Recreating Facts and Documenting Fiction: The Legacy of Michael Crichton’s Narrative

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Recréer les faits et documenter la fiction : l’héritage de l’œuvre de Michael Crichton

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1. Introduction

1 When Michael Crichton passed almost two decades ago, he left a prolific life as writer, director, and producer of several thrillers which have set high standards for other creators to follow. The commercial success of his plots was such that movie rights would be negotiated by Hollywood even before the books had been sent to the printers. To this day, Crichton continues to be a hot commodity as his best-sellers are being reprinted, new titles have been published posthumously, whether under his sole name or along with those of other authors, and previous works for the screen have been remade.

2 Although he may not be high on the list of authors for college-level literature courses, Crichton deservedly shares, with Tom Clancy, the titles of father, master, or king of the technothriller, and will remain in a very special place among the pioneers of la fiction à substrat professionnel (FASP).¹ His earliest novels, written under more than one nom de plume, reflect his interests in various aspects of computer technology, chemistry, and even probability theory, albeit sparingly and not extensively reflected in the narrative. Later, A Case of Need (1968), The Andromeda Strain (1969), and The Terminal Man (1974) delve into particular aspects of medicine or biology, describing facilities, equipment,
and procedures in great detail and supported by graphical data and “realistic” fragments of professional communication genres; the characters portrayed appear as “real, flawed people, not simple caricatures” (Grazier, 2008: vii) who use distinctive professional terms, abbreviations, and acronyms in their interactions, while additional clues and information are provided to allow readers a better understanding of medical practice, or malpractice. The editorial success and guild recognition for his medical thrillers definitely motivated Crichton to continue pushing boundaries and explore other substrats professionnels increasingly remote from his educational background.

One aspect of his “contentious” or “controversial” works (Golla, 2011) inevitably addressed by media critics, literary analysts, scientists, and FASP researchers/practitioners is Crichton's mixing and blurring of contemporary science and plausible fiction to entertain and educate readers (cf. Trembley, 1996; Adams, 2003; Grazier, 2008; Genty, 2009; Zwart, 2015). However, references to the creative resources recurrently used by the author are commonly enumerated but not singled out or explored to greater extent. In this article we offer a renewed examination of Crichton's narrative techniques in their connection with recognized traits and formats of non-fiction in general, and academic/professional writing in particular. Our selection is larger than those in previous studies or articles: it spans from A Case of Need (1968), published under the pen name of Jeffrey Hudson, to his most recent posthumous titles, and includes exemplars of the FASP genre as well as of works whose “FASPness”, to cite a term coined by Isani (2004: 34), might be questionable. Readers will find that our coverage is more characterized by breadth than by depth; this drone-like rather submarine-like view is totally intentional. We have chosen to enumerate instances across works rather than include illustrative extracts, as we expect readers to crosscheck the references provided against the original works, thus inviting research which expands on our preliminary approach to this author's narrative.

2. Recreating facts: Crichton's professional authorship and authorial professionalism

Michael Crichton's career as a published writer started at age sixteen and spanned fifty-two years in which he covered travel literature, school news, scripts for a puppet show first and for movies later, fiction (FASP, among other genres) and non-fiction—an artist’s monograph, accounts of electronic and hospital lives), media articles, and keynote lectures. As a teenager, he was news editor of his high school newspaper and thought of going college to become a writer. “I decided to study anthropology instead”, he wrote in his autobiographical work Travels. “But I doubted my desire to continue as a graduate student in anthropology, so I began taking premed courses, just in case” (1988: 4).

It was definitely his explorations of the medical substrat professionnel which earned him recognition first as a writer, then as a film director, and finally as TV producer. “I often listened to patients, thinking, ‘How can I use this in a book?’” he said about his days as a medical student (1988: 68). When his novel A Case of Need (1968) was published, “there was a lot of talk about this author... who seemed to know so much about Harvard [Medical School]” (1988: 73). Ten years later, he used his own experience as a resident at the Boston City, Boston Lying-In, and Massachusetts General hospitals when he directed the movie version of Dr. Robin Cook’s homonymous novel Coma, and again
in 1994 when he created *ER* for NBC based on a manuscript he had written 20 years before.⁴

Other works of fiction, although not necessarily depicting specific *substrats professionnels*, reflect Crichton's earlier background in anthropology.⁵ In *The Great Train Robbery* (1975), he provides detailed accounts of the workings and argot of Victorian England's underworld; in *Eaters of the Dead* (1976), he comments on Viking life as perceived by an Arab character, and even suggests that the mist monsters in Ibn Fadlan's manuscript were Neanderthal men who lived not before but alongside modern men (Trembley, 1996). In *Rising Sun* (1993), he offers cross-cultural insights around American-Japanese relationships through the interactions involving a senior police officer and his junior partner as they work on a murder case. Finally, in *Timeline* (1999), it is the characters' knowledge of medieval life what helps them return to the modern world from an almost impossible mission in 14th century France.

As it is well known, Crichton's fiction and non-fiction writing transcended the two professional domains of his college education; but it would be inaccurate to say that he moved away from medicine or anthropology to explore other domains in the early 70s since he actually returned to these fields in the 90s. His tenure as postdoctoral fellow/science writer at the Jonas Salk Institute for Biological Studies in La Jolla, California, as Visiting Writer at the Massachusetts Institute of Technology (M.I.T.), and his increasing contacts with people from different walks of professional lives allowed him to expand his intellectual curiosity and horizons, hone his research skills, and perfect his storytelling. It was a casual conversation on a beach with M.I.T. scholar and artificial intelligence pioneer Marvin Minsky in the early 80s, for example, that allowed Crichton to learn that cloning dinosaurs was something “that could probably be done one day” (Dugan, 1993). Certainly, there were multiple conversations like this one which eventually inspired plots.

In a 1999 appearance on *The Charlie Rose Show*, Crichton declared: “I'm attracted to the challenge of trying to write a story that will be persuasive, even for a few hours, on some subject that's impossible or highly, highly unlikely” (Golla, 2011: 169). Many of his plots voice his often-controversial views on topics such as abortion, euthanasia, sexual harassment, feminism, cruelty to animals, US-Japan economic relationships, air transportation safety, the role of modern media, climate change, and genetic manipulation among so many others.

The fact that Crichton wrote stories about different *substrats professionnels* or discussed in a single work several domains other than that of the main story line, what Isani calls *panachée FASP* (2004: 29), makes the application of FASP authorial or generic categories somewhat challenging. In *Jurassic Park* (1990), to name but one of his multi-disciplinary works, while most of the plot revolves around genetic engineering or chaos theory, the writer makes detailed incursions into paleontology/paleobotany, computer systems design, and construction engineering. Drawing on this, Crichton may present a peculiar case of professional authorship and authorial professionalism when studied through the lens of FASP scholarship. On the one hand, he wrote, at different times and in different works, in each of the four capacities of *professionnels-auteurs* or *auteurs-professionnels* described by Petit in his 1999 seminal work. Thus, placing Crichton in a single authorial category is not an easy task. On the other hand, unlike Cook, Clancy, Gerritsen, or Grisham, identified as medical, military, medical/forensic, and legal FASP writers respectively, Crichton’s chameleonic authorial career would call for an
overarching category to identify cross-disciplinary auteurs who systematically explore various substrats professionnels in different plots rather than in single instances of panachée FASP.

3. Documenting fiction: a breakdown of narrative techniques

Given the “scientific tendency” in Crichton’s college writing (1988: 4), his medical background, and his postdoctoral work at the Jonas Salk Institute, it is no surprise that most of his plots revolve around “important societal dimensions of current techno sciences and their (progressive or disruptive) consequences” (Zwart, 2015: 2) and that his narratives draw on and employ a number of techniques used when communicating science in works of non-fiction.

It is very likely that Crichton was simultaneously writing A Case of Need (1968) and The Andromeda Strain (1969) as both stories deploy some similar narrative techniques although in varying degrees. However, the second book is actually the author’s first thriller in which the episode structure is typical of fiction paperbacks but sandwiched between the Acknowledgements and References sections that distinguish scholarly volumes. As part of the narrative, Crichton presents and discusses real and fictional concepts, theories, hypotheses, methods and experimental procedures; he defines, classifies, describes, exemplifies, compares, contrasts, uses chronology, and establishes causality and results. The “factual” aura of the story is then reinforced by maps, made-up graphs, tables, microscope and computer-generated data, as well as transcripts of radio communications and other various “top-secret” documents. The final product creates the impression of a novelized account of real events of scientific or technical relevance enlivened with “factual”—and, on one occasion, “classified”—data often omitted in published research or news releases (cf. Diaz-Santos, 2000).

Now, we will examine how the fusion of narrative techniques typical of fiction writing and distinctive features of non-fiction and academic/professional writing endows Crichton’s plots with copious details in line with the howdunit genre.

3.1 Introductions

Like those of specialized journal articles, monographies, textbooks, or even grey literature, Crichton's introductions serve the socially recognized purpose of situating for readers a particular event within defined—and most often contested—research territories and niches, or historical contexts, whether the competition is about finding diamonds with great superconductivity power (Congo, 1980), patenting techniques to genetically engineer a wide range of products (Jurassic Park, 1990; Lost World, 1995; Next, 2006), or applying quantum research to teleportation (Timeline, 1999).

Like their scholarly counterparts, Crichton’s introductions bring readers up to date through the rhetorical strategies or moves documented by genre analysts, namely: making topic generalizations, claiming relevance of field, reviewing previous research, establishing gaps in research, raising questions and concerns, and presenting hypotheses (cf. Swales, 1990 & 2004; Bhatia, 1993 & 1997). With the exception of a few introductions containing copyright footnotes, Crichton’s references to scientific or
technical breakthroughs and the associated big names appear rather journalistic; unlike with formal citations, readers will not always be able to trace references to a publication, date, or page number, even if they appear as footnotes. Although a deeper analysis of Crichton’s introductions and how they comply with the well-known models discussed in genre analysis literature can still be both interesting and entertaining, we should expect from the outset that the fictional author’s approach will be characterized as peculiar and imprecise to some degree.

Three instances which differ from the expected overall structure of introductions are those in *The Terminal Man*, *Congo*, and *The Lost World*. In the first novel the “Author’s Introduction” ends with a timeline of events in the “history of therapy of psychosurgery” (1972: xii-xiii) which lead to the operation in Los Angeles of fictional character Harold Benson. In *Congo* (1980), the author closes his “Introduction” with two paragraphs in which he thanks real and fictional people alike, a technique we will address later. Finally, in *The Lost World* (1995), his historical contextualization of scientific interest in the subject of extinction cuts to a conference presentation by fictional character Ian Malcolm. This last instance is an abrupt narrative twist in two ways: on the one hand, an unusual “move” is integrated into the rhetorical deployment of his Introduction; on the other, one of *Jurassic Park*’s casualties is unexpectedly brought back to life.

By customarily signing, initialing, or dating his introductions—which sometimes are identified by a title in addition to the word “Introduction”—Crichton’s combined communicative purposes are obvious: placing a fictional event within the context of real developments in science and technology which could be fact-checked so that the fictional event will continue to appear as a very real one.

### 3.2 Acknowledgements

Whether they are an independent section—or genre—at the beginning/end of the book or just two paragraphs—or move—of an Introduction, Crichton’s Acknowledgments have served at least two communicative purposes: on the one hand, they express thanks to those who provided useful ideas and expertise-based inputs to develop a plot, or to those who assisted him with various aspects of a book project; on the other, and most importantly, they show readers that the author has credentials, established disciplinary connections, and is therefore qualified-and vetted-to discuss the most diverse of topics.

Following the conventions of both non-fiction and FASP, in *Jurassic Park* (1990) Crichton thanks, among other direct or indirect sources, well-known paleontologists, DNA researchers, chaos theorists, and a science writer. Some names reappear in the Acknowledgments of *The Lost World* (1995) given the connection between these two stories. This socially recognized format is repeated in subsequent works, with names of contributors accompanied by those of the generally identifiable institutions they are affiliated with (e.g. “Steve Clemens of the Japan America Society of Southern California” [Rising Sun, 1992], or by the type of practical help they gave the author (e.g. “Brant Gordon for the computer-generated architectural renderings” [Timeline, 1999]).

A careful examination of Acknowledgements in previous works will confront readers with both apparent truth and outright fiction. In *Congo* (1990), for example, there is no separate section for acknowledgements; they are made in the last two paragraphs of
the Introduction. One of these refers to real people who helped the author with travel to the Virunga region in Congo, the setting of the novel; the other lists fictional characters like R. B. Travis, Dr. Karen Ross, Dr. Peter Elliot—even Amy the gorilla—and their affiliations with real and fictional institutions. It might thus be surmised that, although actual and made-up names were mixed, Crichton decided to have separate paragraphs for each of the two categories of “contributors”.

The above example may account for an evolution towards the more factual if we compare these acknowledgements with the ones in *The Andromeda Strain* (1966). In this earlier work, the author names six sources in various branches of the US military, five in government agencies and the private sector, and ten in research and academia. Curiously, if one wants to track down these contributors using well-known search engines not available half a century ago, we will be promptly taken to an Internet link where the pdf version of the book can be accessed... and not much more. Therefore, the Acknowledgments section of *The Andromeda Strain* can certainly be dismissed as entirely fictional like other textual and paratextual elements that we discuss in this article.

### 3.3 Rhetorical functions and techniques of English for Science and Technology (EST) discourse

A landmark study by linguists at the University of Washington-Seattle described scientific and technical English as “dense in presentation of ideas, often heavy-footed stylistically, and frequently difficult in terms of grammatical and lexical elements” (Trimble, 1985: 13). As a result, a number of rhetorical tools that advance the main purposes of this discourse have been identified: the functions include descriptions (physical, function, process), definitions, classifications, instructions, and visual-verbal relationships, while the techniques include patterns of time and space order, and of causality and result; order of importance; comparison and contrast; analogy; exemplification; and illustration.

The functions and techniques enumerated above are commonly and recurrently combined in Crichton’s books; that is, readers can find more than one in a single work and, therefore, across his literary production. To enumerate a few instances of how he successfully navigates these expository tools, we can mention: the definition of object in computer terminology (*Jurassic Park*, 1990: 230–231) or of bad blur in photography (*Rising Sun*, 1993: 211); the classification of levels of electronic jamming at ERTS Inc. in Houston (*Congo*, 1980: 153–154); the description of simple processes such as capturing a snapshot of street life in the 19th-century frontier town of Deadwood (*Dragon Teeth*, 2017: 228–229), setting up a satellite communication kit (*Congo*, 1980: 153), to more complex experimental procedures such as sequencing dinosaur DNA (*Jurassic Park*, 1990: 98–103); the comparison between an electron and a light microscope (*The Andromeda Strain*, 1969: 218); and the causal connection between what is known in aviation as uncommanded slats deployment and the common term turbulence (*Airframe*, 1996: 45–47).

The inclusion of graphs and tables, or what the Washington School identifies as visual-verbal relationships, should not be dismissed as a way of giving the story extra credibility by “providing information, usually detail, that is tedious to read in solid text, or is difficult or impossible to describe accurately in words alone” (Trimble, 1985: 13).
In *Airframe* (1996), for example, readers are subtly invited to be part of the investigation of the TransPacific Airlines 545 incident through the presentation of excerpts of the flight manifest. If we just glance at or even decide to skip these inserts, and fail to compare the one on page 297 with a previous one on page 80, we will later realize that we missed an important clue to understanding what was really at stake with the elusive crew of the Norton widebody.

Most of the rhetorical functions and techniques of EST discourse enumerated above are integrated into the fictional plot development in a sort of didactic narrative which reads like the science of a textbook rather than that of a journal article. Aware of his heterogeneous readership, Crichton skillfully handles formulation, reformulation, illustration, exemplification, and analogy as solid foundations to “mak[e] communication of specialized knowledge easier for interlocutors who are less competent in a given field of knowledge” (Ciapuscio, 2003: 229). The extract below from *Congo* (1980) highlights a combination of classification (rhetorical function), exemplification and analogy (rhetorical techniques), and reference to how certain words have particular meanings at a fictional research facility.

In ERTS slang, the simplest level of electronic jamming was called “tuba”. Like a kid next door practicing his tuba, this jamming was merely annoying; it occurred within limited frequencies, and was often random and accidental, but transmissions could generally pass through it. At the next level was “string quartet”, where multiple frequencies were jammed in an orderly fashion; next was “big band”, where the electronic music covered a wider frequency range; and finally “symphony”, where virtually the full transmission range was blocked. (153–154)

As demonstrated by Stoerr (2011) and Isani (2013), one classic way in which these rhetorical functions and techniques are also recoded is in the form of pedagogical dyadic exchanges between expert and non-expert (who is often a specialist in another field), a recurring feature of FASP works which draws on asymmetrical or dissymmetrical dialogues around disciplinary knowledge. The technique follows a typical three-part exchange between experts and novices or lay people, representative of the readers: (1) the expert character makes reference to a specialized term, concept, piece of equipment, or procedure which is relevant to a particular point of the story; (2) the non-expert or lay person asks a “naive” question about that term/concept/equipment/procedure; (3) the expert provides a reformulated, simplified, or illustrative response. Quite often, in the third part of these exchanges, authors follow up the simplified version with “a cascade of associated terms that intentionally provide the reader with the complex rendition of the scientific topic exploited” (Stoerr, 2011: 92). In this fashion, Crichton has elucidated diverse complex scientific areas such as black holes (*Sphere*, 1987), chaos theory (*Jurassic Park*, 1990), digital alteration of recorded video (*Rising Sun*, 1993), and the Bernoulli principle in aviation (*Airframe*, 1996), among others.

In addition to such pedagogical dyadic exchanges, Crichton has explored another elucidation technique, that of group exchanges which are similar to dyadic exchanges except that they involve more than two participants. A significant difference is that the group is formed of specialists from different fields of expertise who are part of an emergent collaborative or multidisciplinary task force. Since the participants are not members of the same discourse community, this type of exchange mostly qualifies as asymmetrical: it takes place between domain experts and specialists of other domains, who share pockets of educational/foundational backgrounds and research tools (cf.
Gotti, 2006; Isani, 2007). And finally, the structure of these exchanges does not naturally follow the predictable three-part sequence of dyadic exchanges explained above.

In *Jurassic Park*, for example, Crichton resorts to group exchanges more than once with mathematician Ian Malcolm assuming the role of top or transdisciplinary expert. The most interesting one takes place in the episode “Control” (1990: 160–166) when Malcolm clarifies over the radio a crucial misunderstanding of available data for systems engineer John Arnold, geneticist Henry Wu, and palaeontologist Alan Grant, characters/experts who would regularly use similar mathematical tools. By drawing their attention to a graph showing the height distribution of the compys, Malcolm convinces his interlocutors that the dinosaurs are breeding: the graph shows a Gaussian—and not a Poisson—distribution, a curve typical of a breeding population and not the curve expected of animals engineered in batches at a genetics lab. In this particular case, the group exchange not only reinforces the authenticity of the passage through the combination of verbal and non-verbal representations of specialized discourse but also helps readers see the relevance of including graphical data in the narrative and, most of all, constitutes a critical plot twist.

### 3.4 False documents and other embedded genres

Commonly associated with Gothic fiction, the false document—or “found” manuscript—is a centuries-old resource by which writers fabricate documents, or fragments of them, which add both verisimilitude and narrative variety to a story. As Trembley points out “[m]emos, computer programs, brain wave charts, and classified government documents are ‘reproduced’ prominently … throughout [most of Crichton’s] novels” (1996: 27). His craft at creating these and other documents, whether belonging to everyday or specialized communication, may not, or need not, reside in their generic accuracy but rather in their correspondence with the formats in which the popular mind represents them (cf. Genty, 2009).

A brief look at some of many examples will show how Crichton has used, quantitatively and qualitatively evolved, and excelled at this narrative technique across his literary production. In about a year, he went from using just a photocopy of the last page of a medical discharge summary—with signatures and official stamps—in *A Case of Need* (1968) to multiple false documents in *The Andromeda Strain* (1969): transcripts of communications, a letter from several scientists to the President of the US warning about sterilization procedures of space probes returning to earth, a 274-page classified document describing the Wildfire Project, computer scan printouts, lab test results, and transcripts of auto clock flight records. In 1976, Crichton explores the found manuscript in *Eaters of the Dead*, recreating a travel adventure enhanced by a substantial number of footnotes/commentaries around the true-life 10th century traveller Ahmad Ibn Fadlan’s written account of Vikings and mysterious mist monsters. In *Next* (2004) Crichton seems to go overboard regarding presenting false documents by including the broadest range and number of generic forms in a single novel: 18 full-length or abridged articles published in “specialized journals” or in the regular media—curiously most of them do not a have a by-line and several focus on blondes—, transcripts of a Q&A session at a scholarly lecture and of two TV news show (one of which features 7 newspaper headlines), a press release from a government office of
university technology transfer, a 6-entry screenshot of a Google search of the Gandler-Kreukheim syndrome, an out-of-office reply message, and an obituary.

In addition to the identifiable text types enumerated above, one can find in Crichton’s works descriptive or narrative passages which bring to mind different socially recognizable embedded or nested genres. His scholarly “asides” (Diaz-Santos, 2000) on a variety of topics, whether central or peripheral to his novels, echo the expository strategies typically found in conference abstracts, introductions of research articles, or grey literature. Likewise, he often introduces his characters in ways that resemble genres of professional representation, or narratives of expertise, such as the biodata, résumé or CV., thus endowing them with the “attributes, understandings, experiences, and values of a disciplinary member” (Hyland, 2012: 17).

This display of textual and generic diversity, or penchant for rewriting and fabricating, can be traced back to Crichton’s college days when he submitted his version of an essay written by George Orwell, an “experiment” which only allowed him to raise his grades from C+ to B- and conclude that Harvard’s English department was too difficult for him (Crichton, 1988). As such, it is no wonder that the letter to the President of the US in The Andromeda Strain is “consciously patterned after the Einstein letter to Roosevelt” (1969: 41), or that the unnamed feature “No Blond Extinction After All” in Next (2004: 214) is a combination and reconstruction of at least two articles published in The New York Times and the BBC News World Edition in 2002.

For the average reader of fiction, Crichton’s use of false documents and other embedded genres may give “the appearance of truth through details” (Trembley, 1996: 17); it may also pass as new knowledge or as the author’s typical take on character development. For language/writing students in the ESP context, however, these may constitute starting points to play with dynamic structures and reconstruct the socially recognizable generic forms they echo (Diaz-Santos, 2018).

### 3.5 Footnotes and appendixes

Crichton’s use of footnotes in A Case of Need (1968) seems fully justified as a means to compensate for readers’ lack of knowledge or familiarity with specialized topics, without altering the normal flow of the narrative with digressions of varying lengths. His first work about hospital life features 50 content footnotes which clarify for the reader medical terms (lividity), abbreviations (PID–pelvic inflammatory disease), procedures (comparing an arteriogram with a pneumoencephalogram or PEG), and provide brief insights into the medical profession (e.g. doctors in the US cannot change their names after receiving their MD degree without invalidating that degree). In some cases, footnotes direct the reader to a seven-appendix section where additional substantive information is provided on medical abbreviations, jargon or practice (like describing diseased organs as if they were food–delicatessen pathology), and ethical concerns on topics such as abortion or interacting with the police.

However, the author’s use of these ancillary notes across his literary production shows his evolving craft in incorporating specialized information or side comments into the main narrative. Quantitatively, content footnotes sharply diminish in subsequent works and are replaced by reformulation strategies, e.g. specialized terms are explained through analogies, parenthetical expressions, or dyadic group exchanges; acronyms are spelled out or explained; and potentially digressive comments are
seamlessly interwoven into the main story line in the form of scholarly asides. Qualitatively, Crichton explores the use of footnotes—which at times are block comments—as a narrative technique in *Eaters of the Dead* (1976). These annotations do not appear as coming directly from the author but rather from a fictional editor, an unnamed scholarly character who, in reconstructing the found manuscript of Ahmad Ibn Fadlan for the contemporary reader, “begins, ends, and continually intrudes into [...] Fadlan's narrative, controlling it in a way that may change or ruin parts of it” (Trembley, 1996: 81). Again, we find the author at great pains to instill credibility to his plots through paratextual elements of the book.

### 3.6 Conclusions and Recommendations

35 Like in many other works of fiction, Crichton chose to end a significant number of his novels with an epilogue, sometimes using other headings like “Postscript”, “Afterword”, “Author’s message”, or “Author’s note”. Although these unequivocally provide closure to the story by briefly summarizing what became of the characters or how a particular plot thread evolved, in the final section of five of his novels he offers a higher and broader pass on their main theme and voices his personal stand and the use of the words “conclusions” and “recommendations” inevitably invites readers to take his points as if they had been presented in a work of non-fiction.

36 In two appendixes of *A Case of Need* (1968), Crichton discusses six arguments for abortion (Appendix VI, 408–414) as well as the implications of euthanasia, the social responsibility of doctors to provide care to as many people as possible, and the definition of death and its connection with organ transplants (Appendix VII, 414–416). Likewise, in his highly-criticized *State of Fear*, Crichton’s conclusions (sic) on the dangers of politicizing scientific theories such as eugenics or climate change also come in the form of an appendix (2004: 631–638). Finally, in *Next*’s “Author’s notes” he enumerates five conclusions (sic)—albeit written in the form of recommendations—he arrived at on the subject of genetic research (2006: 496–504).

37 A curious example, though, is the “Epilogue: Beta Scenario Revisions” of *Binary*, which enumerates five recommendations (sic) resulting from a contingency study made by the RAND Corporation for the US government, and refers to the unanimous conclusion (sic) of the evaluation committee that “none of the recommendations needed to be acted upon” (1972: 168–169). While these propositions seem to reflect the author’s legitimate concerns or views on chemical stockpiles at the time in which he wrote this novel, those unfamiliar with Crichton’s career may not notice that the review committee lists, among others, “B. Gottlieb (RAND); K. Villadsen (Defence Systems Review); P. Lazarus (Defence C/C)”, who are actually Crichton’s editor at Alfred Knopf (Bob Gottlieb) and film industry veterans (Kurt Villadsen and Paul Lazarus) he worked with during his stints as film director.

38 In sum, one can hypothesize that even when most of his plots address contemporary issues in various numbers and degrees, Crichton’s choices for conclusions and recommendations are closely connected with controversial storylines in which he expects his audiences to take a more reflective stand towards the fictional material.
3.7 Bibliographies/References

During a 1995 appearance on *The Charlie Rose Show*, Crichton outlined for the host his recurrent take on plot building: “A lot of my research is directed toward answering some question, and I’ve got the question answered before I start to write the book” (Golla, 2011: 108). For *Timeline* (1999), for example, he researched over 200 titles, 81 of them on the medieval world; in his attention to detail, he named his main character Edward and gave him the title of “Regius Professor”, an inside joke in the community of medievalists (Adams, 2003). But it is one thing to do a deep and extensive search on topics, time periods, locations, and particular aspects of the practice of professional communities—of great relevance in the case of FASP—and quite another to list those sources under a formal Bibliography section, as in scientific research articles.

In addition to endowing his fiction with a distinctive and required feature of college-level assignments or scholarly literature, Crichton made clear his intentions to motivate audiences “to read further from more knowledgeable authors” (*Rising Sun*, 1993: 397). Called either “Bibliography” or “References”, these final sections are organized in different ways: most novels list authors alphabetically; others group titles according to category (e.g. “principal sources”, “other sources”, “scientific references”, and “articles, press”); and others arrange references by chapters—or days—following the structure of the story. Unlike the Bibliography/Reference sections in Crichton’s earlier works, the one in *State of Fear* is an annotated one, with brief evaluative comments which read like book blurbs.

Particularly interesting is the author’s comment about the Bibliography of *State of Fear* provided “to assist those readers who want to review my thinking and arrive at their own conclusions” (2004: 641). Those familiar with Crichton’s works will probably interpret this not just as an invitation but as a real challenge. One of the intriguing aspects of *The Andromeda Strain* (1969) is that meticulous readers will find in its References section works written by fictional characters alongside other sources: five titles by Dr. Jeremy Stone, two by Major Arthur Mancheck, one by Dr. Charles Burton, and one by Dr. Peter Leavitt. Readers who undertake to verify these references will find that there are no such issues of *Science, The Journal of Biological Research, The Bulletin of the Society of Biological Microbiology*, or *The New England Journal of Medicine*, let alone articles by Stone, Mancheck, Burton, or Leavitt. Hence we conclude that, mixing fictional characters with real ones, whether in the Acknowledgements or in the Bibliography/Reference sections, appears as both a distinctive narrative technique to make stories appear more credible and an intellectual prank by the author.

4. *The Andromeda Evolution*... or Crichton comes alive!

In earlier presentations and exchanges on the aspects discussed in this article, some colleagues have expressed doubts about the idea of Crichton’s narrative techniques as a legacy for other writers of fiction in general and of FASP in particular, as well as on the likelihood that aspiring or future FASP authors are among students now taking English for Specific/Academic Purposes courses. With the fairly recent publication of *The Andromeda Evolution* (2019), the arguments once frowned upon have somehow been legitimized.
David Wilson's novel is an unmistakable sequel to *The Andromeda Strain* (1969). From the very first chapter—“Day 0 - Contact”—the connection between the two stories is established, with recurring references to the scenarios of February 1967 (the Scoop VII platform, the town of Piedmont in Arizona, the microparticle named AS-1, the Project Wildfire funded by the US Department of Defense) and the most recent one (a preternatural body in the Upper Amazon region, the new plastiphage configuration AS-2, the Project Eternal Vigilance with dwindling support from the US Department of Defense). An additional link between the two events situated decades apart is the inclusion of James Stone, who is no other than the son of Project Wildfire's top scientist Dr. Jeremy Stone, in the task force sent to the Brazilian forest. Once again, the plot revolves around an anomalous entity showing up in a contemporary context—like the AS-1 microorganism of *The Andromeda Strain* (1969), the blurred image of a mountain gorilla in *Congo* (1980), the spacecraft on the floor of the Pacific Ocean in *Sphere* (1987), the dinosaurs of *Jurassic Park* (1993), or the nanoparticles on the loose in *Prey* (2002)—and a multidisciplinary team of experts rushed to investigate the ominous development.

Since *The Andromeda Evolution* is one way in which CrichtonSun LLC aims at introducing the late author's works to younger readers, Wilson was probably invited to deploy the very same techniques used by Crichton to blur the distinction between facts and fiction—and which he dutifully did, thus checking most of the boxes left by his predecessor for posterity. To put things succinctly, as with Crichton's original work, the book features an Acknowledgements section and quotes by Crichton on the first page of each chapter. The plot is advanced through rhetorical functions and techniques of EST discourse, scholarly asides, supported by charts, diagrams, photos, and transcripts of communications among other false documents. The epilogue hints at the possibility of a sequel but, unlike some of Crichton's previous works discussed in this discussion, it does not offer conclusions or the author's stand on relevant contemporary issues addressed in the book. Finally, like in *The Andromeda Strain*, a References section lists several publications by fictional characters alongside real-unclassified-sources.

Although opinions about this product vary, with long-time Crichton fans either fascinated or disappointed, *The Andromeda Evolution* appears to have met the expectations of most readers; in August 2021, for example, Amazon customers gave a 4.3 rating out of 5, with 59% and 23% of 1,204 reviewers giving 5 and 4-star ratings respectively. There is no doubt that in *The Andromeda Evolution* Crichton comes alive and that his style can be learned, emulated, and further developed. However, authors following his footsteps will need to be aware that there are multiple factors—in addition to writing resources and techniques—on the way to attaining a similar literary or financial success.

5. Conclusions

This research has allowed me to (re)examine five decades of Michael Crichton's published works of fiction and non-fiction from angles not fully explored by literature scholars, or FASP researchers. One finding that stands out is the author's outstanding versatility: his practically simultaneous work in more than one project, whether fiction, non-fiction, or the combination of both; his capacity to communicate on numerous and varied contemporary issues with learned expertise and an authoritative voice; and his
skills at employing the discourse of science and technology and at constructing a wide range of socially recognized genres in the form of documents which add verisimilitude to his fictional plots. The recent novel discussed in the last subheading supports the implicit claim in our title: Crichton's distinctive narrative constitutes a legacy for contemporary or aspiring authors wishing to explore the domains of FASP.

47 Without a doubt, Crichton constitutes a peculiar case of FASP authorship and professionalism for two basic reasons. Firstly, he wrote as professionnel-auteur and as auteur-professionnel at different times and following non-linear trajectories. As such, he is a rare FASP author who satisfies more than one category of the four FASP author categories defined by Petit, being both a professionnel-auteur who relies on his specialized background for specialized knowledge and terminology, and an author who carries out extensive personal research in fields not connected to this background. Secondly, his success with plots examining knowledge and practice in domains other than those of his background, or the multidisciplinary nature of some of his works, also makes it difficult to connect his authorship with a single FASP subgenre. Crichton pushes the fictional convergence of multiple specializations within the same work of fiction beyond that of the usual panachée FASP defined by Isani (2004) and in this sense, this article suggests an overarching authorial category for those able to successfully write fictional plots which cross over disciplines or professions.

48 While the expository techniques or book formats discussed here are not new or exclusive to him, the quantity, quality, and recurrence of these in Crichton’s fiction make it a characteristic trait of his works. These techniques are cleverly exploited and deployed to endow his stories with great credibility, not only in the narrative text but also through paratextual elements. If at times the author’s representations of science have been judged inaccurate or otherwise problematic, it should be kept in mind that although Crichton systematically interacted with top-level experts at different stages of his creative process, his writing was never constrained by the required argumentative practices, editorial guidelines, or peer-review processes of publications like Science, Nature, The New England Journal of Medicine or The International Journal of Biological Research (cf. Lomar, 2013).

49 As this article constitutes a first approach to Crichton’s idiosyncratic use of narrative techniques, we suggest that the ideas directly or tangentially connected with the topics covered here provide potential for future and more in-depth research; new findings will not only contribute to FASP scholarship but will be especially useful in specialized language education, one of the initial FASP goals.

50 Additional evidence can be furnished regarding the connection between narrative techniques and subgenres within FASP, and how authors represent/echo particular disciplinary discourses or genres; a deeper exploration into the extent to which false documents and embedded genres comply with or differ from the actual genres they represent might render additional understandings not only of FASP authors’ discursive/generic competence but also of effective applications to classroom use (cf. Diaz-Santos, 2018). At another level, an examination of how narrative techniques or particular FASP passages in printed works are retained or recoded in subsequent versions will reveal interesting data about—and applicable to—authorial writing choices and skills; these versions usually materialize as adaptations for film and TV (including remakes), audiobooks, graded readers, and translations into other languages. Finally, a closer and deeper look at dyadic or group exchanges in FASP...
works may offer interesting perspectives on the workings of popularization techniques and communicative competence; offering insights into meaning negotiation across disciplines, whether in established or emerging multidisciplinary contexts.

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NOTES

1. Though it has been widely accepted that the emergence of FASP can be traced to the 1980s, by the start of this decade Crichton had already published 5 bestsellers which constitute exemplars of this genre.

2. His travel article “Climbing up a Cinder Cone” was encouraged by his parents after a family visit to the Sunset Crater National Monument in Arizona when he was 14; it was then sold to The New York Times and finally appeared in print in 1959.

3. The publication of Five Patients: The Hospital Explained in 1970 shows that it is very likely that Crichton had been simultaneously working on medical fiction and non-fiction.

4. In addition to being the sixth longest running medical drama worldwide and to receiving 116 awards, ER remains a pioneering work of medical FASP TV series.

5. After earning an A.B. summa cum laude from Harvard in 1964, Crichton was awarded a $3,000-travel scholarship and spent a semester teaching anthropology at Cambridge University.

6. In his 1999 seminal article Petit makes reference to these expert-fiction writer collaborations as both reinforcers of the authenticity of the story and proof of recognition of the author by well-known professionals willing to be involved in a work of fiction.

7. The closest name we could get to in our searches was that of Lieutenant Everett J. Sloane, United States Navy (Ret.). This “contributor” now appears as a fictional one, probably named after American actor Everett H. Sloane, who could have been one of Crichton’s favorite characters.
Although we adhere to the expert vs. non-expert distinction made by FASP scholarship, quite often these exchanges happen between participants who are quite knowledgeable on a topic and not necessarily experts (see Isani, 2009).

The shortened form of Procompsognathus (conflated with the distantly-related Compsognathus, “The Littlest Dinosaur”), as used in the book *Jurassic Park*.

By contemporary standards, Wilson’s team happens to be more diverse as it includes American, African, and Asian scientists, men and women, and a key character with a history of motor disabilities.

ABSTRACTS

In this article we discuss Michael Crichton’s distinctive use of educational and research skills in representing professional practices and manufacturing specialized knowledge to document his fiction with scientific plausibility. A connection between his literary production and professional life is made to then examine his idiosyncratic deployment of identifiable traits of academic or professional writing. We uphold that his legacy constitutes a plentiful and influential source for current and aspiring FASP writers, scholars, and language teachers. Among ideas for future consideration and research, we suggest that his trajectory as a fiction writer and the multidisciplinary nature of his works calls for an additional—not necessarily alternative—look at FASP authorship.

Dans cet article, l’auteur examine l’emploi distinctif que fait Michael Crichton de son expérience formative et de ses compétences en recherche pour représenter des pratiques professionnelles et produire du savoir spécialisé, construisant ainsi une fiction qui a une vraisemblance scientifique. Il souligne le lien entre sa production littéraire et sa vie professionnelle, pour analyser ensuite son emploi particulier des traits identifiables de l’écriture académique ou professionnelle. Il soutient que l’héritage de Crichton constitue une source abondante et influente pour les futurs auteurs de FASP, les chercheurs et les enseignants de langue. Parmi d’autres pistes possibles pour de futures recherches, il propose que la trajectoire de Michael Crichton comme auteur de fiction et la nature multidisciplinaire de ses œuvres appellent à un regard supplémentaire — pas nécessairement alternatif — sur l’auctorialité des FASP.

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**Mots-clés:** techniques narratives, FASP, discours en anglais scientifique et technique, analyse des genres discursifs

**Keywords:** narrative techniques, FASP narratives, EST discourse, genre analysis

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