prospective voyages throughout the Middle East and the Mediterranean. He impatiently checks his watch and waits for the sun to rise so the show may begin. Just when Peer Gynt can wait no longer he is roused by a strange stirring and asks, "I wonder what that curious mumur – ?" (Ibsen, Peer Gynt 104). When the definitive stage direction "[Sunrise.]" breaks upon the page, Memnon's Statue begins its singing address (Ibsen, Peer Gynt 104):

From the demi-god's ashes arise new-born
Singing Birds.
Zeus, the all-knowing,
Shaped them for conflict.
Owl of Wisdom,
Where sleep my birds?
You must die if you read not
The Riddle of the Song! (Ibsen, Peer Gynt 104)

Peer Gynt's response is one of incredulity. "I really do believe I heard sounds from the Statue! That would be the music of the past. I heard the rise and fall of the Statue's voice" (Ibsen, Peer Gynt 104). Of particular significance is his inclination to immediately record the experience. "I'll note that down for consideration at experts' hands." (Ibsen, Peer Gynt 104) What follows is an extraordinary stage direction and a direct citation from Peer Gynt's own field diary:

[Makes a note in his pocket-book.] 'The Statue sang. I heard the sounds quite plainly, but could not completely understand the words. I have, of course, no doubt the whole thing was hallucination. Otherwise, I have not observed anything of importance so far. (Ibsen, Peer Gynt 104)

His description belies an ambivalence about empirical observation. Stones appear to speak, but since stones cannot speak, they must not have spoken. Why then the note? Peer Gynt might have omitted this inexplicable episode from his official travel account. Yet he seems to admit that his own knowledge, and by extension scientific knowledge, may not be equipped to fully understand the bizarre phenomenon of the singing stone. Thus this ambiguity becomes something of great importance, inscrutable data Peer Gynt, like William Dawe, will drag along for the consideration of posterity. However, Peer Gynt's actions are also self-deluding. His archival impulse is redundant insofar as he does bear witness – he hears the proclamation of the stone. Yet the song supersedes the listener; it appears to have the essential ability to self-articulate without the aid of interpretation.

Jacques Derrida, in his famous treatise on the archive, recalls Freud's depiction of the ecstatic moment when "the very success of the [archaeological] dig must sign the effacement of the archivist: *the origin speaks by itself*" (92). The implications are startling. Derrida argues that Freud means to suggest:

The archaeologist has succeeded in making the archive no longer serve any function. It *comes to efface itself*, it becomes transparent or unessential so as to let the origin present itself in person. Live without mediation and without delay. (93)

Memnon's song offers a hyperbolic illustration of this contention, but in "The Aetiology of Hysteria" Freud presents a subtler scenario, which through an archaeological metaphor describes how psychologists may avail themselves of diagnostic procedures

similar to those employed by doctors who determine the cause of symptoms not through any misleading explanation from their patients, but essentially by *listening* to the wound. He gives the example of the dermatologist who "recognize[s] a sore as luetic from the character of its margins, of the crust on it and of its shape" or of the forensic physician who arrives at the cause of an injury through observation (Freud 191). So too, Freud argues, may the cause of "hysteria" make itself known without any articulation by the patient. Rather, through inducements, the symptoms lead back to an originary traumatic scene whose events are then "corrected", thus effecting the psychological cure (193). Derrida quotes at length from Freud's analogy:

Imagine that an explorer arrives in a little-known region where his interest is aroused by an expanse of ruins, with remains of walls, fragments of columns, and tablets with half-effaced and unreadable inscriptions. He may content himself with inspecting what lies exposed to view, with questioning the inhabitants - perhaps semi-barbaric people - who live in the vicinity, about what tradition tells them of the history and meaning of these archaeological remains, and with noting down what they tell him- and he may then proceed on his journey. But he may act differently. He may have brought picks, shovels and spades with him, and he may set the inhabitants to work with these implements. Together with them he may start upon the ruins, clear away the rubbish, and, beginning from the visible remains, uncover what is buried. If his work is crowned with success, the discoveries are self-explanatory: the ruined walls are part of the ramparts of a palace or a treasure house; the fragments of columns can be filled out into a temple; the numerous inscriptions, which, by good luck, may be bilingual, reveal an alphabet and a language, and, when they have been deciphered and translated, yield undreamed-of information about the events of the remote past, to commemorate which the monuments were built. *Saxa loquuntur!* (Derrida 93; Freud 192)

Freud's imagined scenario inevitably harkens back to the discovery of that most famous stele by Napoleon's engineers in 1799 as they prepared the foundations of a fort

near the Egyptian town of El-Rashid, or as it is more commonly known in the West, Rosetta. Once seized by English forces under the terms of the Treaty of Alexandria, and spirited back to the preparatory rooms of London's British Museum, the work of decipherment began (BritMuseum). The tri-lingual inscription, a decree posting the good works of the young Pharaoh for the consideration of his people, written in Hieroglyphs, Demotic and, crucially, Greek challenged the initial translation efforts of the English Physicist Thomas Young. He managed to puzzle out the sounds of the name Ptolemy. However, it was the Frenchman Jean-François Champollion (known as "Champollion le jeune") who deduced a system from the baffling signs. He concluded that hieroglyphs also record the *sound* of the ancient Egyptian languages thus enabling subsequent researchers to not only *hear* the message of the Rosetta Stone, but all similar coded messages unearthed by and murmured to later Egyptologists. He cheekily demonstrated this new found phonetic knowledge when he presented his landmark paper on the subject to the Academie des Inscriptions et Belles Lettres in Paris on 27 September 1822 (BritMuseum text). His dedicatory consisted of hieroglyphic script – a collection of symbols, bird, hand, lamp and others framed within an oval "cartouche" that sounded out the phrase, "a mon ami Dubois." (British Museum).

In 1872 George Smith heard a similar call echo through the august halls of the British Museum; it also emanated from another stone slab, arguably one of equal significance, especially for those with literary inclinations. This self-taught Assyriologist

famously broke into dance and proceeded to remove his clothing the moment he cracked the code of the Flood Tablet, written in Akkadian cuneiform eight hundred years BCE. It whispered an account of a great flood, a boat beached on a mountain, and a bird sent in search of dry land. David Damrosch, in his study The Buried Book, explores the manner in which The Epic of Gilgamesh, perhaps the most ancient story recorded by writing, was transmitted across cultures and languages in the ancient world only to recede for two thousand years and then to resurface to Western readers in the 19th century.

Ironically, The Epic of Gilgamesh also contains a self-reflexive commentary on its own inscription, in the form of lapis lazuli tablets graven with an account of Gilgamesh's exploits. Competing translations offer varying interpretations. "He went on a long journey, was weary, worn-out with labour, returning he rested, he engraved on a stone the whole story" (Sanars 61). In some versions the tablets form the very foundations of his city. In others they are buried fast beneath it. However they all share a common trait; they literally call out the forgotten past: "open the copper chest with the iron locks;/ the tablet of lapis lazuli tells the story" (Ferry 4). In his 2007 Massey Lectures Alberto Manguel ascribes other powerful implications to the tablets:

The epic starts with an exhortation to the reader, handing over to us, across the many centuries, the responsibility of learning. You and I, the poet tells us, must enter the city of Uruk and seek in its foundations a copper box containing the lapis-lazuli tablets on which the story of Gilgamesh is written. This, as far as we know, is the earliest 'book-within-a-book' device in the history of literature. Here all story begins. (City 30-31)

Robert Byron, travelling through Central Asia during the 1920s, understood that the stone itself carries an indelible message that transcends inscription, one that is legible to those whose senses are particularly attuned. He writes in his canonical travel narrative The Road to Oxiana:

I bought some lapis this evening, not because it was cheap or a good colour, but because it comes from the famous mines near Ishkashim in Badakshan, and is therefore the authentic stone from which the old painters ground their blue. (328)

Derrida raises the stakes in Archive Fever by alluding to a decidedly less tangible inscription described by Freud in a later work in relation to another fictional scenario. In "Delusion and Dream" Freud takes as his case of study, not a human patient, but rather the character of a work of literature, specifically Wilhelm Jensen's novel, Gradiva. At the outset of this "Pompeiiian Fancy" the protagonist, docent of archaeology at a German University, makes an intriguing find, which precipitates the rest of the tale.

On a visit to one of the great antique collections of Rome, Norbert Hanold had discovered a bas-relief which was exceptionally attractive to him, so he was much pleased, after his return to Germany, to be able to get a splendid plaster cast of it [. . .] About one third life size, the bas-relief represented a complete female figure in the act of walking; she was still young, but no longer in childhood and, on the other hand, apparently not a woman, but a Roman virgin about in her twentieth year. In no way did she remind him of the numerous extant bas-reliefs of a Venus, a Diana, or other Olympian goddess and equally little of a Psyche or nymph. (Jensen and Freud 7)

Freud launches his analysis of Dr. Hanold by focussing on his subject's unusual reaction to this otherwise unremarkable bas-relief. He cites directly from Jensen.

[He] found in the relief nothing noteworthy for his science [. . .] He could not explain what quality in it had aroused his attention; he knew only that he had been attracted by something and this effect of the first view had remained unchanged since then. (Jensen and Freud 149, 9)

Freud goes on to provide an overview of the case. Hanold assigns the figure a name, Gradiva, or 'girl splendid in walking', invents a genealogy for her as the daughter of a Roman aristocrat of Hellenic ancestry, and assigns her a geographic locality; she is imagined to be a citizen of Pompeii. Hanold, Freud notes, becomes obsessed with the gait of "Gradiva", one that through his ogling of German women in public places, and a review of archaeological inventories, proves to have no equal. Again, Hanold invents a scenario in which "Gradiva" steps from walking stone to walking stone, alluringly exposing her ankles. Not unpredictably these researches precipitate a strange dream in which Hanold is transported to Pompeii just before the famous volcanic eruption in the year 79 only to observe his version of Gradiva, treading her path, oblivious to the impending danger. She responds to Hanold's warning with an uncomprehending expression and continues in the same direction. Jensen writes:

At the same time, her face became paler as if it were changing to white marble; she stepped up to the portico of the Temple, and then, between the pillars, she sat down on a step and slowly laid her head upon it. Now the pebbles were falling in such masses that they condensed into a completely opaque curtain; hastening quickly after her, however, he found his way to the place where she had disappeared from his view, and there she lay protected by the projecting roof, stretched out on the broad step, as if for sleep, but no longer breathing apparently stifled by the sulphur fumes. From Vesuvius the red glow flared over her countenance, which with closed eyes, was exactly like that of a beautiful statue. No fear nor distortion was apparent, but a strange equanimity, calmly submitting to the inevitable, was manifest in her features. Yet they quickly became more indistinct as the

wind drove to the place the rain of ashes, which spread over them, first like a gray gauze veil, then extinguished the last glimpse of her face, and soon, like Northern winter snowfall, buried the whole figure under a smooth cover.
(Jensen and Freud 18-19)

Startled from the dream, Dr. Hanold takes a breath of fresh air at his open window when he catches a glimpse of that extraordinary gait on a woman wending her way through the crowded German thoroughfare. Without bothering to dress, he runs into the street in futile pursuit. Gradiva has disappeared. Then with a "nameless feeling" and vague scientific ends as a ready pretext he makes plans for a voyage to Pompeii. The girl witnessed by Hanold in Germany is actually his childhood friend and neighbour, Zoe Bertrang, upon whom he grafts his fantasy of the Pompeiian maiden. Her father is also a scientist who takes a zoological trip to the ancient Roman site in search of lizards. In a series of plot contrivances, Jensen arranges a meeting between the old friends amidst the ruins of Pompeii, which proves to further enable Hanold's delusion in a fitting locale. Freud proceeds to interrogate the personality and motivation of the protagonist. Diverging from that thread, I remain with Hanold in the excavations, to further explore his communications with stone.

After a failed effort at entering the site on the night of his arrival, Hanold joins a guided tour the next morning. Only when he slips away from the rabble does he begin to *hear* strange messages:

[W]hat had formerly been the city of Pompeii assumed an entirely changed appearance, but not a living one; it now appeared rather to be becoming

completely petrified in dead immobility. Yet out of it stirred a feeling that death was beginning to talk, although not in a manner intelligible to human ears. To be sure here and there was a sound as if a whisper were proceeding from the stone [.] (Jensen and Freud 50)

However, such vague intonations do not hit home for the archaeologist whose training has prepared him for the reception of a more deliberate type of message. On attempting to decipher graffiti inscribed on the wall of one of the ruined houses of Pompeii Norbert Hanold suddenly discovers that the skill he so long cultivated at interpreting inscriptions has failed him. He also experiences a breakdown in linguistic comprehension. That language of his research, Latin, becomes unintelligible in the field.

Indeed all "his science left him, but it left him without the least desire to regain it; he remembered it as from a great distance" (Jensen and Freud 55). Surprisingly, the scientist feels no alarm at the dissolution of his former knowledge. Rather, he comes to regard it as "a lifeless archaeological view and what came from its mouth was a dead philological language" (Jensen 55). Jensen attempts to demonstrate the epistemological limits of an orthodox view of science. Indeed he turns his scientist into what Kroetsch describes as a "man of the imagination", and by extension into a poet, who can avail himself of sensory perceptions otherwise not sanctioned by traditional scientific methodology to strive for "comprehension with soul, mind, and heart [. . .] among the remains of the past, in order not to see with physical eyes nor hear with corporeal ears"

(Jensen and Freud 55). In writing of Van Gogh's distortions of the landscape surrounding Arles, de Botton homes in on the implications of such heightened perceptions:

He was willing to sacrifice a naive realism in order to achieve a realism of a deeper sort, behaving like a poet who, though less factual than a journalist in describing an event, may nevertheless reveal truths about it that find no place in the other's literal grid. (208)

Indeed Hanold seems to revel in the realization of this potential:

Then something came forth everywhere without movement and a soundless speech began; then the sun dissolved the tomb like rigidity of the old stones, a glowing thrill passed through them, the dead awoke, and Pompeii began to live again. (Jensen and Freud 55-56)

In his encounter with Gradiva among the ruins, Hanold avails himself of his newly discovered powers of poetic divination in order to hear and see beyond his auditory and visual senses the call of stone, "a strange shudder passed down his spine. He saw and heard nothing, yet he felt from the secret inner vibrations that Pompeii had begun to live about him in the noonday hour of spirits and so Gradiva lived again, too" (Jensen and Freud 60).

Hanold not only abstractly reconstructs the scene of Old Pompeii from his archaeological understanding of the site, but rather in an act of interpretation "blasphemous" to his scientific training, he *sees* the paving stones "faultlessly fitted together as before the devastation" though imbued with vivid colour (Jensen 56). So too does Gradiva appear as if by re-animation not as a "stone representation, everything in uniform colourlessness" but as a living, breathing woman (Jensen and Freud 56). Neither is her dress a "cold marble white", but evidently made with "soft, clinging material" and "of a

warm tone verging faintly on yellow" (Jensen and Freud 56). Gradiva's hair also stands out "with golden brown radiance, in bold contrast to her alabaster countenance" (Jensen and Freud 56). Something of the bas-relief is retained in her complexion, yet the rest of her body has undergone a transformation reminiscent of the one witnessed by Deucalion and Pyrrha. This movement is the metaphorical equivalent of bone fleshed from stone. It is opposite to the one depicted in Hanold's original dream, in which he witnesses the fossilization of flesh and the symbolic creation of the figure on the stone tablet.

Freud calls it "an ingenious and poetic representation" of Hanold's transference of interest from the living woman to the sculpture; "the beloved had been transformed into a stone relief" (Jensen and Freud 229). Gradiva, or Zoe Bertrang, rails against Dr. Hanold for the reproach of indifference he committed in the past, when "archaeology overcame [him]" (Jensen and Freud 128). She employs an appropriate palaeontological / archaeological metaphor to this end.

To you I was but air, and you [. . .] were as boresome, dry and tongue-tied as a stuffed cockatoo and at the same time as grandiose as an – archaeopteryx; I believe the excavated, antediluvian bird monster is so called; but that your head harboured an imagination so magnificent as here in Pompeii to consider me something excavated and restored to life[.] (Jensen and Freud 129)

Gradiva boils down her critique to a biting observation, which underscores yet another danger for Dr. Hanold, as for Dr. Beringer before him, of working at the threshold of science. " '[A] person must die to become alive again; but for archaeologists that is of course necessary' " (Jensen and Freud 131). The irony of Gradiva's statement is not fully

apprehended by Hanold whom Jensen depicts as suffering from peculiar symptoms, which with all due respect to Freud's psychiatric diagnosis, seem more attributable to genre confusion. His scientific methodology is forced to reconcile the input of foreign systems of information: "Thus, under the glowing sun of the Campagna, there was a mythological-literary-historical juggling in his head" (Jensen and Freud 61-62).

Indeed Hanold no longer implicitly trusts empirical data alone. He does not accept Zoe Bertrang's field sketches at face value. Rather he sees her sketchbook as a sheet of papyrus upon which Gradiva has inscribed with images of the ruins of Pompeii, a stone griffin table, and the beginnings of another view through a screen of stone pillars (Jensen and Freud 87). As Gradiva drifts into the House of Meleager, his physical senses do not adequately account for her disappearance.

Norbert's gaze passed around, and he listened. Yet nowhere about did anything stir, nor was the slightest sound audible. Amidst this cold stone there was no longer a breath; if Gradiva had gone into Meleager's house, she had already dissolved again into nothing. (Jensen 63)

The intricacies of Hanold's reasoned invention of an ancestral association between Gradiva and the House of Meleager only compounds his genre confusion. He cannot decide if Gradiva is thus linked to the Greek poet Meleager, who lived a century before the destruction of Pompeii, or rather to the Greek mythical hero Meleager whose hunt of the Calydonian Boar is depicted in a mosaic discovered at the site, and previously viewed by Hanold at the Museo Nazionale in Naples. Jensen deliberately muddies the waters by mingling Gradiva with Atalanta, a huntress with whom the hero Meleager falls in love. He

does so with direct citation from Ovid's Metamorphosis. Jensen excerpts lines 318 and 319 from the following passage.

Atalanta, the pride of the forests on Mount Lycaeus,/ whose robe was clasped at the neck by a buckle of polished metal,/ her hair very simply gathered up in a single knot./Rattling on her left shoulder, there hung the ivory quiver that guarded her arrows, above the bow she held in her left hand. / So much for her garb; and as for her face, you could truthfully call it/ a girlish face for a boy or a boyish face for a girl.
(Ovid 8: 317-323)

Notwithstanding the compelling final description of Atalanta's gender, Hanold's linkage between she and Gradiva is later physically manifest in the form of a brooch sold to him by the unscrupulous owner of the Albergo da Sole as an antiquity found amidst the petrified corpses of young lovers who perished in an eternal embrace. Intriguingly, the scientific side of Hanold immediately dismisses the artifact "encrusted with green patina" as counterfeit – the "fabulous invention of some especially imaginative narrator" (Jensen and Freud 94). However, he seizes on the resonances of the piece not susceptible to empirical observation.

When the arrival at the Sun Hotel took it in his own hand, however, the power of imagination exercised such ascendancy over him that suddenly, without further critical consideration, he paid for it the price asked from English people[.] (Jensen and Freud 94)

Only when imagination trumps reason is a poly-generic message conveyed across myth, history, art, and literature: "From the green brooch between his fingers a feeling passed through him that it had belonged to Zoe-Gradiva, and had held her dress closed at the throat" (Jensen and Freud 95). Through poetic alchemy, Atalanta's buckle

metamorphoses into the counterfeit brooch to become a lost possession which must be restored to Gradiva. As such he pursues her into the House of Meleager. Clearly, these are not the associative leaps made by a strict observer of archaeological protocols. As with the failure of his ability to translate inscriptions in stone, Hanold exhibits a paradoxically sanguine view of his failure to identify and accurately date archaeological ruins – lost skills, which formerly fell into his province of expertise.

As he entered, however, it was not clear to him whether he had been here yesterday or two thousand years ago to seek from the owner of the house some information of great importance to archaeology; what it was, however, he could not state, and besides it seemed to him, even though in contradiction to the above, that all the science of antiquity was the most purposeless and indifferent thing in the world. (Jensen and Freud 77)

Hanold's curious indifference to his chosen profession belies an awakening realization that its methods are not only incomplete, but they are futile in virtue of that incompleteness. Of course Freud is methodical in demonstrating that Hanold's actions result from a profound and complex delusion. His journey, Freud contends, is "a splendid example of an act under the sway of delusion" though one that is tidily resolved at the romantic conclusion of Jensen's tale (Jensen and Freud 203). Hanold's repressed memory is awakened. Finally, he recognizes his old girlfriend and the folly of his assumptions. The pair engages to be married. However melodramatic, the analogy of the childhood friend "excavated from the ashes", is appropriate to Freud (Jensen and Freud 139).

There is no better analogy for repression which at the same time makes inaccessible and conserves something psychic, than the burial which was the fate of Pompeii, and from which the city was able to arise again through work with the spade. (Jensen and Freud 196)

Freud's notion of psychic spade-work harkens back to his earlier formulation cited by Derrida in Archive Fever. He maintains, albeit through a psychopathological allegory, that stones speak. *Saxa loquuntur!*

Like all of Freud's theses, and the concepts over which they preside, Derrida argues, so too is his notion of archive "cleft, divided and contradictory" (84). On the one hand psychoanalysis seeks to "formalize the conditions of archive fever and of the archive itself" while on the other "it repeats the very thing it resists or which it makes its object" (Derrida 91). In effect, Derrida contends, "it attempts to return to the live origin of that which the archive loses while keeping it in a multiplicity of places" (Derrida 91-92). Archaeological metaphors are equally appropriate for analyzing Derrida's discourse. Indeed, one might make fine use of a pick and shovel to excavate meaning from the previous statements. At the very least a recapitulation of Derrida's notions of "*trouble d'archive*" and "*mal d'archive*" will go some way to elucidating this complex problematic.

Derrida suggests that the very term "archive" is troubling in virtue of its unreliability and lack of clarity. Archive is troubled by "affairs", "secrets", "plots", "clandestineness", "half-private, half-public conjurations." It resides, he argues, in an "unstable limit" between "public and private," "society and the State", "family and intimacy" and paradoxically between "oneself and oneself" (Derrida 90). With this exhaustive set of binaries he seems to suggest that archive is necessarily the product of

collusion and competing interests. It is a plurality that cannot be fixed. *Trouble d'archive*, according to Derrida also reflects trouble for translation given the "irreplaceable singularity of a document" and the impossibility of interpretation, repetition and reproduction. Thus the concept itself, "archived in the word 'archive'" Derrida contends, is inherently troubled and all of this springs from what he calls a *mal d'archive* (Derrida 90).

Mal d'archive does not exclusively refer to a sickness, rather Derrida envisions it as a kind of passion fueled repetition compulsion, "it is never to rest, interminably, from searching for the archive right where it slips away" (Derrida 91). Clearly, Dr. Hanold knows this frustration and desire as he repeatedly attempts to solve the riddle of the bas-relief, just as the ghost of Gradiva, disappears on cue amidst the ruins of Pompeii leaving tantalizing traces. William Dawe does too. He relentlessly probes the archive of the Red Deer River badlands for a prize specimen, never quite unearthing the ideal for which he is in search. Dawe, as Derrida describes, "runs after the archive, even if there's too much of it, right where something anarchives itself" – right where fossil bone and matrix meet and crumble to dust (Derrida 91). The cases of Dr. Hanold, and Dr. Dawe run parallel trajectories. Both men are *en mal d'archive*. They share "a compulsive, repetitive, and nostalgic desire for the archive, an irrepressible desire to return to the origin, a homesickness, a nostalgia for the return to the most archaic place of absolute commencement (Derrida 91). Indeed, Derrida might also put Dr. Freud in similar company. With psychoanalysis, Freud enacts the condition of his study. According to Derrida, even

as Freud attempts to formalize *mal d'archive* and the archive itself, psychoanalysis "repeats the very thing it resists or which it makes its object (Derrida 91).

But where do these conditions leave the *archéologue raté* who stoops in the dirt with one ear cocked listening for the pronouncement of stone? Precisely nowhere, John D. Caputo might argue. His analysis of Archive Fever leads to an unavoidable conclusion. He, along with Derrida, asserts that "we are in need of archives". This is so because unlike what Hanold may have temporarily believed:

The living past cannot rise up from the dead and speak to us like dead stones. . . We must pick our way among the remains, wrestle with and conjure the ghosts of the past, ply them with patient importunity in order to reconstruct the best story we can. We have no other choice.
(Caputo 273-274)

Caputo thus stipulates that ruins, traces, artifacts, and even documents are not enough. Alone, they can represent nothing more than inanimate evidence. Their message is only conveyed through interpretation, interpellation, and the translation of individuals, equipped with an understanding of the historical context in which these specimens occur, and prepared to decipher their apparent meanings.

Hayden White elaborates upon this line of thinking by adding a key distinction. He has no problem with cold stone imparting a message to literary characters. By this line of reasoning Jensen and Kroetsch have a certain obligation to such legerdemain for the

edification of their reading audience. However, as a historian, White takes objection to the application of similar techniques to what he terms as "fact":

For why should not imaginary events be represented as “speaking themselves”? Why should not, in the domain of the imaginary, even the stones speak – like Memnon’s column when touched by the rays of the sun? But real events should not speak, should not tell themselves. Real events should simply be; they can perfectly well serve as the referents of a discourse, can be spoken about, but they should not pose as the subjects of a narrative. (White 3)

At a closer glance, it becomes apparent that White's objection runs even deeper than the proverbial song of Memnon's column, "narrative becomes a problem only when we wish to give to real events the form of story. It is because real events do not offer themselves as stories that their narrativization is so difficult" (White 4). White means to address the co-option of sequence in historiographical methodology by interested parties for dramatic effect, the inculcation of morality, or some other teleological ends. However, applied, perhaps unfairly, to specimens emerged from the bone yards of the Red Deer River valley, a comparable view seems tantamount to a recapitulation of the old analogy of the tree falling in a forest. No commentator would accept the syllogism that because no one is there to hear it, it makes no sound. Does not the distinct physical constitution of a fossil bone in relation to its surrounding matrix amount to a kind of enunciation for Kroetsch's William Dawe or the Geological Survey of Canada's George Mercer Dawson alike? Must a human apprehend this ancient message? Perhaps stone can't sing after all, but it may well whisper.

Good Jones

Our heavy fleshy body decays in just the same way, and our activity will turn into just such a pandemonium of signals gone amuck, if we do not leave behind us substantial proof of our existence.

(Mandelstam, *Journey to Armenia* 56)

Since then, at an uncertain hour,
That agony returns:
And till my ghastly tale is told,
This heart within me burns.

(Coleridge, *Rime* ll. 582-585)

A good prospector, a serious one, who does not want to tell lies either to others or himself, should not trust in appearances, because the rock, which seems dead, instead is full of deception: sometimes it changes its nature even while you're digging, like certain snakes that change color so you won't see them.

(Levi, *The Periodic Table "Lead"* 84)

'Why is any fissure in the earth's crust consigned to the devil?'

(Dragland, *The Drowned Lands* 70)

Hey there reader, I'm talking to you,
It's time to give the bone diggers their due.
So sit down reader and take heed,
I've got stories to tell about "THE PALAEO BREED".

(Tanke, *The Palaeo Breed*)

I am a science boy
I grew up on dinosaurs
(The Rheostatics, *It*)

Stacking pop cases at Wilson's Soft Drink Company for a few lousy bucks an hour gets Pete McGraw thinking about the meaning of legacy. Donald Shebib's landmark film of 1970, *Goin' Down the Road*, follows the plight of two wayward Maritimers displaced by the collapse of the coal mining and fishing industries on Cape Breton Island. In this prototypical Canadian road movie, the guileless pair discovers that Hogtown ain't no El Dorado. After another mind-numbing shift on the line, Pete and his sidekick Joey Mayle, drown their sorrows at a local tavern. While Joey, ever the optimist, is content to sip suds and live day by day, Pete attends to a grim calculus worthy of the bar stool prophet in Al Purdy's *Quinte Hotel* opus. If during their two month tenure at the plant they stack a case every three seconds, for an average of nine thousand cases per day, Pete estimates they will have each piled a whopping three hundred and four thousand cases by the time all is said and done.

At first Joey fails to grasp the metaphorical import of the figure. Then Pete drives home the essence of their predicament "Every day is the same thing. The same bottles go in the same machines. They go in the same cases [. . .] You can't see what you've done. There ain't nothin' happening." Pete dreams of a more lasting testament to his existence: "I just wanna do something that matters. Something that shows for myself. Says I was there. Peter McGraw was there." Like William Dawe, Pete McGraw sees his name in stone, though decidedly not in the rock of Sisyphus. Neither literalist can rest in peace until they engrave themselves into posterity, and like all youngish men of a certain temperament, they go west

to seek their fortunes. Dawe strikes out for the Alberta badlands to make his mark, and after a botched shoplifting attempt, Pete drags Joey along for a ride on the Transcanada to stamp their names on Gold Mountain, that other elusive city of myth.

This chapter seeks to explore the notion that palaeontological / geological discovery, and its corresponding scientific description, operates as a vehicle for memorializing the names of individual collectors and scientists, both fictive and historical. A close examination of the actions of William Dawe, and his fictive counterparts from a selection of ancillary texts, as well as those of his historical predecessors from their own field notes, miscellanea, and autobiographical accounts, will demonstrate that self-aggrandizement and self-perpetuation may also be a primary impetus behind this scientific enterprise. Moreover, these aims are only sustained by acts of writing such as field notes, reports and descriptions. The discoverer's name survives for posterity precisely because it functions as a proxy for that of the un-named prehistoric creature/specimen discovered. Such an amalgamation results from the work of the awl, but perhaps even more directly, from the pen of the palaeontologist.

Shebib's fictive Maritimers certainly share hopeless naïveté with the charmed protagonist and boon companion of Voltaire's enduring screed-*cum*-novella, Candide. Whereas Pete and Joey are completely taken in by material prospects—the flashing lights of Yonge Street and the vinyl paradise that was *Sam the Record Man*—Candide and Cacombo

attempt to see beyond the "stones" and "yellow mud" of the mythical mountain kingdom of El Dorado to the fabric of a truly civil society. Apparently pay dirt is the last thing on their minds. Aside from the shock of witnessing school children play at alleys with gold nuggets, emeralds, and rubies, Candide and Cacambo sense that their river trip into unexplored regions and through yawning caverns has landed them on strange shores indeed:

'What country can this be?' said one to the other. 'It must be unknown to the rest of the world, because everything is so different from what we are used to. It is probably the country where all goes well; for there must obviously be some such place.' (Voltaire 77)

Unlike Deadlodge Canyon, there's nothing bad about these lands though they too abound in the material equivalent of a fossil mother lode. Dawe's exaggerated fondness for old bones owes a debt to precedents set by master satirists. The value of metals and minerals, in El Dorado, as in Swift's Country of the Houyhnhnms, can only ever be artificial and ridiculous (Voltaire 81, Swift 221-213). Since these coveted commodities are neither rare in a city made of gold, nor generally useful to a herd of anthropomorphized horses, they certainly are not worthy of "the fiercest and most frequent battles" in conquest or defence (Swift 213).

Perhaps it is predictable that allegorical populations in far away lands (ie. those beyond Toronto!) should turn up their noses at the greed of bipedal hominids, Yahoos and Europeans alike. As Herodotus perspicaciously observes, "In any case it does seem to be true that the countries which lie on the circumference of the inhabited world produce the

things which we believe to be most rare and beautiful" (III, 115-116). One person's "pebbles and dirt" are another's treasures. Candide and Cacambo purport to see through such foolishness. They are more impressed with the egalitarian and symbiotic principles of El Doradan society, evinced by communal religion, subsidized education, nutrition, and housing, not to mention universal patronage for the arts and sciences. Yet when they take their leave, they carry away more than admiration. In addition to ideals worthy of posterity, these altruists depart with a grand retinue, and a ransom the likes of which is more than sufficient to "rescue Lady Cunégonde", protect them "from Inquisitors", and make them richer than "all the kings of Europe put together" to boot (Voltaire 82):

Candide and Cacambo were placed on the machine with two large red sheep, saddled and bridled for riding after they had crossed the mountains, and in addition twenty sheep with pack-saddles full of food, thirty to carry exquisitely chosen presents, and fifty laden with gold, diamonds, and precious stones. (Voltaire 84)

As if to commemorate their good fortune and underscore the historicity of their adventure, Candide "wrote the name of Cunégonde on several trees". His presumption is immediately repaid with calamity, and the loss of the greater part of their spoils to bogs, deserts, precipices and other impedimenta (Voltaire 85). Not so different from Pete and Joey and Dawe after all.

Flaubert would have objected to such a crude impulse. While the ordered and dignified graffiti of antiquity graven into the legs and plinth of the Colossus of Memnon won his admiration, the same cannot be said of the cheap efforts of his contemporaries *vis-*

a-vis Pompey's Pillar. To be fair, Latin verse commemorating a visit by Emperor Hadrian and Empress Sabine to the singing statue in the year 130 would seem to render any graffiti as paltry as the spray-painted tags of aggrieved teenagers. The vehement distinction drawn by Flaubert may simply make him a snob. However, it may also attest to a marked imbalance in the relative durability, and by extension, relative value of differing monumental media. What is a dab of paint against an inscription in stone measured on the continuum of history? His remarks, which were partially cited in the previous chapter through de Botton, merit further exploration. Once again consider Flaubert's initial impressions of the column at Alexandria. They are recorded rather innocuously in his travel *récit*, *Voyage en Égypte*.

[Samedi 17 novembre, 1849]

Colonne de Pompée, monolithe avec un splendide chapiteau corinthien et le nom <<Thomson of Sunderland>>, écrit à la peinture noire sur la base en lettres de [deux] trois pieds de haut – les tombes ont la couleur grise du sol, sans la moindre verdure. (Flaubert, *Voyage* 175).

Flaubert's mood changes when he broaches the topic again in a letter to his uncle. He had more than a year to stew over Thompson's act. It was enough time for Flaubert to see the painted graffiti as an affront to posterity. Suffering quarantine at Rhodes no doubt only added to his huff. The translated excerpt, alluded to in *The Art of Travel*, partially captures Flaubert's moral rectitude. De Botton makes elisions not only in the introductory remarks, but also omits a rhapsodic digression in Flaubert's complete letter:

A son oncle parain
De la quarantaine de Rhodes.
Dimanche, 6 octobre 1850.

Avez-vous réfléchi quelquefois, cher vieux compagnon, à toute la sérénité des imbéciles? La bêtise est quelque chose d'inébranlable; rien ne l'attaque sans se briser contre elle. Elle est de la nature du granit, dure et résistante. A Alexandrie, un certain Thompson, de Sunderland, a sur la colonne de Pompée écrit son nom en lettre de six pieds de haut. Cela se lit à un quart de lieue de distance. Il n'y a pas moyen de voir la colonne sans voir le nom de Thompson, et par conséquent sans penser à Thompson. Ce crétin s'est incorporé au monument et se perpétue avec lui. Que dis-je? Il l'écrase par la splendeur de ses lettres gigantesques. N'est-ce pas très fort de forcer les voyageurs futurs à penser à soi et à se souvenir de vous? Tous les imbéciles sont plus ou moins des Thompson de Sunderland. Combien, dans la vie n'en rencontre-t-on pas à ses plus belles places et sur ses angles les plus purs? Et puis, c'est qu'ils nous enfoncent toujours; ils sont si nombreux, ils reviennent si souvent, ils ont si bonne santé! En voyage on en rencontre beaucoup, et déjà nous en avons dans notre souvenir une jolie collection; mais, comme ils passent vite, ils amusent. Ce n'est pas comme dans la vie ordinaire où ils finissent par vous rendre féroce. (Flaubert, *Lettres* 226-227)

While DeBotton faithfully presents the Frenchman's central irritant—the idiocy of tourists—he replaces with points of ellipsis, a revealing metaphor that goes far to explaining Flaubert's real beef. He translates the first two lines as, "Stupidity is something immovable; you can't try to attack it without being broken by it" but skips over the third, "Elle est de la nature du granit, dure et résistante" or "by its very nature it is granite, hard and immutable. [my trans.]" (de Botton 97). Again, around the middle of the letter, DeBotton translates "Il l'écrase par la splendeur de ses lettres gigantesques" as "[h]e overwhelms it by the splendour of his gigantic lettering", but omits Flaubert's equally intriguing follow-up, "[n]'est-ce pas très fort de forcer les voyageurs futurs à penser à soi et à se souvenir de vous?" or "it isn't very *strong* to compel future travellers to think of *oneself*, and to remember *you*" [my trans. and emphasis] (de Botton 97).

While I grant that my translation is ungainly, I have traded elegance for exaggerated precision. Undoubtedly, Flaubert is referring to the lack of dignity and the arrogant presumption embodied by Thompson's graffiti, whose author seeks to crudely piggy-back his name on the fame of an ancient monument. However, he also seems to be making a veiled commentary on the dubious presumption of writing for posterity in general. This goes for other writers (*vous*), *bien sûr*, but it also goes for himself (*soi*). Such an act, by the same logic, must share the fate of Thompson's temporary emendation to a genuinely durable work. It's not very *strong* (*fort*) in comparison. Only the idiocy behind the act, which Flaubert likens to granite, will survive. These two omissions cut to the heart of the matter and perhaps also explain Flaubert's curious use of hyperbole. The infamous Thompson von Sunderland's signature increases twofold in proportion from its first mention in 1849 to its second mention in 1850. It literally goes from "trois pieds de haut" to "six pieds de haut." This elementary multiplication serves only to underscore the futility of self-aggrandizement through writing, a frail, temporary medium beside stone.

Michael Garval sounds this fault line in a disquisition on the elements of monumentality. His "'A Dream of Stone': Fame, Vision, and the Monument in Nineteenth-Century French Literary Culture" examines the underlying motivators behind the outbreak of "*statuemanie*" in France during the post-revolution cultural rupture, and lasting up until the First World War. Garval describes the phenomenon as a furious rush to confer "transcendent distinction and would-be immortality," to convey "ideals of excellence and

immutability" and to embody "the greatness not only of individuals, and of their works, but of the nation as a whole" (85). Gone were the effigies to royalty. They had been swept from the squares like the bronzes of so many tin-pot dictators. What rose in their place, or rather *who* rose in their place fascinates. Garval explains that the depiction of cultural figures became the only viable replacement for dubious monuments to political authority beginning as early as the 18th century with Houdon's statues of Voltaire (86).

Romantic sensibilities, Garval contends, favoured "lone tragic, promethean heroes: prophets, explorers, discoverers, inventors, and seekers, particularly in the creative arts" (86). Underappreciated bohemians who languished in wretched poverty during their short consumptive lives made for an even better study. Garval notes, "the hostility, neglect, or indifference that such solitary figures endured in life was thought proof of their ultimate worth to posterity, intensifying the perceived need for their posthumous commemoration" (86). That little distinction was drawn between the activities of "artists, musicians, scientists, and explorers" is significant, even if writers were privileged above all others in this group. Also curious is the fact that unlike the kings of yore, who had monuments to themselves erected during their own lifetimes, 19th century *statuemanie* in France, Garval observes, was a "posthumous apotheosis, both a last judgment upon worthy lives, and an embodiment of posterity, promising heroic eternal glory to triumph over death" (86). Much like a "*pierre tombale*", he adds. Like all dreams, Garval tells us that *statuemanie* too was ephemeral. Ultimately, crowing cocks stirred citizens from their slumbers who then trudged

past decrepit statues of forgotten great men, nibbled by rust, stained by soot, mantled in pigeon droppings and set on crumbling plinths in dismal parks. As the cryptic photographer in Kroetsch's Badlands observes and prophesies "Everything is vanishing" (99)

In his thinly veiled political allegory, Quo Vadis?, Henryk Sienkiewicz illustrates the presumption of attaching one's legacy to stone. While the material itself may endure, the integrity of the message cannot be guaranteed. Sienkiewicz's Emperor Nero boasts that he would "construct a Sphinx seven times as large as that which now gazes into the Memphian desert" (199). Of course this new sphinx would bear the features of its commissioner, so that "the centuries to come" would remember him (Sienkiewicz 198-199). Perhaps sensing the fate of Ozymandius, his interlocutor preaches caution. Petronius suggests another more practicable alternative. " 'But through your verses, you have already erected a monument, not seven times, but thrice seven times, as large as the Pyramid of Cheops' " (Sienkiewicz 199). For Petronius the Colossus of Memnon is not a paragon of monumental technology, but rather it is a metaphor for the limitations of memory:

'Ah, would that a stature could be erected like the statue of Memnon, but one that should be able, at sunrise to speak with your voice! Were that carried out, for thousands of centuries the seas which border Egypt would swarm with vessels which had transported thither multitudes from the three quarters of the world—multitudes come to lose themselves in ecstasy as they listened to your singing.' (Sienkiewicz 199)

According to accounts, other Europeans, some fictive, and some apocryphal, aspired to Emperor Nero's lofty ideals while repeating Thompson's vulgar precedent. Baron

Munchausen tangled with the famed Pillar during his transit across Egypt. His enchanted chariot was the worse for the encounter, though he left no appreciable mark on the relic, and only a vague track later confused by Napoleon's engineer De Tott as an ancient antecedent to the Suez canal (Raspe 134-137). The same cannot be said of another party.

Driven by a megalomaniacal impulse to brand a monument raised to the glory of a faded empire with the mark of one then still in vogue, or perhaps simply by boredom or a booze-fueled wager, Killkelly reports that a group of British seamen once set about scaling Pompey's Pillar. They succeeded in reaching their goal through the clever contrivance of a paper kite, which they flew into the capital enabling them to hoist a climbing rope (Killikelly 335). At the top, apart from destroying, and subsequently pillaging a volute, they succeeded in discovering the remains of a statue (an ankle and foot), which formerly bestrode the column. Killikelly, through Irwin, writes that they added a final flourish before descending, "Besides the testimony of many eye-witnesses, the adventurers themselves have left a token of the fact, by the initials of their names, which are very legibly painted in black just below the capital" (336).

Their names may be gone, but the pilfered volute, gifted by the ship captain to "a lady who had commissioned him to procure a piece of it" perhaps still languishes in the attic of an English country estate, or lies unidentified in a cabinetto drawer in the basement of the Ashmolean (Kilkelly 336). Who's to say whether rough sailors actually made such an

ascent? Baron Munchausen suffers no doubting Thomases. He is known to have served his skeptics with a challenge to duel, and a stiff rejoinder: *"If any gentleman will say he doubts the truth of this story, I will fine him a gallon of brandy and make him drink it at one draught"* (Raspe 64). And perhaps rightly so. E.M. Forster notes the dearth of authoritative sources regarding the column in question:

As often happens in Alexandria, history and archaeology fail to support one another. Ancient writers do not mention 'Pompey's Pillar', but they tell us a great deal about the buildings that stood in its neighbourhood and have now disappeared. (157)

Forster raises two salient questions: "Why and when was the pillar put up?" (161) He puts his money on "Emperor Diocletian, about A.D. 297" on the strength of a "four line Greek inscription to him on the granite base on the western side, about 10 feet up" (Forster 161). It conveniently reads: "To the most just Emperor, the tutelary God of Alexandria, Diocletian the invincible: Postumus, Prefect of Egypt" (Forster 161). Intriguingly, Forster adds that it is "illegible and indeed invisible from the ground" and only recently decoded by the diligent work of "generations of scholars", none of whom he names directly (161). Then as if to undercut all this careful science, he throws out another dubious possibility made all the more enticing by its complete lack of sourcing and the anachronism it implies: the monument was raised to the glory of the Christian triumph in 391 (Forster 161). However, this theory requires a touch more seasoning than the principle of parsimony provides. Forster concedes that by this time "the Alexandrians had not the means or the power to erect a new monument of such size" (Forster 161). Surely apocryphal stories involving

sailors and barons owe their very genesis to the foggy origins of the monumental structure. Just what does the pillar monumentalize anyway?

This episode raises another historical convergence. There also exists an identically named American site, which purportedly bears no direct connection to the Egyptian one of antiquity. Yet, it is conceivable that an early editor of the Lewis and Clark Expedition journals may have adjusted the appellation of a naturally occurring sandstone formation outside of Billings Montana, from "Pompey's Tower" to "Pompey's Pillar" to suit an alliterative ear and as an ironic nod to tradition. Hawes recounts that on Captain William Clark's return trip from the Pacific Ocean, he left his mark on the rock face: "W Clark July 25 1806" (1). Now protected under glass, it accompanies others of varying distinction, which pre-date and post-date the intrepid explorer's signature. According to the story, Clark named the geological feature after Sacagawea's young son whom he called "Pomp" meaning "Little Chief" in Shoshoni (Hawes 1). Indeed, Pompey's Pillar, which is now officially recognized as a United States National Monument, bears evidence of equal reverence in the past by aboriginal groups whose pictographs (viz. signatures) also adorn its surface.

Ancient Roman tourists and their Greek consorts left similar tags on the stone legs of Memnon's Colossus. A.J. Letronne rejects any facile inferences regarding the arrangement of this ancient graffiti. In his comprehensive inventory of the seventy-two

inscriptions made upon the Egyptian statue during the reigns of Emperors Nero, Hadrian and Septimius Severus, Letronne raises compelling paradoxes about bids at self-perpetuation by stone. To begin with it seems that placement is not linked to chronology in any discernable order; the highest markings are not necessarily the oldest ones (Letronne 9). For example, Letronne notes that an inscription from the time of Vespasian appears on the statue's right foot, whereas another from the time of Hadrian can be found above all others, at the highest point of the same leg (9). Opportunism seemed to be the governing principle for tourists who applied their names to the Colossus. The first simply chose a spot that suited them best. All subsequent tourists chose locations that accommodated the length of the inscriptions they intended to apply, depending on whether those inscriptions consisted of poetic verse or other personal details (Letronne 9-10).

Indeed, as Letronne observes, this activity had religious connotations (10-11). No Egyptian inscriptions appear on the Colossus, suggesting that only the Romans and Greeks revered the Colossus as the manifestation of a god (Letronne 16). On a primary level these signatures functioned as attestations. Signatories, in virtue of their marks, bore witness to the voice of Memnon. Because of the sacred quality of these tributes, Letronne finds it unlikely that older inscriptions may have been effaced to make room for new ones (11). Owing to the scarcity of open space on the forefront of the legs, and given that physical constraints prohibited any graffiti between the legs, even the poet Asclapius was compelled to engrave his eight lines on to the statue's plinth as was Gemellus, a prefect of Egypt

under Antonius (Letronne 14). This was viewed as an undesirable location insofar as the inscriptions were likely to be subject to greater wear and the threat of vandalism. Therefore the likelihood that the names of Asclapius and Gemellus would survive fell into some question.

Evidently, not just any Roman or Greek deigned to leave their names in stone. Letronne reports that nearly all also engraved their ranks and titles: among them included eight governors of Egypt, two governors' wives, three regional commanders, several administrators, two procurators of the emperor, a royal scribe, two judges, and a religious leader (15). The lowest ranking member of this group was a poet. Included among the military personnel who carved into the Colossus, were Legion prefects, a camp commander, various cohort lieutenants and captains of the guard (Letronne 15-16). Already there is ample evidence to suggest that this endeavour – a bid at attaching one's name to an object that endures for posterity – is strongly class based. While it seems elementary to suggest that the rich and powerful could afford the luxury of writing personal legacies through elaborately commissioned verse, Emperor Hadrian's inscription stands in stark contrast even to that of his wife. While Empress Sabine eschewed Latin for the affectation of a poetic tribute in Greek, her husband understood the enduring power of understatement. The minimalist inscription he oversaw at the hand of his Greek scribe "IMPERAT. A[D]RIANOC", or IMPERATOR HADRIANUS transliterated, bears an uncanny symmetry to

the eponymous Linnean binomials ascribed to type specimens by eminent palaeontologists and aspiring men like William Dawe (Letronne 149).

In a recently digitized British Library recording Virginia Woolf's voice crows from beyond the grave: "Words, English words, are full of echoes, memories, associations. They've been out and about. On people's lips, in their houses, in the streets in the fields, for so many centuries." Names too, she seems to whisper. Not to mention in the museums and in the laboratories. Leave it to a taxonomist to trump a critic at his own game with an astute literary allusion. By way of introduction to his cautionary exposition against the prospect of radical change in the science of naming, Gareth J. Dyke enlists the help of the indomitable Alice –not the one of short story renown, but rather the other of Wonderland. Indeed he even goes Through the Looking Glass to buttress the tried and true binomial Linnaean system, in the face of a growing chorus of voices advocating for a less hierarchical, purely phylogenetic based system called PhyloCode. Dyke explains that architects of this new naming strategy claim greater stability can be achieved by eliminating the genera/species qualifiers of taxa composition in favour of non-ranked classification. Jay Withgott offers this precision:

Proponents of the movement want to abandon Linnaean hierarchy's categorical ranks, which they see as biologically meaningless artificial constructs that impede scientific progress. Instead, they want to define groups according to their relatedness by common ancestry. (1)

Dyke seems to contend that in a discipline such as palaeontology, which is preoccupied by the almost constant influx of new, fragmentary, and contingent specimen material, specificity is at stake. To the chagrin of an old-fashioned bone sharp like the protagonist of Badlands, PhyloCode has the potential to take the *Dawe* out of *Daweosaurus magnicristatus*. Dyke's ironic wink-wink-nudge-nudge to Lewis Carroll actually drives to the heart of this discussion of naming for posterity. The following excerpt is drawn from a conversation Alice has with a talking gnat.

'I don't REJOICE in insects at all,' Alice explained, 'because I'm rather afraid of them--at least the large kinds. But I can tell you the names of some of them.'

'Of course they answer to their names?' the Gnat remarked carelessly.

'I never knew them do it.'

'What's the use of their having names,' the Gnat said, 'if they won't answer to them?'

'No use to THEM,' said Alice; 'but it's useful to the people who name them, I suppose. If not, why do things have names at all?' (Carroll 142)

Clearly the fossilized creatures don't stand to benefit appreciably from the hoopla entailed by the rituals of excavation, preparation and classification. However, a contemporary scientist may selflessly argue that human knowledge does. Taxonomist Carol Kaesuk Yoon asserts the quintessence of her discipline via the unfortunate victims of a strange neurodegenerative illness : "Without the power to order and name life, a person simply does not know how to live in the world, how to understand it. How to tell the carrot from the cat – which to grate and which to pet?" (2) According to Kroestch, Canadian

writers may experience a similar disconnect in virtue of their literary inheritance. He traces the pathology in a case study of Margaret Atwood's canonical novel, Surfacing.

Kroetsch argues that the female protagonist makes "herself unnameable in any traditional terms" by "freeing herself of artefacts like scrapbooks and photographs and wedding rings" (Lovely 50). In so doing she renames herself, Eve-like, "into a valid vision or version of the world" (Lovely 50). With some rhetorical finesse Kroetsch extends this concept to Canadian writing which he places in debt to the model of Eve because it, like she, comes after Adam, and "after the naming has been done" (Lovely 50). Dawe's taxonomic anxiety might also be read allegorically for the anxiety of Canadian literature during its post-modern turn:

The Canadian writer in English must speak a new culture not with new names but with an abundance of names inherited from Britain and the United States. And that predicament is in turn doubled – by the writing done in the French language in Canada. The problem then is not so much that of knowing one's identity as it is that of how to relate that newly evolving identity to its inherited or 'given' names. And the first technique might be simply to hold those names in suspension, to let the identity speak itself out of a willed namelessness. (Lovely 51)

Notwithstanding the taxonomist's exaggerated sense of mission-importance, (or for that matter the Canadian literary critic's tenuous position writing from America during the great nationalism debates of the 1970s), a contemporary scientist would probably not ascribe his/her own name to a new specimen as a guarantor and flag of conquest. It simply isn't done anymore. However, the forerunners of the discipline of palaeontology saw no

shame in naming new species after themselves. Indeed William Dawe admits this is one of the chief objectives of his expedition: "Looking and looking . . . *Daweosaurus magnicristatus* . . . the lost bones . . . the dead creatures immortalizing the mortal man. The bones as crazy and obscure as my own" (Kroetsch, Badlands 31-32). The prospect of failing to achieve this proxy-immortality lies at the heart of his narrative. As a savvy yarn-spinner Kroetsch is attuned to the fact that "at its best the threat of anonymity generates story" (Lovely 51). He also did his research and was well aware of the implications of binomial nomenclature. In his Red Deer River trip notes he includes this telling description:

[9]

The total Linnaean system
of naming:
the name of the genus
comes 1st
the name of the species follows
last comes the name of the
person (if available) who
first wrote a scientific
description of the animal or plant

ex:

Lambeosaurus magnicristatus

Sternberg. – i.e.

Lambe's reptile great-crested

Dr. Charles M. Sternberg

collected & described

the dinosaur.

(Kroetsch, MsC 775/04.25 Box 16/44 IV)

To be fair, the *Lambeosaurus magnicristatus*, a crested and duckbilled herbivorous dinosaur, after which Kroetsch modelled *Dawe's lizard*, was not coined in vanity. Rather, Professor William Parks of the Royal Ontario Museum, named the beast in 1923 after his colleague, and first official palaeontologist to the Geological Survey, Lawrence Lambe who spent a good portion of his career studying fragmentary material of the same creature (ROM). Diligent scientists are not the only recipients of such magnanimous gestures. Dr. Jason Bond of East Carolina University recently named a new species of trapdoor spider after the iconic rocker Neil Young. He, and now all of science, calls the critter from Alabama, *Myrmekeiaphila neilyoungi*, thus guaranteeing the musician a lasting rebuttal to the Lynryd Synryd imprecation that "southern man don't need him around" (Reuters).

Another professor of forestry and natural resources at Purdue University came up with a decidedly capitalistic twist on the notion of taxonomic tribute. Dr. John Bickham's auction for the naming rights to seven bats, new to science, from Mexico, South America and Africa has some precedent. Rex Huppke of the Chicago Tribune reports that the first documented case occurred in 2005 when "an online gambling website paid the Wildlife Conservation Society \$650,000 USD for the naming rights to a Bolivian monkey". Since then similar auctions have been held in Monaco, Florida and San Diego. The highest bidders collectively paid in excess of two million dollars for the novelty of attaching their names to a shark, a butterfly, a hydrothermal vent worm, and a sea slug (Huppke). Dr. Bickham describes the gimmick as an effective fundraising tool for the chronically under-

supported discipline of systematics. He argues that auctions will generate awareness about "the biodiversity crisis" (Huppke). Bickham contends that since only ten percent of the earth's species have been "discovered", countless may go extinct before they are ever formally described (Huppke). As such he suggests that those who would buy their way into posterity are actually motivated by altruistic impulses, rather than vanity.

'This provides a terrific opportunity to recognize someone who loves science and wants to be more involved in the discovery of a species in the vast world around us [. . .] They would be able to join me and a Purdue team on a future scientific research expedition. Plus, the species name is forever, so you'd be immortalized in the international scientific community.' (Fiorini)

Less generously, Michael Ondaatje in The English Patient articulates the desire for geographical conquest, as a function of empire building, and more viscerally, as a means of gratifying the colossal ego of the male explorer.

Still, some wanted their mark there. On that dry watercourse, on this shingled knoll. Small vanities in this plot of land northwest of the Sudan south of Cyrenaica. Fenelon-Barnes wanted the fossil trees he discovered to bear his name. He even wanted a tribe to take his name, and spent a year on the negotiations. Then Bauchan outdid him, having a type of sand dune named after him. But I wanted to erase my name and the place I had come from. (Ondaatje *English* 139)

Chivalry is dead, if we are to judge by appellations bestowed by Ondaatje's field party. His mellifluous narrator muses: "[t]here was a time when mapmakers named the places they travelled through with the names of lovers rather than their own" (Ondaatje, English 140). Of course this isn't exactly a revelation considering that even the

quintessential romantic, Don Quixote, ultimately worries that posterity may forget the name, not of his beloved Dulcinea of Taboso, but rather that of his trusty steed.

Fortunate the time and blessed the age when my famous deeds will come to light, worthy of being carved in bronze, sculpted in marble, and painted on tablets as a remembrance in the future. O thou, wise enchanter, whoever thou mayest be, whose task it will be to chronicle this wondrous history! I implore thee not to overlook my good Rocinante, my eternal companion on all my travels and peregrinations. (Cervantes 25)

As Paul Newman once quipped in an interview about his co-starring role in *Butch Cassidy and the Sundance Kid*, "nostalgia ain't what it used to be." Ondaatje shows that legacy anxiety intensifies as the curmudgeon approaches his twilight years:

When we are young we do not look into mirrors. It is when we are old, concerned with our name, our legend, what our lives will mean to the future. We become vain with the names we own, our claims to have been the first eyes, the strongest army, the cleverest merchant. It is when he is old that Narcissus wants a graven image of himself (142).

Pathetic at the best of times, narcissism for the washed up discoverer takes a maudlin turn. Frank Davey observes that Western Canadian writers apprehend this danger and reflect back not the hallowed name of the explorer, but rather their "disappointed limitations" as in the case of John Newlove's Samuel Hearne, and Earle Birney's Captain Cook ("Explorer" 1). Apparently, such perspicacity was not restricted by geography. Margaret Atwood offers a scathing critique on this distinctly male obsession in her 1979 novel, Life Before Man. She casts one of her principal characters in the role of a Royal Ontario Museum fossil technician with just as furious a penchant for old bones as Kroetsch's Dawe. Of course there's a rub. Lesje is a woman who has grown out of her

childhood dream of discovering a new species, to accept an ambivalent notion of custodianship – the kind of mundane realization that ultimately drives William Dawe to suicide:

If you discovered a new kind of dinosaur, you could name it after yourself. *Aliceosaurus*, she used to write, practicing, Anglicizing her name. When she was fourteen this was her ambition, to discover a new kind of dinosaur and name it *Aliceosaurus*. She made the mistake of telling her father this; he thought it was very funny and teased her about it for months afterwards. She isn't sure what her ambition is now. (177-178)

Palaeontology is even more ruthless than fiction. It's hard to fathom a crueler metaphor for the disappointing limitations of scientific ambition than the blight of "synonymy." I.G. Sohn explains the concept as it pertains to taxonomy in these succinct terms: "Synonymy in zoological nomenclature consists of the listing of two or more names that refer to the same species, genus or family. The first published valid name of the two has priority" (1). For the would-be-immortal bone hunter, the last proviso is especially galling. So if an earlier collector attaches his name to some splinter of tarsal, that appellation must hold even when years later a scientist discovers, retrieves and minutely prepares a complete and perfect specimen. Sohn goes on to offer this stoic, or naive, consolation:

Just as there is no special honor attached to the publication of a new name, there is also no dishonor in having a name reduced to synonymy. Some workers in the past have been insulted by such an act by a colleague, but there is no justification for such a reaction. The science grows continually, by addition and correction, and no one can expect to know all that will be known to his successors. (2)

The dispassionate taxonomist sounds barely human or totally disingenuous. He fails to acknowledge the obvious sting a diligent colleague would suffer after having succeeded in fleshing out an animal, of which his predecessor may have had the dimmest inkling, only to lose credit due to a formality. Clearly, the insult lies in the retraction of the good worker's name from posterity. To have it included in the historical record of species synonymy adds insult to injury. At best he is remembered for an error of identification that ultimately contributes to the progress of science. At worst he is remembered as an eternal second fiddle. Even Sohn, perhaps unwittingly, calls it a "reduc[tion]". This twist drives home the precarious nature of using taxonomy as vehicle for immortality. As Carroll demonstrates with his caricature of the famous egg-boy, there is nothing so arbitrary as a name:

'Must a name mean something?' Alice asked doubtfully.

'Of course it must,' Humpty Dumpty said with a short laugh. 'My name means the shape I am – and a good handsome shape it is, too. With a name like yours, you might be any shape, almost.' (Carroll 176)

The same goes for a dinosaur, to wit. Marlon Brando's character in Bertolucci's film *Last Tango in Paris* apparently learned Carroll's lesson. In an infamous scene Paul rejects Jeanne's overture to invoke histories through taxonomic appellation with his ironic, yet no less arbitrary refusal to be named: "You don't have a name, and I don't have a name either. No names here. Not one name." In his critical practice Kroetsch takes a similar stance. The title of his essay "No Name is My Name" is a paradoxical argument unto itself. In it he cites Thomas Haliburton's 1836 novel, The Clockmaker for its peculiar treatment of names

and naming. Unlike Dawe, one of Haliburton's principal characters does everything in his power to protect his anonymity. Based on this diametrically opposed example, Kroetsch offers an intriguing speculation:

It may be that the villain (nameless) turns out to be the hero in the story of the Canadian story. The nameless figure who seems to threaten us may in fact be leading us to higher ground. To avoid a name does not (as Haliburton's narrator so well realized) deprive one of an identity; indeed, it may offer a plurality of identities. (Lovely 52)

Dawe's quest might therefore be read as parody – not only as an endeavour of extremely limited scope, but also as a bankrupt enterprise.

Dawe's fictional peers show far less ambivalence. The lineage of Badlands can be traced to a cluster of adventure tales not limited to the purview of Canadian literature, or for that matter to a specific literary period. While, Jules Verne's Journey to the Centre of the Earth is nowhere explicitly mentioned in the Kroetsch papers, Dawe shares obvious traits with that other over-determined *scientifique*, Professor Lindebrock, who quite literally drags his nephew and their guide to hell and back. To penetrate the depths of the planet, Professor Lindebrock follows in the footsteps of another like-minded individual, the mysterious Arne Saknusseum who leaves clues to his voyage in the form of ancient field notes written in an arcane script. Lindebrock plays the role of the conquering hero. He avails himself of the occasion to bestow names upon the features of his newfound domain.

Ever the man of science, Lindebrock observes the precedence principle so engrained in taxonomic nomenclature. Therefore, he assigns to a spring the name of the guide that discovered it in a knick of time; "Hansbach it was from that moment" (Verne, Journey 136). The great interior waterway becomes "the Lindebrock Sea" for as the professor reasons, "I don't imagine that any other explorer is likely to dispute my claim to having discovered it and my right to call it by my name!" (Verne, Journey 163). A bay in that sea misses going by the name of the professor's nephew, only because Axel insists on calling it Port Grauben as a romantic tribute: "[M]y uncle, who liked naming places, suggested giving it a name, and proposed mine among others. 'I've a better name to propose to you,' I said" (Verne, Journey 175). Neither does the professor fail to remember his debt to the esteemed colleague whose researches enabled the Lindebrock expedition.

[. . .] Your name, engraved here and there, leads the traveller bold enough to follow you straight to his objective, and at the very centre of our planet it will be found again, inscribed by your own hand. Well, I too will sign my name on that last page of granite. As for this cape seen by you in this sea discovered by you, let it be known henceforth for ever as Cape Saknussem!" (Verne, Journey 223)

Another scientist from another key intertext makes a similar gesture. The cantankerous Professor Challenger from Arthur Conan Doyle's The Lost World names the South American plateau where dinosaurs still roam, after its unfortunate "discoverer". Edward Malone, the journalist-*cum*-archivist takes note: "Maple White Land it became, and so it is named in that chart which has become my special task. So it will, I trust, appear in

the atlas of the future" (Doyle 99). While Malone fulfills his scribe's duties, he does not relish the taxonomic implications of a particularly nasty insect bite:

"The first-fruits of our labors," said Challenger in his booming, pedantic fashion. "We cannot do less than call it *Ixodes Maloni*. The very small inconvenience of being bitten, my young friend, cannot, I am sure, weigh with you as against the glorious privilege of having your name inscribed in the deathless roll of zoology." (Doyle 97)

Neither does Malone succumb to the temptation toward self-aggrandizement during his sojourn to Maple-White Land. Rather when from a tree he spots a large water body he behaves in much the same fashion as Axel Lindebrock. Indeed Doyle offers a tongue-in-cheek recapitulation of Verne's seaside vignette from Journey to the Centre of the Earth. He casts Malone as a love-struck adolescent, against his foil of the manly hunter, Lord John Roxton, and Challenger as a self-absorbed braggart against his foil of the *éminence grise*, Professor Summerlee. The expedition members squabble over "the great blank which marked the lake" as they attempt to "elaborate the first map of the lost world." No scene better captures the audacity, presumption and absurdity of naming.

'What shall we call it?' he asked.

'Why should you not take the chance of perpetuating your own name?' said Summerlee, with his usual touch of acidity.

'I trust, sir, that my name will have other and more personal claims upon posterity,' said Challenger, severely. 'Any ignoramus can hand down his worthless memory by imposing it upon a mountain or a river. I need no such monument.'

Summerlee, with a twisted smile, was about to make some fresh assault when Lord John hastened to intervene.

'It's up to you, young fellah, to name the lake,' said he. 'You saw it first, and, by George, if you choose to put 'Lake Malone' on it, no one has a better right.'

'By all means. Let our young friend give it a name,' said Challenger.

'Then,' said I, blushing, I dare say, as I said it, 'let it be named Lake Gladys.'

'Don't you think the Central Lake would be more descriptive?' remarked Summerlee.

'I should prefer Lake Gladys.'

Challenger looked at me sympathetically, and shook his great head in mock disapproval. 'Boys will be boys,' said he. 'Lake Gladys let it be.' (Doyle 121-122)

In one fell swoop, Doyle satirizes the entire gamut of men – the paramour, the megalomaniac, the trophy-hunter, and the pedant – who would strive for immortality via taxonomy. Margaret Atwood takes Doyle's parody further in Life Before Man. While Atwood undoubtedly exploits the ready, stereotypical, and largely erroneous emotional connotations associated with palaeontology, she also uses Lesje to comment on metaphors of science itself. Through the force of her own imagination, or perhaps owing to the dismal environs of her basement laboratory (read: life), Lesje periodically revisits the ancient past. Unlike Simpson and Sternberg who are assiduous about confining their fantasies to the floral and faunal distributions appropriate to a given geological period, Lesje "allows herself to violate shamelessly whatever official version of palaeontological reality she chooses" (Atwood, Life 10). Although it seems obvious, in order to make the fantasy "hers" she must make it subjective (Atwood, Life 10). This gesture is especially unorthodox given Lesje's putative membership in the ranks of straight-laced scientists:

In general she is clear eyed, objective, and doctrinaire enough during business hours, which is all the more reason, she feels, for her extravagance here in the Jurassic swamps. She mixes eras, adds colors: why not a metallic blue stegosaurus with red and yellow dots instead of the dull greys and

browns postulated by the experts? Of which she, in a minor way, is one. (Atwood Life 10)

Simpson has his Magruder make a similarly bold declaration about the pigmentation of the dinosaurs he carouses with in the late Cretaceous. Although, as Gould points out with ironic glee, he ventures no further than an expanded traditional colour palette:

Playing it safe, artists have not dared to use the emerald-green hue of the creature I know saw before me. They show the eyes as brown or black, not the startling crimson of the reality before me. My mental image from student days was all the wrong colors. Would you immediately recognize a bright red, stripeless tiger or a purple-spotted squirrel? (Simpson 38)

According to Gould, contemporary theorists who interpret the frills, bosses, and horns of dinosaurs as signs of sexual display, or combat readiness, might be more inclined to accept Lesje's wild speculations. They too would "prefer an amazing array of brightly conspicuous colors, by analogy to peacock's tails" (Simpson 109). Atwood's critique doesn't stop at the *revealed truths* of science. It also chips at preconceived notions of gender in science and its literary representations. Lesje has a fraught response to Arthur Conan Doyle's The Lost World. On the one hand she rejects the pervasive myth of romance inculcated in young girls by their predictable reading materials. "Rocks had been her big thing before dinosaurs" whereas her friends "read Trixie Belden, Nancy Drew, Cherry Ames the stewardess" (Atwood, Life 37). On the other hand with The Lost World, she makes an exception to her preference of the "factual" over "stories that weren't true" (Atwood, Life 37). Perhaps she gives herself license to love Doyle's novel with abandon

because it is afforded a honorary, if accidental, place in the Geology stacks by her school librarian.

Indeed she embraces one of the characters with an unusual ardour. Lesje articulates an abhorrent sexual fantasy involving the most ossified member of the Lost World Expedition. She rejects outright the bluster of Challenger, the virility of Roxton, and the youthful vigour of Malone (to say nothing of the faith of Zambo, who is disqualified without mention by racial and class taboos), in favour of the quiet brilliance of Summerlee – so desiccated a specimen that he could literally pass for a skeleton, or a human fossil:

It was the other one, the dry, skeptical one, the thin one; Professor Summerlee. how many times has she stood at the edge of this lake, his thin hand in hers, while together they've witnessed a plesiosaur and he's been overcome, converted at last? (Atwood, Life 37)

Lesje ridicules Malone's sappy name choice for Lake Gladys, which Professor Summerlee would have preferred to bloodlessly call "Central Lake." Yet, she also smarts at the implied tribute insofar as she chooses Lake Gladys as a setting for her romantic rendezvous with Summerlee – perhaps some plot twist sublimated from the Nancy Drew stories she derides:

She permits herself a walk by moonlight along a path trampled by the giant but herbivorous iguanodons; she can see the three-toed prints of their hind feet in the mud. She follows their trail until the trees thin and there, in the distance, is the lake, silvery, its surface broken here and there by a serpentine head, the curve of a plunging back. That she should be so privileged. How will she ever convince the others of what she has seen?

(The lake, of course, is Lake Gladys, marked clearly on the chart on page 202 of *The Lost World* by Sir Arthur Conan Doyle.) (Atwood Life 36-37)

However, later in the novel Lesje vehemently denounces the topographical name choices in The Lost World for being so trivializing, and so transparently patriarchal. To critique the impetus behind male naming gestures she paradoxically adopts a similar strategy. Rather than fantasizing her name on the lake in place of that of dear Gladys, she enacts another possibility. Rather than passively receiving so trite a flattery for so peripheral a landscape feature, she actively presumes to ascribe her name, in its most foreign-sounding configuration, to the whole of the Lost World plateau. By so brazenly assuming the naming right of the conquering hero (viz scientist), she undercuts the male hubris that drives it:

If she were to discover a country which had never been discovered before (and she fully intended to do this sometime), she would of course name it after herself. There already was a Greenland, which wasn't at all the sort of place she had in mind. Greenland was barren, icy, devoid of life, whereas the place Lesje intended to discover would be tropical, rich and crawling with wondrous life forms, all of them either archaic and thought extinct, or totally unknown even in fossil records. She made careful drawings of this land in her scrapbooks and labeled the flora and fauna.

But she couldn't call this place Aliceland; it wasn't right. One of her reservations about *The Lost World* concerned the names of the topographical features. Lake Gladys, for instance: *too goyish*. And the whole primitive plateau was called Maple White Land, after the artist whose sketches of a pterodactyl, found clutched in his delirious and dying hand, sure- though it didn't say so in the book- that Maple White must have been a Canadian, of the pinkest and most frigid kind. With a name like that what else could he be?

Lesjeland, though: That sounded almost African. She could picture it on a map: seen that way, there was nothing ludicrous about it. (Atwood Life 80-81)

Unbeknownst perhaps even to Atwood, Lesje's critique extends far beyond the fictional boundaries of Doyle's lost plateau, and the presumptions of the Challenger Expedition, to a scientific and historical corollary. The Science Newsletter for December 11, 1937 boldly announces under a section dedicated to "EXPLORATION", "Expedition Ready to Secure Specimens from 'Lost World' ". A brief column goes on to predict success for an American Museum of Natural History expedition led by Dr. George H.H. Tate and "financed by William H. Phelps of Caracas" to "one of the least explored regions of the world", a remote plateau in the Orinoco jungle. The article also insists that "Dr. Tate and his colleagues will bring back specimens of bird and mammal life as well as map the region they are visiting." According to the anonymous writer, there is good reason to expect that these creatures will be unknown to science owing to the fact that Dr. Tate secured many new forms on two previous expeditions to nearby plateaus. While the writer records the name of the mysterious geographical feature as "Mt. Auyantepuy" it remains inconclusive whether Dr. Tate and his colleagues could resist according their names to unsuspecting critters and other blank spaces on the map.

Indeed the laurels of eponymy may sometimes be worn as a perpetual dunce cap, as was the case for Charles Dawson (no relation to George Mercer Dawson). "[I]n 1885, [. . .] [he] was elected a Fellow of the Geological Society for his contributions to the science, though little appeared in the literature under his own name" (Reader 59). John Reader reports in his book, Missing Links: The Hunt for Earliest Man, that Dawson made it a practice to surrender his finds to experts for analysis and description. As a reward for such

dutiful and self-effacing service to the altar of science, Smith-Woodward named a collection of human skull fragments and the jaw of a chimpanzee taken from a gravel pit near Sussex, *Eoanthropus dawsoni* ('Dawson's Dawn Man'). Reader also explains that Smith-Woodward made Dawson principal author of their joint paper, thus marrying their names for time immemorial to the most infamous hoax in the history of paleoanthropology – Piltdown Man (Reader 59).

Marriage may seem an odd metaphor for species appellation. Yet, another Dawson, in one of his sensitive moments, invoked the very concept. Although George Mercer Dawson chose to expound this unique view on taxonomy in an atypical medium for a scientist in the field, the implication of his statement is clear. He scrawled an allegorical ode, "The Geologist", on a scrap of paper during his tenure as Chief Naturalist with His Majesty's British North American Boundary Commission Survey. To my knowledge it has never been widely published nor discussed in the context of an academic study, I reproduce it here in full from my own transcription of the holograph document held at McGill University Archives. I include Dawson's deletions, insertions, and original spelling for the sake of editorial transparency:

Contorted beds of unknown age
~~My~~ >Our< weary limbs shall bear,
 Perchance some neat synclinal fold
 At night may be ~~my~~ >our< lair.
 Dips we shall take on ~~unknown~~ unnamed streams
 or where the rocks strike follow
 Along the Crusted Mountain Edge
 or anticlinal hollow.

Where long * neglected mountains stand
 Fast Crumbling into shreds
 And laying bare on every hand
 The treasures of their beds
 We'l [sic] gently with the hammer wake
 The slumbering petrification
 That for ~~some~~ >a< hundred million years
 Has been debarred from action.
 or snatch some Crinoid or Mollusc
 Ⓓ Unearthed without our toiling
 Adrift upon the river bed
 By brute attrition spoiling

[→over]

[To waste?] [one?] day in[,] bring back
 Into the sunlight glory
 All natures misbegotten ~~types~~ >shapes<
 of pattern rude & hoary
 To reptile of prodigious bones
 or two tailed salamander
 To wed the lovely name of Jones!
 For >Gives< Jones good cause to wander.
 (Dawson, M.G. 1022, Box 59, File 17, "Poems")

This effort could hardly be called doggerel verse, though he wrote his fair share of that too. In fact Dawson, the natural historian, demonstrates with "The Geologist" that a poem can also be a serious medium for scientific expression. As Laurence Ricou has observed, the physical dimensions of a field book may even facilitate this particular form of expression: "The field notes are in prose, but their cryptic factuality, and the shape of the long slender notebooks keep turning towards poetry" (Field Notes 120). The effect of Dawson's piece is uncanny. It portrays an environment not only inimical to human existence, but one wholly devoid of it. While Dawson declaims the sublime beauty of the

world pre-humanity in "The Geologist", H.G. Wells shows the other side of this coin in The Time Machine. Dawson's accompanying illustration of a forlorn bivalve lying on an ancient seashore harkens to its opposite scene. Wells' time traveller blunders on to a desolate beach in the distant future populated by a hideous derivation of *homo sapiens* more monster than man, more palaeontological relic than product of evolutionary development.

A horror of this great darkness came on me. The cold that smote to my marrow, and the pain I felt in breathing overcame me. I shivered, and a deadly nausea seized me. Then like a red-hot bow in the sky appeared the edge of the sun. I got off the machine to recover myself. I felt giddy and incapable of facing the return journey. As I stood sick and confused I saw again the moving thing upon the shoal – there was no mistake now that it was a moving thing – against the red water of the sea. It was a round thing, the size of a football perhaps, or, it may be, bigger, and tentacles trailed down from it; it seemed black against the weltering blood red water, and it was hopping fitfully about. (Wells 148)

The last two lines in the final quatrain of Dawson's poem represent the culmination of not only every trial and tribulation of the field geologist at his work (in this case reporting on the natural features of the regions bordering the 49th parallel of latitude), but also of the operating idea behind the poem – the mechanism of naming. He does not employ figurative language beyond the allegorical stand-in, "Jones", inferred to connote "any scientist". Dawson means what he says. His verb choice should be taken literally with all the patronymic obligations once implied by the rite of matrimony. Jones' bride, the "reptile of prodigious bones" (or his brides if you count him for a polygamist and include the "two-tailed salamander"), must take its husband's name. Since its "maiden" name is unknown, and not knowable in virtue of the fact that the reptile is a type specimen, or the

first of its kind to be glimpsed by the human eye (and subject to semiotic processes), it must be labelled at the species, and perhaps even at the genus level according to the immutable rules of taxonomy – possibly *Jonesosaurus jonesei*. While not quite a Frankenstein birth, or an Athenian hatching whole from the head of her father, the product of Good Jones' naming gesture does embody some of the alchemical mystery conjured by Ariel in her famous speech from The Tempest:

Full fathom five thy father lies,
 of his bones are coral made:/
 Those are pearls that were his eyes./
 Nothing of him that doth fade,/
 But doth suffer a sea-change/
 into something rich and strange. . .
 (1:2)

The marriage of Jones also seems to imply a kind of consummation. Certainly Dawe's "maniacal obsession" is driven by a predatory lust, "a drive, a compulsion", one he finds abhorrent in the mirrored passion of Sinnott (Kroetsch, Badlands 7, 109). Like Sinnott who will have his picture of the Tree of Hawks at the critical moment when Web leaps onto the raft, a landslide buries Grizzly, and the birds rise majestically into the air, the author will have his image. The fulfillment of that lust can be teased from documents in the Kroetsch archive. The basis of this scene appears to be an anecdote recounted, and a photograph taken, by David Carpenter.

Web saw: Dave Carpenter
 tree full of hawks –
 north of ~~brooks~~
 Brooks – up
 to 40 hawks, 5 or

so in the air at
a time. Middle of
July – on shore
opposite where they
later to
help Sinnott

(Kroetsch, MsC 27.16.9)

Clearly, Kroetsch wanted the hawks as badly as Dawe wants his bones. Although Carpenter's picture shows the skeletal silhouette of a tree, it is notably devoid of winged creatures.



Fig. 21 "Tree of Hawks". David Carpenter (Kroetsch, MsC27.16.9)

As the author demands satisfaction from the technology of posterity, so does his character demand it from the zoology of posterity:

Eagerly they climbed; they leapt to a pinnacle, they crawled, almost flat against the almost vertical slope of clay, they slid and clambered again, as if their eagerness itself must plant the bones and sprout them, out of the barren clay and rock. From seventy million years deep in the black matrix of the past, the bones must leap to light. Must loose themselves from the bentonite. Must make their finders rich and famous. The bones that must satisfy the finders (Kroetsch, Badlands 28).

If Dawe is a megalomaniac obsessed with foisting his name on to the future via the unsuspecting bones of a dinosaur, McBride is his very antithesis. Whereas Dawe dreams of siring a son merely to carry on the moniker of his clan, McBride dreams only of the well being of his children:

McBride, the one among all those travellers who dreamed insistently of home. Who did not want his name on a crate of bones, or the kick of adventure in the pit of his stomach Or those nights when footsteps whispered in the dark and lifted his head from his cot, set his heart pounding. . . . He wanted his children and his wife (Kroetsch, Badlands 37)

Whereas Dawe deliberately abandons his wife (and later his daughter) to pursue scientific expeditions, McBride abandons a fool's errand to rejoin his needy family. Anna Dawe admires in him the very virtue her father considered a flaw:

In the western yarn those men were trying to tell each other, he was the only one with the ability to become a hero, the wisdom not to. Home was a word he understood, and heroes cannot afford that understanding. Which meant he must become the fool among those fools. (Kroetsch, Badlands 39)

Instead of worrying about cultivating his reputation, McBride worries about cultivating his quarter section.

McBride, in bib overalls and a straw hat on the bow of the flat boat, who only wanted to make a few dollars, a summer's wages, then return to his homestead at Red Deer Crossing, to his wife, his four kids, the crop that was supposed to grow and ripen while he was away. (Kroetsch, Badlands 11)

Not only does McBride take joy in the self-effacement of domestic life, but he believes that such a life follows the course of nature. That a man should be remembered for anything other than honouring his family obligations doesn't compute. Indeed, for McBride there is something inherently unnatural with exhuming the bones of long dead creatures at the expense of fostering new life. As his rearguard and proxy the Bleriot Ferryman intones, "Dead is dead" (Kroetsch, Badlands 46).

Even the ferryman might owe that sage bit of advice to a literary predecessor. Kroetsch's reading lists include a peculiar title written by Lilian Brown, second wife of the American Museum's star collector, Barnum Brown. Kroetsch gleans valuable information regarding the temperament of a bone hunter from Lilian's first vividly titled autobiography, and more specifically from its preface written by another legendary AMNH palaeontologist of The Gobi Desert Expedition fame:

Thurs: Oct 26/72

Lilian Brown, I Married a Dinosaur

- Brown "a lone wolf"
- with pick, shellac and plaster.
- on life in India and Burma.

(Kroetsch, MsC27.16.9)

Roy Chapman Andrews describes his colleague of forty years in an unusually honest way: "He is a lone wolf as a fossil-hunter. Pixie [Lilian] discovered that to her sorrow" (Brown, Married 8). Andrews also writes of Brown in glowing terms, recalling the admiration of the institution's director, Henry Fairfield Osborn, "'Brown is the most amazing collector I've ever known. He must be able to *smell* fossils. If he runs a test-trench through an exposure it will be right in the middle of the richest deposit. He never misses'" (Brown, Married 8).

The second part of Kroetsch's note comes from Chapman's own amusing, yet no less generous anecdote:

He has discovered many of the most important and most spectacular specimens in the whole history of palaeontology. When he ceases to look for bones on this earth the celestial fossil fields may well prepare for a thorough inspection by his all-seeing eyes. He'll arrive in the Other World with a pick, shellac, and plaster, or else he won't go. You may be sure he'll still be doing it, alive or dead. (Brown, Married 8)

It's no small praise, and no small irony, coming from a man who through his discovery of dinosaur eggs at the Flaming Cliffs would become the model for the quintessential Hollywood adventurer, Indiana Jones. However, Kroetsch may have derived the substance of his ferryman's interdiction from her second autobiography, which details another Barnum Brown fossil chasing expedition to Guatemala. In the no less intriguingly titled, Bring 'Em Back Petrified, Mrs. Brown describes the obstacle posed to the party by a

local "*magica*" named Kaa whom she portrays rather patronizingly as an uncivilized witch doctor:

'It is best,' she croaked at last, 'to let the dead lie.'

'But . . .' Barnum began.

'It will bring badness to all if you do not.'

With this she dismissed Barnum as a mere man and fixed an eye on me that actually sent shivers up my spine.

'Why do you not talk to your man?' she demanded. 'It is against nature to bring the dead back. What can be learned from digging up bones? Only bad things,' she answered herself, 'things that are dead – dead.' (Brown, Bring 'em 22)

Brown's response, invested though it is in scientific reasoning seems to pale beside the foreboding proclamation of Kaa. It's just the kind of warning that Dawe repeatedly ignores to his expedition's ultimate peril:

'Rot!' Barnum cut in, ignoring my 'shushing.' 'Don't you know that the history of the earth is recorded in its rocks? That no evil of any sort can come from learning the truth that is in there?'

A change spread swiftly over the woman's dark face. Her expression became something halfway between a curse and an evil smirk The smirk won out.

'It is the devil's mischief you are up to," she cackled, following us to the door with a mocking, 'You will see – you will see.' (Brown, Bring 'em 22)

Kroetsch undoubtedly borrowed other morsels from equally obscure sources. So plausible is McBride the hayseed farmer, one could easily believe that Kroetsch took an upstanding neighbour from his childhood days on the family homestead near Alberta's Battle River as a model. One wouldn't be that far off. Certainly Kroetch lifted McBride's

name from his copy of Hunting Dinosaurs in the Badlands of Alberta wherein Charles H. Sternberg recounts a close call during a storm in Texas while in the company of local assistants. Indeed Kroetsch made marks of emphasis in the margins of his photocopy (reproduced as underlines here) to indicate as much:

Once in the brakes of the Permian beds of Texas, on a Saturday evening a great storm threatened. I thought we could reach Mr. Galyean's house before it burst. His son was with me, a boy of about 15 years of age. We had gone only a short distance, however, when the rain fell in sheets, not only drenching us to the skin but filling innumerable ditches with water running like a mill race. These we must cross. I remember we passed though the same patch of weeds repeatedly, so I knew in the darkness we were walking in a circle. Every few feet was a deep and narrow ditch full to the brim with red muddy water. I found these rushing streams by pushing my pick ahead of me, as the only time we saw anything was when the lightning flashed. At last we got sight of the light in McBride's house a mile up the creek from Galyean's. We thus secured the direction and thought we were all right, but without our knowledge, some one moved it from a south to an east window and we got off again, and before we knew it were slipping down into the roaring Coffee Creek full of driftwood. If we had slipped into it, both of us would have been lost. The boy had hold of my coat tails; I struck the point of my pick into the muddy slope and swung around with John hanging on behind describing the arc of a circle. The pick held while we dug holds with our heels [sic] to support us until I could reach upward and take another hold with the faithful pick. Thus we got out on the level flood plain of the creek. I then allowed John to take the lead, and he took me as if by instinct, safely to his father's house where we were soon drying our clothes before the fire-place, heaped high with blazing cottonwood chunks. (Sternberg Hunting 76)

While Kroetsch cherry-picks the name of "McBride" from the preceding passage, the bowman/farmer in Badlands seems to more closely resemble Sternberg's actual assistant, Mr. Galyean, who gets even more ink devoted to him in the bone hunter's first autobiography. While no annotated copy of this text exists in the Kroetsch fond, it doesn't seem too great a leap to suggest that Life of a Fossil Hunter may well also have been

consulted. Indeed a bibliographic note indicates that if Kroetsch didn't make a research trip from Binghamton to Ithaca to unearth these obscure books, he at least availed himself of the services of interlibrary loan:

Cornell microfilm

Sternberg, Charles Hazelius
 Hunting Dinosaurs in the
 Badlands of the Red Deer River,
 Alberta, Canada
 (1917)

Carb Copy

QE
 707
 S83A4

Sternberg, Charles Hazelius
 The Life of a Fossil Hunter
 (N.Y. Hold, 1909)

ar W
 46777
 (Kroetsch, MsC27.16.9 loose leaf)

In the latter text Sternberg describes his trusted sidekick:

My assistant and cook was a farmer, Frank Galyean by name, who lived on Coffee Creek on the Vernon road, twenty-five miles north of Seymour. I camped a mile above his house on the west branch of the creek at Willow Springs, a favorite camping ground, as it was one of the few places in which water was always to be found. (Life 230)

Sternberg's reaction to one of Galyean's prospects was less than rosy. It recalls the warning made by the "rough-sailor-captain" to Susanna Moodie in Roughing it in the Bush,

"Don't be too sanguine Mrs. Moodie; many things look well enough at a distance which are bad enough when near. (28)

I worked for several weeks on Indian Creek and Coffee Creek with very poor returns, but on the nineteenth of September, Mr. Galyean, who was of a sanguine temperament, announced that he had discovered the complete skeleton of a huge beast. So, filled with high ropes [sic], I followed his lead along the rough face of the mountains, until at last, when we were completely exhausted by the ruggedness of the way, he pointed out a pile of the weathered and broken bones of a species so common that they were not worth picking up. (Sternberg, Life 231)

Gaylean, like McBride who survives a shipwreck and a skunking to repair the Dawe expedition's leaky raft, also redeems himself with an irreproachable service:

Dropping in a moment from my hill of expectancy into a slough of despond, I turned homeward, Mr. Galyean, who was as disappointed as I was, leading the way to a short cut through a gap in the mountains. As he got on the trail, which had been made by animals on their way to the spring, he stooped and picked up something, remarking, 'Why, here's a bone!' I took it and was astonished to find it a complete skull, covered with a hard, siliceous matrix from a heavy bed of Indian red, clay which was completely covered with concretions. (Sternberg, Life 230-231)

Even this extraordinary discovery doesn't wholly satisfy his master. Galyean feels the wrath of the single-minded collector, just as McBride would have felt that of Dawe had he not wisely made a break for it to the Bleriot Ferry and home. At least Sternberg, unlike the misanthropic Dawe, confesses regret over his rough treatment of his faithful assistant even if he makes no apologies for his obsessive fixation:

In my excitement over this rich find, I forgot my disgust with Galyean for leading me on a wild-goose chase, forgot how tired I was, forgot my dinner, forgot everything, and set to work at once collecting skulls and bones [. . .] This load I started to carry down the steep trail to camp, a mile away. The

good-natured Galyean, when he saw me tottering under the load, offered to relieve me of my burden, but I answered with such vehemence that no one should touch it, that I would break my back first, that it was more precious than its weight in gold, that he gave it up and fled down the mountains to camp, so that he might at least have a warm meal waiting for me when I arrived. (Sternberg, Life 232-233)

Sternberg was not Kroetsch's only model for the tyrannical William Dawe, and Frank Galyean was not his only model for McBride. Field notes, and excerpts from the published work of Geological Survey of Canada scientist, Thomas Chesmer Weston were also consulted by the author during the production of Badlands. Annotated photocopies of Weston's 1889 Red Deer River expedition notes, as well as an entire chapter from Weston's autobiography, Reminiscences Among the Rocks, can be found with the rest of the Kroetsch papers at University of Calgary Archives. As with Sternberg, Weston availed himself of the services of a local assistant. Kroetsch was aware of this fact. The author's notes give a precise date for a research visit to the National Archives of Canada in Ottawa, on May 29, 1972 during which he physically consulted Weston's original field diaries. Initially he transcribed sections of Weston's 1888 notes by hand. The following excerpt reveals Kroetsch's interest in McKenzie as a possible model for McBride. The Mc-prefix fits, as does the sanguine temperament:

Left here at 2pm and proceeded
down river to McKenzie crossing
owing to the water being exceedingly
low we had great trouble in sit-
ting down Ran on to several
sholes [sic] and came near loosing [sic]
our boat and baggage
After a long conversation with

Mr. McKenzie he strongly advised us to abandon our trip for this season . . .

McKenzies bill for teaming	
taken wages in provisions	
Flour/hundred	4.00
Beans	1.00
1 Ham	2.00
5lbs bacon	.60
sundries	<u>1.50</u>
	9.10

(Kroetsch, MsC27.16.6)

Kroetsch slightly abridged and re-arranged the preceding citation. In its original context, Weston gives a clearer indication of why he was so open to the ready suggestion of a complete stranger that the work of the Geological Survey should be postponed for a year. It seems that Reverend Gaetz, in addition to preaching, ran the only sawmill for miles, and therefore represented the last place to have a boat made. It also seems that this esteemed forefather of the City of Red Deer, stuck the good agents of the Government of Canada with a lemon. The shoddily constructed boat was unequal to the task of running even the upper reaches of the Red Deer River. Not only that, but it seems he also failed to advise Weston that low water levels so late in the season would pose an insurmountable obstacle. Still, Weston and his motley crew undoubtedly betrayed themselves for the greenhorns they were by overloading their vessel with a surfeit of equipment. Good thing for the word of an honest farmer.

[24]
Camp Red Deer Crossing
Monday

Aug 13th /88

10 a. m. Shifted camp to
Mr Gaetz house Dined with
him and then proceeded
down Red Deer River
Finding our boat leaked
we camped for night at
mouth of Blind Man River
To this locality we have pas
sed one many small rapids
and shallow places obliging
one of my men to get out and
hall [sic] our boat off.
The shore at the Mouth of
this river (Blind Man) is
strewn with pieces of coal
We have to night a large
fire made from it

Camp Mouth Blind Man River Red D.

Tuesday

Aug 14th / 88

Dull rainy looking morning
Bar. 26.57 Ther. 50
Spent part of morning up Blind
Mans River High banks of clay
with beds of sandstone about
half a mile up [Bras?] scarcely ex-
posed [hole ?] plants and very
much distorted shells see
collection
Left here at 2pm and proceeded
down river to McKenzie crossing
owing to the water being exceedingly
low we had great trough in sit-
ting down Ran on to several
sholes [sic] and came near loosing [sic]
our boat and baggage
After a long conversation with

McKenzies bill for teaming

taken wages in provisions	
Flour/hundred	4.00
Beans	1.00
1 Ham	2.00
5lbs bacon	.60
sundries	<u>1.50</u>
	9.10

Mr. McKenzie he strongly advised us to abandon our trip for this season as he [said] it would be next to impossible to get a boat down at this season and that two boats and four men would be required to carry baggage and specimens Finding that I could not get either men or boats fit for this journey I have stored the boat we have and disposed of provisions & c. as well as I could and [des-?]

25

[b?] proceed from here to Calgary and spend a short time at [????] Coulee
 Left McKenzie Crossing at 1.30 and proceeded on journey to Calgary. Camped for night 13 miles south of McKenzie crossing
 Should it be decided to try this journey next season Mr. McKenzie will have all things ready for us by the 1st week in June as this long trip should not be later in the season.
 Mr. McKenzie says the water will then be high and he thinks we may safely navigate the river but we must have the boats and good men

He has promised to go himself and find the other man.
(Weston RG 45 Vol. 176. Notebook #2852)

Weston elaborates on this botched attempt at shooting the Red Deer in his published account. While Kroetsch didn't copy the following excerpt he surely read it, as a facsimile of the subsequent chapter (beginning a few pages later) appears in its entirety in the Kroetsch fond. Weston is diplomatic about assigning blame for the debacle though his depiction of the "anxious faces" of the Gaetz family, and description of his men who "seemed to know nothing about navigating rapid streams" are telling and comically reminiscent of Dawe's own able seamen:

I think from their anxious faces they had doubts as to whether our boat would carry us far, before some calamity overtook us. If they did think that, they were right, for in a short time I found that we were incapable of guiding our heavy-laden boat through the swift waters, in fact my men seemed to know nothing about navigating rapid streams.

Part of our first night was spent in trying to patch up our boat, and the following morning we succeeded in reaching Mr. McKenzie's farm, eight miles below the crossing, and the last settlement on the banks of the Red Deer River, before entering an unsettled and little known portion of that land.

Mr. McKenzie, a noble specimen of the half-breeds of that district, was greatly surprised to find us attempting to descend the river equipped as we were, and strongly advised me to abandon the journey, promising if I did, to have another boat built by the following spring and to accompany me himself. This I decided to do, and in a short time boat and part of our provisions, camp equipment, &c. was stored, my men settled with and soon I was on my way back by stage to Calgary. It seemed hard after so much trouble to abandon my long looked for trip, but as McKenzie said we could not afford to lose our lives for a little geological work.

(Weston, Reminiscences 244-245)

McKenzie keeps his word. Weston finds him dutifully waiting at the Calgary train station on June 6th 1889. After securing expedition supplies at T.C. Power & Bros. outfitters, and warming up with a preliminary examination of Elbow River fossil leaves, Weston strikes out for the Red Deer River in McKenzie's buckboard. Kroetsch goes along for the bumpy ride. His hand-written research notes transcribe a selection from the initial entries in Weston's 1889 field book:

Weston 1889

p.3

Monday June 10th 89

“Expected to start early this morning for the Red Deer, but during the night McKenzies horse ~~had~~ has strayed, and I don't know when we shall get off now.

1 30. p.m Mc has found his horses, and at 2 p.m we start in our heavy country farmers waggon. [sic] We have 100 miles to travel before reaching McKenzies house from which place we are to start down the River.

Reached McPhersons at 8 p.m
This is the first stopping place from

Calgary. Distance 22 miles from town.

McPhersons Coulee

Tuesday ~~July~~ June 10th '89

McKenzies horses are not to be found this morning. He is away after them. I expect they have made for home. If so? 2 pm - Mc has walked 15 miles, but has brought his horses

back, and at 1 30 p.m.
 [sic] we start on another stage
 of the journey. Reached Rosebud
 Coulee at 8 30 where we put
 up for the night. This is one of if
 not the best farms between

 here and Edmonton. It is situated
 in a valley through which
 the Rosebud Creek courses.

Rosebud Coulee
 Wednesday
 June 12th '89
 Left Rose-bud Coulee at 8 a.m.
 and reached Lone Pine

-see Xrox
 (Kroetsch, MsC27.16.6)

The final remark reveals the significance Kroetsch attaches to the Weston material, both for fleshing out the character of McBride, and more broadly as a model depiction of a river-based fossil expedition. Kroetsch abandons hand transcription for a comprehensive photocopy of the subsequent twenty-eight pages (4-32 according to Weston's pagination) of the 1889 field book, which he heavily annotates with marginal comments. Further evidence linking McKenzie to McBride can be culled from Weston's early entries. Kroetsch's comments appear in bold in the right margin:

[4] Camp
 Thursday June 13th '89

**T.C.
 Weston
 1889
 Field Notes
 RG 45**

Rained all night, but is now clearing off 8a.m. Continued journey Have 24 miles and reached the McKenzie crossing at 10 p.m. Crossed the river with waggon [sic] and horses. In doing so found that the water only reached up to the (or rather an inch of the) plat form, of the waggon. [sic] Mc says the water is low for this season of the year. Mc has a good farm nicily [sic] situated on the bank of the Red Deer a short distance above the "Cañon", and about

**Vol 176
pp 4-29**

one and a half miles between the mouth of the Blind Man River.

McKenzie's Farm.

Friday June 14th 89

While the men are caulking and fixing our two boats, I have examined the cutting immedately [sic] in front of Mc's house. In one of the thin beds of argillite in the bank, fragments of plants were found.

Chalk shells were found in the gravel beds above the plants.

The opposite side of the river here, is thickly wooded with large pines, poplar, and grey willows. The pine is largely used for lumber being sawn up at a small

large pines

sawmill

mill a short distance
from here.

1889
June 15

Mckenzie Crossing
Red Deer River
Saturday June 15th '89

Bright hot morning Mc & I
are starting for the Blind-
man River. Distance 3 miles
by road 1 ½ by along river bank.
8 p m. We have worked well
all day and have collected
quite a number of fossil plants
Found the bed from which
they come on the Red Deer
It is only seen when the water
is low, and is seen to under
lie a 3 feet bed of yellowing
brown sandstone, large
blocks of which are seen along
the margin of the river in
this vicinity. But this fos
siliferous clay slate must

crop at some where up the
Blind Man R. as loose
piecis [sic], some of which are
three or four hundred pounds
might lie scattered along
the bed of the river
The following is a rough
section of the Cut bank,
about 50 feet from below
the mouth of the Blindman
R.

Feet in

Right gray cal? argillite
holding fossil plants
([Hard?] sp. No1) only seen
in place at the margin
of the river at low

water _ _ _	6	
Yellowish brown sandstone (sp No2) with a few roots of plants. This would make a good building-stone.	3	
crumbly sandstone	8	sandstone

6		
	Ft	in
sandy clay with thin seams of coal.	30	
sandstone	8	
Boulder clay	6	
Black soil	<u>3</u>	
see photo. No2.		

McKenzie farm
Monday June 17th 89

**Monday, June 17
depart at 2 p.m.**

Packed box of fossils from the Blind Man R. and left them at Mc Kenzies house to be sent to Calgary when an opportunity occurs.
Took photo. of McKenzies farm while men were loading boats. At 2 p.m we left the McKenzie farm and drifted down stream to within four miles of the great coal beds.
(Kroetsch, MsC 27.16.9)

took photo
coal beds

The strongest indicator that Kroetsch took a particular interest in McKenzie, lies in the marginal comment "took photo." His double underscoring of the word, "photo" seems to suggest a firm intention to seek out that very image. Kroetsch certainly found himself in the right place to accomplish such a task during his Ottawa research trip. Weston's 1889

expedition photographs are separately catalogued and preserved elsewhere within the Geological Survey of Canada fond at the National Archives. Perhaps this is why no copy of it occurs in Kroetsch's papers. While the set is incomplete a startling picture survives, which attests to McKenzie's familial devotion. Sinnott could not have produced a more haunting image to remind McBride of his absent family.



e003719189

Fig. 22 "McKenzie Family" T.C. Weston. (LIBRARY AND ARCHIVES CANADA / B 02476)

Intriguingly, though Weston includes many plates in his published account, he elects to include a variation on the description of the photo mentioned in his notes, rather than the photo itself:

The following morning, June 17th, after a successful days' work at the confluence of the Blind Man and Red Deer rivers, the McKenzie family, typical representatives of the half-breed Indians of the Canadian North-West were assembled and photographed, then our two boats were launched and provisioned, and at 2 p.m. we waved adieu to our friends of the last habitation we should see for many days, and drifted swiftly down a portion of a river unknown in the summer to any of the settlers I had met with in Red Deer village. (Weston, Reminiscences 253)

Weston's anthropological positioning butts against his personal affection for the McKenzie clan, conspicuously delineated as "Indian half-breeds" rather than as "Scottish half-breeds." George Mercer Dawson makes a similar gesture in his 1873 Boundary Commission notes regarding a native entrepreneur named "Ambrose":

[May] 17 [1873] After Breakfast
 went down to "Dock"
 & waited for Sailing of
 Tug for Ft William, about
 6 miles from here & on
 Left Bank Kamanistiguia
 River. The Tug is owned
 by an Indian named
 "Ambrose" who uses her
 mostly as an exploring
 steamer, for going in quest
 of mines & mineral locations.
 He has made a good deal
 out of discovery & sale
 of properties & is one of
 best off men in place.

 seems intelligent. Not
 dissipated. Dresses well
 but in queer taste. Watch
 of gold chain of large size
 with some ponderous
 ornaments on it. has

two indians, a man
 called McDonald & an
 Engineer as crew of boat
 (Dawson, M.G. 1022 Cont. 83 1401F)

Dawson would produce several other portraits of his aboriginal assistants, each meticulous in detail, but similar in tone to Weston's. The views of both men were undeniably tinged with the racialized and colonialist perspectives of the day. Notwithstanding this ambivalence Weston, like Dawson, does not forget to remember the name of his trusted assistant in the published account of his travels, which he knew was destined to reach a much wider audience than his esoteric field jottings:

June 6th. – Mr. McKenzie – a fine example of the half-breed indians of the Canadian North-West Territory –joined me at Calgary. He had made the journey of a hundred miles or so with waggon [sic] and horses from his farm on the banks of the Red Deer River, to meet and convey me to my starting point down this – so far as vertebrate palaeontology goes – one of the most interesting rivers of the North-West [. . .]

Our present trip by waggon [sic] was much less interesting, and occupied a day longer. Part of it was made on the Edmonton stage road, and part over the plains, till we reached the banks of the Red Deer River, opposite the McKenzie farm – eight miles or so below the Red Deer Village – which place we reached at 10 p.m. July 13th. Our horses had long scented their stables and were very impatient to cross the river, then a very rapid stream which had risen a foot since "Mac." left, and it was a question whether we would not have to go to the ferry, eight miles up stream. Mac. gave me the reins [sic] while he examined his sounding marks on the banks of the river. The night was cold, and in the distance we heard the barking of numerous prairie wolves or Coyotes (*Canis latrans*); I had anything but a soft job to hold in our horses till Mac. returned and said we would cross on his lower ford. Our camp equipment was arranged to keep it from the water which Mac. expected would cross on his lower ford. Our camp equipment was arranged to keep it from the water which Mac. expected would cover the floor of the waggon, [sic] then he took the reins and with the cheering words, "keep your eyes closed and don't move," allowed the horses to plunge into the stream. For a moment I felt the waggon [sic] sway with the

current and the water covered its floor, but in another minute or two our horses gained a footing on the opposite shore, and with a last brave pull ascended the steep bank , and in a few moments I was comfortably seated before a large fire in the hospitable one of one of the early pioneers of the Red Deer River district. (Weston, Reminiscences 250-251)

Although Weston begins his portrait of McKenzie with fatalistic conceits of the noble savage pandered most famously by Rousseau in *Émile*, and Fenimore-Cooper in his *Leatherstocking* tales, he also makes a curious series of admissions that Kroetsch could not have failed to notice in his copy of Reminiscences (Chapter XII., copied in its entirety and annotated by Kroetsch. MsC 27.16.6). Firstly, Weston credits McKenzie with greater philological and historical knowledge of the territories he has been dispatched to explore.

My friend McKenzie, who was versed in several Indian languages, and had spent many years among the aborigines of the Canadian North-West, gave me many interesting accounts of the early settlers and explorers of the Alberta and other districts (Reminiscences 252).

Secondly, he grants that his own efforts to assess and name "new" topographical features, follow well-established identifiers already assigned by his non-European predecessors.

In Alberta as in almost all sections of the North-West Territories, many of the beautiful names given by the Cree and other Indians to lakes, rivers and mountains have been changed by the white man, but between themselves I found the Indians used the old Indian appellations, and even the half-breed seemed to resent the re-naming of rivers, localities, etc., a thing too much done by young explorers of the present day. (Weston, Reminiscences 252-253)

By any measure, these comments are prescient for 1899 especially considering that their author was an agent of the government body largely responsible for (re)naming the geography and geology of Canada. Perhaps this perspicacity also helped Weston to spot hypocrisy when it came from his own pen. Not only does Kroetsch keenly observe the signs of Weston's pomposity on his copy of the scientist's notes, but he uses some of the details from this episode in Chapter 19 of *Badlands*, "Crew Bathing." His comments again appear in bold.

17

Camp Range 16 Tp. 25

Monday July 1st /89

Left the vicinity of the Rosebud this morning and continued down stream making about thirty miles We are now quite out of the bone locality, in fact only a few weathered bits of fossil bone have been seen for the last fifty miles. Since lunch to-day, we have been passing nothing but great banks of mud with a few beds of sandstone in which no fossils have been found.

Before leaving our last night's camp, this morning being Dominion day we toasted a flag staff on a high butte about a mile below the Rosebud River or Creek. My men wished

to call this butte, Weston's Butte so that they might have a name for it when hunting in the fall. Nothing of interest has been

**Mon
July 1
travel 30
miles**

"quite out of bone locality"

great banks of mud

Dominion Day

Weston's Butte

found today.
 9 p.m. To-day has been very favour-
 able for our journey, and we
 have run a long distance.
 With sails up in both boats
 we have made more than
 ten miles an hour.
 [sketch of river & topography]
 (Kroetsch, MsC27.16.9)

**sails up – making
 more than ten
 miles an hour.**

A skeptical reader might find it hard to give credence to Weston's assertion that he acquiesced to the will of his men, who so intent on their prerogative to name an inconsequential and anonymous rock formation after their fearless leader, simply refused to take no for an answer. Presumption has its limits. Even Good Jones of Dawson's poem didn't feel it necessary to christen every "unnamed stream" after himself. That same skeptical reader might find it impossible to suppress a groan of derision when she comes across Weston's lame justification that his men required a point of reference for their fall hunt, as if the fortunes of a future chase relied solely on the good auspices bestowed by so blessed a name. What a surprise then to discover a key emendation in Weston's published version of the episode:

The following morning was bright and beautiful. My men had been looking forward to this day for some time, for it was Dominion Day, and we were to celebrate it by tapping our only bottle of brandy which I had guarded diligently in case o getting a rattlesnake bite. Hitherto our 'nips' had been made of a decoction of pain-killer, sugar and hot water, a splendid drink when one is 'chilled to the bone.' We were early in our boats, and while drifting with the current, passed several beaver dams, shot a wild goose, and had climbed a high butte by 11.30. Here we hoisted a long pole we had brought up, which with a large red pocket-handkerchief served as a flag staff. Having christened the elevation 'Dominion Butte,' fired a salute, sung 'God Save the Queen,' drunk to all absent friends and relations, we

descended to our boats which we reached just in time to find that they were being inspected by several Indians. (Weston, Reminiscences 263)

Something unexpected happens in the transition between notes and memoir, field and study. The author reconsiders his initial magnanimity and selflessly re-assigns a new name befitting the glory of Canadian Confederation to the geographical feature he had already once re-named ten years previously. "Weston's Butte" goes down as "Dominion Butte" for all posterity. Moreover, it is "christened" so, thus lending the gesture a legal and religious authority that purports to supersede any previous appellations. Of course he does not heed his own denunciation of the presumptuous practice of "young explorers." Instead of making a quick getaway he might have consulted the curious "Indians" who may very well have had a name for the rock. As Anna Dawe observes, no doubt with the approbation of the French philosophers, "*There are no truths, only correspondences* (Kroetsch, Badlands 39)."

Still, McKenzie's name modestly persists, buried though it is, in the yellowing pages of archived field books, and in a forgotten volume long gone out of print. That Weston chose to memorialize his exploits and geological discoveries keeps with the spirit of the intrepid explorer and the mandate of his organization. That he should remember the name of a farmer who paddled his boat for a summer is congruous if it serves to establish local colour for his tale. However, Weston's gesture seems to be more a genuine personal tribute, and strictly speaking a superfluous one. An argument against cynical treatment of the

arrogance of the classic male explorer can be mitigated by the fact that Weston wasn't really charting new territory. Colonel John Palliser, and David Thompson, and J.B. Tyrrell before him, had already achieved this redundant feat on behalf of the European powers that were. Although a lapidary by training, Weston served another master, that of science with a capital "S". A contemporary reader, ingrained from the outset with skepticism and suspicion, might easily overlook the ideological component espoused by men of Weston's ilk, who viewed the expansion of human knowledge with the reverence of a vocation (arguably another feature of colonialist ethos). Clearly, many of them viewed any layman prepared to assist in so worthy a cause, as deserving of due credit.

Not only did Sternberg appreciate credit, but he insisted upon it:

One thing I have demanded as my right, in my opinion an inalienable right, although I am sorry to say that there are those who have denied it to me, - I demand that my name appear as collector on all the material which I have gathered from the rocks of the earth. (Sternberg, Life 30-31)

As such, Sternberg's respect for his patrons was commensurate with the degree to which they recognized his own labours. He held Cope in especially high regard:

He [Cope] did not think that the money he paid them [collectors] paid for the dangers and privations they endured, far from their friends and the comforts of civilization. On the contrary, he gave them credit in all his publications for their discoveries of species new to science. And this is the one essential thing to the collector –at least the true collector who values his labor as something that cannot be measured by money. (Sternberg, Life 45)

Not only does Sternberg give Cope *et al.* the benefit of the doubt, but he interprets their willingness to recognize the collector's work as a mark of altruism – a sign that palaeontology aspires to some higher ideal:

All work done for science has a value above that of money. Lesquereux might have made money if he remained a watchmaker, and Cope would have won a fortune as a ship-owner if he had entered his father's office, but both men realized that there is work which offers higher rewards than riches; they gave their lives to science, and they will never be forgotten. (Sternberg, Life 45)

In retrospect, this is ironic praise considering the fact that Cope, like many other scientists and institutions of the day, likely did his best to nickel and dime his collectors for the sake of banal economy. Still, Sternberg learned valuable lessons by example. He recalls a poignant note once written to him by Dr. Carl Von Zittel, of the Royal Museum of Munich. Of course Von Zittel begins with solemn regrets that more lucrative pay was not forthcoming, but that Sternberg should take heart because through his collections he had "erected an immemorial monument" to his name (Sternberg, Life 111-113). Sternberg ascribed such importance to this insight that later in the same work he reproduces a direct citation from the aforementioned letter in even more biblical language:

Dr. von Zittel wrote: [. . .] 'For my part, I have done my best to give you credit for the scientific side of your work, and your collections from Kansas and Texas in the Munich Museum will always be an everlasting memorial to the name of Charles Sternberg.' (Sternberg, Life 248)

Cope also wrote a similar letter to assuage his physically and emotionally exhausted collector. In turn the collector returns the favour by reproducing it in full in the context of his autobiography:

'In fact you have no occasion to be blue as to yourself, for you fill an important place in the mechanism of the development of human knowledge. Very few men follow a more useful life than yourself, and when the final account comes to be counted, you will have no occasion to be ashamed of your account. I have personally the highest respect for your devotion to science. The serious worker in science holds a high position among men, no matter what the great herd may say about him. They simply do not know, & their opinion is not worth considering.

So of that science of the first kind does not pay much money in this world but some time (after us, there will be more reward for our works.

Very truly yours.

E.D. Cope

(Sternberg,

Life 238-239)

Clearly Sternberg was a quick study. He immediately apprehended the implications of associating one's name with such rare specimens. He also understood the rigidity of the laws of taxonomy, wherein precedence is the final arbiter. So it is with certainty that Sternberg asserts, "as long as science lasts, and men love to study the animals of the present and of the past, Cope's name and work will be remembered and revered" (Sternberg, Life 243). Sure it will. Science is technically obliged to remember. Viewed in this light, Sternberg can afford to be sanguine about his sufferings in the field when such "enduring results" are all but guaranteed upon return to civilization. Indeed Sternberg grows heady with draughts from the proverbial Grail. He muses with the conviction of a prophet:

Cope is dead and von Zittel is dead, so far as such men can die, but I have preserved their letters as heirlooms for my children's children; for they testify that "no matter what the common herd may say about me," I have accomplished the object which I set before myself as a boy, and have done my humble part toward building up the great science of palaeontology. I shall perish, but my fossils will last as long as the museums that have secured them. (Sternberg, Life 248)

Perhaps Sternberg would not have been so assured about his legacy had he read of the quintessential ruined museum – The Palace of Green Porcelain – visited by Wells' time traveller? Nevertheless, he also demonstrates that his feet were planted firmly on the scorching earth with this sardonic remark regarding his toils in the Red Beds of Texas, "If I succumb to the awful heat and die, my discoveries will have done much toward enriching the collections at Munich" (Sternberg, Life 252). In his anticipation for posterity, Sternberg foresees his mortal remains returning to the matrix from which he has excavated all of his greatest discoveries. There is an implicit commingling suggested – metaphysically with the spirits, and physically with the bodies of extinct beasts.

Greater than their [palaeontologists] obligations to me, are mine to the men of science who have described, published, but, above all, have prepared and exhibited the noble monuments of creative genius which I have been so fortunate as to discover and make known to the civilized world. My own body will crumble in dust, my soul return to God who gave it, but the works of His hands, those animals of other days, will give joy and pleasure "to generations yet unborn." (Sternberg, Life 281)

Only bones and name remain. This configuration squares with Dawe's own notion of perpetuity:

Bones. Bones were more to Dawe's way of thinking about life. The carcass out on the open prairies, then the coyotes, the hawks stripping the carcass down to bones, then the rain and the wind and the sun stripping the bones down to art and glory, the fossilized beauty that was the sole object and intent of Dawe's enduring passion. The unflushed remainder (Kroetsch, Badlands 89).

Sternberg viewed the work of his lay assistants, as his scientific patrons Dr. Lesquereux, Professor E.D. Cope, Dr. Henry Fairfield Osborn, Dr. S.W. Williston, Dr. Karl

Von Zittel, Dr. F. Broili *et al.* and later Lawrence Lambe viewed his own labours – as honourable and indispensable contributions to the advancement of palaeontology. It's no wonder then that Sternberg memorialized their efforts in his autobiographies. In Life of a Fossil Hunter he proudly extols the courage of one of his men, who quite literally risked life and limb for the glory of discovery (and/or for the glory his master):

It matters little how he got the skull, but I am ready to testify that it was the bravest undertaking I ever saw accomplished in the John Day beds; and as long as science lasts, this noble specimen of one of the largest tigers that ever lived should be associated with the name of Leander Davis. I am glad that the great dike across the Cove is named after him also. (203)

Yet, Sternberg's praise is not reserved to grand acts of bravura. He also respectfully recalls the name of a hermit who lived "a day's journey through sand and sage-brush" in "a ranch beside an alkaline lake in the very heart of the desert." Lee Button's cabin "built of logs from the neighbouring mountains" offered an oasis for the fossil hunter, who though seasoned as he was, willingly admitted that "there was horror in the thought of being lost in that solitude" (Sternberg, Life 156). Button's sense of frontier hospitality upheld the custom of the day that food and shelter should be free to all travellers in need. Indeed Sternberg and his party freely availed themselves of Mr. Button's "camp kettle", "frying pan", "Dutch oven", "coffee pot" and the contents of his larder. (Life 157). On one occasion, after a hard day in the bone beds, Sternberg repaired directly to the vacant cabin and into the "Lord's blankets." When a courteous knock at the door came later that evening, Sternberg extended his absent host's generosity to another weary stranger. Of course the man turned out to be Lee Button himself. Sternberg confesses, "I felt so cheap I would have sold out for nothing"

(Life 157). Button was such a class act he wouldn't have any apologies. So Sternberg offers the highest compensation he can muster; he formally remembers Lee Button's services to posterity, attaching his name obliquely to the specimens recovered that season:

He became a true friend and helper, and his log cabin proved a valuable place of shelter for my party during some of the cold October nights. If these lines should ever reach his eyes, they carry to him my cordial thanks for his hospitality. (Life 169)

Similarly, Sternberg recognizes Bill Day and Mr. Mascall for their varying forms of assistance. Of the former he writes:

I suppose Bill Day must have weighed about a hundred and eighty pounds, but he was an expert hunter and a keen observer. He owned a herd of ponies and furnished me with all that I wanted, and as he knew every inch of the fossil beds and all the best camping grounds, his services were invaluable. He kept our larder supplied with venison, also. I think my success in that region was largely due to his assistance. (Sternberg, Life 178)

Something of Day's stature and practical skills resonate with the character of Web, though Dawe would be loathe to admit as much, and no document in the Kroetsch fond directly attests to the connection. However, Web's work is just as indispensable to Dawe's success as Day's was to Sternberg's. Dawe would have been too paranoid and jealous and frantic to have much use for anything other than a floating base camp. Although Sternberg saw the practical value of stable accommodations:

I was also indebted to Mr. Mascall, a man who lived on the second bottom of the river. He had an extra log cabin behind the one he lived in, and he let us use it as a storeroom for our extra supplies of food and for our fossils, when we began to secure them. (Life 178)

Mascall offered another welcome intangible to Sternberg that would also have been appreciated by men like McBride and Grizzly, though likely revolting to Dawe if his reaction to the domestic scene in Anna's bone tipi is any indication:

This Mr. Mascall had a wife and daughter, and when we came in from the fossil beds, after several weeks of camping out, it seemed almost like coming home to be able to put our feet under a table, eat off stone dishes, and drink our coffee out of a china cup, and to sleep on a feather bed instead of a hard mattress. (Sternberg, Life 178)

Indeed McBride's hand outstretched to the lonely wife at Stone House, and Grizzly's revelation bear striking parallels:

Grizzly understood this time, a table set with chinaware and glass, food prepared in a kitchen, served on a table; and not just remarks passed, oaths idly sworn, orders given and received, but the grace of conversation; and children, wondering, silent in the presence of visitors; and a woman's hands in their midst. (Kroetsch, Badlands 36-37)

Even Web, sickened by a monotonous diet of Goldeye and hard tack likely would have valued Mascall's green thumb as much as Sterberg did: "Then Mr. Mascall was a good gardener, and always had fresh vegetables, a most enjoyable change from hot bread, bacon, and coffee. I shall not soon forget his hospitality" (Life 178-179).

Nor did Sternberg soon forget his name, for the bone sharp realized that forgetting was as good as casting his worthy friend to oblivion. Dawe may have wanted to rub Web from the story of his conquest, but the man's labours would not permit a full erasure. Cunningly, Dawe manages to preserve the work of his troublesome assistant without

affording him full credit. If surname and family name roughly equate to a Linnean binomial, then Dawe remembers Web incompletely leaving doubt, Anna Dawe observes, about the creature's true genus and species: "*Weber was his last name, and if he had first name other than Web my father never bothered to write it down.* (Kroetsch, Badlands 3)

However, memorialization is not always the boon it purports to be. Strikingly different connotations come with a name that goes down in infamy. The shades in Dante's Inferno, at least those in the outer circles of Upper Hell, damned by sins of incontinence, scramble for the attentions of the proto-palaeontologist Pilgrim, that he might report their names to those who have not yet gone extinct. Ciacco, a glutton like those great sloths of the ice age, pleads: "But when you are once more in the sweet world/I beg you to remind our friends of me./ I speak no more; no more I answer you" (VI 88-90). Later in the descent to the outer rings of Lower Hell, Virgil shakes an ancient palm in the Wood of Suicides: "But tell him who you were; he can make amends,/ and will, by making bloom again your fame/ in the world above, where his return is sure" (XIII 52-54). Unlike in Purgatory, intercessory prayer provides no hope for the denizens of the pit. Pride compels Pier delle Vigne's response: "If one of you should go back to the world,/ restore the memory of me, who here/ remain cut down by the blow that Envy gave" (XIII 76-78).

The raptorial, Jacopo Rusticucci, Guido Guerra and Tegghiaio Aldobrandini lunge at the Pilgrim with similar intention, "therefore, if you survive these unlit regions/ and

return to gaze upon the lovely stars,/when it pleases you to say 'I was down there,/'do not fail to speak of us to living men" (XVI: 82-85). Yet Rustucci poses a twist. He offers an ambiguous blessing to the Pilgrim that calls to mind the technology of field notes "'So may your soul remain to guide your body/for years to come,' that same one spoke again,/'and your fame's light shine after you are gone,'" (XVI: 64-66). Dante the poet uses Dante the Pilgrim to express his self-conscious understanding of the power of writing to perpetuate one's name. He acknowledges the instruction of his former tutor Brunetto Lantini, "you taught me how man makes himself eternal" (XV: 85). It's bitter consolation for one who was damned because he did. Conversely, at the outset of the excavation, Virgil derides those wretched shades, whose blasé lives couldn't even get them fossilized in Limbo. "The world will not record their having been there;/Heaven's mercy and its justice turn from them./Let's not discuss them; look and pass them by"(III: 33-51). At least posterity will always have *The Aeneid*. The Poet is not damned because he didn't.

Deeper in the bone bed, the Pilgrim is confronted by reluctant specimens, those not so eager to reveal their genera and taxa. A ceratopsian pope attempts to confuse the Pilgrim regarding the nature of his parietal crest "If it concerns you to learn my name/that for this reason you came down the bank,/know that I once was dressed in the great mantle./" (XIX:67-69). And farther on he encounters a shade so reduced he is like an insect flitting in amber. Guido Da Montefeltro boasts his secret, only because he does not believe the Pilgrim can bring it to the surface in his collecting bag:

'If I thought that I were speaking to a soul
 who someday might return to see the world,
 most certainly this flame would cease to flicker;

but since no one, if I have heard the truth,
 ever returns alive from this deep pit,
 with no fear of dishonor I answer you:
 (XXVII: 61-66)

As the bone-diggers proceed deeper yet the specimens become harder to distinguish.
 They bear signs of violent trauma like duck-billed hadrosaurs mauled by a marauding pack
 of theropods.

And I to him: 'If you want me to bring back
 to those on earth your message-who is the one
 sated with the bitter sight? Show him to me.'

At once he grabbed the jaws of a companion
 standing near by, and squeezed his mouth half open,
 announcing, 'Here he is, and he is mute.'
 (XXVIII: 91-96)

Some lack solvency and appear disarticulated by the ravages of prehistoric rivers
 and time:

'So may the memory of you not fade
 from the minds of men up there in the first world,
 but rather live on under many suns,

tell me your names and where it was you lived;
 do not let your dreadful, loathsome punishment
 discourage you from speaking openly.'
 (XXIX: 103-108)

The Poet drags out another recalcitrant giant by its tail: "He still can spread your legend in the world,/for he yet lives, and long life lies before him,/unless Grace summons him before his time" (XXXI: 127-129). But the Pilgrim is finally confronted by a shade frozen in the innermost ring of Lower Hell who refuses outright the "honour" of being named:

'I am a living man,' was my reply,
'and it might serve you well, if you seek fame,
for me to put your name down in my notes.'

And he said: 'That's the last thing I would want!
That's not the way to flatter in these lowlands!
Stop pestering me like this – get out of here!'
(XXXII: 91-96)

Is it any coincidence that Kroetsch uses "Grave-robbers beware!" as a caption and title for chapter 10 of his novel? Sternberg's recitation of another name also would have been rebuffed. He "rewards" a one-time assistant named "Joe Huff" for his services; in fact he seems to give the man his just desserts. Even the composition of his name appears anonymous and embarrassingly contrived. Sternberg acidly writes:

I returned to camp much elated, and was planning to pack the outfit into the Basin the next day, when to my disgust Joe Huff, who owned the horses, refused to pack them, as he did not want to run the risk of injuring them. It was useless to tell him that he had been hired to do what I wanted, etc.; he was not to be moved. So I paid him off, and saw him start for his home near Moscow, Idaho, riding bareback. I felt sorry for him, but he had a stubborn fit on, and there was no doing anything with him.
(Sternberg, Life 177-178)

When the capricious horseman recovers from his *huff* and regrets his decision, Sternberg serves up an ironic response, in print, and with relish, "After I had hired Bill Day, he wanted me to overlook the past and re-employ him, but it was too late then" (Life 178). It has a tinge of bathos and recalls Nick Carraway's reaction to Jay Gatsby's memorable speech from The Great Gatsby:

He broke off and began to walk up and down a desolate path of fruit rinds and discarded favors and crushed flowers.

'I wouldn't ask too much of her,' I ventured. 'You can't repeat the past.'

'Can't repeat the past?' he cried incredulously. 'Why of course you can!'

He looked around him wildly, as if the past were lurking here in the shadow of his house, just out of reach of his hand.

'I'm going to fix everything just the way it was before,' he said, nodding determinedly. 'She'll see.' (Fitzgerald 106)

Kroetsch too, seems to owe a debt to Fitzgerald. Dawe's exchange with Sinnott is equally pathetic and equally doomed to parodic remembrance.

'I recover the past,' Dawe said. Unsmiling. Adjusting his grip on the sweep. 'You reduce it.'

'I know," Sinnott said. 'And yet we are both peddlers.'

'You make the world stand still,' Dawe said. 'I try to make it live again.'

'Then let me save you from your inevitable failure,' Sinnott said. 'Tell me where you might possibly be reached and I'll send you the consolation of my masterpiece: The Charlatan Being Himself.' (Kroetsch, Badlands 112)

Forgetting is incomprehensible for men who make bone scrounging their bread and butter. Joe Huff's name is thus posthumously attached evermore to an act of intransigence. The character of Jebidiah Leland in Orson Welles' *Citizen Kane* glumly describes his own

elephantine powers of recollection. "I can remember absolutely everything young man. That's my curse. That's one of the greatest curses ever inflicted on the human race . . . memory." Dawe thus *curse*s his eldest assistant, inasmuch as he remembers Grizzly at all in his account of their ill-fated badlands expedition. Indeed the entire crew complacently agrees to memorialize the cook not for his culinary efforts, but rather as the butt of an adolescent joke. Notwithstanding the young piano player's garish end, he manages to get in his digs too, "Grizzly was cross as a bear, Tune said, and was pleased with his joke." (Kroetsch, Badlands 146). However, the true insult doesn't come with throwaway puns. It lies in a naming gesture substantively similar to the one Weston employed for his own geographical "christenings":

To the man whose name they would not bother to learn, but whom they nicknamed Grizzly because the first night out, the dark falling, he had tried to tell them a story of a time in the Rocky Mountains when he, Grizzly, was camped somewhere near the source of the Red Deer River, cooking then for a crew that was making a topographical survey. The story had held Web even while he despised the teller, because he had never thought of that flatlands river as having its source in the mountains; and that first night out of Red Deer Crossing, having heard the chinaman's jumbled tale of what had, apparently been an encounter with a bear- that night he, Web dreamed he was on an upriver trip: he was looking for the hidden and pristine lakes that are the river's source, the sky high and dazzling glaciers that feed the originating lakes. (Kroetsch, Badlands 12)

Certainly, this act of renaming is bred of racist disregard. The crew members, like arrogant customs agents of a bygone era, simply re-name their mate out of laziness, or outright contempt. The "difficult" foreign name is thus anglicized, and replaced with a

ready nick-name derived from a story they deign to only partially hear. What was a source of trauma to "the chinaman", Web uses to trellis his own fantasies.

The little chinaman who had met a bear in his cook tent in the mountains. Who stood still, when he first saw the bear, because he had been told a bear can't see the mountain it's crawling over and all you have to do is stand stock still: and he, the chinaman, the cook, did: for what seemed an hour. No, a daylong hour, a season's lost life. Stood motionless in the tent, the high rank stink of the bear reeking over him: and then when he knew he must either bolt or perish from holding his own breath, he moved; the bear saw the motion if not the man and moved too, bolted too: the man and the bear meeting in the tent's two-by-four framed doorway, embracing: the man, embraced in the deep hair and the overpowering stench of the bear's belly, struggling or surrendering was, in his imagination if not in mere reality, very nearly cornholed before they broke free from the collapsing tent, raced side by side and in terror together up the forested mountain – (Kroetsch, Badlands 160)

Therefore, the cook's ethnic extraction, and more gruesomely his near sexual violation, is remembered by posterity in the universe of the novel instead of the man. Of course Kroetsch is complicit in Grizzly's exploitation insofar as the cook's story, by its very design, is offered to reveal more about the desires of other characters, and, perforce, about the writer himself. He summarizes in his research notes:

Grizzly's story:
right at the source
itself, the
grizzly waiting,
guarding.

Web misses
the point of
Grizzly's story
& turns it into an
idyllic dream

(Kroetsch, MsC 27.16.9)

Furthermore, the author coyly uses Grizzly to memorialize an episode from his own past, which he later recounts in a memoir about the writing life.

My own experience of transformation had nothing to do with a plains grizzly but much to do with a common black bear.

I think I have this right.

I was working up North on the Fort Smith Portage on the Slave River. I had hired out to work as a laborer, but, unfortunately, since I was the only person in camp with a B.A. in English and Philosophy, I was assigned the checker's job. I had to keep track of all items unloaded from barges onto trucks for transport past the Rapids of the Drowned and back onto more barges.

I had to work after supper, when the laborers had finished, in order to keep up with the paperwork. One evening I walked into the tent that had been set up over a 2' X 4' frame. In that wonderful dim light that is unique to the inside of a tent on a late fall evening, I thought at first that I saw myself sitting at my desk.

By the time I realized that a large black bear was consuming a chocolate bar I had left on the desk, it was as surprised as I. The two of us got to the narrow 2' X 4' door at approximately the same time. We revised the doorway, making it large enough for the two of us to pass through, albeit somewhat awkwardly, together. The bear and I, for obscure reasons, both struck out in the same direction. The bear had disappeared into the dark forest before I remembered to stop running and to lie down and to hold still. I think I stumbled, actually.

I had a date that night with a woman from the metis community in the settlement called Fitzgerald. She knew a lot about the forest; in fact she did some trapping. We had been walking for a while along a forest trail when she touched me briefly, there in the starlit dark. She seemed to sniff the night. Then said, sharply, "My God, you smell a lot like a bear."

I stopped dead in my tracks. "Should I go take a shower?" I asked her.

She, too, had stopped. A kind of pity-or resignation-welled into her voice. "No," she said. "That isn't what I meant at all." (Kroetsch Likely 107-109)

Naturally, Kroetsch begins the preceding tale in his playfully titled book, A Likely Story, with a statement of post-modern ambivalence regarding the nature of memory and history. "I think I have this right" seems to propose its inverse, "I may have this entirely wrong". Kroetsch deliberately generates a tension between veracity and falsity, the official and the anecdotal, in keeping with his distaste for binary thought and his understanding of Foucauldian notions of history, which he articulates in his ambivalently titled collection of essays, The Lovely Treachery of Words. The "truth" of this recollection vies with two separate notes penned by the author long before he wrote this highly selective autobiography. In a slim green blue and white coil notebook tucked away in the University of Calgary special collections, Kroetsch enigmatically scrawls:

[4]
 Book about
 Grizzlies –
 Andy –
 (Kroetsch, MsC775-04.25-16,44)

And in another coil notebook with an orange cover he writes.

[22]
 check my book
 on grizzlies for
 grizzly story
 -bear tried
 to eat the
 cook –
 bear symbolism
 in Grizzly?
 (Kroetsch, MsC775-04.25-16,44)

Just how much "transformation" the core of the grizzly bear story undergoes from textual sources to autobiographical experience to fictional treatment remains indeterminate, an ambiguity that perhaps to the writer's delight, will likely persist for the edification of posterity. Since Kroetsch made a point of examining Sternberg materials, he may well have drawn further inspiration for Grizzly from a series of egregious entries Charles Mortram made in a 1917 field book. The events described begin in Calgary and wind up in the badlands near Millicent, Alberta:

July 5.

[. . .]

At 10:20 P.M. I met the Chinaman who was going to cook for me, at the depot. He thought he had missed me and missed the train so he had sent his baggage back to his room. This had gotten him discouraged so he did not want to go with me. I tried to persuade him to get his baggage again and go on the 2:45 A.M. train as it was too late for the 10:30 P.M. train. He wouldn't do it so at 10:45 I was without a cook. I at once started for Chinatown and went in the stores and asked where I could hire a Chinaman cook. At 12 I had engaged another. I went to the depot with him and bought tickets and checked his baggage.

[. . .]

July 9.

This was a very warm day. We all worked on no.1. We got all sections wrapped on the one side. In the afternoon Gustav and Arthur went to wrap the arch of small carnivore that I found some time ago. About five thirty a bad wind storm struck, followed by a heavy rain. We did not get to camp until after the storm. When we arrived we found every tent down. Four, the cook, was under the cook tent holding up the mess box. Three of the four tents were torn, one beyond repair, and the other two were in bad shape. The little bell end tent had the whole top torn out. Our beds etc., were wet but the only thing injured by the rain was my field glasses which got thoroughly soaked. I think they can be cleaned up and will be OK. The cook tent was uninjured and my sleeping tent was only torn on one end so we put them both up and were able to sleep in the dry.

[. . .]

July 12. We all worked on no. 3 which is a fine skull of Centrosaurus. It is in very hard sand rock. We chisel it out. We also turned over the skull of no. 1 and finished wrapping it. No. 1 is all ready to haul down now.

This has been a bright, warm day. I took two photos of no.1. My Chinaman is a very good cook and we are able to do more work in the field, as we don't have to work in the cook tent.

(Sternberg, "Notebook 1917" 11-12)

Although Charles Sternberg Jr. makes no mention of an encounter with a bear, he also seems to give his cook a trivial name out of convenience. Indeed he commits a greater indignity by making a name of a numeral. It is conceivable that a man of a certain disposition might find it attractive to have his name attached to such a ferocious and majestic animal. Indeed Kroetsch explores the notion that the old time fossil hunters were hell bent on finding the largest, and most fearsome specimen on which to saddle their names. In an interview with Shirley Neuman, Kroetsch contends that many of them conducted their digs like bulls in a china shop – just the sort of cowboys who wouldn't mind lending their names to, say, a *Daweosaurus magnicristatus*.

When I did the study of the palaeontologists in southern Alberta, I was amazed that they didn't pick up small bones – small animals –because everybody was into finding bigger bones – the biggest bones were the most important. Their simple rule was that a still bigger dinosaur was better. And now they have to go back and go through the destroyed sites looking for seashells or whatever that would tell them a great deal. They were dominated entirely by the notion of these huge animals, which they were misreading as lizards. Their system of reading destroyed the sites in really profound ways, of course. (Neuman 14-15)

And of course the protagonist of Badlands behaves in a way commensurate to his historical predecessors, or at least according to Kroetsch's conception of them. Dawe's badlands expedition is exclusively focussed on recovering the skeletons of dinosaurs, the bigger the better. He doesn't sweat the small stuff. In fact, he doesn't have the time of day for it.

They stopped early, in the bend where Crawling Valley joins the valley of the Red Deer. They tied up below the dry creek bed, above the shallows, a stand of trees providing shelter and firewood and a toilet. And Dawe having landed, did not explore the valley for traces of fossilized oysters and ammonites of the Bearpaw Sea; instead, slowly, quietly, he tramped inland and up onto high ground; so that he might look for miles across the bald prairie. (Kroetsch, Badlands 84)

Arnold Davidson remarks of Dawe's single-minded fixation, "he is not at all interested in gaining an accurate picture of the total environment that existed during that dark pre-historic time to which he naively believes his search will carry him" ("History" 2). The chief implication is that small marine creatures simply don't merit the honour of sharing the bone hunter's name. However, it must be recalled that the allegorical Jones was an assiduous collector. He was just as likely to "snatch some crinoid or mollusc" as he was to salvage some grand saurian. Specimen size meant little to a field hand eager to "gently with the hammer wake/The slumbering petrification/That for some >a< hundred million years/Has been debarred from action." Indeed Jones (and Dawson by extension) was just as happy to "wed" his name to a "two-tailed salamander" as he was to bestow it upon a "reptile of prodigious bones." Even George Mercer Dawson's non-poetic work seems to

confound Kroetsch's position that the early collectors ignored fragments, and small creatures in favour of larger more complete specimens. Dawson devotes as much due diligence in his 1873-8174 Boundary Commission field notes to the *inoceramus* shells he collects in Manitoba as he does to the "dinosaurian" bones he finds in Saskatchewan. Tyrrell's major discovery of the skull of *incrassatus*, and Weston's duplication of the find some years later, are soberly mentioned in both sets of field notes.

These even-handed descriptions demonstrate that the GSC surveyors considered the finding of vertebrate fossils merely one aspect of their work which had a much broader scope: establishing geology (especially coal reserves); determining the best grazing range for livestock and the lands most suitable for farming/settling; as well as conducting floral and faunal inventories; and conducting anthropological descriptions of indigenous peoples where possible. Sternberg revels in the honour of sharing his name with non-dinosaurian creatures. His pride draws no distinction between prehistoric leaves, camels, fish or birds. He offers one such floral example:

Here too, the noted paleobotanist, Dr. Leo Lesquereux, collected fossils in 1872, securing among other specimens a large, beautiful leaf which he named in my honor '*Protophyllum sternbergii*'. (Sternberg Life 18).

And here he refers to a faunal example:

He [George Sternberg] brought in a skull, the smallest I have ever collected, with a great many broken bones and teeth. One specimen, which Dr. Broili named in my honor *Cardicephalus sternbergi*, was not over half an inch long (Sternberg Life 255).

In fact, Sternberg is assiduous in detailing the full catalogue of species, which he collected and delivered to experts for scientific description. Credit, for Sternberg, was next to godliness, though he would have rejected such a formulation as blasphemy. Undeniably, the perfection and completeness of a discovery are also rated high in the in the capacity of fossils to memorialize, not only of the extinct creatures from whose remains they are derived, but also of the individual actors and the scientific complex, which unearths and describes them.

Sternberg's "motivation for autobiography" goes far to explaining the exhaustive compendium of his prehistoric animal menagerie. In his introduction to the New West Press re-issue of Hunting Dinosaurs in the Badlands of Alberta, David Spalding argues that another basic factor moved Sternberg to record his exploits, "not insignificant is the fear of personal oblivion, which has prompted many people to write their life stories" (Sternberg, "Hunting" xiii). Since Sternberg lacked the scientific training to participate to any great extent in the formal descriptions of the animals he discovered, (though he kept extensive field notes nevertheless) and correspondingly lacked access to publication venues restricted to the purview of "experts", he relied on his self-financed and self-published autobiographies. He attempted to become a scientific popularizer and in so doing *to write* himself into posterity with folksy language and the common touch. Although his was still a restricted and specialized audience he strove to make bone hunting both intellectually and metaphysically intelligible to the wider public.

Then we do not work for today alone. As long as the Victoria Memorial Museum stands, this and the other Red Deer Dinosaurs we collected, and prepared, will be admired. It is because men will forget the worker in their admiration for these strange relics of a day some three million years ago, that I am going so exhaustively into detail, the life of a fossil hunter in field and shop, so that the observing public, when they go through one of our great museums may feel they are on holy ground. (Sternberg, Hunting 125-126)

Intriguingly, even the so-called expert consulted by Kroetsch made recourse to similar discourse in the preface of his own autobiography. Weston reaches out to the broadest possible readership by beginning Reminiscences among the Rocks with this disclaimer:

At the request of my children and several of my friends, I have endeavoured to record some of the incidents connected with my explorations while in the service of the Government Geological Survey of the Dominion of Canada. I have also set down a few details of the geological formations in which I have worked. I have prefixed to these writings some autobiographical particulars which may not be without interest to the reader. It is a very plain tale, without the slightest striving after any of the literary properties that generally accompany a story.
 T.C.W.
 237 Daly Avenue, Ottawa.
 May 7th, 1898
 (iii)

Even a post-modern novelist like Kroetsch could hardly have come up with a better meta-fictional taunt to the audience. In lieu of taking the subsequent "story" at face value the contemporary reader should expect all manner of artifice and literary sleight of hand – certainly no "plain tale" and certainly no boring scientific treatise. Whether it was genuine or false humility that motivated such statements, it is evident that the implicit diversions

and dissimulations in Weston's preface serve a narrative function. Could it be that he, directly or indirectly, took some cue from popular adventure stories of the day? Did his vehement rejection of the "slightest striving after any of the literary properties that generally accompany a story" belie a greater debt than he let on to Conrad, Haggard, Wells, DeMille or even Verne, Poe, Defoe and Swift? Perhaps it is not so outlandish to suggest that Victorian men of science should be influenced by Victorian (and pre-Victorian) men of letters. While hard evidence is wanting, it does not seem coincidental that Weston's colleagues Dawson and Tyrrell accounted faithfully for their respective annual dues to the Arts and Letters Clubs of Montreal and Ottawa. Dawson's unpublished folio of poetry attests to the fruitfulness of his association with literary types. While Tyrrell did not boast reams of verse, later in life he took it upon himself to complete a decidedly literary project – albeit an editorial one. His substantial mining fortune enabled him to buy outright the holograph manuscripts of famed North-West Company trader and surveyor, David Thompson. Originally, Tyrrell writes, his intention was "to abbreviate, and partly rewrite it, in the hope of being able to reduce it to somewhat more popular form" (Thompson xix). However, the Chaplain Society ultimately agreed to publish David Thomson's journals in full with the addition of a contextual preface written by Tyrrell.

Indeed Tyrrell provides the aforementioned explanation in the very preface under discussion. He also includes an oblique rationalization of why he felt compelled to undertake this work. His call for a monument to the woefully underappreciated explorer

invokes the same kind of "posthumous apotheosis" inherent in the 19th century French "statuemanie" phenomenon as articulated by Garval. Ironically, rather than helping to erect a statue to Thompson "in some prominent place in the capital of the Dominion" (a venture no doubt well within his considerable resources) Tyrrell instead chose to erect a literary monument to his predecessor in the public domain (Thompson xx). In so doing he also implicitly grafted his own name on to the bid to exalt Thompson for posterity. Tyrrell, like Weston, also produced a popular autobiography of sorts, though unlike Weston's Reminiscences, it was never published in its entirety. The hand-written holograph manuscript survives in the University of Toronto Special Collections, available for consultation by the most determined of researchers. However, Thompson's journals are still widely available in stately bound volumes at venerable public institutions across Canada. Now owing to digitization the reach of the Champlain Society extends even further, and its publications are even more readily perusable via its website repository. While Tyrrell could never have imagined the latter development, he was certainly savvy enough to appreciate the former.

This overture to posterity is not the same type of blunt naming gesture made by Dawe *vis-a-vis* his *Daweosaurus*, or that of any of the historical palaeontologists *vis-a-vis* their type specimens. Rather, Tyrrell believed he shared a genuine connection with Thompson in virtue of their shared exploits in the North-West. Tyrrell goes on to explain that through his mapping and surveying missions for the GSC he quite literally followed in

his predecessor's footsteps. Moreover, through all of the comparative measurements performed during this retracing Tyrrell officially corroborated the precision of Thompson's original work. Without Tyrrell's formal approbation, informed by his recourse to the latest technology and knowledge, the quality of Thompson's observations simply could not have been accepted as accurate by the scientific complex of Tyrrell's day. Thus Thompson's name persists not only because Tyrrell takes pains to recuperate and disseminate his written accounts, but also literally because he proves the worth of those accounts. Tyrrell's impetus to elevate his (via/and Thompson's) name to posterity is a symbiotic movement rather than parasitic one. Tyrrell writes:

My interest in Thompson's work began in 1883 and the following years, when as a Geologist on the staff of the Geological Survey of Canada, I was travelling in or near the Rocky Mountains, and was making maps on which to record my geological investigations. In conducting these surveys the number of places with names of unknown origin, and the accuracy of the main features of the maps then in use, greatly impressed me. (Thompson xviii)

Tyrrell's preliminary researches on Thompson's journals and monolithic map of the North-West yielded a publication entitled "A Brief Narrative of the Journeys of David Thompson" in The Proceedings of the Canadian Institute vol. v, 1887-1888. However, at this early date Tyrrell recalls that he was unable to consult the real meat and potatoes of Thompson's account – Volume XI, which detailed the surveyor's peregrinations from the Rockies westward to the mouth of the Columbia River. Only after his article appeared did Thompson hear from Mr. Charles Lindsey, the custodian of the missing volume who eventually agreed to let Tyrrell take it off his hands for an undisclosed sum. Then the gold-

rush intervened. Tyrrell explains that he stashed the manuscript when he repaired to Dawson, Yukon Territory to conduct the business of dredging paydirt from the creeks. Only when he returned to Toronto in 1906, did he resume his researches. Only then did he fully apprehend the degree of Thompson's accomplishments when he traced the surveyor's passage to the outer edges of the Dominion against his own GSC field-notes:

Between the years 1883 and 1898, while engaged on the staff of the Geological Survey of Canada, it fell to my lot to carry on explorations in canoes, on horseback, or on foot, over many of the routes which had been surveyed and explored by David Thompson, a century before, to survey the rivers that he had surveyed, to measure the portages on which he had walked, to cross the plains and mountains on the trails which he had travelled, to camp on his old camping grounds, and to take astronomical observations on the same places where he had taken them. Everywhere his work was found to be of the highest order, considering the means and facilities at his disposal, and as my knowledge of his achievements widened, my admiration for this fur-trading geographer increased, and in order to show my appreciation of the splendid work which he did I decided to offer this narrative to the public. (Thompson xix)

Tyrrell might have been just as impressed had he compared notes with Jason. The captain of the Argonauts goes to the ends of the earth to obtain the Golden Fleece. In so doing he risks alienation from his wife and sons. This threat is realized when he announces to Medea that he will leave her for another, better connected princess. True to form, Medea returns the bitter favour by murdering their sons. So in a limited way Anna Dawe might count herself lucky insofar as she lives to revile her absent father. Elisabeth Killbourne Dawe might be read not as a faithful Penelope ever waiting on Huron shores for her husband's return, but rather as an active agent, empowered as Medea, to exact a terrible revenge for the bone hunter's sins of hubris and abandonment. All that literally remains of

Elisabeth is a solitary lake house, but the Medean prophecy does not require her physical presence for ultimate prosecution. Neither must it obey any statute of limitations. It promises the irony of a ridiculous death for the hero who survives unscathed from countless daring exploits. Worse yet it comes by the very instrument of his conquest.

You, as you deserve,
 Shall die an unheroic death, your head shattered
 By a timber from the Argo's hull. Thus wretchedly
 Your fate shall end the story of your love for me.
 (Euripides 1376-1405)

Dawe's final canoe trip on to the Great Lake, can also be viewed as an absurd and pre-determined conclusion even though death comes by his own hand rather than the nameless raft that carried his party down the Red Deer River.

He had written on the last page of his last field book: I have come to the end of words. Yes, and the fucking bastard had let me prepare the canoe, had let me send him out onto the water. And we found the canoe all right; at least we didn't lose eighty dollars worth of canoe. But we never found the body. Thank God for small mercies. Oh the government was efficient, they searched high and low, the policemen, the guides, for their famous man. But they found nothing. (Kroetsch, Badlands 229)

Therefore from the outset, both Jason and Dawe are doomed to become victims of their own successes. After these men have made expeditions into the hinterland, and returned with their respective golden fleeces, civilian life must only ever be anti-climactic. The intrepid George Mercer Dawson, also meets with an inglorious end. No amount of hardship and deprivation during his treks into the wilds of the Northwest could kill the man whose dwarfism allegedly left him in fragile health, and perpetually susceptible to the

dangers of damp chills and over-exertion. Only after he had criss-crossed the Dominion, collected box-car loads of specimens, charted the geology of the prairies, British Columbia and the Yukon, resolved an international sealing dispute in the Bering Strait, written sundry treatises, and driven able-bodied men like J.B. Tyrrell to the threshold of human endurance could he finally succumb to a banal illness in his Ottawa rooms. His decline was so rapid that the ailing Dawson could not even hold out for his mother and sister to make the short trip from Montreal to his sickbed. Imaginative souls who have perused his gloomy odes to unrequited love, and his glaring tribute to a suicide, as well as his Last Will and Testament notarized on the day of his death, can be forgiven for entertaining wild speculations. Without a shred of documentary evidence, the same speculative reader might envisage collusion on the part of the Victorian medical establishment to protect the honour of one of its scientific *confrères*, and that of one of Canada's most esteemed families. Just as the authorities who searched for Dawe's body likely stamped "accidental drowning" on his death certificate, might Dr. Powell have stamped "acute bronchitis" on Dawson's in lieu of another cause?

Orpheus courted an even more grandiose ambition than Jason or Dawe. Notwithstanding the audacity of his attempt to retrieve his dead wife from Hades, Orpheus seeks to forever attach his name (and melodies) to an archetypal journey to the underworld – one that would be called ever after an "Orphic Quest." Theseus tries a similar feat, and botches it completely. Like the selfless McBride, or the guileless Tune, he exhibits poor

judgment when he agrees to accompany his misguided friend Pirithous to the underworld. The latter is determined to spirit away for his bride, Persephone, Queen of the Night. A generous reader might pardon Pirithous such a folly, if he is truly motivated by love. Persephone's husband is not so forgiving. A nonplussed Hades beguiles the pair into sitting in the Chairs of Forgetting where they are lashed by serpents and partially metamorphosed to stone (Apollodorus, Epitome 1.24). This is not exactly a miscarriage of justice if Pirithous real impetus is considered – fulfilling the fratboy like compact struck with Theseus that they both should marry daughters of Zeus (Apollodorus, Epitome 1.23). Only through the intervention of a demi-god does the Athenian king make his escape from the bowels of the earth. Hercules, dispatched by King Eurystheus on his final and most preposterous labour, must fetch Cerberus, hell's triple-jawed pit bull. Having succeeded in his mission through brute force, Hercules manages to release Theseus on his way back to the land of the living. When the hero attempts to free Pirithous from his bonds, the earth trembles and he must leave the adventurer to his fate. (Apollodorus, Library 2.5.12). Like Dawe and his surviving crew members, Theseus ultimately has no compunction with abandoning one of his own to the badlands.

Unlike Orpheus who wants to launch a new kind of tourism, Jason and Dawe simply want to attach their names to novel and unique specimens. They are like Perseus in this respect whose confrontation with Medusa, beyond simply amounting to the defeat of a troublesome monster, may have had more to do with the warrior's desire to marry his name

to a creature whose gaze preserves all in stone to the dread and edification of posterity. Indeed after he lops off her head, Perseus takes great care with "his famous trophy" placing it a bag fit for air travel (Ovid IV: 161). So potent is the blood of Medusa that when Perseus transits over Libya, via his winged sandals, mere drops of it turn to venomous snakes on the sands below. The Gorgon has a face that would make a baby cry, or turn a giant to stone. In another version of the Atlas myth the Titan refuses Perseus shelter in his high-walled and dragon-guarded orchard. The physically outmatched hero repays the sleight by offering Atlas the "gift" of a wicked peep-show which produces a petrifying effect:

[. . .] Then turning his face, he produced
 from a bag on his left-hand side the loathsome head of
 Medusa.
 The mighty Atlas was turned to a mighty mountain; his hair
 and beard were transformed into trees, his massive
 shoulders and arms
 to a line of ridges, his erstwhile head to a cloud-capped peak;
 his bones became rocks. Then rising high in every
 direction
 he grew and he grew and he grew (so the gods had
 decreed), till the whole
 of the sky with all of its stars could now bed down on his
 ranges. (Ovid IV: 655-662)

Curiously, Perseus does not avail himself of the same tactic when he faces the sea-monster Ceto, as it is about to devour his future wife, chained as a sacrifice to the rocks of Ethiopian Cepheus. "The prince of whalemens" accomplishes this feat with a single dart, like a consummate harpooner, thus meriting the admiration of Melville's narrator, Ishmael, who recounts the tale with gusto based this incontrovertible proof:

And let no man doubt this Arkite story; for in the ancient Joppa, now Jaffa, on the Syrian coast, in one of the Pagan temples, there stood for many ages the vast skeleton of a whale, which the city's legends and all the inhabitants asserted to be the identical bones of the monster that Perseus slew. When the Romans took Joppa, the same skeleton was carried to Italy in triumph. What seems most singular and suggestively important in this story, is this: it was from Joppa that Jonah set sail. (Melville 304)

Fish story connotations aside, after Perseus wins the battle with the help of his enchanted arms, he undertakes a tender ritual with his old trophy, acting not unlike Good Jones, or William Dawe, or any other groom with a new bride, or a type specimen:

Fearing to bruise the Gorgon's snake covered head on
the hard sand,
he softened the ground with leaves and covered it over
with seaweed,
to serve as a mat for the head of Medusa, the daughter
of Phorcys.
The fronds which were fresh and still abundant in
spongy pith
absorbed the force of the Gorgon and hardened under
her touch,
acquiring a strange new stiffness in all the stems and
the foliage. (Ovid IV: 740-746)

Indeed the sea-nymphs concretely illustrate how Perseus' name might benefit from marriage not to the lovely Andromeda, but rather to the hideous Medusa:

The sea-nymphs tested this miracle out on additional
fronds
of seaweed. Excited to find this yielded the same result,
They repeated the marvel by tossing the plant's seeds
over the waves.
Coral even today preserves this identical property:
contact with air induces its hardness and what was a

flexible
 shoot under water is turned to rock on the ocean's
 surface. (Ovid IV: 747-752)

And so to the hero's megalomaniacal satisfaction, the name of Perseus persists upon contact with such a formidable foe. Why apply these stories from the classical tradition to Kroetsch's tale of early twentieth century bone hunters in Alberta? Above and beyond any obvious resemblance to the paradigmatic underworld journey, an explanation can be found in the Kroetsch fond at the University of Calgary Special Collections. Quite simply the author admits a debt to ancient mythology at several instances in his research notes, the following of which is but one example:

[11 verso]
 these are ~~primal~~
 civilized men [away?]
 from civilization –
 a man like B Brown
 who was sophisticated
 enough to be a
 philanderer – and
 on their trip they
 seek a darker,
 more primitive
 dimension of

 [12]
 themselves – part
 of the Orpheus
 theme – a
 psychological dimension?

and finding
 dimensions of

themselves that
they wouldn't
have expected.

(Kroesch, MsC 775/04.25 Box 16/44 Notebook [i])

Clearly, Kroetsch found the work of Swedish anthropologist Ake Hultkranz, as central to the generation of Badlands as he did the works of Sternberg and Weston which he also copied *en bloc*. Chapter II "Dominant Motifs in the Orpheus Tradition" from Hultkranz's 1957 study The North American Indian Orpheus Tradition: A Contribution to Comparative Religion appears in its entirety, and like the Weston and Sternberg material, it is also heavily annotated by the author with extensive underlining and marginal notation. Numerous critics, Margaret Laurence among them, have read The Studhorse Man as an irreverent recapitulation of the Odyssey. The presence of the Hultkranz document in Kroetsch's research materials would seem to confirm that Badlands, concomitantly, is a recapitulation of Orpheus' voyage to the underworld refracted through a distinctly north-western North American lens. Kroetsch avails himself of native mythology, as interpreted by a European anthropologist, to produce another version of the tale. No doubt he delights in the irony of a re-appropriation of an already dubious appropriation. Indeed his purpose in grafting the North American Orpheus tradition on to his fictional scenario is made manifest in these marginal comments.

seeking:
futility,
immortality:
man seeking
to get his

name on
 newly
 discovered
 species.
 (Kroetsch, MsC 27.16.7; Hultkranz 59)

They accompany a partially underlined paragraph from the original text. Hultkranz distils the Orphic quest to its fundamental purpose – a search for immortality:

Here it may also be remarked that the person who has departed to the realm of the dead frequently symbolizes a higher value and therefore in himself constitutes a higher being, a spirit, a divinity. The discussion of the character of these figures must be postponed for the moment. It must here suffice to observe that the values they represent are germinative force and fertility in the widest sense, and the therewith intimately associated idea of immortality. In one Ojibway legend which in many respects runs parallel with the Orpheus legend (though without its being possible to reckon it as an Orpheus legend), it is eternal life itself that an Indian seeks in the other world.
 (Kroetsch, MsC 27.16.7; Hultkranz 59)

By his very allusion to the Orphic Voyage, Kroetsch also invokes other like journeys from the classical tradition – The Voyage of Argo among them. Orpheus, it must be recalled, like Castor and Pollux, those brothers who were to divide their afterlives between heaven and hell, was an Argonaut hunting for the Colchians' national treasure long before he went to Hades in search of Eurydice. He also held the sirens at bay with his lyre before he cajoled the king of the underworld with the same instrument. To capture the Golden Fleece, Jason led Orpheus and the rest of his crew beyond what Hultkranz describes as a "horizon curtain" (Kroetsch, MsC27.15.7; Hultkranz 79). Kroetsch notes the term and pays particular attention to the subsequent discussion of the "Symplegades" or "Clashing

Rocks" which made the Bosphorus as much a gate to the netherworld as it was the outlet of the Black Sea. He notes Hultkranz's description of "difficult obstacles encountered by the traveller" and also shrewdly underlines the anthropologist's stipulation that in the North American native Orpheus tradition "in order to reach the realm of the dead one must cross water" (Kroetsch, MsC27.15.7; Hultkranz 75-78). In a separate document Kroetsch grafts these perils on to the nascent characters of Badlands:

forces/energy

Old Indian woman as Eurydice –
who was left behind.

obstacle motif: dangerous monsters [encounters with
mosquitoes?]
rattlesnakes

assistance from different beings (wife, guardian
spirits, old men or old women)

-The differences between Orpheus and the
deceased is [betokened?] by their belonging to
two different worlds. The essential difference between
the living and the deceased.

[apply Levi-Strauss?]

> the journey is generally a difficult passage between
this world and the beyond

>to reach the realm of the dead one must
generally cross water.

(Kroetsch, Msc27.16.9 loose leaf)

Evidently, Kroetsch had epic trials on his mind. He was assiduous enough to extend another maritime advisory to the principal character of The Studhorse Man. The bathtub

bound narrator, Demeter Proudfoot, so christened by an innocent mother who believed the goddess' name to be masculine, recounts an episode from his rival's experience of the First World War. In it Hazard Lepage encounters another prophet, albeit a blue-eyed old woman in a burned out wine cellar amid two naked corpses, who offers this familiar warning to the benighted antihero: "*Mon pauvre soldat, inutile de te cacher, [. . .] La mer sera votre meurtrière*. It's not so far off from the famous speech Teirsias offers to brave Odysseus during his Hadean sojourn in Book XI of the epic: "As for your own end, Death will come to you out of the sea, Death in his gentlest guise" (Homer XI: 101-174).

Indeed Kroetsch includes marginal notation alongside Hultkranz's discussion on the prevalence of Symplegades motifs in the North American Native Orpheus tradition. While Hultkranz does not source the former in the latter, he notes striking parallels:

The same applies concerning the otherwise so peculiar Symplegades motif, which is found among the Orpheus traditions of the Southeast area (and which here to a certain extent replaces the water motif). Its role in the religious life the peoples of the Southeast has been formulated by Speck as follows: 'The common [mythological] element to the whole region is the eastward or westward journey of the soul and the obstacles it meets with. The most general type of obstacle is the cloud swaying at the end of the earth, where it and sky meet. This is the barrier to the spirit world, through which everyone desiring entrance must pass.' The Symplegades motif is in the Southeast not restricted to the Orpheus traditions; it occurs also in the accounts of journeys to the other world apart from the Orpheus narratives which have been given by the Cherokee, Yuchi, Creek, Chickasaw, and it enters in the cosmological conceptions of the Chitimacha. We find the same motif in a form more reminiscent of the Greek Symplegades – two rocks which strike against each other – among the Caddo. The notion of the 'horizon curtain' has, as Thompson has shown, a wide distribution in North America, from the Kaska in the north to the Navajo and the Louisiana tribes in the south. (Kroetsch, MsC27.16.7; Hultkranz 79)

Kroetsch comments on the preceding paragraph in the right margin: "Clashing Rocks. Have to lose one person or a sacrifice – check on 'wandering rocks' " (Kroetsch, MsC27.16.7; Hultkranz 79). Whether this implied sacrifice refers to McBride's desertion, or Tune's accidental burial, remains ambiguous. Assuming he followed his own directive, Kroetsch would have discovered that "the Wandering Rocks" posed a distinct though equally treacherous obstacle at the opposite end of the Ancient World. Upon their return from Colchis, Jason and the Argonauts succeeded in evading the ubiquitous boulders which supposedly guarded the Straits of Messina only through the intervention of a powerful goddess and the daughters of Nereus:

The Nereids, swimming in from all directions, met them here, and Lady Thetis coming up astern laid her hand on the blade of the steering-oar to guide them through the Wandering Rocks. While she played the steersman's part, nymph after nymph kept leaping from the sea and swimming round *Argo*, like a school of dolphins gambolling round a moving ship in sunny weather, much to the entertainment of the crew as they see them darting up, now aft, now ahead, and now abeam. But just as they were about to strike the Rocks, the Sea-nymphs holding their skirts up over their white knees, began to run along on top of the reefs and breaking waves, following each other at intervals on either side of the ship. *Argo*, caught in the current, was tossed to right and left. Angry seas rose up all round her and crashed down on the Rocks, which at one moment soared into the air like peaks, and at the next, sticking fast at the bottom of the sea, were submerged by the raging waters. But the Nereids, passing the ship from hand to hand and side to side, kept her scudding through the air on top of the waves [. . .] Thus, though the water swirled and seethed around them, these sea-nymphs kept *Argo* from the Rocks. (Apollonius of Rhodes IV, 930-965)

Odysseus and his crew weren't so lucky. Although they took Circe's advice and avoided certain death on the Wandering Rocks (for no vessel other than *Argo* could make a passage there), they soon found themselves between the devil and the deep blue sea, if

indeed the six-headed, twelve footed, many toothed, dreadful beaked Scylla qualifies as a devil, and if the swirling maelstrom of Charbydis leaves any drop of blue in the sea. While they initially escape Hell's toilet, albeit thinned in number due to the monster's ravenous appetite, an ill-considered decision on the part of the crew to cull select heads of the Sun's cattle gets the ship and all hands flushed down the tubes. Only the hero survives, and just barely.

So it seems if there are rocks to be surpassed, better they be clashing than wandering ones. At least the former allowed the keen sailor a sporting chance. If Kroetsch consulted Apollonius of Rhodes for an account of the Argo's passage through the Symplegades, he would have encountered Phineus' practical advice to Jason:

Send out a dove from Argo to explore the way. If she succeeds in flying between the rocks and out across the sea, do not hesitate to follow in her path, but get a firm grip on your oars and cleave the water of the straits. For that is the time when salvation will depend not on your prayers, but on your strength of arm. So think of nothing else, be firm, and spend your energies on what will pay you best. By all means pray to the gods, but choose an earlier moment. And if the dove flies on, but comes to grief midway, turn back. It is always better to submit to Heaven; and you could not possibly escape a dreadful end. The Rocks would crush you, even if Argo were an iron ship. (Apollonius of Rhodes II, 314-352. 82)

If only Dawe had respected the sound advice of the ferryman, the moonshiner and the travelling photographer, poor Tune might have fared as well as the Argonauts' dove – worse for the wear and minus some pluck – but at least not doomed to a "dreadful end" betwixt the rocks. Sinnott has enough sense to reject Dawe's invitation to join the party:

Not on your life. I was there-two summers ago I think it was. Three. Yes. Three summers ago. One of those outfits looking for bones. They were all of them cracked right out of their heads in the end. Took some beautiful pictures. Chap from the government wanted them, trying to figure out what happened to the men he sent in there-perfectly sensible people, decent men. Wanted pictures before. After. (Kroetsch, Badlands 101)

He intuitively has the sense to respect a cosmic "No Trespassing Sign" whereas "heroes" tend to champ at the bit. Aeneas, like Dawe also bristles at the Sibyl's Sinnottesque warning: " 'Great leader of the Trojans, the chaste man not set foot upon the threshold of that evil place [. . .]" (Virgil VI. 561, 150). In the myth of the Argonauts "the dove got through, unscathed but for the tips of her tail-feathers, which were nipped off by the Rocks" (Apollonius of Rhodes II, 572-606. 89). However, the story was not to have a happy ending, Dawe didn't miss the ominous signs. No self-respecting geologist could. The expedition's outcome was written on the sandstone walls of Deadlodge Canyon even before it began:

They were into the Badlands.

The stiff blade of light came over the rimrock; the light grew from purple to a blue veil, from blue to red to orange; the tall and starkly outlined buttes emerged from the darkness. The buttes came as pyramids against the light; they came as mounds, as beehives, as cones. They had those forms of the past, and yet they were not any landscape that Dawe had known, that Web had imagined. (Kroetsch, Badlands 19)

Kroetsch and his cousins ran their own version of the Symplegades at the conclusion of their 1972 river trip when they passed out of Deadlodge Canyon to the Jenner Ferry:

[14 verso]

FRIDAY NIGHT – STOPPED
 AT THE JENNER FERRY
 (JENNER'S FERRY?)—
 RECURRENCE OF BADLANDS –
 GATE EFFECT –
 HIT ROCKS ON SOUTH
 SIDE OF RIVER
 APPROACHING THE FERRY –
 MOVING AWAY FROM
 THE ROCKS WE HIT

 [15]
 A SANDBAR – HUGH
 AND I GOT OUT OF
 THE BOAT AND PULLED
 IT ACROSS THE BAR
 INTO THE CHANNEL,
 STORED OUR GEAR IN
 AN OLD SHED, ON HAY
 AND HIRED A MAN
 TO TAKE US IN TO BROOKS
 (Kroetsch, MsC 775/04.25 Box 16/44 Notebook (i))

Their escape also bears some resemblance to Aeneas' successful return from the underworld when he passes with the Sibyl not through the Gate of Horn, that "easy exit for true shades", but rather through the other gate of sleep, The Gate of Ivory, from which "the powers of the underworld send false dreams up towards the heavens", and evidently the occasional corporeal body (Virgil VI, 893-898. 160-161). The experience had a profound impact not only on the author, but also on the characters he would later send down the same river in his novel:

[16 verso]
 DRIVING UP OUT OF

THE VALLEY AT THE
 JENNER FERRY – ONTO
 THE SHORT GRASS
 PLAINS – THE SUDDEN
 INVERSION, SEEING
 NOT FROM THE
 BOTTOM BUT FROM
 THE TOP. FROM
 THE TOP OF AN

 [17]
 INVERTED SAUCER –
 WEST ACROSS
 GRASS AND SAGE TO
 A WILDLY DRAMATIC
 BLUE TORN-CLOUD
 SKY, A NARROWING
 CORRIDOR BETWEEN
 EARTH AND CLOUDS,
 THE DRAMATIC BLUE
 GREY over the
 green grey earth >

 [verso]
 a small herd of
 antelope about,
~~watching us~~
 watching us, grazing
 watch us.

EASY TO IMAGINE
 BUFFALO OUT HERE,
 THE INDIANS IMMEDIATELY
 AND ALWAYS IN TOTAL

 [18]
 CONTACT WITH ENVIRONMENT.
 SLEEPING IN A TENT
 IS SO DIFFERENT FROM
 SLEEPING IN A HOUSE

PERHAPS IN A TRANCE
 THE SHAMAN ALONE
 ABLE TO TRANSCEND
 ENOUGH, ABLE TO BE
 OUT OF IT ENOUGH
 TO SEE SOMETHING
 OF ITS SHAPE, ITS
 TOTALITY.

[verso]
 THE JOURNEY
 THROUGH DEADE LODGE
 CANYON WILL HAUNT
 ME IN ITS
 PURITY, THE RELEASE
 FROM ANY SIGN or
 SOUND of the man-made
 world; three
 figures alone on
 that landscape, pulling

[19]
 a boat through
 shallow water.

[verso]
 WHOSE STORY ?
 MORE VIEWPOINT THAN ONE?

one immediate		?
one recollecting	?	
on trying to imagine it		?

varieties of survival:
 the man up against it –
 perhaps one of the
 men working for the fossil
 hunter; the Indian
 woman; the girl
 trying to understand
 her ~~fat~~ grandfather in

order to get her own head
together – because in
the course of his “search”
he destroyed his family

[20]
theme of survival

like ~~the shock depressed~~
~~figure in Drumheller~~
~~try~~ the fellow in Drumheller
with his anxiety states/attacks
visiting a fortune
teller, trying to
believe in personal
survival after death

future teller in
Drumheller?

theme of survival relates
to the Orpheus story.
(And to the flood story)
(Kroetsch, MsC 775/04.25 Box 16/44 Notebook (i))

Before living visitors can escape the realm of the dead they must first gain access to it. Even the VIP status afforded by a partially divine pedigree, as in the case Odysseus and the rest, does not guarantee admittance. Certain ablutions and rituals of purification must be undertaken before the visitor is permitted entrance. Circe advises Odysseus to pass over the River of Ocean and make landfall at Persephone's Grove where he must perform a specific kind of cleansing before he may commune with the shade of Teirisias:

Once there, dig a trench about a cubit long and a cubit in breadth. Around this trench pour offering to all the dead, first with honey mixed with milk, then with sweet wine, and last of all with water. Over all this sprinkle white

barley and then begin your prayers to the helpless ghosts of the dead. Promise them that once you are in Ithaca you will sacrifice in your palace a barren heifer, the best that you have, and will heap the pyre with treasures and make Teirias a separate offering of the finest jet-black sheep to be found in your flock. When you have finished your invocations to the glorious fellowship of the dead, sacrifice a young ram and a black ewe, holding their heads down towards Erebus while you turn your own aside, as though about to recross the River of Ocean. Then the souls of the dead and departed will come up in their multitudes and you must bid your men make haste to flay the sheep that are lying there slaughtered by your blade, and burnt them up while they pray to the gods, to mighty Hades and august Persephone. Sit still yourself meanwhile, with your drawn sword in your hand, and do not let any of the helpless ghosts come near the blood till you have had speech with Teiresias. Presently the prophet himself will come to you, my lord king. And he will lay down for you your journey and the distances to be covered, and direct you home across the fish-delighting seas.' (Homer X 169-170)

Medea, with equal alacrity, advises Jason to wash, dig a similar hole, and commit a like sacrifice. Moreover, she extends an Orphic warning to the penitent:

[W]ait for the moment of midnight and after bathing in an ever-running river, go out alone in sombre clothes and dig a round pit in the earth. There, kill a ewe and after heaping up a pyre over the pit, sacrifice it whole, with a libation of honey from the hive and prayers to Hecate, Perses' only Daughter. Then, when you have invoked the goddess duly, withdraw from the pyre. And do not be tempted to look behind you as you go, either by footfalls or the baying of hounds, or you may ruin everything and never reach your friends alive. (Apollonius of Rhodes III, 1020-1055. 136-137)

Aeneas' guide, also prescribes blood and fire, those elements requisite to preparations for an underworld sojourn. In addition the Sibyl insists that all traces of earthly corruption must be expiated before the hero is judged pure enough to enter the precincts of Hades. Aeneas must bury a dead crew member with all the attendant ceremonies even before he is permitted to undertake rituals of sacrifice. Unlike Dawe, who

abandons Tune's body to the badlands, Aeneas faithfully fulfills his due to Palinurus, as he did for his compatriot Deiphobus during the wars (an act for which he is acknowledged later in Hades). Once complete he is invited into the Sibyl's own sacred pit, the cave where the rites will be performed:

Here first of all the priestess stood four black-backed bullocks and poured wine upon their foreheads. She then plucked the bristles from the peak of their foreheads between their horns to lay upon the altar fires as a first offering and lifted up her voice to call on Hecate, mighty in the sky and mighty in Erebus. Attendants put the knife to the throat and caught the warm blood in bowls. Aeneas himself took his sword and sacrificed a black-fleeced lamb to Night, the mother of the Furies and her sister Earth, and to Proserpina a barren cow. Then he set up a night altar for the worship of the Stygian king and laid whole carcasses of bulls on its flames and poured rich oil on the burning entrails. Then suddenly, just before the sun had crossed his threshold in the sky and begun to rise, the earth bellowed underfoot, the wooded ridges quaked and dogs could be heard howling in the darkness. It was the arrival of the goddess. 'Stand apart, all you who are unsanctified,' cried the priestess. 'Stand well apart. The whole grove must be free of your presence. You, Aeneas, must enter upon your journey. Draw your sword from the sheath. Now you need your courage. (Virgil VI. 235-260 139-140)

In keeping with Kroetsch's tendency to make the sacred profane, these ritual ablutions are inverted by the crew of the Dawe Expedition. He may have taken his cue from a Nez Percé tale, which he cites as an epigraph to Badlands. A copy of "Coyote and the Shadow People" can be found in its entirety among the Kroetsch papers, unmarked but for the citation "Archie Phinney, Nez Percé Texts". Phinney's rendition sees Coyote in the role of Orpheus beset by sorrow over the death of his wife and prepared to make an extraordinary voyage to secure her release from the underworld. No doubt there are ironic implications to the trickster cast in the role of the classical hero. Coyote, like Orpheus,

ultimately loses his Eurydice forever because he contravenes the proscription of "death spirit."

'[Y]ou must guard against your inclination to do foolish things. Do not yield to any queer notions. I will advise you now what you are to do. There are five mountains. You will travel for five days. Your wife will be with you but you must never, never touch her. Only after you have crossed and descended from the fifth mountain you may do whatever you like.' (Kroetsch, MsC 27.16.8)

However, it is implied that he looks back, not to confirm the well-being of his spouse, but rather because he cannot control his raging libido. Kroetsch seizes on Coyote's "joyous impulsion" and uses it to introduce a novel whose principal character will also be driven to his goal of self-perpetuation by grossly visceral motivations:

But suddenly a joyous impulsion seized him; the joy of having his wife again overwhelmed him. he jumped to his feet and rushed over to embrace her. His wife cried out, 'Stop! Stop! Coyote! Do not touch me. Stop!' Her warning had no effect. Coyote rushed over to his wife and just as he touched her body she vanished. She disappeared –returned to the shadowland. (Kroetsch, MsC 27.16.8)

That Kroetsch reads Coyote's folly as parody of the Greek myth seems to go without saying, but that he reveres it as a parallel text, perhaps even as a version contemporaneous and independent from the "original", bears further consideration. The "death spirit", like Circe, Medea and the Sibyl, prescribes a requisite set of ablutions that must be performed before Coyote can visit the shadowland. They inevitably contradict Coyote's perception and reason. Nevertheless the ghost insists, " 'You must do whatever I

say. Do not disobey' " (Kroetsch, MsC 27.16.8). Coyote is compelled to pick serviceberries from a bush he cannot see, to lift a door flap to an invisible lodge, and to eat a meal of prairie dust. He faithfully completes these motions as he does the proverbial exile in the wilderness during which he is ordered to fast and to remain motionless in the hot sun until the ghost's return. However, when Coyote ultimately disobeys the death spirit's order, he must suffer the same consequences as Orpheus. Try as he might to repeat the ablutions, they come to no effect after his indiscretion. As a general rule the living are never granted a second chance to visit to the underworld. :

He went through the motions of eating again. Darkness fell, and now Coyote listened for the voices and he looked all around, he looked here and there, but nothing appeared. Coyote sat there in the middle of the prairie. He sat there all night but the lodge didn't appear again nor did the ghost ever return to him. (Kroetsch, MsC 27.16.8)

Dawe's crew members also perform ritual ablutions before their descent to land of the dead. The most obvious instance occurs in the chapter aptly titled "CREW BATHING" previously discussed in relation to its sourcing in Sternberg's memoirs. Web is the first to leap into the silted waters of the Red Deer River. He immediately makes a mockery of this ritual of "purification", by turning it into an occasion for masturbation. Tune cuttingly remarks, " 'Don't know if you're getting clean [. . .] but the river is getting dirtier' " (Kroetsch, Badlands 85). Nevertheless, both he and Grizzly join their comrade. To the utter surprise of the crew, Dawe exposes his physical deformity for the first time, and joins in their bathing. The gesture is not without foreboding undertones. After all the Red Deer is

no bracing Caucasian torrent like the one Jason bathed in before his trials. Rather in literal and symbolic respects, it is the very river of death that wends through the boneyards, at once Acheron, Cocytus, Phlegethon, Lethe, and Styx.

Other examples of corrupted ablutions abound. Each of the crew perverts the rituals of purification. Most obviously they cover themselves in dirt. Anna makes her first appearance starving at the bottom of an open grave wrapped in a filthy blanket (Kroetsch, Badlands 8). McBride re-appears after his ordeal in the rapids clinging to a Queequeg-like coffin-*cum*-pig trough. He smears his naked body with mud from head to foot (Kroetsch, Badlands 32). When Web lends him a change of clothes, he deliberately soils those too (Kroetsch, Badlands 35). Grizzly also takes an inadvertent mud bath when the raft crashes into the river bank and sets off a slide which buries him on deck (Kroetsch, Badlands 105). Web smears his own body with strawberry juice (conspicuously bloodlike), and stove blacking (quite literally brimstone) (Kroetsch, Badlands 5, 80). He also gets buffeted by hailstones, gets sucked up into a tornado, and to top it off he commits an act of sexual depravity whilst being struck by lightning (Kroetsch, Badlands 118,176). Indeed Anna, countermands the notion of a virgin sacrifice by systematically sleeping with each member of the crew, save Tune. And look where that got him. Even Dawe has his battered knee slathered with plaster of Paris to form a makeshift cast. Tune of course, suffers the most comprehensive mock ablution, insofar as he can never rise again from the mantle of fossil matrix that becomes his unsanctified grave.

Ablutions alone do not grant the heroes of the classical tradition access to the underworld, and hence to everlasting renown. Enchanted talismans are also required. The king of Colchis gives the hero of *Argonautica* "deadly teeth from the serpent's jaws" which are sown so that Jason may face the guardians of the Golden Fleece. Medea, in turn offers protection against these supernatural foes with a charm of invincibility.

'In the morning, melt this charm, strip, and using it like oil, anoint your body. It will endow you with tremendous strength and boundless confidence. You will feel yourself a match, not for mere men, but for the gods themselves. Sprinkle your spear and shield and sword with it as well; and neither the spear-points of the earthborn men nor the consuming flames that the savage bulls spew out will find you vulnerable. But you will not be immune for long – only for a the day. Nevertheless, do not at any moment flinch from the encounter. (Apollonius of Rhodes III, 1020-1055. 136-137).

America echoes Medea's advice to Jason, when she promises Dawe a disaster, but also success "if you hold back nothing. . ." (Kroetsch, Badlands 62). Immediately following this scene Dawe descends into the depths of the ABC mine where he encounters a Hephaestus like Grimlich who gives him a crate of dynamite and growls, "do your own murdering" (Kroetsch, Badlands 72). Dark forebodings continue with Sinnott's contribution and warning to the Dawe Expedition, " 'Take it . . . careful . . . I was trying to make something that would light magnesium powder . . . night pictures. . . damned near blew my head off' " (Kroetsch, Badlands 113). The dynamite, in conjunction with its electrical trigger, functions for Dawe like that supreme talisman, the Golden Bough, which serves as a skeleton key for Aeneas during his voyage to the underworld. Even securing this

talisman is a trial for the Trojan. To obtain it he must make recourse to the avian harbingers of his goddess mother:

Then when they came to the evil-smelling throat of Avernus, first they soared and then they swooped down through the clear air and settled where Aeneas had prayed they would settle, on top of the tree that was two trees from whose green there gleamed the breath of gold along the branch [. . .] Aeneas seized the branch instantly. It resisted, but he broke it off impatiently and carried it into the house of the priestess, the Sibyl. (Virgil VI. 190-212, 138-139)

Similarly, before Hercules can make his way down into the pit to claim Cerberus, and rescue Theseus, he must also secure a golden talisman. Prometheus, no stranger to incendiary tokens, warns that like the Golden Bough, the Golden Apples of the Hesperides can only be recovered through the intercession of a god. Proving that brawn and brains are not always mutually exclusive, Hercules tricks Atlas into fetching the prize and also into re-assuming his burden of the sky (Apollodorus Library 2.5.11). Dante recapitulates the key trope forwarded by his literary master. *His* Virgil, the guide, performs the necessary ablutions on the Pilgrim and drapes him with a proxy Golden Bough:

[I] offered my tear-stained face to him, and he
made my face clean, restoring its true color,
once buried underneath the dirt of Hell.

At last we touched upon the lonely shore
that never yet has seen its waters sailed
by one who then returned to tell the tale.

There, as another willed, he girded me.
Oh, miracle! When he pulled out the reed,
immediately a second humble plant

sprang up from where the first one had been picked.
(Dante I. 127-136)

The miracle of the Golden Bough is that it regenerates as soon as it is plucked, and that it does so in perpetuity. Dawe might appreciate so potent a metaphor for his scientific ambitions, but neither he nor his crew can stomach the monotonous implications of Grizzly's ability to pluck a "Goldeye" from the Red Deer River without failure wherever the flatboat may drift amidst "the high buttes [that] were gold, all gold in the broken sun" (Kroetsch, Badlands 110, 116). Like Charon, who acquiesces at the sight of the Golden Bough, and grants the Sibyl and Aeneas passage over "that river no man may recross", the Stezeville ferryman also responds to the sight of Grizzly's "Goldeye" and allows Sinnott, Dawe and the crew to float beyond their last-chance landing before Deadlodge Canyon (Virgil VI, 400-405):

Grizzly was pulling a goldeye out of the turbulent waters: Sinnott insisted that Grizzly hold it up. And he focussed close in on the steel blue of the back, the silver belly, the gold of the iris of the eye; the fish was a foot long at least; Grizzly held it at arm's length, so he himself would not be in the picture, only his fingers in the gills:

"Descendant of the Depths," Sinnott said. "Pity it's black and white," he added.

The ferryman had walked upstream to meet them; he was shouting something from shore. Sinnott straightened away from the camera: he and the ferryman recognized each other and waved.

"What did he say?" Dawe said.

The ferryman's dogs, at his heels, set up such a din that his voice was not to be heard. (Kroetsch, Badlands 110)

Indeed even the ferryman's hounds seem to accept the token, recalling how Cerberus is subdued by the Bough and a helping of the Sibyl's fine *patissèrie* (Virgil VI, 400-425):

The kingdom on this side resounded with barking from the three throats of the huge monster Cerberus lying in a cave in front of them. When the priestess was close enough to see the snakes writhing on his neck, she threw him a honey cake steeped in soporific drugs. He opened his three jaws, each of them rabid with hunger, and snapped it up where it fell. The massive back relaxed and he sprawled full length on the ground, filling his cave. (Virgil VI, 400-415, 425)

Although the Goldeye's base connotations more closely approximate Dante's recapitulation of the scene wherein the poet/guide tosses the hellhound a pedestrian mud pie:

My master stooped and, spreading wide his fingers,
he grabbed up heaping fistfuls of the mud
and flung it down into those greedy gullets.

As a howling cur, hungering to get fed,
quiets down with the first mouthful of his food,
busy with eating, wrestling with than alone,
(Dante VI: 25-30)

Not only does the Golden Bough (and its proxies) repulse ravenous beasts, but in conjunction with another ablution, it may also paradoxically lead its bearer directly down the maws of sleeping giants. Whereas "Aeneas leapt on the threshold, sprinkled his body with fresh water and fixed the bough full in the doorway", Dawe and his crew bumble by hook 'n' crook, through acts of God, and mortal combat, and a near-fatal accident to their own version of Hadean paydirt (Virgil VI. 630-638, 152). Naturally, Web bears the brunt of

these trials. Although ridiculously rendered, each respective incident of palaeontological discovery is cast in an ethereal light, much like that associated with the Golden Bough.

After Web is spit from the tornado he recounts this tale:

'We were sliding down that one white butte and there it was, Dawe, in the white hail in the blackassed tail of that early night it stuck out: the specimen. It stuck out of the hail, it had just been put there, [. . .] and I knew I had found it, Dawe, we had found your perfect *specimen* – ' (Kroetsch, Badlands 177)

Similarly, when Web defeats the snake man at "squaw wrestling" the party reconvenes at another site described with luminous trappings:

They were quiet, the gathering men. They formed a circle, found their mooncast shadows.

White clay, washing down from the coulee wall, had made a miniature flood plain, a white floor as smooth and seemingly as hard as marble. Raised an inch, two inches above the floor, where the coulee wall rose up again, was a rim of stone: it might have been the socket of an eye.

Dawe bent to the blank, stone eye, touched it.

'What's the verdict?' Web said. Web placed one foot inside the rim of stone, pulled back.

'Ceratopsian." Dawe's voice deepened on the sound, caressed it, his small body caught in the vibration of the sound's enormous magic: 'Horned.' (Kroetsch, Badlands 137)

Dawe himself spots a "breath of gold" amid the proverbial "tree that was two trees" (Virgil VI, 200-202):

In the rain-wet clay, Dawe saw what looked as if it must be a bone.

The tabletop of the butte ended, trailed off as a ridge, a knifeback ridge of clay that angled downward, running like a dinosaur skeleton's vertebraed back out toward a cluster of hoodoos, far below them. Dawe at first believed it was the illusion that compelled him, the ridge like a skeleton's back, the slick mud softly purple, gently green, in the rain, like the imagined hide of a living dinosaur.

But the brown protuberance, the stone that was not a stone, was hardly twenty feet out, down, on the naked ridge. (Kroetsch, Badlands 148-149)

Even armed with a flashlight token, living visitors to the underworld are not free to prospect without restriction. The Sibyl warns Aeneas that his passage into Hades is bound by rigorous time limits. " 'Night is running quickly by, Aeneas, and we waste the hours in weeping' " (Virgil VI, 538-540, 149). Although not so rigidly held to the duration of a single night, Dawe too must acknowledge the temporal constraints of a season in the field. Extremes of weather will put an end to his excavations as surely as supernatural caprice puts an end to Aeneas' time amid the hallowed fields of Elysium:

Dawe thinking: how much more of this? Ninety days, if all goes without a hitch and I'm lucky as well. If a miracle occurs. Ninety days and nights to the end of the season. Time enough in which to drift another 150 miles, in which to hike through thousands of acres of coulees, and over buttes, and up dry creek beds. (Kroetsch, Badlands 31-32)

At no point in the expedition is this impending deadline more keenly felt than just after Tune's time literally runs out. Rather than wasting "hours [or mere minutes] in weeping", for his expired deckhand, Dawe, Sibyl-like, scolds his crew to one last race against the clock – one final night flight:

'We could use the last of the flour,' Dawe said. unexpectedly and expectedly too. 'We'd have to get out of here right away. No food'.
Web shovelling.
'Wrap these bones today," Dawe said. 'By tomorrow they'll be dry enough so we can move them. Head out tomorrow night. . . Travel all night if we have to.' [. . .]

And Dawe again: "Travel all night. By morning – hit the ferry."
(Kroetsch, Badlands 190)

Although Dawe manages to escape Deadlodge Canyon with his hoard of fossils intact, Tune's death suggests that more was lost than gained by the expedition. So too is the case with his field notes. While they are no doubt expansive, Anna finds them to be compendious. Beyond the outright lies they contain, they are also plagued by parsimony, not to mention glaring omission:

But somewhere in the course of that first journey that was his own – somewhere, somehow, he shook himself free of any need to share even his sufferings with another human being. His field notes, after that summer, were less and less concerned with his crew, his dangers, his days of futile prospecting, his moments of discovery, his weariness, his ambitions, his frustrations. They become scientific descriptions of the size and location of bones, of the composition of the matrix, of the methods of extraction and preservation . . . (Kroetsch, Badlands 121)

Dawe's notes lack the reverential tone adopted by Aeneas who realized that all his activities and observations in the underworld, would come at the pleasure of the gods rather than through his own volition:

You gods who rule the world of the spirits, you silent shades, and Chaos, and Phlegethon, you dark and silent wastes, let it be right for me to tell what I have been told, let it be with your divine blessing that I reveal what is hidden deep in the mists beneath the earth.
(Virgil VI. 265-270,140)

Moreover, Aeneas also grasps that his bid to be remembered is substantively out of his hands. After all he has gazed upon the waters of Lethe – where all must take "draughts

of long oblivion" (Virgil VI, 705-715). Dawe subscribes to the power of the archive to achieve this end. This belief is thoroughly mocked, when in the final scene of Badlands Anna Yellowbird and Anna Dawe consign the documentary photographs and the field books to "the still waters of the river's source", "the waters of serenity" (Kroetsch, Badlands 229; Virgil VI, 705-715). Kroetsch, unlike his fictional palaeontologist, has a much more fraught notion of the technology of field notes. On one hand he critiques their monolithic connotations, but on the other he employs similar documentary materials (and conveniently assembles them in a centralized archive at University of Calgary) to memorialize his own literary expedition (much like Dawe attempts for his). The subsequent section will therefore investigate notions of authorial self-construction, in the fictional field notes of Dawe as well as in the *bona fide* field notes of Dawe's scientific contemporaries, in addition to the literary field notes and research materials produced by Kroetsch towards the creation of Badlands.

Box 16

Good Lord, the trails we leave! Suppose someone, finding the ketchup bottle, tried to reconstruct me from my notes.

(Steinbeck, *Travels* 107)

Afterwards he took and buried some of our things in a bucket. He said that nobody else would know where we put them and that we'd come back some day maybe and they'd still be sitting here just the same but we'd be different. And if we never got back, well, somebody might dig 'em up a thousand years from now and wouldn't they wonder?
(Mallick, *Badlands*)

These trails and tracks are useful only as guides. They certainly do not make travel any easier or speedier.

(Simpson, *Attending* 43)

I did not trust to first impressions, for it requires a certain amount of experience to observe accurately. In the beginning it is all too new and exciting.

Andrews Chapman *Ends* 45)

In his 1976 review of Badlands for The Globe and Mail Gary Geddes cites a revealing excerpt:

God help us we are a people raised not on love letters or lyric poems or even cries of rebellion or ecstasy or pain or regret, but rather old hoards of field notes. Those cryptic notations made my men who held the words themselves in contempt but who needed them nevertheless in order to carry home, or back if not home, the only memories they would ever cherish: the recollections of their male courage and their male solitude.
(Kroetsch, Badlands 2)

Both critic and author aim to confront one of the major critical and creative preoccupations of that moment in Canadian Literature – the relationship between fictional and historical documents (Geddes 39). Later commentators like Manina Jones traced the trajectory of this movement from its early articulation in Dorothy Livesay’s essay, “The Documentary Poem: A Canadian Genre” to its more contemporary treatments. Geddes amicably described Kroetsch as a “greedy researcher” and plumbed the author’s fascination with “sub-literary” documents (39). The upshot, Geddes suggests, is that documents are not art, but they may be raised to that level through the manipulation of a clever writer. Kroetsch would later explain what he meant by this term by aptly choosing an archaeological metaphor for understanding and writing “particulars of place” (Lovely 7). He allied his investigations to a fragmentary, discontinuous, and stratigraphic view of the past informed by the thinking of Michel Foucault:

[N]ewspapers files, place names, shoeboxes full of old photographs, tall tales, diaries, journals, tipi rings, weather reports, business ledgers, voting records—even the wrong-headed histories written by eastern historians become, rather than narratives of the past, archaeological deposits.
(Kroetsch, Lovely 7)

Another such deposit is the scientific or quasi-scientific field note, which plays a highly significant role in Badlands as well as in Kroetsch's entire literary oeuvre. Indeed, early drafts of the novel bear the title "Field Notes" which he would later assign to subsequent poetry collections. He records the struggle in his journal: "SUNDAY, AUGUST 26, 1973, Yesterday at noon I finished the final draft of Field Notes. (Hope I can make that title stick; it's modest but accurate)" (Kroetsch, MsC775/04.25 Box16/44). Of course he could not make it stick, because Kroetsch's entire conception of the field note refuses to be fixed. Eli Mandel expounds upon the rhizomic connections between field, note, story, and poem in his introduction to Field Notes: The Collected Poetry of Robert Kroetsch:

You hear Bob Kroetsch telling stories, not writing poems. The field is where (how) it grows, where it dies, where it takes place: ground, open field, field force, field games, the place defined in the telling [. . .] Each story, in other words (and there are always other words), tells another story. The poem is *continuing* because it cannot end. There is a stone that is a colour that is a stone. (Kroetsch, Field Notes 7)

If the adjective "collected" announces a snapshot in a contingent, continuous and self-perpetuating process, another poet in another introduction to another collection snatches on the inconsistency of employing so blunt an adjective as "completed" in any titular relation to Kroetsch's poetry. Fred Wah writes in Completed Field Notes: The Long Poems of Robert Kroetsch:

Completed 2: The conundrum of collecting together a series of poems purported to abhor closure into a 'Completed' project is answered only by the author's note that the sequence is 'in its acceptance of its own impossibilities, completed.' These poems are to 'stand', we are told, 'as the enunciation of . . . a poet's silence. (Kroetsch, Completed XV)

More poetry followed, and this particular silence proved temporary, but with this gesture Kroetsch foreshadows the moment when "readers who, by their generous strategies, make these poems a continuing sequence after all" (Completed 252). So if silence figures into Kroetsch's understanding of the field note genre, so too must the ephemera of literary production. Because the poems point backward to their own construction, and simultaneously forward to their future interpretations, the widest possible range of field data can be considered. Rather than treating Kroetsch's field notes as retrospective observations, Wah suggests they may be read as a guide to all writing in the field:

Think of "field notes" as temporary, as momentary gestures that interpolate possibility. Perhaps even as investigations into the potential for narrative. Or at least the poem's capacity for narrative. Then think of narrative not as a predictable line of action and consequence but as a maze of sudden twists, obstacles, impossibilities, possibilities. Kroetsch's *Field Notes* are not only lessons in the naïveté of completion lessons, in fact, on being lost, they are also a manual of field note technique. (Kroetsch, Completed XII)

Herb Wylie has recently called for a broader perspective on the "total literary picture" surrounding any given work of Canadian writing. By extension, he calls for a re-interrogation of the matrix of the "documentary" tradition. If there is a relative paucity of this kind of research it is not due to lack of critical precedent. John Livingston-Lowes pushed beyond what T.S. Eliot once considered the "frontiers of literary criticism" to pioneer process-focused investigation with his seminal study of Coleridge, The Road to Xanadu (108). Historiographic metafiction, which Hutcheon understands as writing which self-consciously interrogates the process of history making, very often relies on a body of primary source documentation which is implicitly if not explicitly cited.

For Kroetsch the author must also leave similar deposits, presumably for an equally greedy researcher to discover at a later date. In an interview with Radio New Zealand's Elizabeth Alley, Kroetsch emphasized the value of a "more comprehensive literary archive":

[W]hat we need in Canada is a kind of accumulation of those sub-literary documents: letters, journals, scraps of note-taking, manuscripts, which we are starting to get now. So you get a sense of where it's all coming out of [. . .] and that kind of material is part of the total literary picture. (Alley)

Kroetsch, ever the post-modernist, subsequently proceeded to fulfill his prescription by depositing his own sub-literary documents into the University of Calgary Special Collections. This second type of primary source material reveals a highly self-conscious literary process in action. However, like any breadcrumb trail laid in the deep dark woods, Kroetsch's archival trace confounds any reader who attempts to follow it. Consider for example his account of the origins of the long poem, "Seed Catalogue":

For me one of those deposits turned out to be an old seed catalogue. I found a 1917 catalogue in the Glenbow archives in 1975. I translated that seed catalogue into a poem called 'Seed Catalogue'. The archaeological discovery, if I might call it that, brought together for me the oral tradition and the dream of origins. (Kroetsch, Lovely 7)

Critics have accepted this ready explanation at face value. Indeed, Dennis Cooley as recently as 2006 recapitulated Kroetsch's version of events in an Alberta Views essay tantalizingly entitled, "*The Seed Catalogue Secret*". If there is such a secret it's probably tied to the fact that, as far as I'm aware, no researcher has produced the original document

even with help of Kroetsch's ostensibly straightforward directions: "And one afternoon in Calgary, in the Glenbow Archives (in the old building, not the spanking new one), in the basement I stumbled upon an old seed catalogue. I wrote the poem called Seed Catalogue" (Lovely 8).

During my visit to the same institution (in the no longer spanking new building which houses the same old documents and many more) the archivist regretted that every effort has been foiled in locating a 1917 catalogue with the entries cited by Kroetsch. Common experience holds that valuable items inevitably get lost during moves, but this seems hardly plausible in the case of the relocation of a highly regulated archival repository. And after an afternoon's worth of rummaging through the Glenbow's collection of similar documents, I uncovered yet another example of the *lovely treachery of words*, and dates for that matter: McKenzie's Seeds 18th Annual 1914. Same seed catalogue. Different year.

All of the specimens and their purple descriptions appear alongside illustrations and equally colourful attestations by satisfied customers. Excerpts from page three (1-5, 11-16) of Kroetsch's "Seed Catalogue" can be traced to pages eleven;

1. No. 176 – Copenhagen Market Cabbage: 'This new introduction, strictly speaking, is in every respect a thoroughbred, a cabbage of highest pedigree, and is creating considerable flurry among professional gardeners all over the world.'

and fourteen of A.E. McKenzie Co, Ltd.'s catalogue;

'I wish to say we had lovely success
this summer with the seed purchased
of you. We had the finest Sweet
Corn in the country, and Cabbage
were dandy. '
-W.W. Lyon, South Junction, Man.

from Kroetsch's fourth page (39-42) to McKenzie's eighth page;

No. 25 – McKenzie's Improved Golden Wax Bean: 'THE
MOST PRIZED OF ALL BEANS. Virtue is its own reward.
We have had many expressions from keen discriminating
gardeners extolling our seed and this variety.'

from Kroetsch's eighth page (107-110) to McKenzie's twenty-eighth page;

No. 1248 – Hubbard Squash: 'As mankind seems to have a
particular fondness for squash, Nature appears to have
especially provided this matchless variety of superlative
flavor.'

from Kroetsch's fifteenth page (245-254) to McKenzie's fourteenth page;

No. 339 – McKenzie's Pedigreed Early Snowcap Cauli-
flower: 'Of the many varieties of vegetables in existence,
Cauliflower is unquestionably one of the greatest inheri-
tances of the present generation, particularly Western
Canadians. There is no place in the world where better
cauliflowers can be grown than right here in the West. The
finest specimens we have ever seen, larger and of better
quality, are annually grown here on our prairies. Being
particularly a high altitude plant it thrives to a point of per-
fection here, seldom seen in warmer climes.'

from Kroetsch's seventeenth page (296-299) to McKenzie's eighth page;

'It's a pleasure to advise that I

won the First Prize at the Calgary Horticultural Show. . . This is my first attempt. I used your seeds.'

from Kroetsch's twentieth page (352-357) to McKenzie's fifty-ninth page;

Brome Grass (*Bromus Inermis*): 'No amount of cold will kill it. It withstands the summer suns. Water may stand on it for several weeks without apparent injury. The roots push through the soil, throwing up new plants continually. It starts quicker than other grasses in the spring. Remains green longer in the fall. Flourishes under absolute neglect.

from Kroetsch's twenty-first page (373-378) to McKenzie's eighty-seventh page;

No. 2362 – Imperialis Morning Glory 'This is the wonderful Japanese Morning Glory, celebrated the world over for its wondrous beauty of both flowers and foliage.'

and finally from Kroetsch's twenty-seventh page (485-487) to McKenzie's ninety-fifth page:

No. 3060 – Spencer Sweet Pea:
Pkt. 10c; oz. 25c;
¼ lb. 75 c; ½ lb. \$1.25.

It's entirely feasible that Kroetsch made a simple oversight and recorded "1917" as the year of publication when he actually meant "1914." Then again it would be neither surprising, nor altogether unforeseeable that a post-modern writer, preoccupied with destabilizing official histories, should muck around with his own literary archive as an

object lesson. At another point in his interview with Elisabeth Alley Kroetsch further explains his impetus for rejecting notions of monolithic history:

I did feel a certain kind of failure of inherited genres. The novel hadn't accommodated to my kind of my experience or say Rudy Wiebe's. So we had to be radical in that sense. Also I think we were radical in our rejection of inherited history which had left us out. So in my mind we became, what I call, archaeological. We started digging up the hidden material. Some of it about our own lives. Some of it about just ordinary people. Because our history, for some absurd reason, is about heroes not about ordinary people. And so we had to recover all of this material and then I think when you start working archaeologically you know that all you're working with is fragments. So there isn't as yet, and I doubt that there ever will be, a coherent total story. (Alley)

It's also worth mentioning that I listened to this interview on a creaky cassette tape, which the author consigned to his archive at the University of Calgary Special Collections. Perhaps Kroetsch meant to send future researchers down the garden path again, or perhaps he had other intentions. In speaking to his interviewer from Radio New Zealand, Kroetsch also literally speaks to his readers (and listeners). With earphones on, and a splendid view of the Rockies, I could almost believe that Kroetsch had joined me in the reading room to directly impart sense and meaning to the hoard of "field notes" that lay spread across the table:

I think it also will give us great insights, at some point, into the very nature of our own creative process, how we've re-imagined our place [. . .] [I]t's even an extension of the text. I think the notion that novel exists all by itself [. . .] in a vacuum is nonsense. And that's one of the things that we have to discover in new countries is how there is a context of other materials that are almost part of the text. So I think it's interesting to read the novel, and then go to the journal as a [. . .] subtext or as you say, a kind of interpretation, but

it's also like the novel starts to unravel and go out in other directions in very exciting ways. (Alley)

While it's no great stretch to admit a genealogical connection between supporting documents and the novel, the notion that my own research, this work, might also somehow become imbricated in Kroetsch's larger text seems harder to credence. Nevertheless, in speaking to Brian Edwards of Australia's Deakin University, on an equally ancient cassette also stashed by the author in his archive, Kroetsch directly invites his critics (and me) into what he calls "narrative extension":

[T]he critic extends the text. I mean I now think of your commentary on my work as part of the text in a sense. There are some critics I have excluded from this. I hope they vanish, at least [. . . .] [I]t's just a fact that some of those commentaries become a part of the text. There's no way in the world we could imagine say, *Portrait of the Artist as a Young Man*, independent of some of the readings that have been made. And I find that exciting. On that sense it's the critic as reader speaking, reminding us, telling us, of that shared text-making or text-announcing. (Edwards)

This section will comb through peripheral documentation drawn from, or cited in, Kroetsch's Calgary archive, in addition to documents in the Canadian palaeontological archive, as well as an historical selection of literary field notes, with a view to exploring how such materials constitute "narrative extension." Ondaajte's screenplay adaptation of Badlands, originally published in a 1983 issue of Descant, certainly constitutes a "narrative extension" of the original text. Although Ondaatje's prefatory notes obfuscate as much as they elucidate. He gives no indication that the piece is excerpted from a larger whole,

though inexplicable elisions in the body of the text suggest that this must be the case. The Descant version of The William Dawe Badland's Expedition 1916 reminded me of Kroetsch's novel, but with some unfamiliar scenes and some major plot holes. I mentioned as much to Stan Dragland who wrote Ondaatje on my behalf. Ondaatje's response was laconic and mysterious, but ultimately not very helpful: " ' I don't think the film script [of Badlands] was ever published, just a bit. There is the whole thing somewhere tho" (21 May 2005). I resolved to go to the source. Surely, the author could explain a thing or two about the film adaptation of his own book. So, I wrote to Kroetsch:

Where's somewhere, I wonder? Reminds me of a comment he [Ondaatje] made at the end of his notes to The William Dawe Badlands Expedition 1916: 'Many slides of locations have already been taken and are available.' To whom? Wouldn't mind having a look myself. (Pane, "Correspondence")

His response was not quite equivocation, but not quite clarification either:

[. . .] I have no recollection of what photos I considered including in the Badlands text. I believe the photos were in a little privately owned museum in Drumheller that is probably long gone. As for the many photos that I took--I lent them to Ondaatje and don't recall that I ever got them back. As for his script--I believe there's a copy somewhere in my archives. I don't have a copy here in Winnipeg [.]
(Pane, "Correspondence")

While I never could track down the photographs (Ondaatje has no idea what became of them), I found the complete screenplay in the Kroetsch Fond at the University of Calgary Special Collections. Critics like Bart Beaty, Peter Dickinson, Stuart McDougal, Robert Stam and many others, argue that "fidelity" is a fraught, implausible, and undesirable construct too often applied to the adaptation of literary works for the screen. However, the

fact that Ondaatje's screenplay was never widely published, or ultimately realized as a film, necessitates some basic non-evaluative comparisons. Ondaatje's treatment begins with a new scene at a rodeo that establishes how the character of Web comes to join the crew. One striking difference is that Ondaatje does not describe the chief bone-hunter, William Dawe, as a hunchbacked dwarf. In the novel Dawe seems to be a composite of several Geological Survey of Canada scientists and bone hunters. David Spalding observes that Dawe resembles George Mercer Daw[E]son, famed exploration geologist and former director of the GSC, who is instantly recognizable for his physical stature. Like Dawe, Dawson the historical figure was a dwarf who suffered a "hunchback."

Because George Mercer Dawson's father, Sir John William, was president and lecturer at McGill College, the entire family occupied living quarters in present day Dawson Hall. As the story goes one afternoon when George was still a child he fell into the "Burn" – a stream that flowed across the McGill campus (Eakins 233). He came down with the "chill" or "tuberculosis of the spine" (possibly Pott's disease but probably polio) which stunted his growth and left him a hunchback (O'Brien 15; Sheets-Pyenson 93). Too weak to attend regular school, George was educated at home by his father (O'Brien 15; Sheets-Pyenson 93). Mrs. Dawson was so distressed by George's appearance that she tried to protect him by hiding him away from strangers and friends alike (Sheets-Pyenson 93). These early challenges motivated George to become a dedicated scholar in the metropolis of the British empire. In 1869, at the age of 20, he enrolled at the prestigious Royal School

of Mines in London. Three years later he would graduate at the top of his class (Sheets-Pyenson 93).

When George returned to Canada he conducted geological survey work around Pictou, Nova Scotia, but soon accepted a position on the National Boundary Commission charged with mapping the Canada-U.S. border (Sheets-Pyenson 94). In 1875 he was engaged by the Geological Survey of Canada. Dawson fended off desk appointments, preferring always to stay in the field (Zaslow 112). He remained with this organization for his entire career and eventually in 1895 assumed its directorship (Sheets-Pyenson 94). Through his field work he came into contact with west-coast indigenous peoples. The ethnological data he collected also made him one of the pioneers of Canadian anthropology (Sheets-Pyenson 94).

In spite of the formidable obstacles the exploration of the Canadian West posed at that time and his own diminished physical stature, George made a name for himself as a Canada's pre-eminent field geologist (Sheets-Pyenson 94). He never allowed his handicap to restrict his travel on horseback and on foot. He often out-rode, out-walked and out-climbed his more robust colleagues (Zaslow 112). Modern geologists who have examined his work marvel at the precision of his notes, observations and sketches; George Dawson rarely made incorrect conclusions (Zaslow 112). In addition he shared his father's ability as

a lecturer and scholarly writer. He published widely in several fields: geology, anthropology, botany, zoology and history (Zaslow 112).

Ondaatje also seems to elide the character of McBride. When the flat boat is upset in rapids upstream from Drumheller, McBride goes temporarily missing. He reappears marooned on a gravel bar beside a crude raft of his own devising as opposed to floating in a stray pig trough as in Kroetsch's novel (Ondaatje, William 15). Ondaatje chooses to situate McBride's subsequent repairs of the expedition craft downstream from a generic "rancher's house", rather than Kroetsch's "stone house" – an allusion to a distinctive structure on the Red Deer River replete with its own historical resonances (Ondaatje, William 18-19; Kroetsch, Badlands 35-38). Years later Ondaatje would discuss coping strategies for the problems of abundance and redundancy in a source text with the film editor Walter Murch (Conversations 126-127). For his adaptation of Badlands Ondaatje seems to have relied on literalization. As a screenwriter he is compelled to trade ambiguity in dialogue for plot advancement. In the novel, McBride steals away into the night, conspires with a ferryman for passage, and wordlessly extricates himself from the story. He lets his good work (and good sense) speak for itself. In the screenplay he completes the job then paints a sign that reads: "GONE HOME. I AM A SANE MAN" (Ondaatje, William 21).

Murch would later explain to Ondaatje three considerations for cutting film in real time. He put special emphasis on the last: "What shot shall I use? Where shall I begin with

it? Where shall I end it?" (Ondaatje, Conversations 267) Ondaatje likely drew on his editing faculties to end the scene at the "exact moment in which it has revealed everything that it's going to reveal, in its fullness, without being overripe" (Ondaatje, Conversations 267). Stam *et al.* might argue that this decision in no way diminishes the original work of literature, nor does it lead to an inferior film. Although Ondaatje admits "books and films often make bad marriages" (perhaps referring to the much derided excision of the Hiroshima bomb from The English Patient film) he recounts an anecdote that demonstrates his opinion of fidelity criticism. Someone asked a writer, " 'can you believe what the film producer did to your book!' And the writer replied, 'He did *nothing* to my book' " (Dickinson 5; Ondaatje, Conversations 126, 213).

Another salient divergence from the novel is the screenplay's presentation of expedition photographs taken by a peripheral character named Sinnott, and preserved by Anna Yellowbird until the time of the contemporary story thread involving Dawe's adult daughter, Anna Dawe. They are revealed at the beginning of Ondaatje's screenplay in a new show-and-tell scene, whereas they only appear at the end of Kroetsch's original as a kind of documentary coda. Ondaatje displays these photos to the camera as a device to establish the chronology of the expedition and the identity of its participants (Ondaatje, William 13; Kroetsch, Badlands 219). They serve no such function in the novel. As if to balance this structural shift, Ondaatje entirely omits an extended scene that occurs at the end of Kroetsch's novel in which Sinnott documents the tragic and farcical conclusion of the river

journey (Kroetsch, Badlands 214-215). At that point the photographs serve to underscore a metaphor of impending and inevitable extinction promulgated by Sinnott throughout the novel. Such decisions reflect the exigencies of each respective media. Obviously film employs a different grammar than literature and vice versa. Robert Stam calls these "materials of expression", and is careful not to invoke notions of relative value (59). He argues that adaptation can cast a source text in a broader web of intertexts (67). Perhaps Kroetsch had a presentiment of this potential when according to his research notes he chose Sinnott's name to "mock Gennett" (Kroetsch, MsC27.16.9 loose leaf). Ventura has observed that "in German the word 'sinn' means sense; Sinnott would therefore suggest someone who is senseless" (196). Ironies aside perhaps Kroetsch also hoped to acknowledge the theorist's further sub-categorizations of "transtextuality".

One of the most intriguing mode-shifts in the screenplay is the manner in which Dawe conveys the content of his field notes. Ondaatje uses "voice-over" as a means to achieve soliloquy. He employs this theatrical technique not only to the end of parody, but also to extend Kroetsch's implicit critique of the claim to objectivity purported by field notes. At stake is the notion that scientific writing in the field is essentially impermeable to superfluous, or personal observations. Kroetsch graphically indicates passages from Dawe's field book with italics. Other than fixed and extended shots of the pages themselves, it is difficult to conceive of any better filmic technique for making written notes *legible* to the viewer. Nevertheless, Ondaatje deliberately seeks to accentuate the hyperbolic and

performative aspects of Dawe's note generation already suggested by Kroetsch in the original novel. Indeed Ondaatje even ups the ante by appropriating chunks of dialogue, and description proffered by the third person narrator to serve as fodder for Dawe's soliloquies. He puts these in *aural* italics, most notably in scenes 77-79, to bring the contrast between physical labour and scientific observation into sharp relief. Dawe scrawls in his notebook oblivious to the suffering of his crew members who toil in the hot sun. Ondaatje makes his agenda clear in a series of elaborate stage directions:

TUNE and WEB and DAWE work with shellac and plaster putting it on newly exposed bone. TUNE begins to sing and WEB joins in out of key. TUNE groans at WEB's voice. We hear DAWE's diary voice over during this sequence, we get a shot of him writing while the others work.

DAWE (V.O.)

Day one. We have found the
Chasmosaurus type. Small nasal
horn two feet long. . .
Day two. The skeleton takes shape.
Working in the rock bowl. We work
all day chipping free three small
bones. . .A failed mausoleum.
[. . .]

70.

78 EXTERIOR – COTTONWOODS BY RIVER – DAY

Montage of GRIZZLY by river cutting down cottonwoods, shaping two skids, sawing two by four's and building a platform. He is making a stoneboat through [sic] the audience will not know what he is doing.

79 EXTERIOR – SKELETON SITE – DAY

At the skeleton site, the excavations have progressed a great deal. While we see their montage of work, we hear DAWE.

DAWE (V.O.)

Day ten. We are wrapping the skeletons to take back to the

boat. . .

We see the montage of bones being wrapped in plaster. TUNE mixes the bags of plaster with water. While DAWE's black clothes have remained black, though dusty,

TUNE and especially WEB are covered in white. WEB in the trench under the bones has plaster of paris dropping on him all the time as they soak the burlap in plaster and put it on the bones. He lifts them up to TUNE -- the plaster running down his arms. (Ondaatje, William 69-70)

Curiously, Ondaatje backs away from exposing a portion of Dawe's notes as pure confabulation. In the novel, Dawe adopts an imaginative strategy for generating field notes when a leg injury physically prevents him from making observations of a specimen at the excavation site (Kroetsch, Badlands 168). It is a key scene because it reveals not only Dawe's personal vanity, but because it demonstrates that scientific field notes are as corruptible as any other literary genre. Ondaatje may have decided that even a series of jump cuts would fail to convey this contention as powerfully as typography. However, Ondaatje does not relent in his criticism of Dawe's hubris. Instead he uses what Stam calls the "complex resources" of film to meet the problem obliquely (59). Firstly, he parodies the formal inflection in Dawe's field notes that renders every word a message to posterity. This is especially evident in a caustic scene set during the contemporary thread of the story. Anna Dawe and Anna Yellowbird arrive at Dinosaur Park to discover a display of schlocky, fiberglass dinosaurs tended by an equally dilapidated fiberglass "zoo-keeper". By inserting a dime into its coin box the statue comes to life. A "bored voice" intones banal

information about the beasts and their discoverers. It precedes Anna Dawe's admission that all she knows of her father comes from his field notes:

ANNOUNCER OF THE ZOOBOX
 In nineteen sixteen an expedition led
 by William Dawe made major discoveries
 along the Red Deer River, the first
 expedition to find. . . (Ondaatje, William 19)

In a similar gesture later in the screenplay Ondaatje grants Dawe's lordly privilege of soliloquy to his daughter who does not use it to expound upon palaeontological subjects, but rather to wax poetic about a sexual fantasy:

ANNA DAWE (V.O.)
 They wished, they said, to show us
 what the prairie was like at night.
 And sweet Jesus how I wanted to.
 Wanted to lie out there on the prairie,
 looking up at the stars, getting fucked
 by a man whose name I did not know,
 whose face I could not quite remember,
 and would never see again. . .
 the smell of cowshit rich. . .
 and delicious in the air.
 (Ondaatje, William 58)

Such additions need not be viewed through the reductive lens of fidelity criticism. As Kroetsch explains to Brian Edwards of Australia's Deakin University, even a critic's work extends a text. It is no great leap then to reformulate adaptation as another kind of "narrative extension". Ample evidence in the Kroetsch Fond points to a collaborative relationship between the author and the screenplay writer. In his personal correspondence, Kroetsch recalls that he took Ondaatje on an excursion into the very setting of Badlands:

"Ondaatje and I paddled a canoe down a day-long stretch of the Red Deer and looked for bones along the way [. . .]" (Pane, "Correspondence"). Indeed Kroetsch's notes show that he was actively scouting shooting locations for a potential film even as he was shopping out the novel for foreign publication. Ondaatje later takes Kroetsch's advice and adopts Gleichen as the site where Anna Dawe first encounters Anna Yellowbird. He likewise adopts the Patricia Hotel as another convenient venue. Ondaatje fleshes out an outrageous scene at the Hotel bar involving a man and his pet geese (Ondaatje, William 54-56). It exists in an embryonic form in Kroetsch's research notes. Years later Kroetsch would recall "Frenchie Leroux" in an introduction to an illustrated volume entitled Alberta: The Badlands (3). This revised version of the story bears a striking resemblance to scenes 55-56 from Ondaatje's screenplay with one minor difference. Rather than getting kicked out by the Patricia Hotel bartender, Leroux *is* the bottle-slinger. Clearly, Kroetsch made his source material and research notes available to the screenwriter, who in this instance freely elaborated upon them.

It is evident that Kroetsch endorsed Ondaatje's screenplay as a legitimate piece of art in its own right. Furthermore, there is good cause to suspect that Kroetsch viewed it as a kind of narrative extension to his own text written by a respected literary peer. Not only was Kroetsch prepared to share his source documentation with the writer of The William Dawe Badlands Expedition 1916, but he was also prepared to endorse the screenplay to the end of arranging its production. Kroetsch met with Ondaatje in Toronto on at least one

instance. He records the date in his diary: "FRIDAY, MAY 6, 1977 Breakfast with Ondaatje, in the hotel. We talk about the BADLANDS film script [. . .]" (Kroetsch, "Journal 1976-77"). The previous day's entry details a lunch meeting with a prospective producer whom he describes this way: "Lunch with Allen King: a shy, talented man, movie-maker. Interested in the Ondaatje script of BADLANDS. He expects any development will take a long time" (Kroetsch, "Journal 1976-77"). Unfortunately, the prediction proved to be accurate. As Kroetsch recently wrote in a personal email, "About the film rights to Badlands--someone has them right now but is doing nothing and has done nothing for quite a long time. That's the way in the film world" (Pane, "Correspondence").

Another element of narrative extension is localized in the stature of William Dawe. While Kroetsch undoubtedly intended that certain elements of George Mercer Dawson's biography should bleed into the back-story of William Dawe, a citation on a single sheet of foolscap offers the most compelling clue to Dawe's most distinctive physical feature.

William Welleford, [sic] The Fool and the Sceptre
 GV
 1828
 W5 Northwestern Univ Press
 1969
 1735 Benson Ave
 Evanston, Ill 60201
 (Kroetsch, MsC27.16.9 loose leaf)

Willeford's study of clowns contains a discussion of a particular subset of fools:

In many times and places dwarfs and hunchbacks have served as jester, the dwarf being defective in physical size in a way that corresponds to the

idiot's insufficiency of intelligence, the hunchback being deformed in a way that corresponds to the psychic aberration of the madman. (14)

Clearly, Kroetsch found the latter portion of the description intriguing. He takes pains to cast Dawe's all out obsession for fossil bones as the folly of a madman. Notes that appear throughout File 9 from Box 16 prove just how seriously Kroetsch took the comedy in Badlands.

barque becomes comic
ark, saving the
dead, the extinct.

- comic flood in
absolute sunshine –
flood in a
drought.

[. . .]

comic scene – was on “[40 days?]”
wet clay slipping, falling,
climbing as they spot the
bone they have been seeking
and very nearly kill themselves
trying to get to it. (Kroetsch, MsC27.16.9)

Even the fortune-teller is taken aback by Dawe's utter disregard for the consequences of his desires (Kroetsch, Badlands 62). Willeford raises Erasmus' complex notion of madness as both folly and blessing. Whereas Erasmus likens madness to vanity and self-delusion, he also allows for the ancient traditional belief that it may represent a "transformation of consciousness" to facilitate the dissemination of truth (Willeford 25-26). However, Willeford contends that truth-telling is no more central to the fool than stupidity,

madness, or freakishness. Rather, confusion is central "between what has value (truth of whatever kind) and what has none (nonsense)" (26). Willeford's mineralogical analogy that the fool may treat "diamonds and dull stones" interchangeably, ascribing either supreme value or worthlessness according to caprice, is the real principle characteristic of the fool (26). It is a particularly appropriate formulation for a man who ostensibly values the fossilized bones of extinct creatures over the living flesh and blood of his crew.

Moreover, Willeford's invocation of contradictory terms, coined by the psychoanalyst Michael Balint, also gives clues to the fool's paradoxical nature. Dawe, it would seem, is both a "philobat", one who derives pleasure from exercising his own skills and power on a journey rather than arriving at a destination in wide open spaces (ie. besting the badlands); and an "ocnophil", "a person whose pleasure is found not in journeying from one place to another but in being in one place close to an object which he needs and values" (ie. lavishing attention on the bones) (Willeford 27). As Willeford succinctly puts it, "since he is both, he is neither" (27). This inherent contradiction jibes with Kroetsch's own understanding of the figure, which he likens to that of Robertson Davies' fool in The Manticore. In a Sunday, September 16, 1973 journal entry Kroetsch explains that his "sense of the fool's role" is "[t]o uninvent the world. To unconceal. To make visible again. That invisible country, Canada. Our invisible selves" (Kroetsch, "1973 Diary").

Willeford pushes that function even further into farce: "he expresses, relieves, and ridicules the anxieties of others in the face of objective reality" (Willeford 27). Lilian Brown, in the volume consulted by Kroetsch, describes her husband Barnum in similar terms: "Nothing aroused him to a higher emotional pitch than the thought of bone, unless it was actually uncovering some monstrous relic. 'God's country,' he called that strip of lost world" (Brown, Married 16). She touches up the Dorian Gray-like portrait in her second memoir, Bring 'Em Back Petrified. Her fool becomes completely immersed in the task of excavating the fossilized corpse of an armadillo-like creature known as a glyptodont. Apart from ignoring the blazing heat beating down on their patch of Guatemalan hillside, he scoffs at his wife's respect for the strictures of time:

'What I mean,' I added, bluntly, 'isn't it time to eat?'
 He looked up in surprise. 'Lunchtime already?'
 'Lunch!' I snorted. 'We had lunch seven hours ago. This is
*supper*time!'
 That's what bones do to a man.
 (Brown, Bring'Em 212)

Perhaps Lilian Brown's fool, like Kroetsch's fool, in his confusion and deformity, share a trait in common with the fool characterized by Willeford who has "touched the abyss and [has] been possessed by something within it" (26). Before Balzac's Rafael is possessed by an equally ambiguous force in La Peau de Chagrin, he too is shown a glimpse of the abyss as seen through the eyes of pioneer palaeontologist, Baron Georges Cuvier:

Have you never launched into the immensity of time and space as you read the geological writings of Cuvier? Carried by his fancy, have you hung as if suspended by a magician's wand over the illimitable abyss of the past? When the fossil bones of animals belonging to civilizations before the Flood are turned up in bed after bed and layer upon layer of the quarries of

Montmartre or among the schists of the Ural range, the soul receives with dismay a glimpse of millions of peoples forgotten by feeble human memory and unrecognized by permanent divine tradition, peoples whose ashes cover our globe with two feet of earth that yields bread to us and flowers. (Balzac 30)

Dismay is the last emotion Rafael feels as he passes through the various levels of the Cabinet. In fact the higher he goes, the more he is elevated from the suicidal depression in which he is sunk by his wretched poverty, and failed gambling house tryst. At the same time the scale of the treasure surrounding him becomes more evident and less plausible, "the place presented a confused picture in which every achievement, human and divine, was mingled" (Balzac 24). Indeed to Rafael "every land of earth seemed to have contributed some stray fragment of its learning, some example of its art" (Balzac 25). It renders Dicken's Old Curiosity Shop a flea market by comparison—little more than "one of those receptacles for old and curious things which seem to crouch in odd corners of this town and to hide their musty treasures from the public eye in jealousy and distrust" (Dickens 13).

The shop assistant appeals to his "poet's temperament" and imbues the "dry bones of twenty future worlds" with such significance that "this sea of inventions, fashions, furniture, works of art and fiascos, made for him a poem without end" (Balzac 24, 27). His guide even goes so far as to exalt Cuvier as a poet. Recall Kroetsch's note, "scientist as man of the imagination" and note the shop owner's formal address of Rafael as "a poet and man of science" (Balzac 36). Furthermore the guide argues that the Baron, in his treatises, has

"reconstructed worlds from a few bleached bones", "animated forests with all the secrets of geology gleaned from a piece of coal", and "discovered a giant population from the footprints of a mammoth" (Balzac 31). With a final *coup de grâce*, the guide insists that Cuvier can "call up nothingness before you without the phrases of a charlatan" (or a rhyming couplet)! Even so sensitive and tortured a soul as Rafael must admit that not even Byron's poetry can bring the dead to life from a "lump of gypsum" (Balzac 31). It's a wonder Rafael isn't sickened with vertigo after such a grand, sweeping, discourse. Imagine then the temptation when he is finally presented with an object seemingly plucked from the very depths of time plumbed by so vast a mind as Cuvier's.

The shagreen appears innocuous at first, but for its strange luminescence. "It was only about the size of a fox's skin, but it seemed to fill the deep shadows of the place with such brilliant rays that it looked like a small comet, an appearance at first sight inexplicable" (Balzac 38). Alberto Manguel might well read this lambency as a metaphor for the paradigm shift heralded by the transition from papyrus scrolls to parchment codexes. In his book, The History of Reading, Manguel lauds the codex for its portability and its format, which permitted the exponential expansion of literary texts (126-127). Skin, Manguel contends, was truly a wonder for poets such as Martial who penned this testimonial in the first century:

Homer on parchment pages!
The Iliad and all the adventures
Of Ulysses, for of Priam's kingdom!
All locked within a piece of skin

Folded into several little sheets!
(Manguel 127)

Ever the pseudo-scientist, Rafael attributes its lustre to the skill exercised in burnishing a fine hide. He's not so decisive about the import of the Arabic inscription, but he's no less intrigued. Beneath a rind of mineral matrix, Dawe's dinosaur bones might have worn a similar implied, if not literal, warning. Not even America, Dawe's fortune-teller, could deliver so chilling a prophecy:

POSSESSING ME THOU SHALT POSSESS ALL THINGS.
BUT THE LIFE IS MINE, FOR GOD HAS SO WILLED IT.
WISH, AND THY WISHES SHALL BE FULFILLED;
BUT MEASURE THY DESIRES, ACCORDING
TO THE LIFE THAT IS IN THEE.
THIS IS THY LIFE,
WITH EACH WISH I MUST SHRINK
EVEN AS THY OWN DAYS.
WILT THOU HAVE ME? TAKE ME.
GOD WILL HEARKEN UNTO THEE.
SO BE IT!
(Balzac 40)

Even though Rafael is "Orientalist" enough to make the translation, his poetic fancy seems to grapple with his scientific reason. He asks of the proprietor, "is it a jest, or is it an enigma?" (Balzac 41) Neither possibility prevents him from accepting its binding terms. Bruce Chatwin makes another strip of old hide into a holy grail. He begins his famous travel narrative, *In Patagonia*, with this telling description:

In my grandmother's dining-room there was a glass-fronted cabinet and in the cabinet a piece of skin. It was a small piece only, but thick and leathery, with strands of coarse, reddish hair. It was stuck to a card with a rusty pin. On the card was some writing in faded black ink, but I was too young then to read.

'What's that?'

'A piece of brontosaurus.'

[. . .] Never in my life have I wanted anything as I wanted that piece of skin. My grandmother said I should have it one day, perhaps. And when she died I said: 'Now can I have the piece of brontosaurus,' but my mother said: 'Oh, that thing! I'm afraid we threw it away.'

(Chatwin, In Patagonia 1-2)

Chatwin's mother was a poor palaeontologist. She was right to tell her son that the skin belonged to an extinct creature, but that beast was no "brontosaurus" from the upper Jurassic. In fact it was no reptile at all. The skin had been the property of the giant land sloth, *mylodon*, which frequented Patagonia during the last ice age – hence the ginger hair and the relatively youthful complexion. Chatwin's forbear, the sea captain Charles Millward, extracted it from a cave at Lost Hope Sound with the help of a resourceful German, and several sticks of dynamite. He shipped assorted bones and bits of pickled flesh to the Natural History Museum in South Kensington, and another sample to Chatwin's grandmother as a peculiar gift.

W.G. Sebald calls the strange piece of skin "a key myth" for Chatwin, with an undeniably "fetishistic character" (184, 186). He traces its operative force, to Balzac's shagreen, and beyond.

[L]ike all mortal remains devoutly preserved and put on show, [it] has something perverse about it, and at the same time something pointing far beyond the realm of the secular. It is an item that, as in Balzac's novel *La Peau de chagrin* grants even our most secret and shameful wishes, but shrinks a little with the bestowal of each desired object, so that the

gratification of our amorous longing is intimately related to the death wish.
(Sebald 186)

Dawe's dinosaur bones fit the description just as well. His reverence for the fossils, like Chatwin's, and Rafael's, reverence for their respective skins, has a manically religious quality about it, even if he translates that passion into the secular pursuit of science. Even the most expert reconstruction relies heavily on the imagination. Like the devotee who sees a holy relic in a dessicated finger, so does the palaeontologist see a living, breathing animal, in dusty fossils. As Sebald writes in the spirit of Benjamin, the skin, or petrification as the case may be, is "entirely without value in itself" beyond its capacity to "inflam[e] and satisf[y] the lover's illicit fantasy" (Sebald 184).

Simply finding the fetish object is not enough. To be properly adulated it must be displayed, preferably amid equally inscrutable objects. Nicholas Shakespeare argues that Chatwin's early exposure to so curious a cabinet, had a profound effect upon the author:

For Bruce, the lockable cabinet in West Heath Road was a sustaining metaphor and it informed both the content of his work (faraway places, one-offs, marvels, fakes, the Beast) and its style patchwork, vitreous, self-contained). The shelves and drawers were a repository for collecting, movement and story. Bruce's life would enact all three [. . .] He hated to see a collection broken up. (Shakespeare 34-35)

Chatwin's editor, Susannah Clapp, recalls an early draft of In Patagonia that featured an extended description of the cabinet. While she calls it a "spirited piece of

writing", she claims that it "delayed the point at which the book got to Patagonia" (Clapp 33). Ironically, most of that delay comes not with the extended inventory of his grandmother's credenza, but rather with a protracted and poetic theory about how his "brontosaurus" became "prisoned in a womb of blue ice" only to emerge from its glacier, many years later, "miraculously preserved" (Clapp 33). Perhaps more intriguing to the reader are the companion pieces to the "brontosaurus skin", which foreshadow and recapitulate some of Chatwin's later journeys. Evidently, they are decidedly less compelling to Chatwin, expressly because they are not lost. Instead they are recovered and preserved by his relatives.

Already I had a Museum, a cabinet with Roman glass, a miniature penknife, a Tsarist rouble, a real piece of eight and the skull of a field mouse, waiting only to receive its prize exhibit. But my mother, and other relatives, had swooped on the house of the dead, had captured the valuables, and thrown away the piece of brontosaurus. I have forgiven them, but not forgotten. For I am a man who still walks up and down the earth looking for a lost piece of brontosaurus. (Clapp 33)

The paradox is duly noted. Chatwin the nomad perennially struggled with Chatwin the collector. Indeed he dramatized this very tension in his later works. His bizarre Welsh twins from On the Black Hill inhabit a kind of pastoral treasure trove where time is effectively held at bay, sometimes even at gunpoint:

On the mantelpiece stood a pair of Staffordshire spaniels, five brass candlesticks, a ship-in-a-bottle and a tea-caddy painted with a Chinese lady. A glass-fronted cabinet-one pane repaired with Scotch tape – contained china ornaments, silver-plated teapots, and mugs from every Coronation and Jubilee. A fitch of bacon was rammed into a rack in the rafters. The Georgian pianoforte was proof of idler days and past accomplishments.

Lewis kept a twelve-bore shotgun propped up beside the grandfather clock: both the brothers were terrified of thieves and antique-dealers. (Chatwin, On the Black 12)

In a similar vein his Meissen porcelain fanatic, Utz, railed against the forced cohesion of institutional collections all the while jealously guarding his own precious baubles:

‘An object in a museum case’, he wrote, ‘must suffer the de-natured existence of an animal in the zoo. In any museum the object dies – of suffocation and the public gaze – whereas private ownership confers on the owner the right and the need to touch. As a young child will reach out to handle the thing it names, so the passionate collector, his eye in harmony with his hand, restores to the object the life-giving touch of its maker. The collector’s enemy is the museum curator. Ideally, museums should be looted every fifty years, and their collections returned to circulation. (Chatwin, Utz 20)

Still as Nicholas Shakespeare observes through Robert Hughes, Chatwin's imagination was fired by the *wunderkammer* of yore. He admired Durer's drawing of the monstrous "pig of Lanser", an eight-legged mutant, which he found to symbolize "an inadvertent crack in the seamless world of cause and effect" (Shakespeare, 35). Lawrence Weschler boils down all the fuss behind these cabinets of curiosity:

[T]his sort of hoard (the chamber of wonders, in which the word *wonder* referred both to the objects displayed and the subjective state those objects inevitably induced in their respective viewers) was rampant all over Europe, and the question arises: Why? Or rather, why *then*? To say that such wonder was an essential aspect of early Renaissance experience merely begs the question: What was it about the early Renaissance that provoked such an avalanche of wonder? And of course the answer [. . .] lies in the avalanche of marvelous new *stuff* that had suddenly begun pouring over the transom

into a previously parochial, hidebound, closed-in European subcontinent. In particular, the stuff of the New World. (Weschler 77)

Weschler's insights are not limited to that private museological fad of the late sixteenth and early seventeenth centuries. Rather he offers them in the course of his study on a contemporary facility, more post-modern art installation than reliquary, known as The Museum of Jurassic Technology. Its founder, David Wilson, adopts the format of early curiosity cabinets for his *museum* expressly to question to the nature of collection, exhibition and institutionalized memory – a mission statement embodied by Badlands and much of Kroetsch's oeuvre. Weschler's supple notion of wonder, and his grasp of how "new" material can generate a paradigm shift, has direct implications for Chatwin, and Kroetsch's Dawe.

Dawe wonders at the success of his predecessors, Brown and Sternberg, and he anticipates the wonder that will be generated by his eventual discovery of *Daweosaurus magnicristatus*. W.G. Sebald counts as integral to Chatwin's authorial development "those early moments of pure fascination" when peering into his grandmother's cabinet "past his own blurred reflection", he "marvelled at the jumble of curios [. . .] from very distant lands" –some of dubious provenance and some hung with "apocryphal stories" (183).

Shakespeare reports that the collection also contained a pair of potent metaphors for wayfaring: a Victorian walker's compass, and a pocket sundial with exotic place names inscribed on its rim "Boston, Easter Island, Buenos Aires, Ochotsk, Tartary, and – on the

dial just below the needle – Botany Bay" (404). Like patrons of the *wunderkammer* Chatwin wondered at his own wonder. Unlike them he undertook a lifetime of wandering to replicate the sensation dragging back to Homer End copious notes, always in his much mythologized *moleskines*, cryptic photographs, and mementos of Peruvian feathers, rare marbles, an aboriginal subincision knife in Australian "opal", the coarse red hairs and semi-fossilized turd of an Ice Age sloth from the cave at Lost Hope Sound. In a retrospective passage, written years after In Patagonia, Chatwin recognizes these artifacts as essential ingredients to an ancient kind of field note:

My piece of dung wasn't exactly the Golden Fleece, but it did give me the idea for the form of a travel book, for the oldest kind of traveller's tale is one in which the narrator leaves home and goes to a far country in search of a legendary beast. (Chatwin Patagonia Revisited 17)

At one point he even tried to encapsulate similar curiosities in hutches of his own devising. Clapp remembers that Chatwin built three "God Boxes" and filled them with various specimens. He destroyed all but one: a cube about a foot square painted green with a glass window. It contains *gris-gris* he purchased from a West African witch doctor:



Fig. 23 "God Box". Bruce Chatwin. (Chatwin, Photographs 17)

Arranged before a wallpaper backdrop and a small mirror are: "a lion's ear drum, a pair of bird's talons joined with a strip of indigo cloth, a guinea fowl's feather, a dried iguana, and a creature's intestines" (Clapp 97). The photo caption calls the lizard a "gecko" and mysteriously adds, "there used to be a monkey's skull but it has disappeared" (Chatwin, Photographs 16). Kroetsch's Dawe also builds his own "God Boxes" and stuffs them with a fossil menagerie. In a frenzy, he tears up the deck of his flatboat for construction material. Although they are decidedly more caskets than display cases. With them Dawe

demonstrates a terminal case of collector's mania. Chatwin also got a taste of "the lost beast fervour" in Patagonia where he, like the Browns, fell for a prize glyptodont, which through wild conjecture, he believed had been dispatched by early humans with obsidian knives (Shakespeare 297). Moreover, like Dawe, and his historical peers in the badlands of Deadlodge Canyon, Chatwin experiences the bone hunter's disconnect. In a letter to his wife, Elizabeth, Chatwin admits, "I know of no place that you are so aware of prehistoric animals. They sometimes seem more alive than the living" (Shakespeare 297).

Bones are to Dawe as every random object is to Jack Deemer, the ultimate post-modern collector of Kroetsch's later novel, Alibi. In a drunken moment Deemer's agent, William William Dorfen, defends his employer as "an artist in his own right, a kind of looney sculptor intent on tacking together, or assembling in warehouses at least, all the loose pieces, all the high-class garbage of the ridling earth" (Kroetsch Alibi 20). Dawe's crew could never be so generous. Nor could they ever be this circumspect about their boss and his collecting predilection, "So now, against all the randomness, he wants to collect, possess, some special and immovable part of the earth itself. Some place of entrance and exit, right there, wherever that is, where the mystery might or might not be" (Kroetsch, Alibi 58-59).

While Deemer is ostensibly after the perfect spa, so mythological a real estate ad could apply to the great underworld gates of antiquity broached by: Odysseus at The Grove of Persephone; Hercules and Orpheus at Cape Taenarum; Aeneas (and likely the Pilgrim) at

the Cumean Cave beneath Lake Avernus; or to other gates penetrated by the Lindebrock Expedition at the Icelandic Volcano of Sneffels; and traversed by the Challenger Expedition at the South American plateau of Maple White Land. That Deemer should send Dorf to eastern Europe in search of dental specimens is less puzzling when a noseless Hungarian "collector [who] loved his collection" explains, with palaeontological alacrity, that teeth, "because of their constituency, will survive when all else is gone. Teeth he said, absent mindedly picking his nose, may well be our only immortality" (106-107).

Both Chatwin and Kroetsch knew Benjamin's views on collecting. They no doubt admired the fact that his entire oeuvre is, both in content and style, one great cabinet of curiosity. Perhaps Kroetsch acquired the model for his tooth collector during a stroll with Benjamin through the arcades of Paris, where between a discount book shop and a button boutique, an old woman reputedly sat reading in her salon amid a collection of teeth "in gold, in wax and broken' " (Benjamin, Arcades 203). Likewise Chatwin seems to have applied Benjamin's notion of collectors as "beings with tactile instincts" to his character Utz, who with every stroke of his porcelain figurines demonstrates that "possession and having are allied with the tactile" (Benjamin, Arcades 206). Another fragment also resonates with Chatwin, and with Dawe upon his flatboat. Benjamin recapitulates Strindberg's haunting portrait of the arcades-cum-ark abandoned in his story, "The Pilot's Troubles": "From floor to ceiling there were rows of shells of every kind, collected from all

the seas of the world. No one was in but there was a ring of smoke in the air . . ." (Benjamin 205).

Passages from In Patagonia and Utz invoke Strindberg's (and Benjamin's) allegory about static collections. Not only is the museum lifeless by its very definition, but in these separate though remarkably similar examples, Chatwin contends that it can hardly fulfill its primary mandate of edifying the past:

An alley of gingko trees led past a statue of Benito Juarez to the steps of the museum. The Argentine national colours, the 'blue and white' , fluttered from the flagpole, but a red tide of Guevara dicta sprawled up the classical facade, over the pediment and threatened to engulf the building. A young man stood with his arms folded and said: 'The Museum is shut for various reasons.' A Peruvian Indian who had come specially from Lima stood about looking crestfallen. Together we shamed them into letting us in.

In the first room I saw a big dinosaur found in Patagonia by a Lithuanian immigrant, Casimir Slapelic, and named in his honour. I saw the glyptodons [sic] or giant armadillos looking like a parade of armoured cars, each one of their bone plates marked like a Japanese chrysanthemum. I saw the birds of La Plata stuffed beside a portrait of W.H. Hudson; and finally, I found some remains of the Giant Sloth, *Mylodon Listai*, from the cave at Lost Hope Sound – claws, dung, bones with sinews attached, and a piece of skin. It had the same reddish hair I remembered as a child. It was half an inch thick. Nodules of white cartilage were imbedded in it and it looked like peanut brittle. (Chatwin, In Patagonia 7-8)

Indeed Chatwin comes close to parody with his explanation for the museum's closure in the previous and following citations. "Various reasons" reveals not only the absurdity of totalitarian control over public exhibitions, but also the presumption behind the esoteric collections themselves, not to mention the ornate repositories that hold them. All

the effort behind the gathering and display of extinct/antiquated specimens is exposed as little more than the gratification of a personal obsession:

The museum, a grandiose edifice from the 'good old days' of Franz Josef, had been named after the Emperor Rudolf to commemorate his passion for the decorative arts. Along the front facade, there were sculptured bas-reliefs representing various crafts: gem cutting, weaving, glass-blowing. A pair of grimy sphinxes sat guard over the entrance; burdocks were sprouting through cracks in the steps.

The Museum was shut for 'various reasons' – as it had been shut in 1967. Only one room, on the ground floor, was open for temporary exhibitions. The current show was called 'The Modern Chair' – with student copies after Rietveld and Mondrian, and a display of stacking chairs in fibreglass. (Chatwin Utz 122-123)

Such ridiculous discretion is no less arbitrary than the collector's motivation for piecing together any given assemblage. Ultimately it is the collector who imparts a sense of reason to the collection. In Kroetsch's Alibi Dorf dramatizes this subjective logic by reading a collection in the label on a bottle of *Pilsner* beer.

It was a bottle with one of those labels on it that we played with as kids; trying to find the bird on the fencepost, counting the birds, looking for rabbits and teepees and trains and old fashioned airplanes that hardly flew, seeing who could find the most people. An impossible collection. (198-199)

Bruce Chatwin and Robert Kroetsch and their respective collectors also rely on an equally subjective set of criteria towards the aggregation of their own personal collections. Obviously both writers made fond collections of words. One of Chatwin's preferred, and most storied citations, is a cipher translated from the French as "What am I doing here?" Nicholas Shakespeare, and many other commentators, have taken Chatwin *at his word* and attributed the line to Rimbaud from his African correspondence. Shakespeare even

embellishes the origin for effect, stating that Chatwin's collection of essays was "titled after the question posed by Rimbaud in the Ethiopian desert" (503). Clapp interpolates Chatwin's typical pronunciation of the phrase, "The words are a quotation from Rimbaud—it is what he asked himself in Ethiopia –and were pronounced by Bruce with emphatic self-ridicule, and a stress on the 'am'" (172).

However, like the aforementioned sub-incision knife that Chatwin retrieved from the outback of Australia (and like the Seed Catalogue that Kroetsch retrieved from the outback of the Glenbow Archives), its provenance may have been slightly muddled. The Pléiade Edition of Rimbaud's Oeuvres Complètes purports to contain a comprehensive collection of Rimbaud correspondence including the material from his gun-running days in King Menelik's kingdom. Although the African correspondence contains no end of personal lamentations regarding the climate, peoples, and general economic conditions in "Abyssinia" (apparently including present day Yemen, Ethiopia, Djibouti and Somalia) no one example precisely fits the phrase that Chatwin cites in the notebook section of The Songlines, stuffs into the mouth of his protagonist in Utz, and assigns as a title to his collection of essays What Am I Doing Here (Songlines 163, Utz 86, What 3). The original *poète maudit* bemoans to his family from Harar on the 6th of May, 1883:

Hélas! à quoi servent ces allées et venues, et ces fatigues et ces aventures chez des races étranges, et ces langues dont on se remplit la mémoire, et ces peines sans nom, si je ne dois pas un jour, après quelques années, pouvoir me reposer dans un endroit qui me plaise à peu près et trouver une famille, et avoir au moins un fils que je passe le reste de ma vie à élever à mon idée, à orner et à armer de l'instruction la plus complète qu'on puisse atteindre à

cette époque, et que je voie devenir un ingénieur renommé, un homme puissant et riche par la science? Mais qui sait combien peuvent durer mes jours dans ces montagnes-ci? Et je puis disparaître, au milieu de ces peuplades, sans que la nouvelle en ressorte jamais.
(Rimbaud 365)

While Rimbaud's ordeal in African badlands, and his cynical aspiration to the accolades of scientific enterprise, reverberates with those of Dawe and the other protagonists of this study, his rhetorical rumination in this instance asks "How much longer will I be here?" He seems to resolve the question in gloomy letter written to his mother and sister from Aden on the 5th of May 1884:

Quelle existence désolante je traîne sous ces climats absurdes et dans ces conditions insensées! [. . .] Quant a moi, je suis condamné a vivre longtemps encore, toujours peut-être, dans ces environs-ci, ou je suis connu à présent, et où je trouverai toujours du travail; tandis qu'en France, je serais un étranger et je ne trouverais rien. (Rimbaud 386-387)

Rimbaud, like Dawe (and Willeford's fool) comes to a bitter realization with both metaphorical and literal implications; his self-exile in the wilderness is not only indefinite, but likely permanent, and yet paradoxically unsustainable. In the subsequent letters he asks not "How much longer will I be here?" but rather, "What would I do back there?" On the 15th of January 1885 he writes from Aden:

Mais quoi faire ailleurs? J'ai mieux fait de patienter là où je pouvais vivre en travaillant; car quelles sont mes perspectives ailleurs? Mais, c'est égal, les années se passent, et je n'amasse rien, je n'arriverai jamais à vivre de mes rentes dans ces pays. (Rimbaud 396)

He echoes and elaborates upon these thoughts two years later in another letter written from Aden on October 8th 1887:

Et puis, quoi faire en France? Il est bien certain que je ne puis plus vivre sédentairement; et, surtout, j'ai grand'peur du froid, - puis, enfin, je n'ai ni revenus suffisants, ni emploi, ni soutiens, ni connaissances, ni profession, ni ressources d'aucune sorte. Ce serait m'enterrer que de revenir. (Rimbaud 450)

Rimbaud concludes that a return, and an end to wandering, would be the death of him as it ultimately is for Dawe. One of the last struggles between Chatwin the Collector and Chatwin the Nomad is made manifest in the fabulations surrounding the sub-incision knife that he gave to Jonathan Hope. According to Clapp, the "chartreuse" coloured piece of "desert opal" was subsequently examined by the Director of the Australian National Museum who more or less corroborated Chatwin's original assessment. At least its function was properly described. On the other hand, its composition had been embellished, perhaps deliberately by the consummate traveller and *mythomane*. The expert held the stone up to the light and pronounced, " 'Hmmm. Amazing what the Abos can do with a bit of an old beer bottle' " (Clapp 223).

Chatwin's penchant for the Rimbaud quotation betrays his collector's eye, (the same eye drawn to opalescent bottle glass) and belies equally subtle signs of manipulation. It is certainly possible that Chatwin made an error, or took great liberties with his translation, though he doesn't make it easy to verify. Nowhere does he attribute the quote to a specific

letter. Indeed it appears cryptically in The Songlines as: "What am I doing here? –Rimbaud writing home from Ethiopia" (Chatwin, Songlines 163). However, given the repeated allusions to Rimbaud's poetry throughout his oeuvre, and the fact that he also contributed to the Rimbaud opera composed by his friend Kevin Volans (even going so far as to volunteer for the lead role), the probability of such an error seems hardly credible (Shakespeare 510). What's more likely is another instance of the "naughty, giggly pleasure" Chatwin took in "endlessly confusing and conflating" his "role models and heroes" (Shakespeare 332). Ian Buruma argues, "to question the veracity of his stories is to miss the point. He was neither a reporter nor a scholar, but a raconteur of the highest order" (24). Buruma goes on to suggest, "the beauty of this type of writing lies in the perfect metaphor that appears to illuminate what lies under the factual surface" (24). Somewhat less rhapsodically, Stuart Piggott confided to Nicholas Shakespeare, that he believed Chatwin to be "'genuinely incapable' of distinguishing fact from fantasy" (Shakespeare 332). This is yet another irony about Chatwin who as the prodigy of Sotheby's once took great pleasure in spotting fakes among the art collections of the wealthy.

Nevertheless Chatwin was acutely aware of Rimbaud's final days in Marseille. Indeed he described this "death scene" to Kevin Volans. As the composer recalls, Chatwin then promptly phoned Michael Ignatieff for "a book from Paris", perhaps even the Pléiade Edition of Rimbaud's complete works and correspondence. Like the character Utz who "roused himself from his daydream" to declaim Rimbaud's famous line, Chatwin in his

"Assunta, *A Story*" rouses himself from the swoon of illness with an identical verbal flourish:

What am I doing here? I am flat on my back in a National Health Service hospital hoping, praying, that the rigors and fevers which have racked me for three months *will* turn out to be malaria – although, after many blood tests, they have not found a single parasite. (Chatwin, What 3)

Of course it's no coincidence that he should begin the first piece in What Am I Doing Here with these four words. However, this reiteration of the title is more than a gesture of stylistic symmetry. Once again Chatwin harkens back to Rimbaud. This time the collector brandishes his prize artifact to chilling effect. The phrase also announces a strange parallel with the beginnings of his own "death scene" and that of his poetic predecessor. Rimbaud writes to his sister on the 23rd of June, 1891, not from the wilds of Abyssinia, but rather from his hospital ward in Marseille. His leg had just been amputated below the knee as a result of an insidious cancer. Rimbaud begins to intuit his bleak prospects when he asks, "What will I do?" and "Where will I do it?": "Quant a une jambe artificielle, le médecin dit qu'il faudra attendre très longtemps, au moins six mois! Pendant ce temps que ferai-je, où resterai-je?" (671-672).

However, the revelation comes in a subsequent letter, six days later on the 29th of June 1891, when Rimbaud finally asks "What am I doing?" (more or less). Intriguingly, the

implied "here" refers not to Africa, as Chatwin's usage would seem to suggest, but rather to his former home in *civilized* France:

D'ailleurs, je suis tout à fait immobile et je ne sais pas faire un pas. Ma jambe est guérie, c'est-à-dire qu'elle est cicatrisée, ce qui d'ailleurs s'est fait assez vite, et me donne à penser que cette amputation pouvait être évitée. Pour les médecins je suis guéri, et, si je veux, on me signe demain ma feuille de sortie de l'hôpital. Mais quoi faire? Impossible de faire un pas! (Rimbaud 674)

Even as his condition deteriorates, he attempts to book passage on a ship that would carry him back to his badlands (Dawe literalizes this gesture by launching himself into Lake Huron aboard his daughter's canoe). Although, at this point Rimbaud most likely suspected that another ferry was already waiting to spirit him away on another kind of crossing (whereas Dawe in bullish fashion assumes the ferryman's duties and handles a sweep for only the second time). Chatwin wouldn't have missed such a detail either. Clapp recalls that under Chatwin's direction the final scene in the first act of Volans' opera invokes Rimbaud's last missive. On November 9th 1891 Rimbaud dictated a letter to his sister Isabelle. Although he addressed his eerie request to the *Directeur des messageries maritimes*, he might have been imploring Charon himself: "Envoyez-moi donc le prix des services d'Aphinar à Suez. Je suis complètement paralysé: donc je désire me trouver de bonne heure à bord. Dites-moi à quelle heure je dois être transporté à bord" (Rimbaud 708).

Chatwin was fascinated with the double quality of Rimbaud's correspondence. Indeed even this allusion might play on multiple literary sources. With the exception of

Virgil and the Pilgrim most of Charon's passengers are far less eager to mount his gangway – no so with Rimbaud who insists himself aboard. Wayne Johnston, in his memoir, Baltimore's Mansion, reminds readers of a key passage in Sir Thomas Mallory's Le Morte d'Arthur, his favourite, and one that may well have also appealed to the tortured poet (9). Upon receiving a fatal blow, King Arthur does the unthinkable. Like Rimbaud he makes haste to book an ocean voyage, albeit probably not to Newfoundland's Avalon Peninsula as a six-year-old Johnston suspected, but to an isle of the blessed nonetheless. For his equanimity King Arthur is rewarded with the dotage of his sailing companions—three queens—a marked improvement on the wizened old ferryman by any standards:

Comfort thyself, said the king, and do as well as thou mayst, for in me is no trust for to trust in; for I will into the vale of Avilion to heal me of my grievous wound: and if thou hear never more of me, pray for my soul. But ever the queens and ladies wept and shrieked, that it was pity to hear. And as soon as Sir Bedivere had lost the sight of the barge he wept and wailed. (Mallory XXI, 924)

This goes some way to explaining why Chatwin treats Rimbaud's existential question as another rare object from his grandmother's curio cabinet. Clapp's account of the packaging of What Am I Doing Here offers another clue:

On the cover of his book they [the words] are bewilderingly unpunctuated. This has led some readers to suspect a typographical error; others, Terence Stamp among them, have thought that Bruce was intending in this book to tell us the meaning of it all. What happened was this. Ian Craig, head of the design department at Jonathan Cape, was laying out the possibilities for the cover of *What Am I Doing Here* in 1988. None of his lay-outs looked quite right and eventually he offered his conclusion to Tom Maschler: 'It looks shitty with the question-mark.' Maschler agreed, and the alternatives were

presented to the always design-alert Chatwin, who declared that the question-mark wasn't needed. Off it came. (Clapp 172)

Chatwin is completely amenable to stripping the rhetorical connotations from the statement. Indeed removing the point of interrogation renders it more a design object than a loaded question. Like the sloth skin it is at once indicative of the distant wanderings of the nomad and the intractable horde of the collector. Benjamin explains the collector's impulse at work:

What is decisive in collecting is that the object is detached from all its original functions in order to enter into the closest conceivable relation to things of the same kind. This relation is the diametric opposite of any utility, and falls into the peculiar category of completeness. What is this “completeness”? It is a grand attempt to overcome the wholly irrational character of the object’s mere presence at hand through its integration into a new, expressly devised historical system: the collection. And for the true collector, every single thing in this system becomes an encyclopedia of all knowledge of the epoch, the landscape, the industry, and the owner from which it comes. It is the deepest enchantment of the collector to enclose the particular item within a magic circle, where, as a last shudder runs through it (the shudder of being acquired), it turns to stone. Everything remembered, everything thought, everything conscious becomes socle, frame, pedestal, seal of his possession. (Benjamin, *Arcades* 204-205)

Benjamin's notion of collection as petrification is exceedingly appropriate. Bones (and literary quotations) could be no further detached from their original anatomical function than when on palaeontological exhibition. The dinosaur hunters with block and tackle and lever and stone boat nudge fossil bones into their very own magic circles – not unlike Rafael's shagreen in its encyclopedic cabinet. Dawe, like Brown and Sternberg, looked with contempt upon fragments and revered articulated specimens expressly for their

completeness. There is no greater frustration for Dawe, and his historical predecessors, than to discover the perfect skeleton with a missing tail or skull. Completeness combined with uniqueness and novelty creates for the bone hunter a triumvirate of value. Each component is essential for the object to generate the wonder of a paradigm shift.

Sternberg repeatedly emphasizes this point in his autobiographies. He describes his discovery of an ancient shark in the Kansas chalk with unreserved pride: "This is the first time and, I believe, the only time that so complete a specimen of this ancient shark has been discovered [. . .] It is not very likely that such a specimen will ever be duplicated" (Sternberg, Life 114). Only a complete animal can expose previously identified fragments as *misidentifications*. Sternberg reports that his shark had just such an effect, "Dr. Eastman's study of this skeleton enabled him to make synonyms of many species which had been named from teeth alone" (Sternberg, Life 114). Sternberg also includes a testimonial from an eminent scientist regarding the perfection, and completeness, of another critter. Dr. Wieland of the Carnegie Museum writes:

It will be seen what exceedingly satisfactory information is furnished by the present specimen as compared with all other examples of *Protostega* hitherto found. Specimen 1420 [. . .] is more complete than any other at present discovered. As originally embedded in its matrix of chalk, nearly every element was present in an exactly or approximately natural position. (Sternberg, Life 116)

Such obsessive insistence on finding the most unique, most novel, most complete specimen approaches the pathological impulses of the fool. Willeford contends that the fool

also attempts to overcome the "irrational character of the object's mere presence", but that his effort amounts to farce:

He usually does not want what we consciously want; if he does, he is usually not physically and mentally equipped to go about getting it as we would; if he is, he usually comes into conflict with the wills, nonfoolish and foolish, of other people and even apparently of things. (26)

Surely Dawe defies the will of his entire crew, not to mention that of his wife, Sinnott, the ferryman and just about every other character he encounters on his canon ball run down the Red Deer River including, posthumously, his daughter. Even the raft seems to resist, by overturning, colliding with the banks, and riding dangerously low on its draft. Furthermore the expedition is beset by freakish meteorological phenomena, and stubborn geology ostensibly unwilling to yield the booty that Dawe so craves. Remarkably, Dawe's comportment respects Willeford's analysis to the letter:

The fool is often clumsy as well as stupid. His is lacking, that is to say, in his ability to perceive, understand, or act in accordance with the order of things as it appears to others. His perception, understanding, and actions are thus relatively uncoordinated, even chaotic. What he says and does seems symptomatic of an inadequacy or aberration. He has difficulties with physical objects, with social forms, and with the rules that govern both. These difficulties and his failure to master them result in what strikes us as a ridiculous loss of dignity. Often, however, he does not feel the pain and embarrassment that such oddity and failure would cause in us- he may even be proud of them; in any case, his notions of what constitutes accomplishment are different from ours. (26-27)

Dawe is no dummy, but his physical prowess and faculty of reason may fall into question. He becomes entangled in a collapsed tent, drives himself to heat exhaustion, and nearly kills himself by falling from a butte. Although he predicts that his rescuers will find

him "cyanosed" and "blue in the face" he is quite certain that the "kyphosis" that left him "humped and deformed" also rendered him "harder to kill than a snake" (Kroetsch, Badlands 150-151). He refuses the reasonable course of action, that the expedition be abandoned and a doctor summoned, in favour of an absurd and degrading solution. Rather he insists that Anna Yellowbird act as his nurse (and sexual servant) and that the crew dig up his flesh-eating dinosaur so he might claim credit for the find and document the excavation with forged notes. Moreover, he condescends to two Sinnott portraits, which far from lionizing the conquering hero, only heap ridicule upon him.

Even Pierre Berton reluctantly acknowledges that such a deliberately historical gesture must come under scrutiny expressly because of its contrivance. For all of his lyrical musings about "The Great Canadian Photograph" which depicts the driving of the last spike on the Canadian Pacific Railroad, Berton admits that the man with the sledgehammer, isn't really its principal subject:

The old gentleman's name is Donald A. Smith and here, among the shrouded mountains in a damp clearing bearing a strange Gaelic name, he has managed once again to get himself into the foreground of the picture. That act will like him for all time with the great feat of railroad construction though, in truth, his has not been a major role. (1)

Berton goes even further to state that the true subjects of this iconic photograph are, paradoxically, not visible. Rather, like Web, Grizzly, Anna, and especially the departed Tune, the long-suffering workers haunt the background of the official portrait as so many blurred pines that "rise like wraiths out of a white limbo" (Berton 1). Berton concedes what

Dawe is too obstinate to notice: "It is these nameless navvies who really dominate the Great Canadian Photograph" (3).

Dawe's inexorable drive to collect as many skeletons as possible before season's end results in a wake of destruction, of which the death of Tune is but the most glaring example. Willeford attributes this kind of behaviour in the fool as a congenital lack of empathy. He is simply not capable of considering the cost of his plans in human terms, nor is he able to accept defeat:

His inability or unwillingness to perceive, understand, and act in accordance with the normal order of things leads him to transgress bounds of many kinds. In this transgression he triumphs and is defeated. When he triumphs, he often does so in spite of the normal order and in spite of his stupidity, his clumsiness, and his peculiar ideas of what to do and how to do it [. . .] The fool usually survives both his clumsiness and stupidity, or even madness, and the adversity that searches him out; yet his final survival seems a triumph not so much of the human will as of something else. (Willeford 27)

Against all odds, Dawe succeeds in getting his fantastic fossil collection out of the badlands and into the hallowed precincts of science. However, in so doing, he also seems to guarantee himself a life of wandering, which though palaeontologically fulfilling, leaves much to be wanting. His suicide on Lake Huron could be read as an acknowledgment that fate must exact its dues for a life lived beyond the pale of human limits. Dr. Jekyll also makes a similar realization before he comes to a self-administered end.

Psychopathologies aside, a figure that can persevere in an outlandish mission under impossible circumstances must also be considered special. Indeed the fool leads a charmed life. Ironically, that supernatural fortune is localized in deformity. On two instances Anna Yellowbird senses its power. When she first encounters Dawe while lying in the grave at Tail Creek Cemetery, "she was in awe of his twisted back, his magical hump" (Kroetsch, Badlands 6-7). Moreover she observes that "he wore it under his dusty and wrinkled and elegant grey suitcoat, like some talisman of splendid good fortune " (Kroesch, Badlands 6-7). Later, in the cook's tent she compels Dawe to acknowledge the hump and she acts on a powerful instinct to touch it:

'As if it wasn't enough to be a cripple.'
 'You like it,' she said.
 He was at first affronted. The goddamned Indian girl telling him he liked his miserable fate. Why should I like it?'
 'It makes you special.' [. . .]
 'I have a hunchback.'
 He had never spoken that simple sentence in his whole life before.
 'Ah,' she said. 'That is lucky for you.' She reached and touched his back. To share his good fortune: the touch, sacred, magical. (Kroetsch, Badlands 163-164)

Again Kroetsch owes this bizarre paradox to Willeford, who in turn consults The Golden Bough. In a footnote Frazer reports that "it is still widely believed in Europe that touching the hump of a hunchback brings good luck" (Willeford 241). For an explanation of why this may be the case, Willeford looks to Enid Welsford,'s The Fool:

The possession of a hunchback, a bald head, or any striking deformity, is a good safeguard against this malignant influence, presumably because such misfortunes render one too wretched to excite either human or divine envy. (241)

Kroestch may have also been tempted to read George Mercer Dawson's extraordinary career through a mythical lens. Rather than impeding his discoveries, the intriguing possibility opens that Dawson's handicap may have enabled them. Several commentators, Wayne Grady among them, have described Dawson's "first discovery" of dinosaur fossils in Canada near "Wood Mountain", or the present-day village of Killdeer, Saskatchewan (Grady 194-196).

References in Kroetsch's research notes to anthropological research on Blackfoot culture demonstrate that the author of Badlands was keenly aware of the ceremonial function of fossil materials, which greatly predate Dawson's "discovery." Kroetch refers to three sources by Clark Wissler from the Anthropological Papers of the American Museum of Natural History: "General discussion of Shamanistic and Dancing Societies (1916)", "Societies and Dance Associations of the Blackfoot Indian (1913)", "The Social Life of the Blackfoot Indians Ceremonial Bundles of the Blackfoot Indians (1912)" (Kroetsch, Msc27.16.9 loose leaf). While the completeness of these citations (library call numbers also appear) suggests that Kroetsch probably looked at all of Wissler's papers, he may have paid particular attention to the latter entry. "Ceremonial Bundles" is the earliest of the lot, but it is also the most substantive. It notably contains a discussion of *iniskim*, or "Buffalo Rocks", marine fossil material, to which the Blackfoot people ascribed spiritual significance.

Wissler refers to Grinnell's precision that *iniskim* was most often ammonite and bacculite material, though sometimes it included oddly shaped nodules of flint. Ammonites were considered especially powerful, though Wissler reports that any pebble that bore a resemblance to a living creature could be included in medicine bundles with the express purpose of calling and control movements of the buffalo (204, 243). Because of the wide distribution of "Buffalo Rocks" across the prairies, rules of ownership and transference were less restrictive. Wissler contends that most every family stood a chance of coming across *iniskim* in their migrations. Therefore no particular societal affiliation or cultural mores controlled the collection of such artifacts (Wissler 242). Indeed Anna Dawe exhibits no objection to Dawe's eager harvesting of fossil bones. Neither does she privilege her own right to collect the material over the palaeontologist's. In the early going she even responds to Dawe's query "Do you know where the bones are?" with a deferential "You know the way. I will go with you" (Kroestsch, Badlands 8). Although, later in the expedition, the fact of her bone tipi seems to demonstrate a far superior knack for prospecting. While Dawe's understanding of fossil specimens is restricted by his biological and palaeontological knowledge, Anna's view of *iniskim* is far more plastic.

Even the ancient Romans admitted that such petrifications could also be construed as medicine. In his mammoth compendium, The Natural History, Pliny the Elder devotes an entire book to "The Natural History of Stones". He too reports marine fossil material put to a medical application:

The several varieties of ostracites* bear a resemblance to shells. They are used by way of substitute for pumice-stone, for smoothing the skin. Taken in drink, they arrest discharges of blood; and, applied topically with honey, they are curative of ulcerations and pains in the mamillæ.
(Pliny the Elder, XXXVI: 31)

Some seventeen hundred plus years later Pliny's English editors and translators, John Bostock and H.T. Riley, seem to corroborate the ancient prescription in their footnote, "*Fossil shells of oysters and bivalve mollusks, combined, probably, with Fahlunite or Hydrous Iolite." Indeed other commentators reported the assignment of symbolic and ceremonial meanings to other rare, if not technically fossilized, shells. It's very likely that George Mercer Dawson would have been familiar with passages in his father's archaeological reports on the "Dawson Site." During the course of his 1860 excavations in downtown Montreal, John William Dawson found a single bead of wampum composed of the pearly shell of a fresh water mussel. In the first of his The Canadian Naturalist and Geologist articles, Dawson Sr. quotes Cartier's gruesome and probably misunderstood account of the manner in which the Hochelagans harvested this material:

The most precious article they possess in this world is *esnoguy*, which is as white as snow. They procure it from shells in the river in the following manner. When an Indian has incurred the death-penalty or they have taken some prisoners in war, they kill one and make great incisions in his buttocks and thighs, and about his legs, arms and shoulders. Then at the spot where this *esnoguy* is found, they sink the body to the bottom and leave it there for ten or twelve hours. It is then brought to the surface; and in the above-mentioned cuts and incisions they find the shells, of which they make a sort of bead, which has the same use among them as gold and silver with us; for they consider it the most valuable article in the world. It has the virtue of stopping nose-bleeding; for we tried it.
(Dawson, "Notes" 441-442)

Modern researchers believe that Cartier's strange interpretation was probably due to a miscommunication. He had no interpreters with him during the second voyage. Therefore it is possible that Cartier may have confused this imaginative torture technique with the practice of forcing criminals or prisoners to dive into the deeper parts of the river to retrieve shells as punishment (Trigger and Pendergast 347). In his final novel, Utz, which may be read as a case study on the mania of collectors, Bruce Chatwin mentions a similar form of coinage employed in another context:

Cowries, he went on, were used as currency in Africa and Asia where they were traded for ivory, gold, slaves or other marketable commodities. Marco Polo called them 'porcelain shells': 'porcella' in Italian was the word for 'little sow'. (102)

While it is perfectly appropriate to doubt the ethnographical soundness of such a claim given its presentation in a work of fiction, a glance at the historical document cited by Chatwin (notwithstanding its own use of fictional techniques) proves enlightening. Marco Polo writes the following observation regarding the Chinese province of "Carcajan"

Their money is such as I will tell you. They use for the purpose certain white porcelain shells that are found in the sea, such as are sometimes put on dogs' collars; and 80 of these porcelain shells pass for a single weight of silver, equivalent to two Venice groats, i.e. 24 piccoli. Also eight such weights of silver count equal to one such weight of gold. (Marco Polo 2:XLVII)

Again, a subsequent editor/translator duo seems to ratify a long-dead-author's statements. In a detailed footnote to the second volume of The Travels of Marco Polo, Henry Yule and Henri Cordier also present the etymologies parroted by Chatwin's character, Utz:

The word "piccoli" is supplied, doubtfully, in lieu of an unknown symbol. If correct, then we should read "24 piccoli each" for this was about the equivalent of a grosso. This is the first time Polo mentions cowries, which he calls "porcellani". This might have been rendered by the corresponding vernacular name "Pig-shells," applied to certain shells of that genus (*Cypraea*) in some parts of England. It is worthy of note that as the name "porcellana" has been transferred from these shells to China-ware, so the word "pig" has been in Scotland applied to crockery; whether the process has been analogous, I cannot say. (Marco Polo 2)

Nevertheless, such variations still fall well within the purview of scientific verifiability. Anna Yellowbird's flexible understanding of *iniskim* is not delimited by these bournes. Apparently, neither was that of her historical ancestors. Wissler recounts the Blackfoot notion that if "these stones are not disturbed for a long time, they will have offspring" (243). He refers to the example of a man who showed an American Museum anthropological party "a large fossil bi-valve in the matrix of which was the protruding end of a small shell as evidence of such birth" (243). To dismiss this prospect as outlandish superstition, one must also scrap similar accounts in so foundational a text as The Natural History. Perhaps this is more feasible in the case of Pliny the Elder's strange explanation of *aëtites*, stones named after the eagles in whose nests they were often found.

There are always two of these stones found together, they say, a male stone and a female; and without them, it is said, the various eagles that we have described would be unable to propagate. Hence it is, too, that the young of the eagle are never more than two in number. (XXXVI:39)

However, in another description of fossil propagation, Pliny the Elder reveals a subtle intuition regarding the mysteries of taphonomy, which descendants of the Greco-Roman scientific tradition wouldn't elaborate for over a millennium.

Theophrastus and Mucianus are of opinion that there are certain stones which bring forth other stones. Theophrastus states, also, that a fossil ivory is found, both white and black; that the earth, too, produces bones, and that osseous stones are sometimes found. In the vicinity of Munda in Spain, the place where the Dictator Cæsar defeated Pompeius, there are stones found, which, when broken asunder, bear the impression of palm leaves. (XXXVI:29)

Indeed Dawe's long sought-after *Daweosaurus* is only revealed after Anna and Web's tornado-borne act of copulation – the rock so long undisturbed suddenly shows signs of new life (Kroetsch, Badlands 177). On the opposite side of the coin Wissler describes the Piegan belief that "some rocks too large to be moved were spoken of as *iniskim* (244). He offers the example of a large boulder that resembled "a bear on his haunches with his paws to his face" (Wissler 244). It was venerated by natives with paint, prayers, and offerings of beads and clothing. George Mercer Dawson who served as Chief Naturalist and Geologist to the British North America Boundary Commission Survey of 1873-1874 chanced upon a similar altar.

Saw a curious indian grave in the bottom of the valley. A nearly cylindrical concretion from the sandstone had been buried obliquely in the ground & painted with Vermillion. Other stones surrounded this & many offerings or gifts had been left & apparently recently renewed. Beads, a spoon, tobacco, buttons & strips of various coloured Calico prints. Also a flat ornament composed of porcupine quills woven together & a number of eagle feathers. (Dawson, "1874" 62)

In certain respects these *iniskim* resemble rocks from Kroetsch's childhood in Heisler. At the very least Kroetsch is equally willing to anthropomorphize a glacial erratic, and the rocks of a tipi ring, respectively. In his memoir on the writing life, he fetishizes the boulder with remarkable tenderness:

In my exact memory it is a composition of pure and erotic curves. Lying where it did in the buffalo grass, it invited my darkest complicity. At its highest, at what I must call the inverse swoon of its top curve, it rose almost as high as my waist. You must abandon all your assumed notions about boulders. That rock was smooth without being shiny; its remembered colour reminds me of the bodies I have seen on the curved, lubricious, hot beaches of Greek islands, those buttocks and shoulders and breasts, fresh from morning flights out of Brussels, out of London and Stockholm and Frankfurt, no longer white, not yet red. At the time – and I remember I was twelve years old in that crucial summer, I might have risked the words *roseate, damask*. (Kroetsch, Likely 49-50)

Yet, it in a personal diary entry from August 30th, 1974 he dispenses with niceties and offers this frank account. Stripped of intellectual contrivance, it better conveys the ambivalence he felt for an object at once inanimate yet somehow alive:

I remember one time, as a kid, trying to fuck a large stone. A boulder left by the retreating glaciers, I suppose. I was walking across the fields east from out house the mile to where the O'Connors were living at the time. Even then, alone, I knew I was attempting something strange, ridiculous, incomprehensible, necessary. (Kroetsch, "Diary")

He explores similar conflicting emotions when he remembers the tipi ring in his essay, "The Moment of the Discovery of the Americas Continues":

There was, half a mile south from our farm, a ring of stones in the prairie grass. My dad and the hired men, strangely, plowed around it. One day, again when I was a child, I ran away from home; instead of going to a neighbour's house, where I could play, I went to that ring of stones . . . and again I began to wonder. I went back home and asked my mother about those stones. She had, then, never heard of a tipi ring; she said the stones were magical [. . .] I was that day on my way to embracing the model of archaeology, against that of history. The authorized history, the given definition of history, was betraying us on those prairies. A few years after I sat in that tipi ring and cried and then began to notice and then began to wonder, a gang of dam-builders from a Battle River site came by and picked up the stones, and my father broke the sod. If history betrayed us, we too

betrayed it. I remember my father one night at supper, saying out of nowhere that he'd made a mistake, letting those men pick up those stones. For reasons he couldn't understand, he felt guilty. (2)

Present in this account of his family's confused relationship with the inscrutable stones is both the awe of veneration, and the acknowledgement of a desecration. What's more compelling is the fact that the Kroetschs had no foreknowledge of the purpose of the ring (actually a very secular one), only an instinct that it should be respected. In short, they treated it as its creators must have spiritually revered an *iniskim*. In another odd parallel his father intuits consequences for its demolition, though Kroetsch does not directly report any (presumably because it wasn't a true *iniskim*).

But Wissler does. He writes of another large *iniskim* that was revered by the Peigan at the mouth of Birch Creek on the Marias River. It resembled a man's torso. A marauding party of North Blackfoot allegedly threw down the sacred stone. The act of desecration purportedly led to their deaths at the hands of the Peigan (Wissler 244). Once again The Natural History offers an ominous analogue, by the circuitous route of the Argo and its crew. Pliny the Elder reports the presence of a strange artifact in the city of Cyzica. Popular tradition has it that "the Fugitive Stone" was once used by the Argonauts as an anchor, but now must itself be anchored with lead due to its wont for sudden flight (Pliny the Elder XXXVI:23). Its stirrings serve as a reminder of an infamy. Apollodorus writes of the landfall the Argonauts made among the Doliones. The wayfarers were welcomed with every kindness by the people and their king, Cyzicus. However, when the Argonauts set

sail again at night, a cruel wind blew the Argo back to the very beach from which it had departed. This time the Doliones mistook the Greeks for their enemies, the Pelasgians. Naturally, they attacked. In defending themselves the Argonauts killed many Doliones including King Cyzicus. When the colossal error was realized the next morning the Argonauts "mourned and cut off their hair and gave Cyzicus a costly burial" (Apollodorus, Library 1.9.18). In a footnote Apollodorus' English editor/translator, Sir James George Frazer, refers to another version of the same event written by Apollonius of Rhodes:

The Minyae were overcome with sorrow when they saw Cyzicus lying in the dust and blood; and for three whole days they and the Doliones wailed for him and tore their hair. Then they marched three times round the dead king in their bronze equipment, laid him in his tomb, and held the customary games out on the grassy plain, where the barrow they raised for him can still be seen by people of a later age. (I:935-1077)

While never explicitly stated in the classical accounts, it doesn't seem unfounded to suggest that the barrow mound may have also held, apart from the bones of a king, a "fugitive stone". Kroetsch seems to parallel the fate of the north Blackfoot with the fate of Tune. In both cases there are fatal consequences for having dared disturb a large *iniskim*. Yet, there is also something of an *iniskim* about the "new hill" created by the explosion at the base of their cliffside quarry (Kroetsch Badlands 189). Both Web and Dawe have the distinct impression that in digging into the mound, they are digging into the body of Tune. Of course the impression is more emotional than it is geological. Although Pliny writes of another strange rock, which like the sandstone of Deadlodge Canyon, would also seem to facilitate petrification, albeit at a greatly increased rate. This "Stone of Assos", otherwise

known as "Sarcophagus Stone" for good reason, also has a laminated texture. What transmutations the pressures of sedimentary geology can achieve over tens of millions of years, "Sarcophagus Stone" arrives at through rapid corrosion:

It is a well-known fact, that dead bodies, when buried in this stone, are consumed in the course of forty days, with the sole exception of the teeth. According to Mucianus, too, mirrors, body-scrapers, garments, and shoes, that have been buried with the dead, become transformed into stone. In Lycia, and in the East, there are certain stones of a similar nature, which, when attached to the bodies of the living even, corrode the flesh. (XXXVI:27(17.))

The effects of lime application and calcium deposition have been practically appropriated by Creationist Museums the world over, including the one in Big Valley, Alberta, which exhibits calcified boots, hats and various other objects as counter-proof against the vast stretches of time required by science for the process of fossilization. In creationist chronology no fossil is permitted more than the current date plus 4004 years to petrify, purportedly the oldest age of the earth. Web worries that his shovel will slice through the boy's neck, and Dawe is troubled by the impression he caught a fleeting glimpse of Tune's corpse (Kroetsch, Badlands 190, 204). A laboured entry in Dawe's field notes records his uncertainty:

Crushed. He must have been. Beyond. Dawe not finding a sentence, a word, that consoled him into the community of his attendant slaves: *Will notify the proper. Hire and send in.* The sentences breaking in the middle of creation. The pencil freezing in his shovel-stiffened hand. *Dead. And buried. I found one finger. I think. I. Kicked the dirt. Over –* (Kroetsch, Badlands 204)

Rather than consuming Tune's flesh there is the suggestion that the blasted clay embraces and protects it, "like an umbrella of stone" which then "itself became the rain" (Kroetsch, Badlands 189). Pliny proposes a concomitant and equally serene mineralogical description of *chernites*, "a stone which preserves bodies without consuming them, and strongly resembles ivory in appearance: the body of King Darius, they say, was buried in it" (XXXVI:28). Tune might have been smothered in an avalanche of chernites, for all of Dawe's false consolation, " 'Perhaps we should leave him where he is, decently buried in his own way' " (Kroetsch, Badlands 188). However, so decent a burial hearkens back to Dawe's ride in the stone boat, a conveyance otherwise reserved for the transportation of fossil bones:

Silently they lowered Dawe onto the stoneboat; Grizzly produced a rope, arranged the canvas, tied him down. The three men moved out across the long and grassy slope of land, the stoneboat gliding easily on the film of water that enveloped everything but Dawe himself. (Kroetsch, Badlands 156)

To make the metaphor even neater, it must be acknowledged that Dawe becomes a prisoner of his own devices: "He could not raise himself up off the stoneboat, partly because he was tied down onto it like a log, a fossil, partly because he no longer had the strength to raise his own head" (159). Indeed Kroetch uses the stoneboat, which he reproduces from his research into the Brown and Sternberg expeditions, as a deliberate stroke of foreshadowing. Ultimately another boat—Anna Dawe's canoe—would carry his bones to a watery grave.

To allay his own anxieties about the inevitability of death Dawe tears a page from his field notes, likely the very same that contains his admission about Tune's incomplete burial, and hurls it into the river. Keenly aware of the document's capacity to co-implicate him in the death of Tune, or perhaps as a symbolic gesture of erasure, Web prods the floating paper underwater (Kroetsch, Badlands 206). It is immediately countermanded by the surfacing of an undistinguishable presence, ostensibly a sturgeon, though metaphorically much more: "A shadow came up darkly in the brown, translucent water. A long, floating shadow lifted up. Behind them. Following them, it seemed" (Kroetsch, Badlands 206-207). Dawe explains to an incredulous Web that the armour-plated creature is a contradiction in terms: "older than dinosaurs", here before and after them, a living fossil (Kroetsch, Badlands 207). It bears an odd resemblance to a curiosity from the Isle of Sycros. "There is a stone they say, which floats upon water when whole, but which falls to the bottom when broken into fragments" (Pliny the Elder XXXVI:26). If this seems like an abuse of poor Pliny the Elder, one may consult a similar fish story as told by another of Kroetsch's documented sources. On May 6, 1878 Charels H. Sternberg records a peculiar sight in his field notes from the John Day River expedition:

In this same locality there is a bed of rock so light that it floats. I threw a large mass of it at some object in the water, and was amazed to see it float off down the stream. It was the first time that I had ever seen a rock lighter than water. (Sternberg, Life 172)

No such theatrics appear in George Mercer Dawson's field notes, even regarding his extraordinary moment of discovery. The consummate scientist described his first dinosaur

bones with measured prose in his 1875 Report on the geology and resources of the region in the vicinity of the forty-ninth parallel: from the Lake of the Woods to the Rocky Mountains:

The most interesting feature of this part of the section however, is the occurrence of the remains of vertebrate animals. [. . .] They are also, unfortunately, apt to be attached to the ironstone nodules, or incorporated with them, and traversed by crack-lines, in such a way as to render it difficult to obtain good specimens. A more prolonged search among these hills, that I was able to make, would however, no doubt result in the discovery of localities where the remains are more abundant and in better preservation. (105)

A passage in Dawson's original field note book, held by McGill University's Special Collections, from June 29th, 1874, describes the moment in even more laconic precision:

Geology. The hills visited today showed much better sections than those of yesterday. Same beds but can see relations here better. (See sketch of general appearance.) The Section in general way as follows;
 A. Yellowish sand & sandy clay sometimes indurated in layers so as to form a soft sandstone. Forms tops of highest hills seen. Tops flat plateau like. Say 50 ft.
 B. [oulder]Clays & sandy clays with thin layers of lignite near the top & beds with well preserved fossil plants. In the lower third bones of turtles? & of some large vertebrate. Much ironstone in these layers.
 Beds with poorly preserved plants. Some sand & sandstone showing false bedding & rather abrupt undulations. The whole from a distance of a purplish-grey colour. Say 150 ft.
 (M.G. M.G. 1022 Cont. 83 14011 30)

Kroetsch goes to some length to exaggerate this tendency towards brevity through the depiction of Dawe's own process of field note taking: "*I despise words*, he wrote; he stared at the sentence enjoying it. Writing it down had freed him, in some way he did not fully comprehend" (Kroetsch, Badlands 30). Conversely, Dawson's original notes, though

sometimes spare also contain the ghost of an emotional response haunting the level-headed appraisal of his surroundings. As a lead-in to the previous entry, Dawson writes:

Set off from camp about 8 A.M. with buckboard & photographers. Followed trail E. for about a mile & then turned north into "bad land" region. Examined 'hills which showed section but found time very short. Photographers got a couple of views but not so many as intended the sky clouding up for a thunder storm. Got back to camp about 12.30 & started back towards Astron Station by 2 P.M. Cart wheel nearly played out by time reached camp. Heavy thunder storm. Picked up two or three new flowers by the way.

(Dawson, M.G. 1022 Cont. 83 14011 29-30)

Officially, Dawson could attribute this gathering of flowers to his duties as Chief Naturalist. Yet that same dispensation did not require an aesthete's eye disguised, though not altogether obscured, in the technical jargon that concludes his entry:

C. Lower yellowish sands & sandy clays exposed in brook & lateral ravines. Often nodular in horizontal lines. Could see no fossils. Say 80 to 100 ft.

D. Underlying the last & forming the lower parts of sections in brook vallies near our camp. Greyish black clays of very homogenous aspect, but broken up into small fragments wherever exposed to the weather. Found a few fossil shells poorly preserved but of Marine aspect. Seen above level of brook. Say 40 ft.

The whole to all appearance on the large scale horizontal.

The lignites mentioned in division B. are on a level with the tops of the red hills spoken of yesterday & confirm previous supposition. There are three beds of 1 or 2 feet each in thickness. Separated by rather wide clay partings. The lignites themselves not pure. The lignites on the same horizon can be traced by the eye for miles along the higher hills. Where exposed seem hardly able to account for great alteration of strata where burned out, but probably best & thickest parts have suffered combustion leaving such parts as seen too poor to burn. The partings preventing access of air &c.

The richest plant bed immediately overlies the upper lignite. Consists of whitish clay. Plants very beautifully preserved but clay crumbling & had very little time to collect.

The vertebrate remains are generally closely connected with the ironstone layers & are often converted into that substance. They are also unfortunately

apt to be connected to or partly incorporated in the nodules of ironstone & are traversed in all directions by lines of fracture. Picked up a few which found lying loose & which seemed capable of identification. A prolonged search in these hills would probably reveal localities where the bones are more abundant & better preserved. They occur so far as I know, or as section shows, below the lowest lignite some distance.
(Dawson, M.G. 1022 Cont. 83 14011 29-30)

In addition to his tender description of fossil plants, Dawson also includes among his notes beautifully rendered watercolour sketches of landscapes, local inhabitants and his travelling companions, both man and beast. His notebook pages are also graced with frequent interjections of verse elegantly penned onto the reverse sides of telegraph forms and loose receipts. Some of these, such as "The Geologist" are not altogether devoid of literary merit. Zaslav describes Dawson as "probably the best of the several poets in the Survey's history" (112). No poet can truly despise words. Part of a note written by Dawson details an exchange with his father, McGill College Principal J.W. Dawson, and contains these revealing remarks, "Later in life I lived behind entrenchments & in fortifications raised by myself as he must have done, finding expression chiefly as he did in written words, guardedly, & regarding nothing in open speech" (Dawson, M.G. 1022 Box 59 File 8).

Phil Jenkins, no doubt came across the same scraps of paper during his own researches into the Dawson fond. On more than one occasion, we sat opposite one another at the same reading room table, each preoccupied with the contents of his respective file

box, each oblivious to our mutual interest in the same historical figure. Indeed in his semi-fictional presentation of Dawson's "memoirs", Beneath My Feet, Jenkins seizes on the scientist's poetic streak to dramatize the Wood Mountain discovery. In so doing he doesn't shy away from liberally invoking his own share of poetic license:

It was within these days that I dug free a panoply of bones, what I guessed to be the fossilized vestiges of turtles and of some large vertebrate which I believed, due to their suggestion of once belonging to a creature of considerable size, were dinosaur bones. This was a find of considerable pleasure of me, since not two years earlier I had sat in Professor Huxley's natural history class while he lectured us on one of the greatest scientific discoveries of the era, the small dinosaur fossil found in 1861 that established the ancient link between reptiles and birds, and which for him was the 'missing link' that carried Darwin's theory of natural selection from the possible to the certain. A little brushing of one of the White Mud specimens revealed a part of a jaw with grooved teeth which must have been might masticators when the terrible reptile fed. the remains of those ancient vertebrates were closely connected with ironstone, which indeed is an oxidized iron, and are often converted over time into that substance, which likes to overlay clay. This alchemic conversion from bone to stone has the effect of traversing the former bones in all directions with lines of fracture which is precisely what had happened here, so that I picked up several bags of fragments, of jigsaw pieces, some of which were actually lying loose as though they had tumbled from a giant's pocket, and which hopefully were capable of identification by an expert. (Jenkins 111-112)

Jenkins' Dawson then subsequently acknowledges Professor Cope's diagnostic (and no less poetic) contribution to His Majesty's British North American Boundary Commission Survey taking his cue from the *bona fide* Dawson, who does the same in his own 1875 report:

Professor Cope has kindly examined the vertebrate fossils obtained in connection with the expedition. Those from this place include fragments of several species of turtles, scales of gar-pike, and broken bones of

dinosaurian reptiles. Of the turtles, two are new species, to which Professor Cope has given the names – *Plastomeneus costatus*, and *P. coalescens* – and there are portions of species of *Trionyx* and *Compsemys*. The gar-pike belongs to the genus *Clastes*, and of the dinosaurian remains, though mostly too fragmentary for determination, a caudal vertebra resembles that of *Hadrosaurus*.

(Dawson, Report 105)

J.B. Tyrrell, though perhaps not quite a poet, was no slouch with his plume. His transcription, editing and eloquent historical analyses of notes written by fur trader and surveyor, David Thompson prove as much. Thompson's original cartographic survey served as the bases for: Tyrrell's own geological map of the North West, GSC sheet 249 from 1887, "Part of Northern Alberta and Portions of the Districts of Assiniboia and Saskatchewan"; and Sheet 171 from 1884, "The Region in the Vicinity of the Bow and Belly Rivers Embracing the Southern Portion of the District of Alberta and part of Assiniboia" by George Mercer Dawson and R.G. McConnell; and likely sheet 223 from 1886, "Reconnaissance map of a portion of the Rocky Mountains between latitudes 49 and 51-30 degrees" by L.N. Richard, A.E. Barlow, and J. White.

History dictates that these must be the very maps Dawe consults. Although the uppermost region of the last sheet might have been of greater interest to Web, and the Annas, who dreamed the sources of the Red Deer River. Robert Kroetsch also had the luxury of consulting a treasure map before he sent his characters on their hunt. His notes detail plans for a trip to Ottawa to review the Sternberg materials. As a primer to this

1919 - again.
 1921 - Little Sandhill Creek –
 use of automobile for
 the 1st time in field.
 1923
 1924 4 yr [progress? pause?]
 1925
 1926
 1935 - identified sites of
 1936 fossil discoveries
 for Geological Survey
 Stevenville Sheet
 * Map 969A,
 Geological Survey
 of Canada
 1947 – his last expedition for Geology Survey
 1948 - National Museum of Canada took over
 1956- [72?] – work on establish provincial park
 (Kroetsch, MsC27.16.9 loose leaf)

Dawe would have killed to get his hands on Map 969A otherwise known as the *Stevenville Sheet*. Even Robert Louis Stevenson's *Treasure Island* chart lacks lustre in comparison. In 1935-1936 at the behest of the GSC F.P. DuVernet of Topographical Survey assisted Charles M. Sternberg in plotting every major dinosaur quarry location in the richest area of Deadlodge Canyon. Amid sweeping contours a priceless booty is marked with crossed picks. Somehow CM resisted the delicious irony of signalling caches of dinosaur bones with that quintessential pirate symbol (contemporary Royal Tyrrell Museum GPS units do not). Anachronism aside, it would have galled Dawe to learn that a Sternberg had bested him yet again!

Indeed Dawe defends the accuracy of the GSC maps against Web's derision. Kroetsch describes them as "the emblem of his conviction and intent" then he promptly goes on to undercut them with the upsetting of the expedition raft in rapids clearly marked by Tyrrell near the present day location of Morin Bridge (Kroetsch, Badlands 16). Without light the maps, like the river's eddies and channels, cannot be read (Kroetsch, Badlands 15). It's a similar navigational problem encountered by the pilot of the MacKenzie River barge in Kroetsch's first published novel, But We are Exiles. However, this arctic sea dog knows better than to rely on a cartographer's conception of the river:

Running was the essence. Boat and river and sky and a thin line of earth and around every bend another bend. All held in delicate and fluid balance by the pilot. He alone knew where to go; his eyes, his hands, were pitted against the deceptively bland surface of the water. He guided the crew and the cargo. From a point to a clump of spruce, from a rock to a cutbank, from a ripple to the outside of a grey streak to a lone tree. These were his secrets: where and when to take a channel up the outside of Saline island that would save four hours of running time, when to make a crossing below Head of the Line that would save three miles. Watching the wash for indications of shoal water, feeling the boat suck down over a bar and knowing and remembering where to travel on the upriver trip. Eleven hundred miles of river in his head; but they were a different eleven hundred miles in spring or fall, in rising or falling water, morning or evening, wind or calm. A man at the wheel and a man in the engine-room. Joined by an indicator hand and the jingle of bells. They did not have to hear each other's voices. Here the pilot's eyes and hands were in isolated yet absolute control. Pure. (Kroetsch Exiles 18-19)

Instinct certainly comes into play, but the seasoned river pilot must take another tack and *read* the river like a book, which as Twain remarks, can only ever be "a dead language to the uneducated passenger". It's not outside the realm of possibility that Kroetsch borrowed from the old master's eloquent discourse on mapless navigation. Twain

describes the way a placid river vista conceals countless dark harbingers in an essay entitled "The Continued Perplexities of 'Cub' Piloting" from Life on the Mississippi:

This sun means that we are going to have wind to-morrow; that floating log means that the river is rising, small thanks to it; that slanting mark on the water refers to a bluff reef which is going to kill somebody's steamboat one of these nights, if it keeps on stretching out like that; those tumbling 'boils' show a dissolving bar and a changing channel there; the lines and circles in the slick water over yonder are a warning that that execrable place is shoaling up dangerously; that silver streak in the shadow of the forest is the 'break' from a new snag, and he has located himself in the very best place he could have found to fish for steamboats; that tall, dead tree, with a single living branch, is not going to last long, and then how is a body ever going to get through this blind place at night without the friendly old landmark? (Twain, Life)

Dawe laments the loss of these fine maps more than his bowman McBride. He orders his remaining crewmen to search for them rather than their forlorn comrade. (20) Even when McBride turns up farther downriver, Dawe pines for the ordered plotting of Tyrrell's Sheet 249, "Dawe, holding his right knee steady, scribbled: *Mcbride. Found. In a rowboat. In Range 22, Township 33, I would guess, not having my maps immediately available*" (Kroetsch 31). No doubt Dawe admires the mapmakers for reasons other than their accuracy. Like the taxonomists they too enjoy the privilege of naming, a fact amply demonstrated by the GSC agent inspired names of several Rocky Mountain peaks at the headwaters of the Red Deer River on Sheet 223 (Mt. Tyrrell, Mt. McConnell, Mt. Macoun). Arthur Conan Doyle also celebrates the map-maker's opportunism as a divine right. Atwood doesn't miss the chance to satirize the inherent presumption of not only Malone's *Lost World* chart, but of all maps. Her palaeontologist offers this caustic observation:

"Lesjeland, though: That sounded almost African. She could picture it on a map: seen that way, there was nothing ludicrous about it" (Atwood, Life 80-81).

A series of journal entries demonstrates that Kroetsch shares his protagonist's penchant for maps (and Atwood's keen appraisal of their authors). On Sunday August 26, 1973 Kroetsch announces the completion of a preliminary draft of his provisionally titled palaeontological novel, "Yesterday at noon I finished the final draft of Field Notes. (Hope I can make that title stick; it's modest but accurate.)" About a month later, on Sunday, September 23, 1973 he confesses his lifelong obsession with cartography:

I'm to give a talk in Lethbridge in March, to a gathering of geographers. I've long been attracted to geography. From the days in school when we farm kids stayed in the classroom at noon on winter days. I'd study maps, the globe, read geography books. (Kroetsch, MsC775/04.25 Box16/44)

Of course, the good student of geography must eternally vie with the irreverent post-modernist. Whereas Dawe would prefer to navigate strange waters with the aid of his GSC sheets, Kroetsch actively seeks out those maps that intentionally obfuscate, and inspire the imagination. Evidently, the bibliophile from Heisler shares this penchant with the librarian of Buenos Aires. In his Book of Imaginary Beings, Borges recalls the cartographic advice whispered by demons to Emanuel Swedenborg, "God has forbidden men and angels to draw a map of Hell, but we know that its general outline follows that of a Devil, just as the outline of Heaven follows that of an angel" (Borges 217). He adds by way of geographical precision, "The most vile and loathsome hells lie to the west" omitting only the longitudinal reference (Borges 217). Indeed Dawe's lost maps put these infernal

territories in badlands west of the 4th meridian beyond one hundred and ten degrees. In a later journal entry written on the first day of 1975 Kroetsch reflects on his visit to the map lover's *shangri-la*:

Blank spaces.

Yesterday, two days ago, Libby and I in the Rand McNally store on 53rd street, looking at maps. And L. found two of North America – 1650, 1700 – with Western Canada blank. My imagination, fired out of all season by those blank spaces.

An integrated, all-inclusive poetry. The long poem. The novel! The blank spaces too.

Like this book, this diary, a Christmas gift from Libby. The poem as long as the time of the poem. A ledger I owe to some other poet:

bus fare N.Y. to Binghamton today \$12.75

books, the Eighth Street Bookstop 12.80

yesterday: Ponge

Blackburn

a book on back-packing

essays on Kierkegaard

Strand Book Store 828 Broadway 3.78

The Metropolitan Museum of Art 1.50

to see the Duke of

Berry, Book of Hours

Not the map itself, but the blank spaces.

(Kroetsch, MsC775/04.25 Box16/44)

For Kroetsch then a map is a kind of field note too. It shares the formal trappings of the genre even as it partakes in the same fabulations of any myth. Even as the techniques of cartography are perfected, and new strategies devised for coping with "blank space", its inherent artifice can never be entirely concealed. Geological layers may be added.

Landforms may be labelled. With the advent of 21st century satellite imagery and remote sensing, forest canopies may be peeled away and ocean depths may be penetrated, but dragons remain at the edges. Israel Zangwill could never have conceived of such developments, but he has a thing or two to say about overly confident notions of absolute precision. His imagination is certainly fired by cartography's self-assured approach to Canada:

If these old maps erred in the courses of rivers and the lines of mountains and in ratios of space, they are not so misleading as your modern atlas with its all too accurate earth-measurements. For even your most primitive map, your mediaeval figment, with Paradise on the East, a gigantic Jerusalem in the centre, great spaces for Gryphons and Cynocephali, Sciapodes and Anthropophagi, and St. Brendan's Isles of the Blest marked clearly west of the Canaries, gave in its way a less distortive impression than that which we obtain from the most scientific chart on Mercator's projection. Your modern cartographer would persuade you that Canada is fifty times as large as Italy, and Canada, contemplating herself on a school globe, already pouts her breast with the illusion. In a true map, as distinguished from a geographical, dead Space would shrink to its spiritual nullity, and for its contribution to the human spirit, for its amplitude of history and poesy, Sicily – Italy's mere foot-note – would loom larger than all the provinces of the Canadian Confederation. (Zangwill 308)

If Zangwill implores the cartographer to a more holistic work that goes beyond simple topography, Graham Greene cautions against overly romantic surveys that take pains to fill in "blank spaces" at any cost. In this excerpt from his aptly titled travel narrative Journey Without Maps, Greene describes a peculiar map of the Republic of Liberia:

The other map is issued by the United States War Department. There is a dashing quality about it; it shows a vigorous imagination. Where the English map is content to leave a blank space, the American in large letters fills it with the word 'Cannibals'. It has no use for dotted lines and confessions of ignorance; it is so inaccurate that it would be useless, perhaps even dangerous, to follow it, though there is something Elizabethan in its imagination. 'Dense Forest'; 'Cannibals'; rivers which don't exist, at any rate anywhere near where they are put; one expects to find Eldorado, two headed men and fabulous beasts represented in pictures by the Gola Forest. (Greene 46)

Kroetsch leaves Dawe without so much as a fanciful chart. He compels his character to inhabit the blank space, ostensibly banished by his GSC forbears. Without interference from the logic of maps, the badlands can become a place where "fabulous beasts" might once again spring to life. For as his epigraph from bp Nichol's The Martyrology suggests, "this is a strange country / desert flows around us death & / breath makes us wary."

As commendable as his work was, J.B. Tyrrell was neither a trained cartographer nor a trained palaeontologist; in fact he had little formal instruction in geology. Rather, his preparation for unearthing the first carnivorous dinosaur fossil in Canada was a law degree from the university of Toronto, a prescription from his doctor for "outdoor work" due to an infirmity and the political connections of his father. The incident is depicted, to varying degrees of narrative effect in several competing and complimentary accounts. Often agents of the GSC kept two sets of note books on their journeys - one a scientific journal containing geological sections, rough maps, sketches and specimen inventories; and the

other, a semi personal diary. In the former species of note book Tyrrell writes on June 9th, 1884:

(Spc 18&19) Layer of flinty ironstone cont ^g obscure impressions of plants		6
Light grey ratherhard sandy shale with irregular bands of ironstone	25	
Sandstone & ironstone		1
Similar sandstone	5	
Somewhat darker & more readily weathering sandstone with irregular masses of ironstone (Sp20) & reptilian bones (Tyrrell, RG45vol.173.(#1876)1884#4		

He records the same event in his personal diary this way:

After lunch I walked up the back close to camp & from 40 to 80 ft. above the creek found a number of Dinosaurian bones in an excellent state of preservation, though very brittle, among them a large head almost perfect & we spent the afternoon in excavating them out of the bank.
(Tyrrell, RG 45 Vol. 172 #1874 7)

The discovery is painted with more detail in a letter to his father from the field dated August 13th 1884:

While down in the bottom of this last Coulee I found a head of one of the

4
large extinct reptiles that used to roam over this country, the first as far as I know that has been

found in any part of Canada but,
 unfortunately it was too heavy
 to move & too brittle, & though I
 have got a large portion of it.
 it is in so many pieces that
 it is doubtful whether it can
 be put together again. It would
 have been worth a good deal to
 have it just as it was in
 the museum down in Ottawa
 I also found a number of other
 very fine bones but am not
 able to carry them away, as we
 have a wagon load already.

 I may come back for them in the
 Fall when the rest of the work
 is done.
 (MsC26 Box 9 Folder 34)

In Tyrrell's formal account published three years later in 1887 as Report on a part of northern Alberta, and portions of adjacent districts of Assiniboia and Saskatchewan : Embracing the country lying south of the North Saskatchewan River and north of latitude 51 he modifies the tone and expounds on details according to his new understanding of the implications of the find:

Two miles above the mouth of the creek, where the Blackfoot pack-trail crosses the valley, similar rocks are exposed, and in a bed of the whitish sandstones the head of a large carnivorous Dinosaurian was found, which is stated by Prof. Cope to be the largest Dinosaur yet of remains found in the Laramie, and to be allied to his Cretaceous species, *Laelaps incrassatus*.
 (74)

Tyrrell underscores the accuracy of his observations by invoking the authority of E.D. Cope, one half of the duo of rival experts, whose Bone Wars in the early days of American vertebrate palaeontology were the stuff of legend and infamy, literally making the front page of every big daily newspaper in the US (Wallace 226-237). In mid-career Tyrrell, the geological cavalryman of the north-west and far northern barren lands, had become a respected mining expert and wealthy entrepreneur from shrewd investments in concerns first in the Klondike Gold Rush, and later in Northern Ontario. The following account, designed for his international peers in the American Association for the Advancement of Science journal Science, updates the Linnaean nomenclature of his find and precedes a lengthy discussion on the economic importance of the associated coal seam discoveries, which he made near Drumheller.

At an elevation of about 200 feet above the river, scattered among a large number of nodules and irregular masses of brown ironstone which formed conspicuous objects on the hillsides of white sandstone, I found and made a small collection Dinosaurian bones, being the first of such bones found or collected in the valley of the Red Deer River.

Next day we stopped for lunch beside the river where the steep sandstone banks of the valley are 300 feet high. Here Dinosaurian bones were again found to be abundant, and it was here that, five years later, Mr. T.C. Weston, the collector of the Geological Survey of Canada, found the second skull of *Dryptosaurus incrassatus*. (Tyrrell, "Dinosaurs" 458)

If the accounts of dinosaur discoveries are prone to Melvillean trappings as they are retold, it is not surprising then that in his mid-nineties Tyrrell turns the proverbial fish story into a struggle with the great white whale: "I was climbing up a steep face about 400 feet

high. I stuck my head around a point and there was this skull leering at me, sticking right out of the ground. It gave me a fright" (Historica).

The anecdote appears in website supplementary materials to a "Historica Minute" television short, though even Tyrrell's most recent biographer Heather Robertson is at a loss to source the citation. It may well have been derived from a noted report and a typescript "autobiography" that Tyrrell prepared though evidently never published. These fascinating documents are now held by Special Collections in University of Toronto's Robart's Library.

The former is a summary of the season's events labelled "1884":

During the summer I examined the coal seams outcropping on the Red Deer River and elsewhere, and found the first skull of a dinosaur found in western Canada. In Science for April 20th 1923 I published the annexed brief account of these discoveries.

During the summer I collected "about 400 specimens of plants, invertebrates and vertebrates (over)

 (including the skull of a dinosaur)
 from the Laramie and Cretaceous
 rocks of the Red Deer and Battle
 River districts" Summary Report
 Geo & Nat. Hist. Survey. Ottawa 1883
 (Tyrrell, MsC26 Box119 Folder 5)

The latter consists of an elaborated account:

The next day however, I walked up the bank, close to the camp, and at an elevation of between forty and eighty feet above the creek, found a number of Dinosaurian Bones, in an excellent state of preservation, though very brittle. Most of them were heavy and massive,

such as those of the limbs, etc., but among these was a large and fairly perfect head of *Laelaps*,

C 6

(*Dryptosaurus*) *incrassatus*, a gigantic carnivore, which projected out of the horizontal beds of cretaceous sandstone, with its rows of sharp, spikelike teeth giving it a very fierce appearance. We spent the afternoon excavating these bones from the rock, but unfortunately we had no appliances but axes and small geological hammers. We worked with all the care >that the tools< and the time at our disposal would allow, but in spite of all we could do, some of the bones, teeth, et. were broken. Then after we had managed to get them out of the rock we had no proper means of packing tem, and no boxes but the wagon boxes to put them in. However, we got together the skull and some the best of the leg and other bones, and then found that we had a heavier load that we were able to carry with us. We were therefore obliged to leave a small pile of bones at the bottom of the bank just north of the creek, on the chance that we might be able to pick them up at a later date, which fortunately, we were able to do two months later when returning from another expedition.

After completing this work, and packing up our precious collection as well as we could, we stared in a cold drizzling rain on our way to Calgary. (Tyrrell, MsC 26 Box 122 Folder 26)

The notes of R.G. McConnell, and John Macoun are never directly cited, but belong to the corpus of early western Canadian palaeontological field notes that inform the context and implicitly dialogue with Kroetsch's novel. McConnell's discoveries often went to support the publications of his superior, George Mercer Dawson. That Macoun's chicken scratchings were legible to anyone else is extraordinary; they seem to obey no restriction of margin or ruling whatsoever. While the expeditions of Thomas Chesmer Weston are not explicitly recognized in the text, substantial evidence in Kroetsch's research notes, reveal that the author was aware of their existence and that he took steps to consult them at the National Archives of Canada. Included in one file is a hand written transcription, and

photocopied excerpts from Weston's field notes for the 1888-89 field seasons on the Red Deer River. Marginal notations and underlines also prove that Kroetsch understood the significance of Weston's pioneering tactic of hunting dinosaurs by boat along the Red Deer River exposures. An extended, though highly significant, excerpt from Weston's notes details the progress of his expedition from Tail Creek (the starting point of the Dawe Expedition) to his discovery of the second carnivorous dinosaur skull found in Canada, as previously alluded to by J.B. Tyrrell:

9

3rd night camp.

Mouth of Tail Creek

Thursday June 20th /89

8 a.m. shifting camp. We are now making for the Rosebud about 80 miles by water. At the mouth of this Creek. (Tail Creek) high alluvial banks occupy the north side of the river leaving room just above the mouth on the side of the river for farming land or ranching ground.

On the north side of the river here there are fine flats for agricultural purposes all these flats are well timbered white and black poplar, Cotton wood, Birch and spruce.

Ran 25 miles and camped for night on the commencement of the "bad lands" First fossil bone
During the day we have run

many rapids with only water just enough to carry us over.
The river is still falling

The few bed rocks of this locality hold fragments of plants, but I could not find a whole leaf in any place. Here the alluvial banks look much like those at Medicine [sic] Hat, and Coal Banks. Fine flats well wooded are seen first on one side of the river, and then on the other. We have seen [sic] hundreds of wild geese, and ducks, and the margin of the river is marked all along with the tracks of the Red Deer, antelope, and coyote, Moose and other Watapeepemaning in the Cree language white tail deer.

10

Camp Commencement [sic] of bad lands.

Friday June 21st 89

Bright morning, but cold.
8 a m. shifting camp, and making for the Rose bud R. Camped for lunch in Range 21. Township 35. Here we found many fragments of fossil bones, among which was a portion of a Dinosaurian's tooth.
Camped for night about centre of Range 21. Township 34. During the day I have walked a long distance over the buttes of this vicinity. Fragments of reptilian remains can be found on most

of the buttes, but so far I have
seen nothing worth bringing
along.

At this part of the river , and

for many miles up White
fish are abundant To –
night Mc has, in a few
moments caught enough for
breakfast. My men do not
think Perch worth cleaning
and throw them away.

Took Photo. looking up River
No7 Range 21. Township 34.

Continued down river, and
camped for night 18 miles
north of Devils Pine Creek
The Bad land Buttes here
rise to five hundred feet
on both sides of the river.

They are strewn over with
Dinosaurian bones, but very
fragmentary

9 p.m. wind blowing a
perfect gale. Both tents
have been blown down
and the night is very cold

11

Camp Range 21 Tp. 34

Saturday June 22nd 89

Left camp at 8. a.m. It is a
lovely calm morning. Fish jump
ing in all directions along the river,
geese calling, coyote's barking,
and various birds singing mak-
ing the morning very enjoyable.

Photo No7 Range21 Tp 34

Have just seen a deer come
down to drink.

Photo No 8 looking down. Range

21 Tp. 34 Near Range 20.

Camp 18 Range 21 Township 32

Sunday June 23 /89

Have walked about ten miles over these "Bad lands" They are strewn with fossil bones, but they are very fragmentary. We have however collected a few good specimens.

Camp Range 21 Tp. 32

Monday June 24 /89

9 p.m. Have spent the day on the Buttes of this vicinity. On one of the high buttes I found a large number of bones, most of them imbedded [sic] in the rocks. Spent several hours trying to fit pieces together but failed, but succeeded in getting out a large portion of right and left >side< of lower jaw of a deniosaurian [sic]

12

also a portion of a femur. In another locality we found a number of the vertebra and other bones. During the day I have seen many hundreds weight of bones, but all in so fragmentary a state that it would be impossible to attempt to put them together. Many were abandoned after spending hours trying to put them together. Had I however proper [sic] appliances [sic] for

mending these specimens
 before trying to lift them,
 no doubt i should have
 succeeded in carrying away
 some fine bones But these
 are still [to] be got.
 I hope to visit this spot
 again and get other bones
 belonging to my Denosurian
 jaws.

Camp Range 21 Township 32
 Tuesday June 25th / 89
 Spent the morning on the
 Butte from which the jaw
 bones came. photographed
 the butte with men standing
 at our Dinosaurian grave
 Found almost all the upper
 jaw, but with the exception
 of a small portion which
 I have brought away it
 crumbled to pieces One of
 the specimens brought is
 the larges part of the scap-
 ula (?)
 From the above locality we
 shifted down the river
 about a mile but owing to
 head winds could not go
 farther. here I found the
 first fossil shells. They are
 in a three feet bed of rock
 about a hundred feet be-
 low the bone beds, and a-

13

bout ten feet from water level.
 in Range 21 Township 32

camped fro night a mile below fossil shell beds. here the butes [sic] come almost to the river edge and rise to a hight [sic] of about eight hundred feet. Close to our camp there is a thin seam of coal in the bank near high water mark.

 Camp Range 21 Township 32
 Wednesday June 26 /89

Have walked many miles over the buttes today. Half-way up one of the buttes – say 90 feet from the river found an oyster bed see sp. Collected a few turtle bones, and other bones. saw several large femurs, but so much shattered that it was impossible to make anything of them All the buttes here are scattered over with bones in a fragmentary state. The day has been very hot and the flies very numerous Slight rain and heavy wind Night very cold 9 p.m.

14

Camp Range 21 T.p. 32
 Thursday June 27 /89
 Bright hot morning with ten thousand sandflies around my hat. We are just leaving for lower down the river. We have made only two miles to day having spent several hours trying to put together a large femur bones, but found

it impossible to do so Hundreds
of large pieces of femmur [sic]
and other leg bones are ly
ing scattered over these buttes
It is very anoying [sic] often walk-
ing miles over these rocks to
return to carry, with only frag-
ments of bones.

To day I have collected a
thin peice [sic] of rock showing
ripple marks. This is from
the fossil bone beds and
should be placed with

the bones.

The sand and black flies
are very bad to night
Returned to camp at 9 p.m.
on either side of the river
here the buttes rise to from
five to six hundred feet
high. the margin of the
river is well wooded with
black poplar and other
woods and in many of
the vallies [sic] of the buttes
good sized pines
We are still in Range 21
Township 31.
(Weston RG 45 Vol. 176 Notebook #2853)

It was also Weston who wrote of Deadlodge Canyon, (now protected within the
borders of present day Dinosaur Provincial Park):

This is a
grand field for col-

20

lecting – much the best
seen so far on this river.

(Weston, RG 45 Vol. 176 Notebook #2853)

Kroetsch liked this fossil hunter's account so much he copied an entire chapter from Weston's 1899 autobiography, Reminiscences Among the Rocks in which, the above entry is eloquently expanded:

Sunday July 7th, we waved adieu to what is probably the most important field in Canada, so far as bones of extinct animals is concerned. It would take years to glean from these great sandy buttes, flats and cliffs even a part of the information they hold relating to that period when the Cretaceous Rocks of Canada were laid down. (226)

One of these subsequent gleaners of information was Lawrence Lambe, the GSC's first professional palaeontologist who also took a Huck Finn like, albeit scientifically profitable, raft trip down the Red Deer. In his 1897 field notes, Lambe records the tumultuous beginning of his fossil-hunting expedition by boat:

Thursday 29th. Arrived at Calgary at 6 A.M. about 4 hours late. Had breakfast at the Alberta Hotel with a man who is in Lay's Band at Edmonton. the train for Red Deer started at 8 AM. Reached Red Deer at 1.30P.M. Had dinner, & saw new boat. Engaged Brooks for the trip @ \$2 a day. Friday 30th Drove to Indian Industrial Farm. engaged Lamont @\$1.75 a day. In afternoon got grub from Smith & Gaetz. paid him. \$79.43. This includes groceries. hardware & c. Wrote to Mabel, and Father. notified Marshall of the issuing of a draft on my letter of credit for \$79.43. Saturday 31st started down the Red Deer at about 9.30 AM. River quite high &

swift. Reached the mouth of Blind
Man River at about 1.30 P.M. shortly

2

after lunching at 12 noon a little fur-
ther up the river. Pitched camp >camp 1< at this
place (Blind Man River). Made a
collection of fossil plants on the >north< bank
of the Red Deer just across the mouth
of the Blind Man River. The north
bank is here about 100' high and gives
a good section. Below the soil is about
2' of drift (rounded stones and gravels)
below this about 4' or 5' feet of yellowish
sandstone. below this again thick beds
of grey clay. Then a thin bed of ar-
grillaeous [sic] shale about 3" thick contain-
ing plants – leaves. immediately below
this a seam of rather impure coal
from 2 1" to 3" thick- overlying more
clays. The thin bed containing
leaves is about from 10' to 15' about
the surface of the water. and outcrops
pretty parallel to the level of the
water. We pitched camp at this
spot because the boat leaked so
badly that the things were getting
wet. The clothes in my [bin?] got wet.
It began to rain about 6 p.m. &

continued during the evening
(Lambe RG 45 Vol. 290 Notebook #1222)

In spite of the inconvenient leak, Lambe's initial fossil plant collection was to bode well for future discoveries. Almost immediately after this episode Lambe whets his whistle with some incomplete bone fragments. He also indicates that his work is a direct extension

of J.B. Tyrrell's efforts from over a decade earlier. Indeed, Lambe admits that he is guided by a kind of treasure map prepared by his predecessor:

3

Dead Man or Haynes Creek a short time after starting. Lunched a few miles beyond Tail Creek. Landed at a cliff about 2 miles beyond Tail Creek (marked on Tyrrell's map F [encircled] and found fossil plants in thick sandstone beds. they are not well preserved so did not take away. Had 2 showers during the afternoon when it grew quite hot. The cliffs on either side of the river are becoming lighter in colour a, a yellowish grey instead of yellowish brown as they were yesterday & the day before. Collected the first dinosaurian bones at a cliff on the east side of the river in range XXI, Twp. 36. at the point where Tyrrell first collected his. We camped >camp 3< for the night about 1 ½ miles below this point. The bones collected today are only fragmentary. Bothered by mosquitoes when we landed for dinner. Saw bear and antelope tracks where the bones were collected. The thin bed containing the bones at this place is about 3" or 4" thick underlying

 a bed of grey shale (soft which is below a thick beds of light yellowish sandstone. The dinosaurian bed is about 6' above the level of the water of the river. We made about 30 miles today. Tuesday Aug 3rd Thick fog on the river at Sunrise. Got away from camp about 7.45 AM. a little later, and went ashore for lunch at noon at the lower end of an island shown in Tyrrell's – map in range XXI twp.3 twp. 34. In nearly all the cut banks along the river since

we left >camp< this morning I have found fragments of dinosaurian bones but none that I thought worth bringing along. About 10.30 Brooks & I climbed the buttes to the highest point on the eastern side of the river at the big bend where the river turns towards the S.W. We found here at high level, fragments of bones. Mosquitoes in this high ground away from the river were very bad. The banks of the river & the slopes of the valley beyond have the light-yellowish grey colour or drab, similar to

4

those passed yesterday. Examined the cliffs on both sides of the river going down after lunch; found fragments of dinosaurian bones at nearly all of them. At four reached the lower end of the southern most of two islands shown on Tyrell's map at the northern part of Range XXI, twp. 33, proceeded about 1 mile below the island & camped >camp 4< for the night as I wanted to see the exposures here > on the west side<. I went up from the river bank about 500' & about ¼ mile back, & searched over the banks & in the coulees for fossils. Found some broken into little pieces & some larger fragments. By the river side found a fragment over a foot long & about 4" in diameter. Returned to camp about 6.30P.M. Had a swim & a wash. Before lunch shot a goose. It has been a hot day. Bothered considerably by mosquitoes. We are now about 78 miles from Red Deer & have reached the beginning of what Tyrrell calls his "best bone locality".
(Lambe RG 45 Vol. 290 Notebook #1222)

Sure enough, once Lambe arrives at Tyrrell's "best bone locality" (just up river from present day Drumheller, and ironically very close to the spot where Dawe compares his failures to the successes of previous expeditions) he recovers some quality specimens, and another object of particular significance to Robert Kroetsch—a stone hammer much like the one from his long poem of the same name. Also noteworthy is Lambe's detailed description of the way his boat responds to a load of fossils:

Thursday. Aug 5. Remained at the same place today. In the morning at 7 AM started with Brooks to examine the buttes & bluffs at the back of the camp on the East side of the river. Secured a number (about five) vertebrae - & a broken fragment (the end) of what was evidently an immense limb bone. Found also two very large bones [figured?] above. I sketched one (figs 1, 1a) before removing it but after removing the shaly [sic] rotten black rock in which it was partly embedded; of it was too broken or rather fractured to move take with us. After sketching it I found that we had an erroneous >idea< of the shape as the end (a) was enlarged by fast holding iron stone. The other bone, fig 2., we dug out, coated it with plaster of paris, & removed it to camp in four pieces. This evening the mosquitoes are very bad so we sought the shelter of our tents early – (at 9 P.M.) There is a ½ moon tonight. The day has been hot. The

6

beds in which we found the bones
are just above the grassy flat

which stretches back from the top
of the cut bank at the river side.

Friday Aug. 6

Had breakfast at 6 AM and
crossed over to the other (West) side of the river
when I examined the escarpment for
fossil bones. We got a couple of verte-
brae, but nothing worth remaining for
lay. I found an Indian stone ham-
mer or net weight here. We moved
camp at 11 AM, after I had packed
3 pieces of the larger bone in two of the
survey bones. We lunched at a spot
on the East side of the river at a spot
about 4 miles below last night's en-
campment. Examined the shale
here & collected some fossils. at
5 P.M. after having reached a point
about 6 miles further on and not
more than about 6 miles I judged
above the mouth of the creek formed
by the union of Devils Pine Creek

and Three Hills Creek. I spent the
time until about 6 looking over the
escarpment which at this point on the
West side of the river are near to the
water. Shortly after 6 as we were put-
ting up the tents [presonating?] to what
we thought was a moderate thunder-
storm, or violent wind storm from the
west struck us. Little rain fell but
the waves dashed into the boat, which
was in danger of being carried down –
stream, & wet nearly everything in the
boat. Later we got up the tents &
rain set in for the evening. It was
very hot all day; mosquitoes bad.

Saturday August 7th

After breakfast spent a couple of
hours collecting behind the camps on the west
slopes of the valley. Collected a number of bones

vertebrae. What I take to be a foot joint. We saw two very large bones lying together on 3' a triple lay, the other similar in slope 2' 11" lay. They were both very much fractured. Higher [sic] up the slope about 60' I collected in yellow sandstone a number of bones &

7

a couple of small gasteropods. [sic] We left camp about 9 AM and about 2 miles further down reached the mouth of Knee Hills Creek, so that we came further last yesterday than I calculated. Passed a shaque [sic] on the W. side of the River. got some milk. found that we had mistaken the Knee Hills Creek for the Three Hills Creek so that our camp last night was between the two creeks. on the W. side where a jaw had previously been found. Reached a spot on the East side of the River about two >one< miles above the creek that flows into the Red Deer from the Hand Hills. Spent the whole afternoon on the escarpment back of the camp. Found some large bones, which I cashed [sic] & will get later. We have now some good fossils, & the boat is beginning to feel the effect of the load. This is a beautiful moon-light [sic] evening.

Sunday August 8.

Observed Sunday in so far as we did not collect fossils but

tried to get things tidied up. I devoted the morning to drying my clothes which had been well soaked when the storm of Friday struck us. i also read. In afternoon i sketched but did not succeed in producing anything worth looking at.

May be more successful next time. in evening read. There has been a strong but gusty wind from the south all day. Just before sunset the sky clouded over. it was pretty hot all day. This is our see- and Sunday [visit?].

Monday August 9.

Had breakfast about a quarter to six. Men brought down the large bones from the back of the cam. This probably belonged to one animal & I have given them a distinctive mark (a circle of red paint). I examined the escarpment at the mouth of the Rose bud River (opposite) and opposite the mouth of Willow Creek. We have such a weight of fossils on board now that we draw

8

about a foot of water. The surface of the water is about 8" from the gunwale. We camped about 3 or 4 miles below the mouth of Willow Creek >on the East shore<; having made about 14 miles during the day which I consider good progress considering the time I spend on shore. Landing as I do when I consider the exposures promising looking. I have now traversed the part of the Red Deer River where Tyrrell considered the outlook for bones most promising. I must now get without delay to the beginning of Weston's bone locality- a distance of from 18 to 20 miles down the river. (Lambe RG 45 Vol. 290 Notebook #1222)

Dawe begrudgingly mentions Lambe by name as he does Barnum Brown and the Sternberg family against whose "obscene conquests" he compares "his own fine impotence" (Kroetsch, Badlands 51, 148). Spalding even suggests that Dawe's "Lutheran obsessions and limp" owe a debt to C.H. Sternberg (254). The references to this pair of fossil hunters are specific. They refer to Brown's 1910 field season, and C.H. Sternberg's 1912 field season respectively. Dawe begrudges the pair for finds each made in the Edmonton beds near Drumheller: Brown for "the skull of a horned dinosaur unknown to science" on Ghostpine Creek; and C.H. Sternberg for a near perfect Trachodon on Michichi Creek (Kroetsch, Badlands 50-51). The American Museum of Natural History Annual Report for 1910 corroborates Kroetsch's claim on behalf of Brown: "At this camp they made important finds of hadrosaur, ceratopsian, an Ankylosaurus skull and partial skeleton" (Brown, "1910 Annual"). Brown records the event in his field notes with equal enthusiasm: "A single fragmentary skeleton was found in the first coal seam about 160 feet above the river which up to that time was the only Ceratopsian remains observed" (Brown, "1910"). While Kroetsch gets the species of the Sternberg find correct, he gets the date wrong by one day. On August 13 the Sternbergs found dissociated bones, and like Lambe another "stone hammer" which could not have escaped Kroetsch's attention considering his poetic treatment of a similar object. However, the actual date of the trachodon discovery was August 14th 1912, the significance of which was not lost on Sternberg who began the entry with this upper case exclamation, "A RED LETTER DAY." (Sternberg "1912" 13).

From the chronology included at the beginning of the novel, it is clear that the Dawe expedition to the Red Deer River badlands occurs in the summer and early fall of 1916, immediately following the historical period known as the "Canadian Dinosaur Rush" which lasted from 1909 to 1915. During these heady times teams from the American Museum of Natural History and the Geological Survey of Canada took to the field in an all out competition to recover the finest specimens. No legislation existed at the time to prevent the removal of fossils from the country. According to many palaeontologists, the Geological Survey Director responded appropriately by not halting the mass exodus of extinct creatures from the Dominion on NY bound boxcars, but rather by encouraging some of the skeletons to make a northerly detour - mainly to Ottawa's Victoria Museum. Barnum Brown, so named after a distant relative renowned for another kind of travelling circus, led the New York team while Charles Hazelius Sternberg and his sons, George, Charles Mortram and Levi, Kansans all of them, acted as hired guns for the GSC.

At numerous points in the novel Dawe complains of arriving too late in the fossil fields, and of being beaten to the best specimens by Brown and Sternberg. Anna Dawe, writes that her father "had been born one generation too late. But he was not to be deterred by a mere error in chronology" (Kroetsch, Badlands 128). Indeed Dawe's stubbornness was well founded. Although the Rush had officially concluded, there was still much action in the Red Deer fields in 1916. It's a wonder Dawe's outfit didn't run into the Sternbergs. George continued to collect for the GSC with Gustav Lindbland near Bleriot Ferry and

Charles Senior and Levi were working independently for the British Museum of Natural History. George left sparse notes and box lists detailing his discoveries whereas his father and brother left none, or at least none that are readily archived. Kroetsch may be coyly alluding to this gap in the archival record in this passage: "And on the evening of that (third) day Dawe wrote something on page 39, Book A, of his field notes for 1916 then tore off the bottom of the page and presumably, destroyed it" (Kroetsch, Badlands 125).

However, several letters are extant. On September 10th, 1916 C.H. Sternberg writes to Dr. A. Smith Woodward of the British Museum of Natural History. He regales the good doctor with the successes of a season in the field, even as he angles for a new contract: "I prefer to work these beds for you because not only I like your treatment of myself, but I believe I will arouse less jealousy from Canadians if the material goes to you than if I sent it anywhere else outside of Canada" (Sternberg, "1916 Correspondence"). This point unintentionally speaks to one raised in an earlier letter written on Aug 6, 1910 by Barnum Brown to his director, Prof. Osborn in New York: "Our invasion of Canada will bring good results. The rapid construction of new railroads all over this Province will enable us to work several rivers farther north where I hear of fossils from the old trappers and Indians" (Brown "Correspondence").

Sternberg's correspondence resumes with Dr. Woodward in December of 1916. It was a time of war and the prize *Corythosaurus* specimen he had shipped had been sent to

the bottom of the North Atlantic when a German surface raider sunk the merchantman *Mount Temple* (Sternberg, Hunting 201-202). Kroetsch, who undoubtedly took this story directly from his own heavily annotated copy of Sternberg's autobiography, Hunting Dinosaurs in the Badlands of Alberta, incorporates it into a speech given by the photographer Michael Sinnott who claims to have photographed the very excavation of the lost specimen (Kroetsch, Badlands 103). However, to accomplish this miraculous feat Sinnott would have had to be in two places at once. Historical field notes prove that the Sternbergs were hard at work, perhaps in the next coulee over, WHILE Sinnott was predicting a nautical disaster that had yet to occur (Kroetsch, Badlands 103).

All of these men left extensive field notes detailing their expeditions, which are now held by archival institutions across North America. In some cases, the actual specimens they qualify and quantify have been lost; only the notes remain. Not only do these notes provide invaluable background information to the reading of Badlands, but they actively dialogue with Kroetsch's fictional work and so become "literary" in their own right. The list that Dawe rewrites "a dozen, twenty times" on the back of an envelope transcends the inventory of supplies that it itemizes. It becomes a powerful incantation under constant revision and enlargement "enable him to flee", to disappear, not only from his Ottawa office, but from his wife and responsibilities: "Flour, potatoes, beans, rice, bacon, baking powder, raisin, prunes, coffee, sugar, pepper, salt, shovels, picks, buckets, axes, chisels, nails. . . ." (191). When the inventory lists of his historical counterparts are considered in a

like way, narrative possibilities open. F.R. Scott once collected snatches of historical documentation, and assembled them in a found poem collection called *Trouvailles*. Items from George Mercer Dawson's 1874 Boundary Commission inventory also gleam with lapidary lustre, notwithstanding the *de rigueur* glass beads and mirrors. Even Jenkins can't resist reproducing an abbreviated excerpt from this extraordinary document. His Dawson recalls its comprehensiveness with pride, and some amazement. "I have the list still, and it reads like a recipe of the ingredients needed for the essential botanical cum geological expedition:" (Jenkins 137).

Dufferin Man
May 17. 1874.

[reverse]

List of articles
belonging to Nat History.
Dept.

Ration Returns & c.

[pencil]
Giving an
idea of the
detail & fore
thought required
in arranging
for expeditions.

=====

Copy

General list of Government property ~~in~~
in use ~~belonging to~~ Nat. Hist. Department N.A. Boundary
~~use for by~~
commission. May 17. 1874.

- | | |
|--|--------------------------------------|
| 1. Bell Tent. | 3. sets plant pressing boards paper |
| 2. H.B. Tents | 3. Entomological boxes. |
| 2. axes | 1. " collecting box. |
| 4. spencer rifles <u>belts & pou</u> | 1. Lin case holding B.P. app & c |
| 4. pouches for do. | 1. Tin vasculum. |
| 3. Belts for do. | 1. spirit tank. |
| ammunition for do. | 2. wooden chests for birdskins |
| 2. Buckets | 30 lbs cotton wool. |
| 2. Camp Kettles | Arsenical soap & other preservatives |
| 1. oven | scalpels scissors knives &c |
| 1. Pan | 1. Aneroid barometer. |
| 1. Fr. Pan | 1. odometer. |
| 1. Pepper dredge | 1. micrometer. |
| 2. Deep dishes | 1. Prismatic compass |
| 1. Tea pot. | 1. compass |
| 1. B. Knife | Note & field books. |
| 1. Ladle | 1. Geol. specimen bag. |
| 1. spade | 3. " hammers. |
| 1 scythe | 2. leather covers for plant cases |
| 4. Pairs hobbles | 2. thermometers |
| 3. lbs nails | 1000 entomologists pins. |
| 1. lamp | |
| 1. Ball wick | 1. Bark canoe |
| 3. [Fru?] line | Packing cases & blue boxes |
| 1. whitewater wagon. | 1. Reamington [sic] shot gown with |
| | shells & carrier. |
| 1. Buck-board. | 1. Dog chain. |
| 2. Pack saddles. | 56. Paper specimen boxes |
| 4. sets harness | also pill boxes &c. |
| 1. shoe pick | 9. tin specimen boxes. |
| spare shoes | 9. Insect collecting bottles. |
| 1. spare tongue | glass specimen jars |
| 1. spare double tree | 2. spring balances. |
| 1. spare single tree. | 2. Belt axes. |
| spare bolts. | 4. Mouse traps. |
| 3. draught horses | 2. steel traps. |
| 1. " pony | 2. insect nets |

Collections in geology, botany, &c are not included
in the above list.

George M. Dawson

Bought at Marland & Watson's Ap 23 & 24. 73

	\$	C	
6 guns @ 5.50		33	00
48 doz ½ lb flasks gunpowder @2.25doz	108	00	
30,000 gun caps @ 80 c thousand	24	00	
4 doz bullet moulds @ 1.60	6	40	
300 lbs assorted shot @ 1.60	24	00	
4 doz Gun worms @ ?			
12 doz clasp knives @ 2. 2.50 say	27	60	
12 " sheath " say	36	80	
4 doz " " small @ 80	3	20	
4 doz " " largest @1.10	4	40	
1 doz hatchets small	8	0	
1 doz " larger	9	00	
1000 glovers needles	4	00	
2000 needles (large sizes)	2	00	
10 lbs Best English Vermillion @ 1.20	12	00	
1 Tin common Vermillion	1	20	
3 doz flat files @ 1.40		4	20
3 doz triangular files @ 1.10	3	30	
Flints & steel ?			
1 doz draw knives	8	00	
2 doz large sheath knives @ 4.50	9	00	
2 doz " " " @ 3.00	6	00	
2 doz large clasp knives 2.20	4	40	
2 " " " " 2.00	4	00	
	346	10	

[reverse]

Marland &
Watson.
Memo. of
invoice.

Hodgson Murphy & Summer.

10 lbs beads. small opaque Blue @ 30c	3	00	
4 ½ " " bugle s 20c		90	
4 ½ " " dark blue @ 20c		90	
4 " " black bugle 30c		1	20
Lot bunches large. transp. glass & amber drops	4	00	

10 lbs beads small opaque white @ 30c	3	00
10 " " assorted coloured bugle 35c	3	50
10 lbs beads. assorted colours 35c	3	50
10 doz bunches opaque white bugle @ 35c doz	3	50
10 doz " assorted " @ 35c doz	3	50
Lot Large opaque white & blue necklace beads	4	00
24 doz glass earrings @ 35c doz	8	40
12 doz " @ 30c doz	3	60
12 doz " @ 35	4	20
12 doz " @ 30	3	60
	<u>49.</u>	<u>10</u>
Calico print @ from 8 ½ c to 13 ¼	27	00
1 doz Flags	1	20
2 doz standards @ 2.50	5	00
1 doz Handkerchief	1	30
2 doz " 1.30	2	60
30 doz black & white spools. @ 10c	3	00
1 doz handkerchiefs	2	00
	<u>42</u>	<u>10</u>
	42.	10
	49.	10
	<u>51.</u>	<u>83</u>
	143.	03

Total @ Hodgson Murphy & Summer's
Invoice \$145.58

[reverse]
Hodgson & Co
Memo of
invoice

1 ½ oz	apples	daily
4 oz.	biscuits	"
14 oz.	flour	"
4 lbs	baking powder	
6-100 lbs	flour	
16 oz.	bacon	"
1 oz.	oatmeal	"
2 ½ oz	cheese	"

1/200 gal	pickles	“	
1/28 oz	pepper	“	“
1/3 oz	salt	“	
2/3 oz	soap	“	
3 oz	sugar	“	
1/100 gal.	syrup	“	
1 oz	Tea	“	
		over	

[reverse]

½ oz.	Tobacco	daily
½ oz.	Mustard	weekly.
Candles.	3 per tent	“
oil.	½ pint per camp	“
Compressed vegetables	1 portion daily.	

=====

Bought at Hodgson. Murphy & Summer's

		\$	C.		
10 pieces	Riband [sic]	9	14		
4 gr.	medals at 60c	2	40		
1 gr.	cross'	1	60		
1 gr.	glass prayer rings	1	25		
1 boz	rings		30		
1 gr	coral earrings	3	60		
2 doz	Topaz Broach	1	60		
6 doz	combs at 24c	1	44		
6 doz	horn combs @ 23c	1	38		
Job lot side combs		1	00		
2 doz	neck chains @ 2.00	4	00		
6 doz	small folding mirrors	1	50		
6 “	large “ “	2	10		
1 gr.	opaque glass earrings	4	80		
Job Lot glass earrings		3	00		
6 doz	blue glass chains at 30 c	1	80		
6 doz	gilt glass hearts at 30c		1	80	
6 doz	Bead necklaces at 35c		1	95	2.10
6 bunches	red horn rings at 30c	1	80		

6 doz	Broaches at 22c	1	32
6 doz	gilt lockets at 10c		60
1 gross	brass buttons	1	40
1 “	glass “	<u>2</u>	<u>00</u>
		51	78#>83<

(Dawson, M.G. 1022 Cont. 83 14011)

The technique is well represented in other fictional analogues. Defoe has Crusoe recite his useless material fortune if only to highlight the desperation of his exile on a desert island:

I had, as I hinted before, a parcel of money, as well gold as silver, about thirty-six pounds sterling. Alas! there the sorry, useless stuff lay; I had no more manner of business for it; and often thought with myself that I would have given a handful of it for a gross of tobacco-pipes; or for a hand-mill to grind my corn; nay, I would have given it all for a sixpenny-worth of turnip and carrot seed out of England, or for a handful of peas and beans, and a bottle of ink. (103)

Turning again toward the centre of the earth, Professor Lindebrock assiduously reviews his expedition supplies prior to descending into the depths. The sheer enormity of the voyage that lay before his party renders any equipment manifest inadequate. The fact that his formidable list stretches for pages and includes minute details about the function of instruments and their place of manufacture only increases the futility. Nevertheless the good professor and his nephew spend forty-eight hours assembling four packets containing such sundries as: "an Eigel's centigrade thermometer", "an aneroid barometer", "a chronometer", "two compasses", "a night glass", "two of Ruhmkorff's apparatus" (and their alimention), "two of Purdy's rifles and two brace of pistols", "a considerable quantity of

gun cotton", "two pickaxes, two spades, a silk rope ladder" (three hundred feet long), "three iron-tipped sticks", "a hatchet", "a hammer", "a dozen wedges and iron spikes", "a long knotted rope", "essence of beef and biscuits [for] six months' consumption", "spirits", "flasks" (for water collection), "a pocket medicine chest, containing blunt scissors, splints for broken limbs, a piece of tape of unbleached linen, bandages and compresses, lint, a lancet for bleeding", "a row of phials containing dextrine, alcoholic ether, liquid acetate of lead, vinegar, and ammonia drugs", "a supply of tobacco", "coarse grained powder", "amadou", "a sufficient quantity of gold, silver, and paper money", "six pairs of boots and shoes, made waterproof with a composition of india rubber and naphtha" (Verne, Journey 70-72). "The kitchen sink" might not be out of place in such a comprehensive list. It's a wonder Lindebrock and his men could even stand under such a burden, let alone penetrate the unknown bowels of the earth bearing so great a load. Verne seems to slyly suggest as much with Axel's back-handed appraisal of his uncle's preparations, "Clothed, shod, and equipped like this," said my uncle, "there is no telling how far we may go" (Verne, Journey 70-72).

Not to be outdone by his French predecessor, Doyle also lavishly appoints his Lost World expedition. Once the group attains the heights of the strange plateau, they assume a defensive position for the night, building a thorn bush revetment with their hatchet and knives. Predictably, the intrepid scientist names their crude shelter, grandiosely, and after

himself, "Fort Challenger". Only then may they take stock of the gear that will keep them safe from marauding dinosaurs and ensure their scientific success:

[W]e had our four rifles and one thousand three hundred rounds, also a shotgun, but not more than a hundred and fifty medium pellet cartridges. In the matter of provisions we had enough to last for several weeks, with a sufficiency of tobacco and a few scientific implements, including a large telescope and a good field-glass (Doyle 98)

It's a formidable array indeed, even without comparison to its counterpoint in the personal effects of Maple White and his partner James Colver. In describing the contents of Maple White's knapsack, Professor Challenger cannot help but dismiss them for the accoutrements of an "artist and poet" (Doyle 27). He even takes a stab at literary criticism when he judges Maple White's "scraps of verse" as "singularly wanting in merit" and his "pictures of river scenery as "rather commonplace" (Doyle 27). Ironically, an expert in art and poetry might just as offhandedly, and unjustly, dismiss the creative flourishes George Mercer Dawson appended to his scientific field notes. Indeed Tony Rees makes his opinion known about the Chief Naturalist's Boundary Commission compositions citing an ode to smudge as a damning piece of evidence. "Dawson also had his literary aspirations and was a regular producer of florid (and invariably awful) high-Victorian verse" (140). Yet, Morris Zaslow in his history of the Geological Survey of Canada, argues the contrary. "He was an above average sketcher and water-colourist, and probably the best of the several poets in the Survey's history [. . .] (Zaslow 112). Challenger's disdain culminates with the observation that the "strange American Bohemian" ventured into the jungle carrying only

"a paint-box, a box of coloured chinks, some brushes, that curved bone which lies upon my inkstand, a volume of Baxter's 'Moths and Butterflies,' a cheap revolver, and a few cartridges" (Doyle 27).

An even more dismal scene awaits the party when they chance upon "the site of an old encampment, with several empty Chicago meat tins, a bottle labeled 'Brandy,' a broken tin-opener, and a quantity of other travelers' debris" (Doyle 80). If the evidence of "a crumpled, disintegrated", dateless sheet of the Chicago Democrat isn't enough to identify the campers, the garish scene of Colver's skeleton impaled upon bamboo spears does job. Challenger takes grim inventory of the dead man's effects, "A gold watch by Hudson, of New York, and a chain which held a stylographic pen, lay among the bones. There was also a silver cigarette-case, with "J. C., from A. E. S.," upon the lid" (Doyle 82).

While Doyle likely used Professor Challenger's attitude regarding the arts to parody presumptions of scientific omniscience, his Canadian literary colleague Charles G.D. Roberts took a more reverent approach to unwitting comic effect. In the preface to his palaeontological romance, In the Morning of Time, Roberts dutifully submits to scientific authority then in the course of his narrative he casts primitive humans in the same chronological period as dinosaurs:

The effort to project ourselves back into the dim world of prehistory, into the morning of time, is a fascinating adventure of the imagination. But the imagination must be held under curb by a vigilant regard for the results of the painstaking investigations of the scientists. (Roberts, Morning 5)

Edgar Rice-Burroughs makes no bones about flaunting the dictates of science. Fantasy was his bread and butter. He may have even viewed it as his duty to generously mix the flora and fauna of geological periods, projecting humans and dinosaurs to the very dawn of the earth, when only primitive marine organisms began to emerge. He introduces his novel, The Land that Time Forgot with this bold proclamation:

It seems incredible that all that I have passed through—all those weird and terrifying experiences—should have been encompassed within so short a span as three brief months. Rather might I have experienced a cosmic cycle, with all its changes and evolutions for that which I have seen with my own eyes in this brief interval of time—things that no other mortal eye had seen before, glimpses of a world past, a world dead, a world so long dead that even in the lowest Cambrian stratum no trace of it remains. Fused with the melting inner crust, it has passed forever beyond the ken of man other than in that lost pocket of the earth whither fate has borne me and where my doom is sealed. I am here and here must remain. (Rice-Borroughs 9)

Amid the endless contingencies of post-modernism, one dependable axiom stands out: never trust a narrator who purports to reliability. Ironically, this sage bit of advice has long been in circulation. Poe took a cue from Shakespeare when he sketched a protesting narrator for his weird tale, "MS in a Bottle". Often the very mechanism Poe uses to generate horror is by confronting the sane and the sober with the inexplicable and the uncanny:

Upon the whole, no person could be less liable than myself to be led away from the severe precincts of truth by the ignes fatui of superstition. I have thought proper to premise thus much, lest the incredible tale I have to tell should be considered rather the raving of a crude imagination than the positive experience of a mind to which the reveries of fancy have been a dead letter and a nullity. (Poe "MS" 179)

What change came over George Mercer Dawson once he boarded a train in Ottawa for Western destinations? His reading list is enough to cast some suspicion on the exclusivity of his scientific mission. Rounding out a bibliography of scientific texts and geological manuals is a notable exception:

Books for N.W.

Frey

Oliver

Dana Min & geol.

Winchell.

Rolliston

Hershel.

Hind.

Shakespere [sic]

(Dawson, M.G. 1022, "1973-74")

However, Dawson's literary appetite likely placed him in good stead among his fellow officers of the British Boundary Commission. Tony Rees reports that an impressive library had been established at the Commission's Dufferin headquarters, against the numbing prospect of at least two northern winters in the field (a privation Dawson would not suffer since he wintered in Montreal) (Rees 64). Among the hundred volume collection figured the accounts of previous expeditions, scientific treatises and historical tomes. In addition to these formidable references were fictional titles by authors as varied as James Fenimore-Cooper, Charlotte Brontë, Anthony Trollope and Charles Dickens – yet another example of the poetic predilections of certain "men of science" (Rees 65). Indeed T.C. Weston can't help but dredge up a slightly misquoted line from Tennyson's "In Memoriam" when pondering his fossilized quarry, ". . . Monsters of the prime / who tare each other in

their slime" (Weston, Reminiscences 168) Even stodgy old Brown gives in and pens a lone love lyric of his own composition amid five years worth of plain scientific observation,

It floats on me with
the early dawn lingers
the whole day long. It
hammers at my heart
the whole night through
this want of you. (Brown, "1915 Notes")

It's hardly a stretch then to read poetry into the equipment manifests.

Certain documents produced by the author, related to the production of the literary work, also have multiple resonances. They reveal tangible clues to the references Kroetsch consulted towards the composition of his novel. There are some examples in the Kroetsch Fond in which the author leaves field notes about consulting field notes. The outlandish use of underwear and the last of the Dawe expedition's flour to pack specimens comes directly from interview notes Kroetsch made during a talk with C.M. Sternberg in Ottawa:

they tear up their underclothes
& boil flour to
wrap specimens in
wilderness – anything to
enable them to bring out
an extra specimen –
 have that happen they
find the bone they've been
searching, at end of trip – no
plaster or burlap left – they
take off their clothes & boil
up their remaining flour –
 then comic disaster.
(Kroetsch, MsC27.16.8)

In another instance, I was able to follow a remark in Kroetsch's research notes to a separate set of field notes written during a 1972 boat trip which he took down the Red Deer River with his cousins. Incidentally, according to the Badlands chronology, the Kroetsch expedition occurs in the same year as Anna Dawe's booze soaked tour by luxury car of the same locales. Kroetsch writes:

met
 two paleontologists –
 John Storer
 Steve _____ from
 Provincial Museum –
 they have a quarry
 open on Ghostpine
 Creek – 1 mile up
 from the mouth
 - had trouble finding the
 channel as we left
 shore
 (MsC 775/04.25 Box 16/44 Notebook [ii])

These palaeontologists were at work in a quarry containing a type of hadrosaur, or duck billed dinosaur, named after GSC scientist Lawrence Lambe. This *Lambeosaurus magnicristatus*, duly noted by Kroetsch as a Sternberg type find, would later appear as *Daweosaurus magnicristatus* in Badlands. Unbeknownst to the author and his cousins, and with impeccable irony, they too would later appear in the scientific record. Darren Tanke of the Royal Tyrrell Museum directed my attention to the June 17, 1972 field note entries of the aforementioned palaeontologists. Storer writes:

Met Bob Crouch [sic], novelist, who teaches at SUNY Binghamton. He and 2 nephews are boating down the river. They may drop in at the quarry [sic] this p.m.

Dropped by ferry. Bob, Jerry, and Hugh Crouch caught up to us. JES took them to Venderwelde site. Very impressed. Dave Spalding and Bob Bruinsma there. Ron Solkoski has done a lot today. JES took back bag of ilium pieces. The 3 right metatarsals are now exposed (Storer)

Robert W. Bruinsma offers this version of events:

- Drive in from Edm
about 11:00AM
- change & lunch.
- out to quarry by 1:00PM
meet R.S. and DAES
- Later take DAES out
of quarry and meet
J.S. with Croach? [sic] bros
working on novel.
- Remove ilium in pieces
and sack up as they
are overlying right pes.
- Drive out of quarry and
have supper
- DAES drops over
- Visit Hotel-Motel
- To bed at 10:30
- J.S. & SH arrive very late
and inebriated. So
sad. (Bruinsma)

David Spalding gives himself away as "DAES" by remembering the encounter this way:
 “Kroetsch travelled down the Red Deer River by boat in 1972 to do his research, and I first met him then in a Drumheller pub while I was working on a dig” (254).

Had the Kroetsch Expedition sailed some forty years earlier, it likely would have merited a brief description on the pages of *Dr. Chase's Almanac* – a very different kind of

field book kept by a very different kind of badlands collector. Contrary to his descriptive name, Dr. Chase was no bone hunter. Rather, he was a self-professed medical man, and consummate huckster to boot. His sales brochures for "catarrh powder", "nerve food", "kidney-liver pills", "syrup of linseed and turpentine", "backache plaster" and "ointment" marshal testimonials from long suffering victims cured of their "locomotor ataxia", "paralysis of the throat", "nervous collapse", "consumption", "biliousness", "torpid liver", "lumbago", "protruding piles", "eczema", "salt rheum", and "barber's itch". In addition to advertising his panaceas, Dr. Chase provided his prospective patients with a twelve-month calendar complete with weather forecasts, zodiacal predictions, birth stone readings, and space for single line diary entries. In a stroke of marketing genius, he even mounted an annual contest for the best diary entries with cumulative prizes of two hundred dollars in gold!

Somehow a subscription of *Dr. Chase's Almanac* found its way into the depths of Deadlodge Canyon where a rancher named Hansel Gordon Jackson inscribed it for more than thirty years. Better known as "Happy Jack" for his sunny disposition, Jackson knew a snake oil salesman when he saw one, and stated as much in biting editorial comments scattered throughout his entries. Rather than drawing a moustache on Dr. Chase's already bearded face, Jackson labels the good doctor's portrait on the cover of the 1909 issue, "an old Ontario Yarn Sock Man". Between May and June of the same year Jackson lets Dr. Chase know just what he thinks of the diary contest. In the particulars column, Jackson

writes "Mad Stone Pete" as his name (actually the nickname of another local cowpoke); "anywhere" as his address; and "Keep it" as a response to the question "do you wish to have your Almanac returned?" (25) Jackson's repudiations continue when in May 1910 he takes umbrage at the doctor's forecast of a rainy month. He follows a caricature of Dr. Chase's spectacles on the fourteenth with this screed:

15 S. No Rain
 16 M. Dr.
 17 T. Chase
 18 W. is
 19 T. a
 20 F. Liar
 21 S. Dam
 22 S.
 23 M. Liar
 24 T.
 25 W.
 26 T. Dry Dry Dryer Than Hell
 (Happy Jack 23)

Jackson's story is more conjecture and hearsay than it is documented history. In other words, it's exactly the kind of tall tale that Kroetsch most admires. What's clear is that Jackson ran The Old Mexico Ranch. Beyond that the details get fuzzy. In October 1935 a reporter for the Calgary Herald by the name of D.A. McCannel ventured down to the badlands for an exploratory chat. Jackson explained that he started cowboying when the Civil War compelled his family to "wagon trek" from Georgia to Arkansas and eventually farther west in to New Mexico (McCannel). Over the years Jackson rode for "many of the larger cattle outfits" in Arizona, Kansas, Oklahoma, Texas and Mexico. While in Mexico,

Jackson took on an assignment that was to change the course of his life, and also the history of the Alberta badlands (McCannel).

In 1903 the cattle firm of Gordon, Ironside, and Fares contracted Jackson to accompany a shipment of cattle from the Corelitos outfit in Chihuahua to its new range in Alberta (McCannel). Once arrived in Medicine Hat, he met D.J. Beresford, the brother of wealthy British Admiral and Lord, Sir Charles Beresford, who had also transplanted his Mexican outfit to a spread bordering the Red Deer River (McCannel). In this way Jackson found himself riding for Beresford, and eventually assuming the position of foreman. Warren Fulton recalls that his neighbour had cabins built by a "Michigan Log Man" out of drift wood: one well appointed house for Beresford furnished with a mahogany chest-of-drawers and bed; the other a two room barracks for the men (439). The cowboys dubbed Beresford's lordly chambers, "The Blue Parlour" after the set of willow-pattered china it also contained. Jackson slept in the "kitchen" near a pot-bellied stove, while the itinerant riders bunked in the aptly named "Bull Pen" (Fulton 439). Some years later a train accident in North Dakota claimed Beresford's life and caused the ranch assets to be dispersed, excepting the parcel of land upon which Jackson had filed a homestead, the buildings, and a few pieces of equipment (Fulton 439). From these beginnings Jackson scratched together his own outfit, which he would run as "The Old Mexico Ranch" until his death in July of 1942.



Fig. 24 "Happy Jack" H. MacRae. Glenbow Archives

According to some sources he may have also had a hand in operating the Iddesleigh Ferry across the Red Deer River. Fulton states that it was installed in 1915, five years after the Steveville Ferry, "practically at Happy's waterhole" (440). In his introduction to a volume entitled Alberta: The Badlands, by Brian Noble and Glenn Rollans, Kroetsch remembers the 1972 boating expedition he undertook with his cousins on the Red Deer River. After they pulled their vessel out of the water at the Jenner Ferry, like so many bone hunters before them, Kroetsch decided to return alone to Deadlodge Canyon in search of the dinosaur bone that had eluded him:

I recommend such folly to no one. But I had the excuse that I was doing research, and I pushed myself, from sunrise to sunset. I learned to walk slowly, saving my strength and my water supply, under the burden of sun. I learned that the sudden sound of a grasshopper was not a rattlesnake, that antelope and deer can blur into a shimmering landscape that seems to offer no cover, that creeping juniper offers a secure foothold on a cliff's edge, that bunch grass sometimes conceals a quagmire of mud, that cushion cactus is painful to the hand. And when I found a chip of dinosaur's bone, it was so absurdly visible, mounted on a little hoodoo of its own, that I was startled, almost frightened, by my own joyous laughter. (Noble 3)

Curiously, Kroetsch reports no such discovery in his field notes from that trip. Perhaps this is predictable given his unique understanding of the genre. However, this revelation may lead to new connections with the historical record. Robert Kroetsch certainly believed Happy Jack and the Iddesleigh Ferryman to be one in the same person:

Happy Jack ferry – Happy Jack
 was from [?], ran a ranch, then
 ran a ferry – put in about 1914-
 1920-
 -log cabin & dirt floor
 [run?] the road in is
 washed out now.
 below the Steeville ferry.
 (Kroetsch, MsC27.16.8 loose leaf)

His own bout of bone fever spurs him to comment: "I understood, a little bit better, the eccentricity of the characters who entered the badlands and then could not leave, from the famous black rancher, John Ware, to Happy Jack the Ferryman" (Noble 3). Glenn Rollans takes Kroetsch at his word. He also insists on the connection between Happy Jack and the ferry, though his claims are somewhat mitigated by sourcing and geography:

"The ferry had been run by a badlands original: Happy Jack Jackson. Most people near this stretch of river know his story, but the actual setting is so inaccessible that few have seen it" (Noble 56). And like Kroetsch, Rollans speculates about the magnetic pull of the badlands on Happy Jack:

HappyJack resisted everyone who tried to move him out of the valley as he grew older. He kept on planting a garden, riding his horses, raising his oats, running the ferry – and cursing the weather, the world, mosquitoes, William Aberhart and Nellie McClung – until he died. (Noble 58)

Even after closely consulting Alberta Ministry of Transportation records, along with *Dr. Chase's Almanac*, Elizabeth Haestie is wary about drawing any firm conclusions. Although she does place more trust in the documents than in an old cowboy's memory. It appears that Warren Fulton was two years off; Happy Jack's ferry "officially" went into service in 1913 offering passage from the north side of the river to Iddesleigh and Medicine Hat beyond. Haestie writes, in her Glenbow Museum compendium, Ferries & Ferrymen in Alberta :

Iddesleigh Ferry
(1913-24)
Red Deer River 2-21-11-4

The Iddesleigh ferry was installed in 1913 as 'Dead Lodge Canyon,' by which name it was listed in the annual reports until 1916, then changed to Iddesleigh, or "W. of Iddesleigh." It was located in the present Dinosaur Provincial Park on what was then Hansel G. (Happy Jack) Jackson's homestead.

Although there are no available records of ferrymen prior to 1924, there is written evidence that Happy Jack did, perhaps, act as the ferryman, or the assistant ferryman at some time during its operation. It is referred to in many historical notes as the 'Jackson Ferry,' and Happy Jack's diaries in his own handwriting (now in the Glenbow Museum in Calgary) indicate that he did have a hand in its operation.

For instance

28 March 1915 – 'Put the ferry in'
 3 April 1915 – 'The ferry sank'
 12 April 1915 – 'Put the ferry in'
 and so, throughout the years, until at least 1920, the diary contains many references to the ferry going in and out.
 (113-114)

Michael Klassen is adamant that though "it is often assumed so, Happy was never the ferryman." (5) He draws his evidence from the many interviews he conducted with Jackson's friends and former colleagues. Klassen perspicaciously observes, "The way in which Happy Jack is perceived today, and also the way Happy Jack saw himself, often differs from the perceptions of those who knew him" (1). In his 1943 article on Jackson for Canadian Cattlemen Rae Gordon insists that Happy Jack was the "nephew" of famed Civil War General 'Stonewall' Jackson", a fact disputed in print twenty-one years later by Dr. Anderson who forwarded yet another patrimonial possibility: "He denied to me he was in any way related to Stonewall; he said he thought they were distantly related to Andrew Jackson" (Anderson May 21). Klassen also acknowledges that the legend of Happy Jack Jackson depends entirely on "tall tales", "faded memories" and "cryptic journal" entries (1). As such it necessarily involves, "a generous amount of invention" (Klassen 2). Regardless of the truth of the many and sometimes competing stories told about Happy Jack, Rae Gordon is correct to observe that taken together they "would fill a book", or at the very least help to inspire a character in one (145).

Glenbow Archives NA-3250-34



Fig. 25 "Happy Jack Ferry #1" Glenbow Archives



Fig. 26 "Happy Jack Ferry #2" Glenbow Archives

Prairie ingenuity has a long and often apocryphal history. One solution to the perennial problem of isolation was that revered institution of the ferry picnic. Elizabeth Haestie paints these social gatherings with a romantic brush:

Imagine a lovely summer evening, the deck of the ferry swept off for dancing to the music of the local fiddler and mouth organist, the river bank set up with tables of food prepared by the local ladies, young and old alike dancing on the ferry. Would-be travellers were taken across the river, but very often they would stay and join in the merriment. Corn roasts, potato roasts, barbecues and square dances are held 'down at the ferry,' with all comers welcome to join in. (Haestie 36-37)

Kroetsch, on the other hand, is particularly interested in gleaning data from the more ribald side of these events. Invariably, the ferryman as host became the merry-maker-in-chief, no small thanks to his illicit stash of moonshine. Kroetsch can barely conceal his delight on this subject in another field note entry:

[12]
 the ferry was
 always a good
 place for parties –
 a real shake up. –
 the Steveville
 ferry lasted 2
 days – one for
 the sober people,
 the second for the
 drunks – the ferryman
 always had a
 bottle of moon.

 [verso]
 I met _____ on the
 ferry.
 That was quite a
 trip. and
 this one a

Sunday moonshine
till hell wouldn't
have it. . .I
rhubarbed over
Between Jenner
and Ralston.
(Kroetsch, MsC 775/04.25 Box 16/44)

Glenbow archival photographs record the decidedly more dignified happenings of the 1916 Dominion Day picnic at the Steveville Ferry. Clearly, no cameras were tolerated when the party kicked into full swing:



Fig. 27 "Steveville Picnic #1" Glenbow Archives



Fig. 28 "Steveville Picnic #2" Glenbow Archives

Happy Jack cut a dashing figure at the picnics held near his ferry landing. Even then his reputation preceded him. Picnickers availed themselves of the opportunity to learn more about the reclusive rancher. As Warren Fulton recalls, the cantankerous Happy Jack also enjoyed their company in spite of the many jabs he made against "nesters" (homesteaders) in his diary. Fulton writes:

At one picnic in 1919 practically the whole countryside was there. A band played all day, a big tent was put up and there was dancing among the trees at night. There were school picnics and family gatherings too. Many people met Happy during all these gatherings. He was a curiosity to them, with his big mustache, [sic] big hat and black scarf, the .45 always around handy. He was the centre of attention, at times, and, as he grew older, he enjoyed telling his experiences to them. (440)

While mutual misunderstandings may have been resolved at these picnics, some stories die hard – especially the one about the American cowboy with the itchy trigger finger. Happy Jack didn't help his case when he obliged a local mother and conducted her sons in his Democrat to a school picnic at the ferry. The story was seared upon Bennett Owen's memory, and he later told it to Warren Fulton. Owen and his brother were "half scared of this big man to start with and were sitting towards the outside of the seat" when all of a sudden Happy Jack staged a performance straight out of Buffalo Bill's Wild West Show:

As they drove along Happy stopped the team and told the boys to stand up. He reached under a cushion on the seat and pulled out a gun that looked as big as a cannon to the young boys. A gopher stood by the trail and the big man put a bullet in its head. Ben says that they were plumb scared then and sat closer than ever. When they reached the river, they lost no time in getting away from the rig and to the picnic. (Fulton 443)

Clearly, Happy Jack had a mischievous sense of humour and a flair for the dramatic. Notwithstanding the confusion surrounding his duties, or lack thereof, at the ferry the cowman likely provided a model for Kroetsch's snakeman, who in addition to liquor brewing also acted as the Loveland ferryman. It's no coincidence that the Loveland, or the Jenner Ferry as it was also known, was the very next cable boat downstream from the Old Mexico Ranch, and not incidentally it was also the terminus of both the Dawe and Kroetsch expeditions. Indeed, Jackson even refers to himself in reptilian terms. On September 26, 1910 and 1911 he writes, "My Birth Day Long Live the Snake" (Happy Jack). Unlike the snakeman who makes a great production about finding a serpent near the Jenner landing,

Happy Jack was well aware that Deadlodge Canyon offered indigenous habitat for the prairie rattler. Like a kind of frontier herpetologist he also kept careful track of the local snake population, noting their periods of activity and dormancy.

Jan 1908	21 Tu.	6 above Four Snakes Left
Oct 1908	26 Mo.	Snakes all Left
July 1909	12 Mo.	a Snake come in a foot
Sept. 1909	1 We.	Spratt Joined The Snakes
Apl. 1910	13 W.	Two Wooleys Driv up 2 Snakes
Oct. 1910	17 M.	Lots of Snakes Branded calves
Oct. 1910	18 T.	Rain. Snakes Left
July 1916	28 F.	snakes

(Happy Jack)

Then again some of this natural historicizing may well operate as a sly double entendre about his booze. On July 22, 1916, Jackson draws a whiskey jug filled with four wriggling critters. In his final two entries of August of 1916, he betrays a sharp sense of irony, illustrated with another whiskey jug, this time containing only one forlorn snake.

Aug 1916	30 W.	Prohibition
Aug 1916	31 T.	Rain
Dead	[jug sketch]	Issue

(Happy Jack)

However, unlike his fictional counterpart, Happy Jack does not report killing snakes, or wearing their skins as fashion accessories. Yet, much like the snakeman who drains the contents of his still with gusto, Jackson also admits to taking the odd sip of whiskey. For example in September of 1913, he writes:

16 T.	First Lumber for ferry
17 W.	
18 T.	Little Rain Drunk again

19 F.
 20 S. Ben Hauled Hay
 21 S. another Load
 22 M. Rain
 23 T. Got Dam Drunk
 24 W. Drunk
 25 T. Drunk
 26 F. Drunk
 27 S. Drunk
 28 S. Dam Sick Hurrah for Hell
 29 M. Little Better
 30 T. able to Trot
 oh for another Bottle
 (Happy Jack)

Dr. W.G. Anderson once added a bottle of White Horse Whiskey to a Christmas care package prepared by his wife for Happy Jack. Upon receiving so welcome a gift, Happy Jack planted a kiss on Mrs. Anderson, and exclaimed, "You are a lovely lady. If you have any disagreements with the doctor, move right down here and stay with me" (Anderson May 21, 1964). Dr. Anderson also recalled in the third installment of his memorial series on Jackson for the Brooks Bulletin that his friend once scared the living daylights out of a man recently arrived from "peaceful Ontario". As Anderson tells it, Hugh Forester ran in to Jackson on a frosty boardwalk in Brooks. As usual, Happy Jack was packing heat in the form of his trusty Colt .45 pistol. He offered Forester this cool warning, "There will be killins' tonight, Hugh" (Anderson May 21, 1964). Only after hiding out in his hotel room all night did the visitor realize Jackson had been referring to bottles (Anderson May 21, 1964).

Like the snakeman who leads the Dawe party to a prize Chasmosaurus, and directs the offloading of the scow at the conclusion of the novel, Happy Jack also extended a helping hand to the famous Sternbergs, and at least at one instance to William Cutler of the Calgary Syndicate for Prehistoric Research:

Sept 1912	13	Excursion Tied up
	14	The Boat Left
Sept 1914	26	Surveyors Driv up
	27	Sternbergs Pulled out
Nov 1914	9	Cutler Pulled out
Nov 1918	25	Pulled scow out 8 Below
Dec 1919	4	the scow came out
Aug 1926	29 Su.	Sternberg was here
July 1934	15 Su.	Sternberg & Fred was Here
Aug 1934	30 Th.	Sternberg Dunbar & a man here
July 1935	19 F	Sternberg Here light rain
Aug 1935	27 Tu	Hall Family & Sternberg Here
	31 Sa	Sternberg was here.

(Happy Jack)

Kroetsch may well have derived another model for the Dawe Expedition from Cutler's *ad hoc* forays into the Alberta badlands. Cutler's avidity for bones (and profit) was not matched by his excavation skills – a fact he apparently did not hide from his employers. David Spalding speculates that the leader of the Syndicate, one Dr. Sisley, may have asked Barnum Brown of the American Museum of Natural History to check on his "collector" in the field (70). Brown reports on July 14, 1913 that Cutler had indeed discovered a fine Trachodon. However, Brown didn't mince words in his opinion of Cutler's ability to extract it: "I have frankly told him that it is beyond his present knowledge of preparation, especially if it continues into the bank of hard stones as now seems probable" (Spalding

70). Unfortunately for Tune, no Barnum Brown appears in a knick of time to stay Dawe's hand in a similar predicament.

Cutler would quickly discharge his obligations to the Syndicate and offer his services to the highest bidder, initially to the British Museum of Natural History, and after an interval of First World War Service in the bonebeds of France, to the University of Manitoba (Spalding 71, 78-79). Tim Bowling may also have drawn some inspiration from Cutler for his bone collecting soldier, Scott Cameron in The Bone Sharps. In 1922 Cutler managed to finagle his way on to a British Museum expedition to the East African Jurassic site of Tendagaru, where he met a demise that could have been scripted by Karen Blixen (Spalding 225). According to Spalding, Cutler's fatal dose of "blackwater fever" came chiefly due to his own intransigence and failure to observe the precautions of his assistant, the young Louis Leakey, whose prudence no doubt contributed to his later fame in palaeontology (Spalding 226).

Fortunately, science welcomed Happy Jack's practical advice and assistance. These good turns did not escape D.A. McCannel's attention:

He [Jackson] admits that the dinosaurs, whose fossilized bones have drawn scientists from all over the continent to probe Alberta's bad-lands area, predated his arrival but adds that he is still here, while they are merely of interest to the 'bone diggers.' Incidentally, he says little of the assistance he was able to give the Sternberg party engaged for several years past in unearthing these fascinating relics of prehistoric monsters.
(McCannel)

Jackson even earns a nod from Sternberg himself, who was always diligent about giving credit where credit was due. Moreover, Sternberg acknowledges that the "Happy Jack Ferry" was not only a place where expeditions disgorged their spoils to the wagons of waiting teamsters, but occasionally, it also became a bone hunting locale:

During Charlie's and my absences in Montana, George found a large skeleton of a *Corythosaurus*. The remarkable part about it was the complete limbs in position. It was discovered in Mr. Jackson's pasture. Now Mr. Jackson is an old cowman. He was range boss for the brother of Admiral Beresford of England, who built a ranch here. On Beresford's death Mr. Jackson took possession of the ranch and the ferry is named "Happy Jack" after him. In fact he is quite a noted character and one of the few old cattle men living here. (Sternberg, Hunting 87)

Another reason to suspect that Kroetsch used Happy Jack, and other historical ferrymen, as a character models lies in the fact that two separate Sternberg descriptions about two separate ferry encounters are conflated to form the basis for the ninth chapter in Badlands, "McBride Builds an Ark". Kroetsch shifts the scene miles upstream from the Steeveville and Happy Jack ferries to a location above Drumheller, but the parallels are unmistakable. The Dawe Expedition is nearly cut short before it even begins:

They came to a ferry crossing. If the ferryman was in his small white house on shore, he was either asleep or chose not to show himself. The empty ferry, a white shape riding on its own ghostly reflection—square decked, painted and scrubbed, lines neatly coiled—was the perfect river craft of which the flatboat was an unpainted and leaking imitation. Web and Grizzly, whispering lifted the ferry's cable over their tent while the boat slipped under. (Kroetsch, Badlands 41)

Kroetsch's orientation of this ferry between the stone house, and the mouth of Ghostpine Creek corresponds exactly with that of yet another crossing, the Bleriot Ferry, which though motorized is still in service today. Elizabeth Haestie describes it in this way:

Bleriot Ferry
 (1913-present)
 Red Deer River W¹/₂-15-30-21-4

Although this ferry was installed in 1913 as "West of Munson" and listed by that name officially until 1966, its name was changed to honour its first ferrymen, [sic] early settler Andre Bleriot. He was a brother of the world-famous aviator, Louis Bleriot, the first man to fly across the English Channel from France in a "lighter-than-air" flying machine in 1909.

Andre (Andrew) Bleriot settled on a flat on the Red Deer River about 1901 or 1902, according to his own story. He told of returning to France in 1910 to marry, and, after his return to the Munson area, he 'fixed a kind of ferry which was later taken over by the government.' He carried many early travellers and settlers across the river on his own ferry, and also on the government ferry on which he was the first ferrymen. Bleriot served in France during World War One, then returned to his homestead for a few years, finally settling in his homeland in 1925. (58-59)

Might not the ferryman's high-pitched voice offer a tenuous allusion to high flight? This ferrymen certainly takes the "high road" when he abets McBride's escape by invoking his powers to "refuse to carry any vehicle or load which appear[s] to be dangerous" (Haestie 26). Sticklers will insist that according to official records, Andre Bleriot was off fighting in France at the time of the Dawe expedition. Of course anachronism didn't stand in Kroetsch's way when it came to Sinnott.

Kroetsch is obviously taken with the notion of a ferry cable doubling as a guillotine. He reprises the image later in the novel to compliment his parody of Charon and Cerberus:

The ferryman had walked upstream to meet them; he was shouting something from shore. Sinnott straightened away from the camera: he and the ferryman recognized each other and waved.

"What did he say?" Dawe said.

The ferryman's dogs, at his heels, set up such a din that his voice was not to be heard [. . .]

And Dawe, hesitating, heard the man on the shore, the ferryman, calling. He turned to listen.

"The cable!" the ferryman shouted.

Web, on the bow of the boat, hardly had time to see the danger: the floodwaters had raised them up to where the Model-T on the deck would snag on the cable, be torn apart; and he let go of the sweep, stepped to the bow's edge: Tune recklessly rushing forward to help: and they seized the steel cable, Web and Tune, leapt and stumbled to hold on, to lift it clear of the automobile: they held it clear of the painted sign on the side of the car, of the roof, and swept on under. (Kroetsch, Badlands 110, 112-113)

The preceding passage occurs in a chapter aptly entitled "Steveville Ferry".

Elizabeth Haestie explains the history of that craft:

Steveville Ferry
(1910-1970)

Red Deer River 4-22-12-4, NW4-22-12-4 NE33-21-12-4

Steven Hall and his wife started their homestead by the river in 1909. They also built a store, a boarding house and a livery barn and, when the ferry was installed in 1910 Steve also acted as ferryman. The area, formerly Cravath Corners, quickly became known as Steveville, after the hospitable and hardworking Hall. He ran the ferry for two years, then, in 1912, one of his employees, Ambrose Shaw, was appointed and continued as the ferryman until 1928. (151)

From this description it seems hardly conceivable that either Hall or his protégé could be capable of such gross negligence. As is often the case with old adages that prove accurate, truth is indeed stranger than fiction. A very similar incident befell a Sternberg

expedition. Again Kroetsch betrays his interest in the episode by underlining his copy of the bone hunter's book:

About nine o'clock we reached the fifth ferry below Drumheller. The ferry man had stretched a barbed wire across the river; Charlie saw it as he drove his motor under it and shouted to us, Jack rushed for the rear guiding oar and I for the front one, they were both stuck several feet up in the air, and if the wire had caught one it would have swamped us. Jack had his back to the wire and when he released the oar and stood up, it caught his hat and threw it in the river. If the wire had been six inches lower, or the river six inches higher, it would have cut his head off as easily, and thrown it into the river.

We were also thankful the tents were down. If they had not been, they would have been torn from the deck. We soon got into a new horizon. I knew this by the change in the sculpturing of the bluffs. We tied up to a willow thicket for dinner; the wind began to fall. At ten minutes of five in the afternoon the naked buttes, towers and ridges of the Belly River Series of the Cretaceous loomed up in the distance. We soon reached Steveville, and managed to make a landing in the swift stream, just below the Ferry, and below the mouth of Berry Creek on whose border the little town stood. A hospitable town it proved to us; especially have we often enjoyed the hospitality of Steve Hall's Hotel; after this jolly good fellow the town gets its name. (Sternberg, Hunting 51-52)

Sternberg didn't take offence. Perhaps he chalked up this near miss to the usual risks of bone hunting. Neither was he eager to lay blame on the Halls whose "hospitality was famous" and who made "everyone welcome" at their establishment. In addition to his "heart of gold", Haestie reports that Hall also had a penchant for fossils. Apparently, he kept a "pile of dinosaur bones at the ferry landing." This was just the kind of man Sternberg could respect, Dawe could revile, and Kroetsch could use (Haestie 151). In a novelistic twist, not a single trace remains of Steveville today. Indeed even Hall's headstone languishes in a cottonwood grove off Provincial Route 876. His graven name and epitaph have long since crumbled to dust.



Fig. 29 "Mr. and Mrs. Steve Hall" Glenbow Archives

It may have been Ambrose Shaw who fell asleep at the switch that evening. Perhaps one of the green apples he was fond of eating before retiring had an especially soporific effect (Haestie 42). Regardless, Sternberg doesn't begrudge such a friendly and generally accommodating ferryman. Neither does Sinnott who holds Dawe accountable in no uncertain terms when he opines, "now you've goddamned gone and done it" (Kroetsch, Badlands 113). In the subsequent Glenbow archival photograph, Shaw bears a striking resemblance to McBride's accomplice, the Bleriot ferryman.

Glenbow Archives NA-4179-1



Fig. 30 "Steveville Ferryman" Glenbow Archives

This coincidence may be attributable to Kroetsch's further intercalations of historical material in his fiction. Back at the Ghostpine Creek, Dawe's flatboat hardly makes landfall before he and Web strike out "to prospect for a few miles up into the creek's valley" leaving Grizzly and McBride to the dirty work (Kroetsch Badlands 41):

Grizzly, bent low over a campfire, heated a pot of tar. The smell of the melting tar commingled with the stink of the skunk, the odour of burlap and oakum. And McBride, wading to his knees in the mud with oakum and a chisel and a wooden mallet, began to calk the weakened and leaking seams [. . .] All afternoon McBride worked in the cooling, stinking mud around and under the boat, limping, kneeling in silt and muddied water, his torso and arms and face burning in the sun and the fumes of the tar; he would make the boat more absolutely watertight than the carpenters at the sawmill had ever made it; he strove, pounding and bracing and tarring in the heat and the stench, the sun a furnace in the blank prairie sky. (Kroetsch, Badlands 42)

Consider Sternberg's account of the repairs to his own fossil ark at Happy Jack's Ferry. He too confesses that he left the inglorious task of patching up the flatboat to his sons while he wandered off to prospect for bones. Kroetsch underlined key descriptive elements on his copy of the fossil hunter's book:

When we reached our big scow in 1914, we found the seams had opened along the bottom and we were forced to recaulk it. The first thing was to clean out the old oakum and coal tar. Our eyes filled with the poisonous tar irritating them almost beyond endurance. After that was done, with arms above our heads, we drove in the oakum with caulking tools and then retarred the seams. I will acknowledge I did not do my full duty here, I spent most of my time in the hills exploring, which was more to my liking. This trying work work the boys accomplished at last. Then came the supreme test. Will it keep out the water? We slid her down on skids into the river, and she rode as buoyantly as a duck, though not so gracefully.

We had picked out a place to camp three miles above "Happy Jack Ferry." So George, Charlie, and Mr. Johnson, hauled the scow up to the camping ground with our moter-boat [sic], accomplishing a feat, I had thought impossible. Fortunately they had a strong wind in their favor, and the tents pitched on board, acted as sails and helped them breast the current. Levi and I moved the lumber up to camp in our wagon pulled by our team of horses. We crossed many narrow gulches, and were obliged to dig roads across them. In fact we got stuck in the mud of one, where back-water from the river had deposited several feet of mud in it. We got into camp, however, ahead of the scow. In my notebook I often speak of the terrible heat of those days. We had hot work on the rough exposures without water. (Kroetsch MsC 27.16.5; Sternberg, Hunting 87)

Included by Kroetsch along the right margin of this passage is a significant bit of commentary. It suggests that his own expedition somehow missed the ruins of Happy Jack's cabins.

Happy Jack
was not there
where?
ranch
was south

(Kroetsch, MsC 27.16.5; Sternberg, Hunting 87)

The Old Mexico Ranch is located on an exposed river flat along a deserted stretch of the Red Deer River, very close to the conclusion of Kroetsch's boat journey. However, it may have been concealed from view by cottonwoods, which congregate along the waterline. Similarly, the "Old Stone House", which Kroetsch reports in his field notes and uses as a set-piece in his novel, is also mostly concealed by riverside foliage. However, Kroetsch revises the approximate coordinates of the Old Mexico Ranch in another field note, suggesting that he may have been bothered enough by the discrepancy to look more closely at Happy Jack's story:

[7]

*

Happy Jack's
ferry is on
the north
side of the
river.

(Kroetsch, MsC 775-04.25-16,44 Notebook (ii))

Indeed Kroetsch actively seeks out a visual representation of The Old Mexico Ranch and the surrounding country. Again he sets about to feed his imaginative process with "particulars of place". For Kroetsch "sub-literary documents" are just as readily recovered from a barstool, as they are from old shoeboxes. He records some important finds in his field notes:

[1]

FRIDAY, July 21.

barley sandwich – drinking
beer instead of eating.

Happy Jack's ferry – Bob Young
has pictures of the old log
buildings – 2' logs – roof
made of poles covered with a
mixture of prairie wool and
mud.

Deadlodge Canyon begins
at the ranger's cottage
(Kroetsch, MsC 775-04.25-16,44, Notebook [iv])

Unfortunately, Bob Young's photograph does not appear anywhere in the Kroetsch fond at the University of Calgary Special Collections. However, this is not to say that the image is lost to posterity. Like the contents of many private archives documenting Alberta's early history (including Happy Jack's diary) Bob Young's photograph of the Old Mexico Ranch, or a copy of it, may well have ended up in the Glenbow Museum Collection. Two possibilities seem most likely:



Fig. 31 "Old Mexico Ranch #1" Glenbow Archives



Fig. 32 "Old Mexico Ranch #2" Glenbow Archives

While it may be anachronistic to suggest that Brian Noble's updated photographs of The Old Mexico Ranch somehow fed Kroetsch's understanding of Happy Jack during the writing of Badlands, it is not unreasonable to cite them as a visual example of the kind of "narrative extension" that Kroetsch once posited to Brian Edwards of Deakin University. They certainly informed Kroetsch's introduction to Alberta: The Badlands, the very book in which they are found. Recall Kroetsch's empathetic response to the spell of the badlands upon Happy Jack. Perhaps these photographs also retrospectively participate in the composite creation that is the snakeman – equal parts imaginary character, historical figure, extinct creature, and badlands myth. The reverse side of the aforementioned note also contains some interesting tidbits:

[1 verso]
 got Bob Young to
 bring us in to the Patricia
 Hotel last night. Slept in
 this morning because of
 rain – ~~because~~ like a
 prairie day with rain
 falling and now
 knocking off for the day,
 sleeping, going in to
 the bar.
 (Kroetsch, MsC 775-04.25-16,44 [iv])

Evidently, the Patricia Hotel provided the same creature comforts to Robert Kroetsch as it still does to contemporary bone hunters weary from their toils in Dinosaur Provincial Park. While the decor has changed little in the intervening years, absent today is the old barkeep whom Kroetsch describes with special admiration. In a field note entry

Kroetsch quotes his poignant grasp of supply and demand: "We'll trade you some grasshoppers for some gophers?" (Kroetsch, MsC 775/04.25 Box 16/44 Notebook [ii]).

The citation reappears in print with slight modifications midway through Kroetsch's introduction to Rollans' and Noble's book:

I had stayed at the Patricia Hotel, during earlier visits to the badlands. I was from farther north in Alberta, I had grown up near the miniature badlands of the Battle River, and Mr. Leroux, understanding our various plagues, offered to trade me some snakes for some gophers. (3)

However, it only becomes a true prairie yarn when he adds this embellishment:

Mr. Leroux had three pet Canada geese. He could talk with them. I remember – I swear I was cold sober at the time – he led them into the bar, there in the Patricia Hotel. He had to wear one of those beaked prairie caps when he spoke to his geese. He put on his cap and opened the back door of the bar and in walked these three geese. They moved in perfect unison. Three beautiful, tall Canada geese, their heads turning all together, this way and that, in the light of the bar. 'Probably against the law,' Mr. Leroux explained. Then he spoke to the geese and they all three, politely, left by the door through which they'd entered, went out into the darkness again. (3)

Rounding out the same field note entry is further reference to Happy Jack:

[7]
last buffalo
in this area – 1884
last elk around 1900

1902-1942 – "Happy Jackson"
of the Old Mexico Ranch
Brand V-C
(Kroetsch, MsC 775/04.25 Box 16/44 Notebook [ii])

While Kroetsch got the dates right there is some discrepancy regarding Happy Jack's brand. A local history, originally prepared as a centennial project for New Cessford School, features a section on "old time brands". It shows "EL" as registered to Hansel Gordon Jackson (Blumell 334). Remarks in Dr. Anderson's Brooks Bulletin series corroborate the claim made in This is Our Land. Indeed Dr. Anderson even includes a facsimile of Jackson's business stationery, which reads:

MEXICO RANCH
H.G. JACKSON, PROP.
RED DEER RIVER
OWNER OF BRANDS AS SHOWN
STEEVILLE, ALBERTA.19
(Anderson)

A pair of animal silhouettes flank the text: on the left a horse bearing an "L+" on its hip; on the right a short horned cow bearing the brand "EL" on its ribs (Anderson June 4, 1964). While this may seem an insignificant detail, it gives reasonable cause to speculate on Kroetsch's sourcing for the "VC" brand information. Recall that in his introduction to Alberta: The Badlands, Kroetsch pairs Happy Jack with "the famous black rancher, John Ware". Ware certainly earned his fame as a consummate cowboy in the old fashioned way. Tell of his strength and courage passed from one rancher to another by word of mouth. However, that his legend is remembered by history may be attributable to a biography prepared by Grant MacEwan.

At times, John Ware's Cattle Country reads like the labours of Hercules. Ware wins races that shouldn't be won, breaks outlaw horses that wouldn't be broken, and rounds herds

forsaken to blizzards and floods. He survives lightning strikes and drought, wrestles monster steer, drags horse carts and driftwood logs, and lassoes every beast that runs including cattle rustlers. Indeed MacKewan shows no compunction about using novelistic techniques. Even his authorial stance shares more in common with the third person omniscient narrator Kroetsch employs in Badlands than it does with that of "disinterested" historians. In short MacKewan is Kroetsch's kind of history writer (not "wrong-headed" or "eastern"). Field notes from the 1972 Red Deer River trip attest to the fact that John Ware is Kroetsch's kind of historical subject.

John Ware – came
to the Bar U Ranch
in 1882 –
built this cabin in 1902 – died
in 1905
(Kroetsch, MsC 775/04.25 Box 16/44 Notebook [iv])

It's no surprise that a cowman like Happy Jack, and a spread like the Old Mexico Ranch, should capture MacKewan's attention. Neither is it outside the realm of possibility that Kroetsch may have found the VC brand in the following passage:

The Old Mexico Ranch east of Steeveville on the north side was started a short time later –1903. There were various reasons for the special public interest shown in it. The original owner, D.J. Beresford, was the younger brother of Lord Charles Beresford; and when "D.J." decided to transfer his cattle interests from Mexico to the North West Territories, 3,000 critters with Mexican horns and the V Bar C brand were shipped to Brooks.

Even the Old Mexican brand was unusual, inasmuch as the V was on the shoulder, the Bar on the ribs and the C on the hip. And with the cattle came one of Alberta's unforgettable characters, Henry [sic] Gordon 'Happy Jack' Jackson. At first he was the foreman; but after the owner's death as a result of train accident in North Dakota, Happy Jack took over completely. (MacKewan 233-234)

Although the "VC" brand was undeniably linked to the Old Mexico Ranch, it clearly belonged to Beresford. When Happy Jack assumed control of the operation he probably assumed his own brand, "EL". Kroestch may have simply made an honest mistake in his field notes, or it could be another case of his playful handling of documentary material. Not doubt he would have appreciated the jarring effect of the following anonymous photograph taken in 1958, more than a decade after Happy Jack's death. Given his forays into the Glenbow Archives on the trail of old seed catalogues, it's quite possible that he may have even come across it:



Fig. 33 "Old Mexico Ranch #3" Glenbow Archives

The car, set against the backdrop of Happy Jack's cabins, makes for an unnatural conjunction. It seems like an anachronism imposed upon the myth of the old west. A similar effect is produced by the appearance of Sinnott's photography van in the cryptically titled chapter "VANISHING MAN MAKES HIS FIRST APPEARANCE". For Dawe the sight of the Model-T sitting in the middle of the river is confusing. "It looked as if the driver had learned by some miraculous gift to drive on top of the water, only his engine had quit on him" (Kroetsch, Badlands 98). The disorienting image only serves to further complicate the cipher that is Sinnott. In her reading of an early draft of the novel, Jane Kroetsch calls the photographer, "Lord of the Dead". She advises the author to give Sinnott more " 'shape' even when his function is a 'shapeless' one" (Kroetsch, MsC27.16.9). While paradoxical, her advice is not unfounded. As Dante warns the pilgrim, appearances are always deceiving in Hell. Since Kroetsch models his novel on a retelling of the Orpheus myth, his Hades figure must also confound. Sinnott's arrival springs directly from an observation made by Kroetsch in his river trip notes:

[11]
 Thurs July 20 –
 [verso]
 numerous
 sandbars in
 this stretch;
 tall long cutbanks
 where it is
 impossible to
 land – bull
 marooned on narrow
 shore below
 cutbank, unable
 to get up the

[12]
 bank & slowly
 starving to
 death – we
 spend ½ hr trying
 to help but
 could accomplish
 nothing.
 (Kroetsch, MsC 775/04.25 Box 16/44 Notebook iii)

Initially, it occurs to Kroetsch that he could use the same scenario in Badlands by replacing the bull with a man:

[13]
 [verso]
 have someone
 caught below
 a cutbank as
 is the bull
 ?
 (Kroetsch, MsC 775/04.25 Box 16/44 Notebook iii)

He even goes so far as to scout out a plausible location just inside the western boundary of present day Dinosaur Provincial Park:

[14]
 6pm –
 entering the
 park. first
 view of the
 badlands of this
 formation –
 cutbank to our
 right; trees to
 the left.
 [verso]
 very long
 island inside

park.

long cutbank on
south bank where
a person could
be marooned.

(Kroetsch, MsC 775/04.25 Box 16/44 Notebook iii)

Ultimately, he settles on a much subtler transmutation of the stranded bull. The harbinger for Sinnott's arrival and departure is a "drowned calf" caught up in the detritus of a flood (Kroetsch, Badlands 98,115). The detail accrues special poignancy after Tune refuses a final offer of sanctuary. Sinnott and his rig materialize again just below the Old Mexico Ranch at Jenner landing. This time the "Lord of the Dead" is accompanied by suitable familiars –versions of Charon and Cerberus:

Anna was the first to see the ferry: white, motionless, it hung suspended from its cable in the middle of the river. The river narrowing there, the current beginning to carry the boat faster [. . .] Then Dawe saw it too. Saw the ferry. Then he went back to the crate in the middle of the boat, sat down again at his field book [. . .] A black and van-like automobile was parked in the middle of the deck of the ferry. On its side was some peeled lettering in gold. Two men on the deck of the ferry were standing behind what had to be a camera on a tripod. (Kroetsch, Badlands 207-208)

Anna is also the first to apprehend a salient clue to the identity of the Jenner ferryman. The sight of a wild beast under domestication only compounds the strangeness of the scene.

The ferryman had at his side a dog. What appeared at first, for a long time, to be a dog. The boat moved steadily, rocked slightly in the quickening current, moved down upon the ferry.

Anna, on the small bow deck, helped Grizzly lift the sweep aboard, in preparation for the landing. "That's a coyote" she said. (Kroetsch, Badlands 208)

Yet for those who impose themselves upon the badlands, the sight is perhaps not so incongruous. Although Happy Jack does not report any attempt to tame a coyote in *Dr. Chase's Almanac*, Kroetsch's research notes identify a series of images from a local history compendium. For Kroetsch they may well have illustrated the radical compromises necessitated by living amid so inimical an environment. For instance the first photograph depicts a group of respectable ranchers, whereas the second shows a similar group of men in outlandish costume. Taken together they could be read as a metaphor for the psychological dangers of frontier life:

Seventy – Five years Along the Red Deer
River

edited by Helen D. Howe.

picture (1912) – man in cowboy – like
hats, old suit coats, baggy
pants (one man's pants are striped),
all wear vests or sweaters under their
jackets – one wears kerchief
around his neck –
2 smoking cigars, one smoking
a pipe, 2 with mustaches.
(Kroetsch, MsC27.16.9)

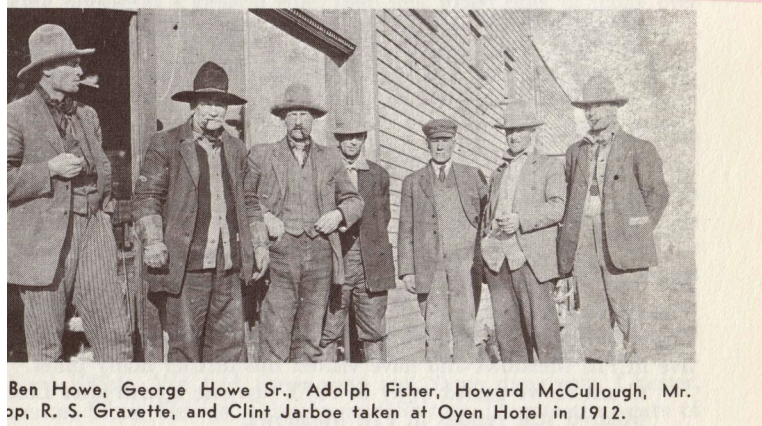


Fig. 34 "Cowboys" (Howe 71)

[verso]
 picture of parade – 2 men made
 up as clowns, ~~one~~ a third
 has is an organ grinder
 with a monkey.
 (Kroetsch, MsC27.16.9)

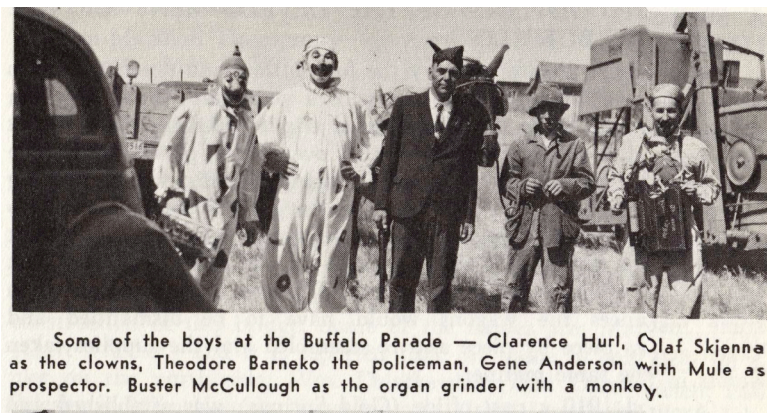


Fig. 35 "Clowns" (Howe 277)

Taken apart they could well illustrate the temperance parade scene from the thirteenth chapter of Badlands. Kroetsch likely used another local Drumheller Hotel as a model for his "Sea-Saw-Bar":

hotel that burned
in 1935 –
Waldorf Hotel – lazy
buck hotel
(Kroetsch, MsC27.16.9)

The fate of the Waldorf Hotel is in keeping with Sinnott's leitmotif of inevitable extinction. Kroetsch teases out the connection with a palaeontological anagram. Regular townsfolk retreat like the "Bear-Paw-Sea" at the mere prospect of signing the pledge book borne by a drunken clown on behalf of the woman in green. Once inside the Sea-Saw-Bar, Dawe heightens the confusion when he asks for a man who knows the river, because his own crew "can't tell water from land" (Kroetsch, Badlands 63). Ironically, the fossil-hunting grounds near Drumheller are rich expressly because what is now land was once water. During the Mesozoic Era Southern Alberta looked much like the Florida everglades. What's more, the delta swamps bordering the Bear Paw Sea provided optimal fossilization conditions.

Abstinence of any kind held little appeal for these tough customers of the Sea-Saw-Bar. Kroetsch spared no pains to render their lives nasty, brutish and short. Indeed their only reprieve from drudgery was the bottle and the brothel. Web certainly anticipates his last brush with civilization before his exile in the wilderness. His discovery of a particular

justifies its inclusion. He appealed to his readers. According to Hlady they insisted that "it was history and should be treated as such" (805). Like MacKewan's biography of John Ware, Hlady's book certainly does not figure among the "wrong-headed histories" of the west that Kroetsch once railed against. Its claim to posterity is bolstered by multiple voices. Hlady writes, "History will always remember Mary Roper and Fanny Ramsley as the most popular Madams in the valley at least that is what the old timers tell me" (807). Communal histories like Hlady's rely on the very devices eschewed by academic texts – hearsay and conjecture. Hlady's tall tale style affords Kroetsch the perfect excuse to exercise his own poetic license with the "facts". He is not troubled by the fact that the Dawe Expedition occurs a year (or so) before the arrival of these entrepreneurs:

It was 1917 or 18 when Mary Roper and fanny Famsley came into town and opened their establishment on the Western Front. Soon they were the centre of attention and were doing a fantastic business. Although Mary and Fanny had many rivals in the business it was these two that had the largest impact on the community. (Hlady 805)

Hlady goes on to enumerate various facts and figures about each respective business. For instance he reports that Mary Roper's place consisted of "many shacks thrown together on a 40 acre lot" with "room for gambling and drinking", and in later years even a "dance hall" where patrons could swing and spin like Web and America in chapter thirteen of Badlands (Hlady 805). Hlady recalls that both establishments were "clean and strict", and that they were used as a kind of "community club by the new immigrant miner or shy person" (like Tune) (806). At the same time he delights in revealing that Mary had an absentee husband and a "200lb black lover" whom she chased about with a loaded shotgun

(Hlady 805). As in the case of the snakeman, Kroetsch seems to have conflated multiple historical figures to derive a single fictional character. He imports Fanny Famsley's player piano into Mary Roper's parlour, and also imbues the latter with the former's love of music. Hlady mentions that Fanny particularly enjoyed providing vocal accompaniment for her ivory-tickling cook.

Both women were reportedly as generous as they were clever in business. Hlady has it on authority that the madams would often send anonymous care packages to needy families by way of taxi cabs (806). Indeed Kroetsch's Mary Roper seems to have taken a motherly role with Tune who would have done well to accept her offer of employment rather than squandering his life on the Dawe Expedition. Even Web laments Tune's missed opportunity: "Played piano [. . .] Best damned job in the world. *Hoo-er* house" (Kroetsch, Badlands 189). Unfortunately, Tune's departure was pre-ordained, as evinced in this comment from Kroetsch's river notes:

[7]
[. . .]
one of the men on
the boat a coal miner
who flees the mines?
(MsC 775/04.25 Box 16/44 Notebook ii)

Although not explicitly mentioned by Kroetsch, Helen Howe's volume contains several other pertinent images including one of a rattlesnake, one of a less-than-amphibious car (reminiscent of Sinnott's van), and another of a familiar domestic scene most literally transmuted into the Snakeman and his pet coyote, Claw

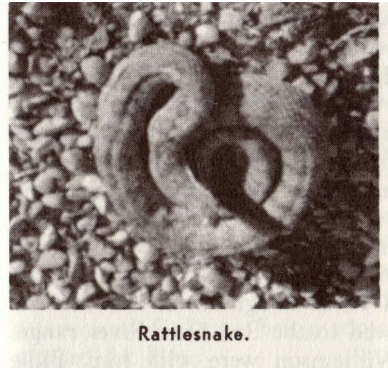


Fig. 36 "Rattlesnake" (Howe 205)



Fig. 38 "Car in Ditch" (Howe 156)



Fig. 39 "Woman and Coyote" (Howe 272)

Both Happy Jack and John Ware had regular encounters with coyotes. However, the aim of these pursuits was not exactly domestication. Kroetsch had direct access to visual representations of coyote/wolf hunts of the same period in the local histories he consulted during the writing of Badlands. A jotting in his research notes also seems to apply to the previous and subsequent photographs:

wolf [bothering?] cattle
 [verso]
 4 ft rattler
 (Kroetsch, Msc27.16.9 note card)

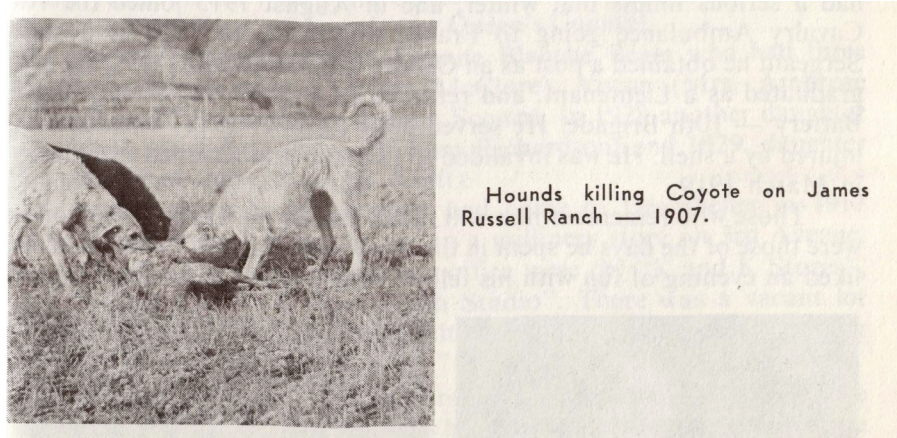


Fig. 40 "Wolfhounds" (Hills 355)

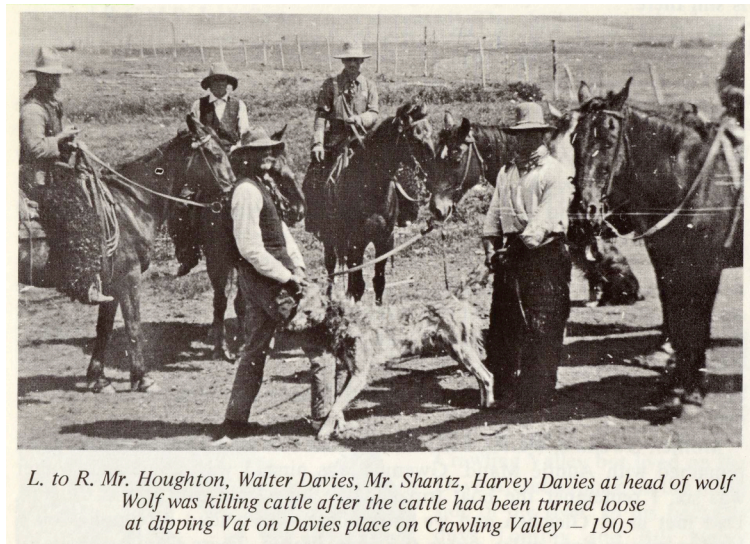


Fig. 41 "Dead Wolf" (Roen 122)

Kroetsch also recorded several comments about these wild creatures in his river trip notes:

Friday, May 11, 1972

[. . .]

[8]

[. . .]

-wolves as well or coyotes
on the Red Deer – see
them only rarely

(MsC 775/04.25 Box 16/44 Slim Green/Blue/White Vertical Striped Coil
Notebook)

SUN 16 July

[. . .]

[11]

[verso]

[. . .]

big coyote (or
wolf?) drinking
on the shore.

(MsC 775/04.25 Box 16/44 Notebook i)

Day # 3

[written in blue pen and overwritten in black marker on cover]

[1]

Mon 17th

Departed 7:15 AM:

stayed on beach near

a shoreline of tall

balm of Gilead with

spruce in back

Badlands. Clear sky.

Hawk this morning.

coyote barking last night

deer on shore

hawk's nest in tall balm

(MsC 775/04.25 Box 16/44 Notebook ii)

With these animals so much in his thoughts during the writing of Badlands, Kroetsch may well have found another of Happy Jack's idiosyncrasies especially compelling. Warren Fulton remembers that Happy Jack also went by another well-earned name:

Some men just love to rope anything that moves and it seems that Happy was one of them. Any chance to give chase to a wolf, he couldn't resist. He did this so often that the Indians began calling him 'Running Wolf' and he used this as his signature at times for the rest of his life. (Fulton 436)

John Ware shared Happy Jack's penchant, though neither man hated canines indiscriminately. On the contrary, one of Happy Jack's most loyal companions to his dying days was a dog named Sport (Fulton 441). John Ware afforded privileged status on his ranch to a hound he called Moses (MacKewan 174). During the drought of 1894, Moses helped Ware run down "quite a few coyotes" (MacKewan 205). Because of their larger size, wolves posed a greater problem. However, this disadvantage didn't stop Moses from trying. MacKewan recounts an exciting episode. Ware came to Moses' rescue when the hound quite literally bit off more than he could chew . . . from a wolf's neck. The cowboy simply applied his steer wrestling techniques to a novel situation. No hard-tying was necessary. After leaping from his mount at full gallop, he laid into the wolf with a hunting knife thus emphatically ending the chase (MacKewan 205). Little could come in the way between John Ware and a two-dollar coyote skin bounty, least of all an uncooperative horse. In another instance Ware managed to break an outlaw bronco in front of its incredulous owner. Then he laid a coyote hide over the animal's back – an insult no horse in the west would have tolerated from a lesser cowboy (MacKewan 205-206).

Yet, John Ware's most heralded victory carries decidedly mythical connotations. His capture of the dreaded "King Wolf" that pillaged foals from foothills ranches over the course of two seasons smacks of the twelfth and final Herculean labour. Big Game hunters from England tried and failed to kill the beast (MacKewan 177). Local stockmen raised a fifty-dollar reward to the first man who could rid them of the scourge of their herds (MacKewan 177). Like Hercules who undertakes special precautions before his descent into Hades, John Ware scouts the site of a fresh kill knowing that the insatiable wolf would be drawn back to the carcass (Apollodorus 2.5.12, MacKewan 182). Ware bides his time, ignoring the temptation of scavenging foxes and coyotes, when finally early one morning he spots the "King Wolf" loping to its prize. A chase ensues in which the wolf is disadvantaged by its full belly (MacKewan 183). Rather than risking a pistol shot from a charging horse, Ware lassoes the predator as he would any runaway stock. Despite its snarling protests, Ware subdues his "hound of hell" exactly as Hercules bests Cerberus, with main force as his only weapon (MacKewan 183). As completion of the final labour releases Hercules from his bondage to King Eurystheus, so the bounty gives Ware the means to build his own house, and begin his own ranching operation in earnest.

However, as in nature, the top predator lasts only as long as its strength and fleetness of foot. John Ware, king of the bucking horse riders, was hobbled not by an outlaw bronc, but rather by a docile mare that had the bad luck to step into a badger hole (MacKewan 253). In a Sophoclean flourish, Ware was crushed to death in full view of his

horrified son who lost his mother only months earlier to typhoid and pneumonia (MacKewan 253-254). Happy Jack ended up very much the old lion with worn teeth and broken claws. Michael Klassen observes that the fire had even faded from his diary entries. Gone was the opprobrium he had reserved for his long time foil, Dr. Chase. Instead his final words belie a quiet resignation:

1942 Aug. 7 RAIN
 8 Warren Hauled Water
 9 2 Loads of coal
 (Klassen 10)

According to Warren Fulton, Happy Jack noticed the signs that he was "on his way out", but he clung to his independence to the very last, "Neighbors [sic] tried to get him to move near them, but he would not. His animals were all dead by 1941 except the cats. Many hours were spent just sitting with a cat on each knee" (Fulton 441). When Happy Jack visited an old colleague in the hospital he frankly observed, " 'Looks like you're headed for the bone yard, Jim. Reckon I'll be with you directly' " (Fulton 441). Ultimately he would keep his promise to Rae Gordon "that when he moved from his ranch he would be carried away in a wooden box (Gordon 145)." Fulton put it gently with this simple metaphor: "Running Wolf had gone down the trail that the old cows take" (Fulton 441). An anonymous writer offers the same dignified respect in an obituary clipping pasted in a Glenbow Museum scrapbook, "One after the other, the oldtimers are crossing the Great Divide [. . .] So it's 'Good-bye, Happy; hope the pastures are green over there.' " Klassen's version of Happy Jack's death scene is not so bucolic, but in its directness (and obliqueness) perhaps it best captures the final chapter of the Old Mexico Ranch:

Hansel Gordon 'Happy Jack' Jackson died sometime between August 9 and August 18, 1942, naked and alone. He had lived like a coyote and died like a coyote. Although he was found lying naked on the floor, it is sometimes said that he was found naked in his chair with his trusty pistol at his side. Even the circumstances of his death have become legendary.
(Klassen 10)

In his cowboy prose, Warren Fulton hints at the edges of these legendary circumstances. Insofar as he was the first to discover Happy Jack's body during a routine grocery delivery, Fulton is an authoritative source. However, there is reason to believe that he may have withheld a particular detail during his interview with Michael Klassen. Consider Fulton's own explanation of the discovery, "on further inspection it was found that Running Wolf had passed away, with only an old cat sitting close beside his body to witness the end" (Fulton 434). This isn't the first time Fulton makes conspicuous mention of the cat. It's no great leap to infer that it wore a Cheshire grin. Perhaps Fulton revealed more of the tableau to another interlocutor? Kroetsch records this anonymous fragment in a field note:

[17]
rancher who died
out on his
ranch alone – cats ate his
ears off before
anyone found
him
(MsC 775/04.25 Box 16/44 Notebook ii)

Dick Imes contributes another spooky twist to the legend. Happy Jack requested that a fence be erected around his plot to keep out grazers and scavengers. Apparently,

Jackson also asked that a heavy stone be placed over his grave. One can only assume that it was meant to keep him in. When word came down that it had inexplicably rolled away, Imes could not conceal his fears. His guileless comments attest to the potency of the Happy Jack myth. It refuses to be pinned down: "Arrangements were made by Dr. Anderson to have it set in cement. The thought came to me that Happy's ghost had rolled away that rock in a desperate effort to get back to the Old Mexico Ranch" (Imes July 14, 1960). Even the town of Brooks conspired to join the graveside shenanigans when its maintenance workers, ostensibly heeding a bylaw directive (and perhaps also the Cole Porter classic, "Don't Fence Me In"), dismantled Happy Jack's picket. Once again Dr. Anderson intervened to restore the tomb's integrity (Anderson June 11, 1964). Although one suspects that no amount of shoring will consolidate Happy Jack's story.

"Running Wolf's" refusal to lie still even in death poses a difficult problem for official histories, but it only encourages narrative possibilities. Kroetsch's snake man also leads an active subterranean existence in the company of his pet coyote and fellow moonshiners. As usual, Kroetsch seems to have elaborated a character from multiple sources, and disreputable ones at that. He jots down another likely story in his research notes:

[14]
 Old Man Nelson
 4 years after
 his death before
 they found his
 still – mine-like

hideaway –
 pet coyote
 warned him
 then someone
 was approaching –

 [verso]
 kept goat on
 top of the house
 to eat off the
 grass-
 rustled a few
 head of cattle.

One-eyed Jack –
 because he
 had only
 one eye

 [15]
 big logs in
 his cabin
 (MsC 775/04.25 Box 16/44 Notebook i)

One can observe the overt linkage between Kroetsch's snakeman, and "Old Man Nelson", and also the more oblique connections between "One-eyed Jack" and "Happy Jack." The Old Mexico Ranch is invoked by the mention of cattle and a log cabin. Yet Kroetsch undercuts any direct historical reference by the dubious complication of the roof-grazing goat. In this way he suspends his fictional character in the grey area of tall tale – a rich, complex genre that is especially frustrating to "wrong-headed" historians because it rejects the authority of official histories, yet it contains a grain of truth. Like the reader, Web can hardly believe his eyes when he discovers the makings of a party in a badlands

cliffside. As a creature of instinct, Web freely exercises his right to prairie hospitality when he chances upon the snakeman's cave and liquor still. His indulgence results in a nasty fall down the coulee. Web's subsequent conversation with his hitherto unseen host is as instructive as it is symbolic:

A peal of laughter came out from behind one of the hoodoos. Then a coyote appeared from behind the sandstone pillar that was the hoodoo's base. Then, as if being led by the young coyote on a leash, a man appeared: a tall, thin, wiry man. And Web noticed immediately, the band on his cowboy hat was the skin of a garter snake, his belt a bullsnake's skin: the snake man asking:

"You some kind of Prohibition agent?"

Web, hanging onto the side of the cliff, watching the coyote.

"You bet your ass I'm not."

"What're you after?"

"Right now I need a drink," Web said.

"You guys couldn't find water in a river." The snake man eased himself down towards the cave's mouth. "Come on up."

"How?" Web said.

"Like you got here in the first place. Crawling on your belly."
(Kroetsch, Badlands132-133)

This scene has some basis in fact. Once again Kroetsch refers to his well-thumbed copy of Hunting Dinosaurs in the Badlands of Alberta. Charles Hazelius Sternberg recalls an opportune discovery during an exhausting afternoon of prospecting. Kroetsch carefully underlines and annotates Sternberg's descriptions the better to subvert them in Badlands. The only refreshment awaiting Sternberg in the abandoned coal shaft is a draught from the cup of dreams. As an avowed teetotaler he would have suffered the blazing heat before he would have suffered any proximity to illicit booze:

I was exploring the valley of the Red Deer River at Drumheller. A great chasm in fact cut by the river and its tributaries four hundred feet deep into the Edmonton Series of the Upper Cretaceous, out of the very heart of the prairie. Across from plain to plain the distance averages about two miles. Tributary creeks and coulees have carved trenches further back into the plain; while in the main valley, especially near the brink of the prairie, are long ridges, tablelands, buttes and knolls, pinacles [sic] and towers, whose bases often impinged on the ox-bows of the river itself; down whose rugged sides a stone rolling would bring up in a sudden halt, in the waters four hundred feet below. All this region except of course the river channel and flood plain, was transformed by nature's sculptury into fantastic badland scenery, the rocks carved into the most intricate patters, entirely devoid of vegetation, except, perhaps, along the northern slope of some rounded bluff, where sponge-moss had secured a precarious foothold; while running through it were trailing junipers, and spruces, with flowers of many a hue (to delight the eye) after searching the steep and barren slope for hours. These slopes were covered with cherty fragments that rolled under the feet, threateing [sic] to hurl the adventurous Fossil Hunter into the gorge below. I had found great quantities of the bones of the huge dinosaurs, or "terrible lizards." Among them the trachodonts or duck-billed dinosaurs, were the most common. Great swimming lizards they were, spanning thirty feet or more in lenght. My party had already two skeletons. One of them thirty-two feet long, we mounted afterwards in the Victoria Memorial Museum at Ottawa, Ontario. We found quarry after quarry where the bones had been piled up as flotsam by some ancient tide, that for ages had ceased to beat on this land. Today the nearest ocean is 700 miles away, and the strata have attained an altitude of twenty-five hundred feet above sea-level. The day had been hot and sultry; as I came upon a coal miners tunnel [*coal mine dream*] (there are unlimited beds of coal in these breaks), I found relief by going in some distance. The floor was deeply covered with fine dust, making a restful place; and it is little wonder I fell asleep; I never knew how long I slept, but when I awoke, I was overpowered with surprise, I could not tell whether I had awakened in eternity, or Time had turned back his dial, and carried me back to the old Cretaceous Ocean.

[. . .]

Is this a dream or reality? How often in other days while searching the semi-arid fossil beds of the west, in my day dreams have I put life int he old dry bones; how often some stately dinosaur has passed before my mental vision.

[*contrast arid valley and lost fatality*]

(Kroetsch, MsC27.16.5; Sternberg, Hunting 134-137)

Kroetsch's marginalia (in italics) seizes on the contrast between the harsh external landscape of the badlands and the space for psychological self-examination afforded by the coal mine. Private reflection, which has little place in a scientific field book reserved to dispassionate observation, is literally driven underground. Kroetsch would not be the last writer to appropriate this episode. Tim Bowling presents another version of Sternberg's coal shaft respite in his recent novel, The Bone Sharps:

The air was blistering, but no marks showed in it. The stone hummed. Everywhere Sternberg looked was a shimmer, a trembling, more dreamlike than dreams. He thought for a moment that he was already asleep, or that he'd walked away from his body and left it beside the skeleton. But surely the spirit wouldn't feel such heat, it wouldn't sweat and ache. He pushed on, around a smoothed bluff, to its north side. The cherty-fragments underfoot threatened to bring him down at every step. In the slight shade, which seemed only a dullness and not a diminishment in temperature, the trailing juniper among the sponge moss and purple crocus seemed fragile as any weathered bone; the sudden colour did not comfort him, but gave a suggestion of coolness that only heightened his thirst. He could not rest here.

He wandered eastward, trying to aim down but feeling again that circular drifting of a bird of prey. Towards what kill, he wondered grimly, then considered it was his own death he was hunting [. . .]

He did not even consider the abandoned coal shaft as a gift, where once he would have prayed in gratitude. Now he clambered up the slope, into the thin gap in the Edmonton Formation.

Darkness. Coolness. A fine black dust on the walls, covering the ground to a depth of fur. He walked in, deeper and deeper, going in no direction he could tell, then sat reclining against the stone wall. In a matter of minutes he was asleep. (Bowling 175-176)

Of course the abandoned shaft recalls another descent into the bowels of the earth portrayed at an earlier point in Badlands. The episode in which Dawe attempts to recruit Grimlich from the ABC Mine, may also owe a debt to Sternberg's anecdote. However, the

scene would hardly have been practicable were it not for the local history of Drumheller compiled by Ernest Hlady. Once again Kroetsch takes special interest in photographs for their ability to furnish him with "particulars of place". He records specific references in his field notes, which correlate with mine descriptions in The Valley of the Dinosaurs: Its

Families and Coal Mines:

Drumheller - 1st mines – 85 feet
deep

1914 – railroad to Drumheller

1st mine - the Newcastle
1913 - A.B.C. mine opened

shipped vast carloads of
coal on the Goose Lake line.

west of the
Drumheller townsite {use these
because
of where
the
boat
is tied
up}

(Kroetsch, Msc27.16.9)

Hlady corroborates Kroetsch's contention that the Newcastle Mine, "#317", was the first in the valley. Garnet Napier Coyle registered the title and later put the mine into operation with his partner, Jesse Gouge (Hlady 580). However, Kroetsch's note that the ABC mine opened in 1913 differs slightly with the historical record. Hlady puts the opening date at March, 1915. He also specifies that as in the case of the Newcastle mine, the

ABC tapped "the Number 5 Seam" (Hlady 628). A shaft led to the active diggings, which were effected by "coal cutting machines" according to the "room and pillar" method (Hlady 628). Even more intriguing is Hlady's description of the seam profile: "In 1921 it was reported that there was 51 inches of coal with a thin layer of bone about 18 inches from the floor" (628). It's a juicy morsel for the novelist with a taste for bone. However it's another story altogether for the benighted coal miner who was obliged to grade coal for shipment. Hlady includes another photograph depicting workers sorting through tailings on a conveyor belt. Its caption suggests that one of their main tasks was to separate extraneous rock from serviceable coal. In other words, they were obliged to "pick bones" from good flesh (Hlady 587).

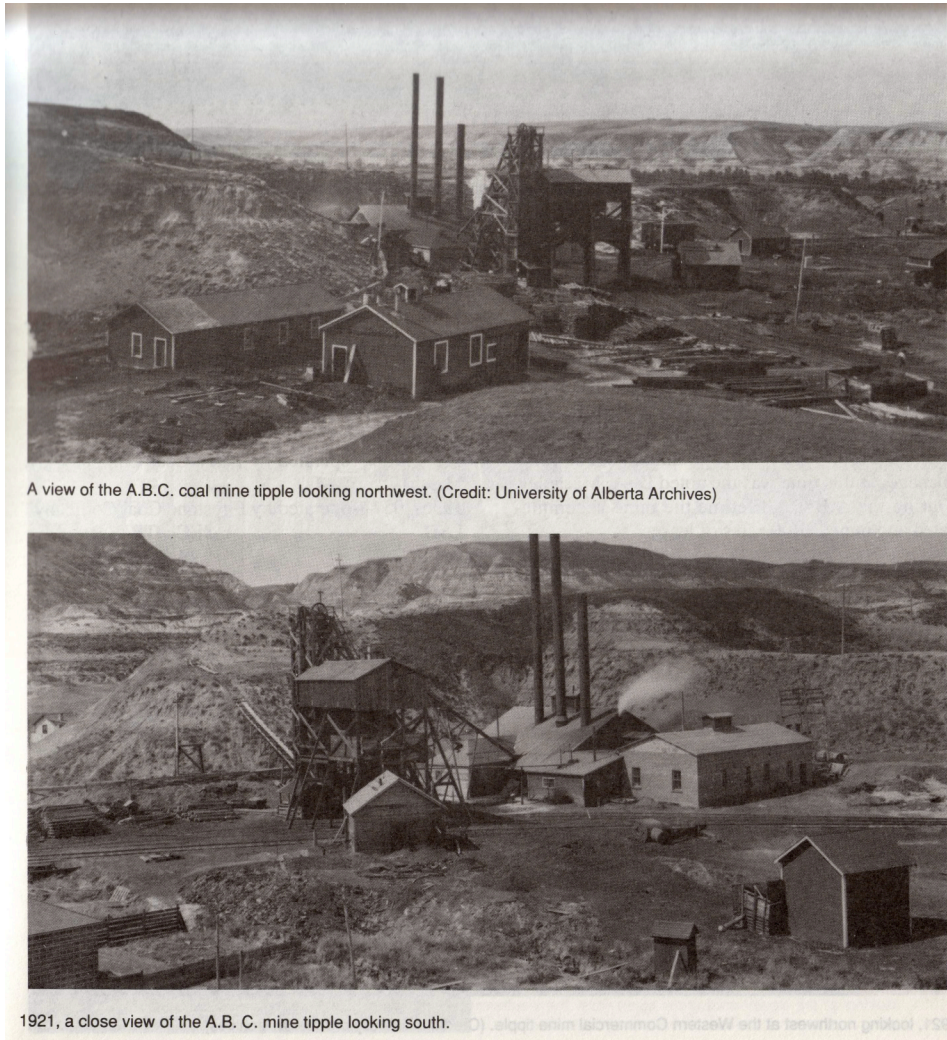


Fig. 42 "A.B.C. Mine" (Hlady 627)

While Kroetsch set Grimlich to work in the ABC Mine, he may have derived the psychological motivation for this character from sites he visited farther downriver. His research notes detail another coal mining centre in close proximity to Drumheller.

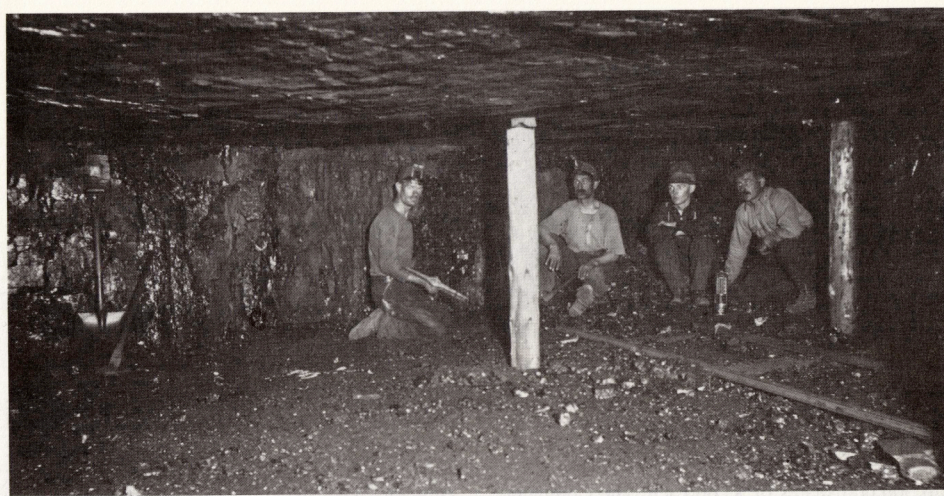
[7]

use East Coulee –
 coal mining town –

men who go to ~~the~~
 underground literally
 men who visit the
 past also in their
 way –

(MsC 775/04.25 Box 16/44 Notebook ii)

With every dynamite blast, Grimlich must confront the tragic consequences of an episode from his own past. His self-exile to the pit is an attempt at atonement for taking the life of another. Even his physical stature seems to confirm his burden. Kroetsch's troglodytic figure bears a striking resemblance to these miners on the job:



Coal miners "pick mining" at the Newcastle mine, season of 1914/15. This coal seam is very low. Notice that, with even the miners kneeling, the mine roof is slightly over their heads, making this seam slightly over three feet. There is a lack of timber placed for protection, so the roof must have been very safe and durable. There is only two miners wearing carbide lamps. (Credit: Glenbow Archives)

Fig. 43 "Coal Miners" (Hlady 581)

smashed open, robbed, by the earlier expeditions that seemed to have taken everything else, and he, Dawe, hated the secret dark mouths up high in the cliffs. But he was tempted too [...] (Kroetsch, Badlands 130)

He copes with his unease by attempting to rationalize his observations. However, rather than reducing his fears to cold hard facts, Dawe sets off on a rhetorical flight of fancy. It is a key moment in the novel because it marks the beginning of a subjective bent in Dawe's field books that culminates in outright confabulation. Moreover, it demonstrates that scientific field notes are as corruptible as any other literary genre:

[H]e pulled his field book out of his pocket. He wrote, pompously, not for himself but for his imagined wife in their remembered, imagined home: *Dawe in the desert. After the endless water, the endless walls of volcanic ash. I have only stared at these ribs of death for four days, and already I can remember nothing else.* Liar, he thought. Liar. Looking out at the light from the cave's dark mouth. *The river itself a mirage that runs through this dry canyon. The wind is more real. The wind that lifts up the dry grass in mockery. The grasshoppers sawing it down again, the sprung, hard grasshoppers crackling into the bright air. Night is relief from the sun. A cave is a pocket of night, cooling and dark, saved from the day. But a cave smells –*

He could not write it. Of death. A cave smelled, as he had not expected, of a denned coyote, a wintering snake. Of death. (Kroetsch, Badlands 130)

Like the previous instances, Kroetsch anchors Dawe's moment of reflection to "particulars of place". But he also locates it on a literary continuum. In rehearsing a line from Milton Kroetsch also acknowledges a Canadian literary predecessor. In fact Dawe's hyperbolic description of his predicament probably owes a greater debt to John Marlyn's 1957 novel, Under the Ribs of Death than it does to Milton's masque to chastity, Comus. Like Marlyn's protagonist, Sandor Hunyadi, who invents himself as a Canadian by re-

writing his name as Alex Hunter, William Dawe invents himself as a great bone hunter by writing his field notes in grand style. Ondaatje performs a similar act of legerdemain with the protagonist of In the Skin of a Lion. Patrick Lewis sits on a bench facing another portal to the underworld at Toronto's Union Station. There at "the ramp down to the gates" and through a ghostly narrator, Patrick reflects on his own self-construction: "This cathedral-like space was the nexus of his life. He had been twenty-one when he arrived in this city. Here he had watched Clara leave him, walking past that sign to the left of the ramp which said HORIZON" (Ondaatje, Skin 209).

Of course, as Dennis Duffy has observed, there is no such railway destination ("Wrench" 135). Indeed the prairie town of Horizon exists only in Sinclair Ross' 1941 novel, As for Me and My House. Duffy quite correctly notes an irreconcilable anachronism. The novel appears "three years after the time in which the scene is set" (Duffy, "Wrench" 135). However, another, possibly more intriguing, anachronism presents itself. Evidently, Ondaatje was familiar with Ross' novel, but he could not have read the afterword that Kroetsch penned for the 1989 New Canadian Library edition of As for Me and My House prior to publishing In the Skin of a Lion in 1987. Yet, echoes of Kroetsch somehow appear in Ondaatje, perhaps extending an undocumented conversation that the authors may have shared in a canoe once upon a time on the Red Deer River. Kroetsch's description of Mrs. Bentley's act of self-creation could apply to Patrick Lewis, as readily as it could apply to William Dawe:

She names her husband with the first word of the first sentence, and never once in the entire diary does she give us her own first name or her maiden name. And yet, in the process of her diary-keeping, she gives us a self-portrait that is a central fascination in the larger story of the Canadian imagination. (Ross 217)

Similarly, elements of Kroetsch's own diary-keeping serve as the basis for extended portions of his novel, as in the case of the aforementioned scene. So Dawe's story, in some respects, reads as a kind of self-portrait in field notes:

[9]
[. . .] only
sound the very
loud clacking of
grasshoppers – an
unworldly sound that
is nether mechanical
nor natural

[10]
warnings to
stay out of caves

day before I got
here – sudden rain-
dry creek had
8” of water in
a few minutes

(MsC 775/04.25 Box 16/44 Notebook iv)

Even as Kroetsch heeds the warning he compels Dawe to face the revelation that his expedition defies an ancient proscription against mortals in the underworld. Were it not for his obstinacy, Dawe might have drawn a similar conclusion much earlier based on the advice of a farmer, a ferryman, a coal miner, a fortune-teller and a photographer. It's no

wonder then that Dawe's descent from the bluffs of the Red Deer River reads like Orpheus' descent into the Taénaran Gateway:

In the falling night, Dawe turned again to descend into the valley. The river, far down, distant, was a long pale slit in the dark. All the Badlands were become a cave, and the river, mirroring an invisible light, was the opening, and Dawe was inside the cave, Dawe was inside.
(Kroetsch, Badlands 130-131)

Again the River Trip notes provide a vital clue to the scene. In this passage Kroetsch prepares the emotional tenor for Dawe's transgression:

[9 verso]
immense
sense of being
isolated –
even beyond the
eye of God.
[. . .]
[18]
man looking
closely at the
earth with
the hugeness
all around
him.
(MsC 775/04.25 Box 16/44 Notebook iv)

In a recent conversation with Rudy Wiebe at Canadian Mennonite University, Kroetsch admits that one of his chief literary obsessions is "a kind of descent into the underworld" (8). He suggests that "going down a river is going into the underworld in some way, especially in the badlands" (Wiebe & Kroetsch 8). For Kroetsch, traversing millions of years of Red Deer River geology during the span of an afternoon, redounds to the

mystical journey of Orpheus. Once again Kroetsch acknowledges his intimate connection to the ancient myth: "Going into the unknown, into the darkness, to recover something that's precious to you. That's a story that inhabits me" (Wiebe & Kroetsch 8).

Even Web can appreciate the dangers of blurring life and death. In the opening scene of Badlands Web is dimly aware of the incongruity of the grave houses in the Tail Creek Cemetery. However, he is stopped dead in his tracks by a "mound of fresh, newly opened earth" (Kroetsch, Badlands 5). Contradictions seize him with a sense of foreboding. He is "relieved and even delighted to be off the flatboat", but he is unable to swallow the strawberries he had been shovelling into his mouth. He "guesse[s] without knowing" that he has arrived at an "Indian or Metis burial ground" (Kroetsch, Badlands 5). He reasons that the "small roofs were intended to keep coyotes and wolves from unearthing the bodies", but something of their arrangement speaks to another inscrutable function (Kroetsch, Badlands 5). He apprehends the regularity of their construction, yet he is disturbed by the randomness in their layout. Crosses appear on some, and conspicuously not on others. In the Nez Percé version of the Orpheus myth consulted by Kroetsch during the writing of Badlands, Coyote learns that "when it gets dark here it has dawned in your land and when it dawns for us it is growing dark for you" (Kroetsch, MsC27.16.8). Apparently similar conditions reign in this central Albertan patch of the underworld. Web intuits the inversion, but when he discovers a living woman residing in the "buried village" of the dead, he reacts as if from a mortal wound appearing to cough blood.

While Anna Yellowbird may have emerged like a spectre to Web, the Tail Creek Cemetery did not materialize out of thin air to Robert Kroetsch. Once again he consulted "particulars of place" to accurately establish setting. Once again he owes a debt to a collective text assembled by an amateur historian. Edith Clark's Trails of Tail Creek Country furnished Kroetsch with copious notes for the first landing of the Dawe Expedition. Mention of the Tail Creek site can be found in the river trip field books:

[6]
 TAIL CREEK
 TOWN
 1870-1880 – hundreds
 of Metis
 congregated here
 before going
 south for
 the buffalo >
 [verso]
 hunts.
 By 1875
 400 cabins
 here
 abandoned in
 early 1880s
 with disappearance
 of buffalo
 (Kroetsch, MsC 775/04.25 Box 16/44, Notebook (i))

And a more detailed gloss of Clark's text can be found in Kroetsch's research notes:

Edith Clark, Trails of the Tail Creek Country
Tail Creek - 400 cabins, 2000 people
 1898 – a prairie fire burned
 all but one house.
 “this >original< Tail Creek Settlement extended
 across Tail Creek, up along the

side of the hill and across the flat above toward the Tail Creek cemetery which is south of Carl Peterson's land ~~an~~ on the w. Lynn land.

“Between the Tail Creek cemetery and Tail Creek there

 is a deep ~~coulee~~ gully which was at one time quite full of Buffalo bones. This is though by old timers to be a place into which the Indians and Metis chased the buffalo”

[sketch depicting confluence of Red Deer River and Tail Creek]
 (Kroetsch, Msc27.16.9 Note pad)

Curiously, Kroetsch ignores the cabin tally he carefully recorded in two separate documents. Instead he reproduces this alternate description of the site in chapter three of

Badlands:

And they were on the flats where Tail Creek held in loose assembly 100 cabin sites, the cabins themselves burned by a prairie fire that had swept into the valley eighteen years previously, the hunters gone because the last buffalo herd had vanished, thirty years before the fire, into its own extinction (Kroetsch, Badlands 9).

Kroetsch further annotates Clark's physical description of the grave houses in his research notes:

graveyard up on flatland
 settlement
 picture – p.20

40 graves – haphazardly located

~~is Content on present-day maps?~~

*

graves	cemetery – like the
as	roofs of a lost town -
houses;	sticking up from the
	earth in the poplars
life &	and buckbrush &
death	tall grass and
coming	berry bushes
together	
confused	

a [--?--] of houses
 around.

~~the whites of~~

Fort Tail Creek – 1874 – 4 men.

(Kroetsch, Msc27.16.9, Note pad)

In the Nez Percé myth, Coyote experiences a similar disconnect when the ghost leads him to a nondescript swath of country in search of his lost wife. Although his guide assures him that she is near, "Coyote could see nothing, except that he was sitting there on an open prairie where nothing was in sight yet he could feel the presence of the shadow" (Kroetsch, MsC27.16.8). Kroetsch's rhetorical question only adds to the confusion. It remains perfectly legible in spite of a strikethrough marking. However, the fragment offers no pronunciation cues. Is it kän-tent, or is it kən-tent? Noun or adjective or transitive verb? According to Clark, "Content" was the name of the village that grew in the vicinity of the Tail Creek Settlement after the latter had faded into memory. What to make of a town so ambiguously named? Ironically, Content would also disappear only to be replaced by a

natural gas plant, which if the pattern holds, may yet share a similar fate. Kroetsch records his impressions of the site as it appeared to him in the summer of 1972:

[8]

West bank of
Tail Creek –
enough exposed
rock to interest

Dawe

island at
mouth.

[verso]

tall spruce right
along the
creek
gooseberry
bushes.
shooting stars
in the wind.

[9]

boulders in
the earth
trees cut down
by beavers.
deadheads

[verso]

[10]

trestle bridge
over Tail Creek
Colm McLean

(Kroetsch, MsC 775/04.25 Box 16/44 Yellow Notebook)

When I visited the Tail Creek Cemetery during the summer of 2007, I discovered a vexing clue that only compounds the mystery. Gone was the trestle bridge, and a trailer park had replaced the tall spruce. Provincial Route 21 now crosses the Red Deer River at about the spot where the Dawe Expedition put ashore. A historical plaque, cemented to a

new bridge built a year after Kroetsch's river trip, vaguely attests to the existence of a place that no longer appears on any map: "ALBERTA RED DEER RIVER CONTENT BRIDGE 1973". The manager of a nearby trailer park gave me directions in French to the cemetery.

In his introduction to Kroetsch's first published installment of Field Notes, Eli Mandel raises Harold Bloom's spectre of the *apophrades* – those "dismal and unlucky days upon which the dead return to inhabit their former houses" (Kroetsch, Field 6; Bloom 141). Bloom uses the term as a trope for exploring the "anxiety" of poetic influence, or the manner in which a "strong poet" from the past will overwhelm all but the best of his/her descendants. In these rare cases, the new work somehow counter-intuitively puts that of its distant antecedents in its very debt. Mandel's gloss of this mystical and tendentious formulation renders it even more opaque than the original. Nevertheless, something in Mandel's interpretation hints at his own fraught relations with the dead. His invocation of the first person plural pronoun, suggests that he has thrown Kroetsch in for the bargain, and not without reason: "[the *apophrades*] com[e] upon us, when we seek to turn away so we become invisible, imitated by our predecessors (Kroetsch, Field 6). Bloom's source passage is equally paradoxical though less ambiguous:

For all of them ["new" "strong" poets] achieve a style that captures and oddly retains priority over their precursors, so that the tyranny of time almost is overturned, and one can believe, for startled moments, that they are being *imitated by their ancestors*. (Bloom 141)

Setting aside the colossal anachronism implied by the last sentence, Bloom's suggestion that time may be manipulated, even "overturned", under specific conditions

Yet this passage contains none of the triumphalism inherent in Bloom's notion of the *apophrades*. Although one might argue that my interpretation manipulates Bloom's original conception of the "strong poet" and his confluence with the "new strong poet." It's true that these dead ancestors are no giants of poetry. On the contrary, they are failed farmers, and anonymous ones to boot. Nevertheless a peculiar intercourse between the living and the dead, the present and past, lies at the heart of the documentary tradition in Canadian writing. Perhaps Mandel would have been better served in his introduction to Kroetsch's Field Notes by Eliot's understanding of "historical sense". Eliot also proposes the paradoxical notion that "the past should be altered by the present as much as the present is directed by the past" (Richter 467). He argues that the "historical sense involves perception, not only of the pastness of the past, but of its presence" (Richter 467). Kroetsch seems to grasp that "the historical sense compels a man to write not merely with his own generation in his bones" (Richter 467). A diary entry recalls his visit to another version of the Hirsch cemetery and supports Eliot's conviction that "no poet, no artist of any art, has his complete meaning alone. His significance, his appreciation is the appreciation of his relation to the dead poets and artists" (Richter 467):

SUNDAY 20 JULY

[. . .]

Then to Jewish graveyard and Lutheran
graveyard. The Lipton Jewish graveyard
profoundly moving, those lost
graves, those almost lost graves,
on a patch of prairie, the road
bending around the graveyard,
the buckbrush and wolf willow
pressing in at the fence. Little

houses on the graves. As in the opening of Badlands. That leap, from Metis to Jew, that connection too. (Kroetsch, "Diary")

While poring over Happy Jack's diaries in *Dr. Chase's Almanac* one afternoon at the Glenbow Archives, I had the occasion to meet Geoff Burtonshaw, a retired carpenter and Métis genealogist from "the bush between Lake Daupin and lake Winnipeg". During our brief conversation he seemed to take up exactly where Kroetsch left off in his observations about the Tail Creek Cemetery. Mr. Burtonshaw called those strange burial structures, "spirit houses" and suggested that they were better built than many of the new condos in Calgary. He explained that the Métis raised them for the practical function of sheltering the bones of their ancestors against scavengers, but also for another reason. He also added that "some of the spirits stick around for a while." When I asked "how long", Mr. Burtonshaw responded, "some forever or until the houses burn down" (28 July 2006). Kroetsch had a sense of this persistence too. He gives Web alone the wherewithal to sense the legacy of the dead, or as Mandel writes in a subsequent sequence from Out of Place entitled "Lost Place" to "read the land for records" (ix).

And they departed the four men together, left the burial ground and walked in single column through the buckbrush and the wild roses along the lip of the valley; they turned down into the coulee, scrambled and slid down through the sparse grass on the steep hillside to the first stand of spruce, to the nearest beaver dams; they crossed over on a dam, stepped over some beaver felled balsam poplars. And they were on the flats where Tail Creek held in loose assembly 100 cabin sites, the cabins themselves burned by a prairie fire that had swept into the valley eighteen years previously, the hunters gone because the last buffalo herd had vanished, thirty years before

the fire, into its own extinction. The four men walked in silent order, Dawe leading, Dawe by a combination of intensity and arrogance enforcing the silence, Web and McBride letting the chinaman follow behind Dawe, making their own acceptance of that silence not a surrender but an accident of order. They marched in diligent haste past the mounds of clay and stones that had once been fireplaces, the trembling aspens already grown tall inside the clay-marked boundaries of the burned cabins; they returned to the river itself, pushed their way through the man-high willows on the swampy ground, speaking now only to curse the sudden swarms of mosquitoes; they stepped from the sucking mud onto the gangplank, Web waiting to be last, waiting to free the stern, and as he did so, looking back to watch the skyline. (8-9)

Conclusion

Memory
All alone in the moonlight
I can dream of the old days
Life was beautiful then
(Streisand, *Memory*)

When these mountains were the seashore
When this desert was the ocean floor
You and I were not born yet
It's too long ago now even to forget
(Workman, *When These Mountains Were The Seashore*)

I love old things;
weather-beaten, worn things,
Cracked broken torn things,
The old sun, the old men,
The old earth's face,
(MacDonald, "The Book of Man" *Out of the Wilderness*)

But the best I've known,
Stays here, and changes, breaks, grows old, is blown
About the winds of the world, and fades from brains
Of living men, and dies.
 Nothing remains.
(Brooke "The Great Lover" ll. 66-71)

Web, like the Angel of History, keeps a wary eye on the past even as the flatboat is carried downstream into the future. In shades of Leonard Cohen, he's already seen that coming too. While it may not promise murder the Tail Creek site gives him a presentiment of extinction all the same. In the sunken foundations, and teetering grave houses, Web espies a vision of Pompeii and Herculaneum. Extinction is after all the ultimate conclusion of any voyage to the underworld. In the subtext it's clear that even Orpheus has only one get-out-of-jail-free card. Dawe, on the other hand, cannot wait to get his shovel in the ground, "to grope down", to have his hands "among the unspeakable foundations, ribs, and very pelvis of the world" (Melville 118). Yet, as Oscar Wilde cautions "those who go beneath the surface do so at their peril" (Dorian 42). Gaze into the abyss too long and the mind grows giddy, just as James Hutton's did when he read the age of the earth in the Old Red Sandstone at Siccar Point (Repcheck 22-23). Palaeontology is a fraught enterprise. Attempting to quantify such immense and ancient prospects can prove elusive as John McPhee explains: "Numbers do not seem to work well with regard to deep time. Any number above a couple of thousand years – fifty thousand, fifty million – will with nearly equal effect awe the imagination to the point of paralysis" (McPhee 29).

Nevertheless, the temptation of the hidden gem, the new find, the type specimen, which would bear the collector's name for posterity, beckons from just below the surface. Vesuvius may have consumed, but it did not destroy the Roman colonies. Michael Grant reminds the reader:

Beneath the massive covering which overlay them, they were preserved, as they would never have been had the disaster not occurred. The peculiar conditions established by ash and mud were such that even the smallest and most fragile objects of daily use have survived (xxxix).

So it goes with true fossilization, an even greater marvel. In his 2009 Anne Szumigalski lecture, Don McKay listens for poetry in the "Cambrian waves", and hears whispers from the Ediacaran (Birney 52). Evidently, the "old ones" can be made to speak with some coaxing:

Today at Mistaken Point, you can caress the rock with your finger, and read their unreadable lines like Braille. You can trace the line between the fossil bearing siltstone and the petrified volcanic ash which, ironically enough, both killed and preserved them, their assassin and archivist. (McKay 8)

In "David" Earle Birney may read the "scroll of coral in limestone" and the "beetle-seal in the shale of ghostly trilobites" as "letters delivered to man", but Don McKay entertains no such presumption (Birney 50-52). Certainly the "long fronds" and soft-bodied stalks" of *Charnia wardi* seem to send "semiotic signals" from the "muted siltstone" that was once their anchorage on the floor of the Iapetus Ocean (McKay 7). However, for McKay these dispatches are indiscriminate, and not exclusively addressed to human correspondents. Indeed they broadly "call life form to life form, across 575 million years of evolution and geological transformation" (McKay 7). By contrast Kroetsch's William Dawe adamantly believes that a crested *hadrosaur* laid its body down on the banks of a Cretaceous river so that sixty-five million years later its mineralized bones would come to honour the name of their collector. *Daweosaurus magnicristatus* stands as metaphor for the

hubris of taxonomy, and the folly of a palaeontologist who believes that he can live forever if he marries a dinosaur.

McKay remembers Christopher Dewdney's striking formulation that speaks to the insignificance of human recollection against the vast repository of nature, "THE FOSSIL IS PURE MEMORY" (McKay 7; Dewdney 7). Dewdney reasons that "a man's entire experiential memory exists only unto himself, is fractionally communicable and chronologically ephemeral" (7). By contrast, the "mnemonic palaeontology is not consumed" and is presumably not exhaustible (Dewdney 7). Yet for creatures older than eyes (and this goes for their reptilian juniors too) one might forget memory altogether. Memory, Ryszard Kapuscinski contends, is a decidedly human preoccupation. Its volatility especially troubled the great historian of antiquity:

Herodotus admits that he was obsessed with memory, fearful on its behalf. He felt that memory is something defective, fragile, impermanent – illusory even. That whatever it contains, whatever it is storing, can evaporate simply vanish without a trace. His whole generation, everyone living on earth at that time, was possessed by the same fear. (Kapuscinski 75)

A further complication lies in the fact that in Herodotus' day, "the only real repository of memory is the individual" (Kapuscinski 76). Therefore accessing these fonds sometimes necessitated travel to far-flung reaches of the known world. Writing, Kapuscinski argues, became Herodotus' chief weapon against encroaching oblivion. The impetus behind The Histories is encapsulated by its very first line: "Herodotus of Halicarnassus here displays his inquiry, so that human achievements may not become

forgotten in time" (I:1). Is the purpose of field notes any different? Laurence Ricou defines them in austere terms:

Field notes are the unrealized raw material of art, not the achieved object. The various implications of Kroetsch's form are clear: field notes are fragmentary, cryptic, ostensibly scientific and factual and empirical. This form suits men who despise words, who want to, who must keep rein on their imagination. (Ricou "Field Notes and Notes" 120)

In a later essay he softens his tone but he still maintains: "Field notes record research and exploration away from classroom, laboratory and desk. They purport to record detail and data not as assembled from books, but as found in direct observation" (Ricou "Field").

These noble scientific aims overlay another hidden strata. While field notes may allay anxiety about the ephemerality of memory, they also serve another end. The commemoration (and embellishment) of personal achievement is precisely the goal of William Dawe's field notes, and perhaps to a certain extent any note written in the field. As Caputo affirms, stone only speaks in metaphor. The listener, the scientist, the "man of imagination" speaks on behalf of the inanimate thing in the earth. Herodotus realizes that he is on shaky ground with such a comprehensive undertaking. So he issues caveats "emphasizing his distance from the material he presents" (Kapusinski 179). Dawe is not so conscientious. His priority is not to document *in situ* data, but to document his desires. He demonstrates as much when he fictionalizes the description of Web's *Gorgosaurus*, or when

he pens epistles to his wife, or when he laments his failures, or when he justifies his rash actions. But perhaps this is no major revelation.

In Microcosms, a work of literature equally defiant in the face genre limitations, Claudio Magris sketches a character after Dawe's own heart. Giuseppe Fano could also stand as an Italian version of Demeter Proudfoot in The Studhorse Man who from the comfort of his own bed declaims his fatuous field notes with not the slightest hint of shame:

For Fano there are no data to be removed because they are incoherent or contradictory in relation to the picture one wants to offer or because they are at variance with an image – even one's own – that is now accepted. Fano does not even worry about the coherence of his memoirs, which he dictated from his bed, sometimes re-narrating entire episodes that he had forgotten he had already recounted he would repeat them once more in his pages because, when the typist told him she had already set them down, he told her not to give it a thought, since it was none of her business, and to keep going.
(Magris 26)

Of course the reader is inclined to forgive the eccentricities of a café society partisan, but likely less willing to afford the same indulgence to a good scientific worker. Ever the popularizer, Stephen Jay Gould seems to enjoy stripping away the mystique long associated with his domain:

Science may differ from other intellectual activity in its focus upon the construction and operation of natural objects. But scientists are not robotic inducing machines that infer structures of explanation only from regularities observed in natural phenomena [. . . .] Scientists are human beings, immersed in culture, and struggling with all the curious tools of inference that mind permits –from metaphor and analogy to all the flights of fruitful imagination. (Gould, Time 6)

As Dorothy and her gang learned when they peeked behind the curtain, the Wizard is just a man, and a small one to boot. Gould adds with the practiced skepticism of the post-modern critic "objective minds do not exist outside culture, so we must make the best of our ineluctable embedding" (Gould, Time 6). Greg Curnoe, visual artist and chronicler-of-a-kind, feels this tension when he searches the landscape of his London, Ontario backyard and conjures its former occupants. At a glance the area is overgrown and "timeless" (Curnoe 19). At another glance he reads in the rubble of a house foundation the exposed profile of an ancient riverbank (Curnoe 20). His field notes detail a further shift in his sense of objectivity when he and his son Galen dig up buried litho stones formerly of the Knowles Company. In a series of prints that he makes from the artifacts, Curnoe documents the evolution of his field experience at 38 Weston St. (23, 156).

Pliny the Younger puts great stock in the durability of the written word even as he describes a cataclysm that must have incinerated untold scrolls. He has faith that the quill of Cornelius Tacitus can do for his uncle what Herodotus proposes. Like Dawe who casts in his lot with a unique specimen, Pliny the Younger throws in his name for the bargain too:

Thank you for asking me to send you a description of my uncle's death so that you can leave an accurate account of it for posterity; I know that immortal fame awaits him if his death is recorded by you. It is true that he perished in a catastrophe which destroyed the loveliest regions of the earth, a fate shared by whole cities and their people, and one so memorable that it is likely to make his name live for ever: and he himself wrote a number of books of lasting value: but you write for all time and can still do much to perpetuate his memory. (The Letters of the Younger Pliny 166)

It remains for Herb Wylie and others to decide if this study adequately investigates the histories that serve as a basis for Robert Kroetsch's Badlands. Years of archival exploration have convinced me that a process-focused inquiry into the creation of a literary work is a worthwhile enterprise that does lead to a deeper appreciation of the relationship between history and literature. Yet, as Eliot writes of Coleridge's practice, "how such material as those scraps of [. . .] reading become transmuted into great poetry remains as much of a mystery as ever" (On Poetry 119). Why then undertake such scholarship? One response may be, why do literary studies at all? That no definitive equation is forthcoming only underscores the myriad narrative possibilities inherent in this dialectic. We read because we love writing. In spite of our knowledge the construction of narrative remains inscrutable; it retains some mystique. Efforts to puzzle this process from the anatomical level constitute for Kroetsch a kind of "narrative extension" to the original text. In this way, to his and to my delight, the story does not end. Box 16 of the Kroetsch fond may be an atypical documentary deposit expressly because of its richness (but such bone beds likely exist elsewhere in relation to other writers). Certainly, Kroetsch took pains to ensure the preservation of the raw materials he collected and prepared toward the generation of his novel. For an author so invested in the technology of field notes and the construction of history, it could hardly be otherwise.

Nevertheless, the model of literary excavation employed in this study has broader applications for the reading and teaching of historiographic metafiction in Canadian and

World literatures. The fostering of archival manuscript seminars at the graduate level where special collections exist presents one possible avenue for encouraging new discussions about old paper. Literary process focused undergraduate courses could conceivably feature syllabi in which primary texts are partnered with a selection of archival and documentary material. Cross-listed courses bringing students of divergent disciplines together around a common theme could also unearth surprising finds. Imagine a room filled with budding palaeontologists, and library scientists, and literary scholars poring over a horde of old field notes written around a common specimen, Robert Kroetsch's Badlands.

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