



Journal of Arts & Humanities

Volume 08, Issue 02, 2018: 35-44

Article Received: 23-01-2019

Accepted: 04-02-2019

Available Online: 03-03-2019

ISSN: 2167-9045 (Print), 2167-9053 (Online)

DOI: <http://dx.doi.org/10.18533/journal.v8i2.1580>

Science as Text, Text as Science: A Reading of Mark Twain's A Connecticut Yankee in King Arthur's Court

Radhia Flah Gaiech¹

ABSTRACT

This paper explores the relationship between science and literature as manifested in Mark Twain's late nineteenth-century novel *A Connecticut Yankee in King Arthur's Court* (1889). Because Twain's interest in and fascination for the scientific advances and technological inventions of his time are incontrovertible, and accounting for the novel's heavy reliance on the techno-scientific discourse, major Twainian critics have focused their discussion on assessing the impact of such progress on the writer and his book. The present paper will take the debate one step further in that the work will be examined in terms of its textuality. It will argue that science and technology are used as major dynamics contributing to the creation of a postmodernist narrative. Functioning as the backdrop of the narrative, science is used by the author as a means allowing him to experiment with what Postmodernist critics call 'new fiction'; one that plays with time, place, character, form, and meaning. Anachronistically introduced to sixth-century Arthurian England, scientific progress enables the writer to articulate the blurring of boundaries between the old and the new; the rational and the mythological; the factual and the fictional, to name but a few examples. Using Postmodern criticism as a general framework, the paper will deal in three sections, respectively, with a review of the historical evolution of the relationship between science and literature; then, the process of storification that science undergoes in Twain's hands (science as text); finally, the author's use of textuality as an artifact or a technology (text as science).

Keywords: Literature, Mark Twain, Narrativization, Postmodernism, Science, Storification, Technology, Textuality. This is an open access article under Creative Commons Attribution 4.0 License.

1. Introduction

I am an American. I was born and reared in Hartford, in the State of Connecticut... So I am a Yankee of the Yankees –and practical; yes, and nearly barren of sentiment, I suppose –or poetry, in other words... I went... to the great Colt arms factory and learned my real trade; learned all there was to it; learned to make everything; guns, revolvers, cannon, boilers, engines, all sorts of labor-saving machinery. Why, I could make anything a body wanted –anything in the world, it didn't make any

¹ Assistant Professor, Faculty of Arts & Humanities, University of Sousse, Tunisia. E-mail: radhiaflah.gaiech@gmail.com

difference what; and if there wasn't any new-fangled way to make a thing, I could invent one –and do it as easy as rolling off a log. (Twain, 1997, p. 10)

Thus spoke Hank Morgan (The Boss), Mark Twain's protagonist in *A Connecticut Yankee in King Arthur's Court*. The above cited quote has, indeed, caused much ink to be spilled by the Twainian critics since the publication of the novel in 1889. Given the significance of late nineteenth-century techno-scientific achievements in America, discussions of the work have generally focused on Twain's attitude to such progress. Accounting for the disastrous ending of the novel, these interpretations tend mainly to argue for an ambivalent attitude on behalf of the author. As his biographers indicate, the writing of *A Connecticut Yankee* coincided with a shift in Twain from fascination for science and technology to a feeling of disillusionment. As Charles H. Gold puts it:

What emerged in 1889 was, of course, a very different view of the world and of the liberating and ennobling possibilities of technology. Clemens, who for years had been intoxicated by its possibilities, seemingly limitless, seemingly benign, came to see technology as an instrument of destruction. (Gold, 2011, pp. 73-74)

Admittedly, where critics such as, for instance, James Williams, consider that the book reveals a "high confidence in the beneficence of American democracy, capitalism and technology" (Williams, 1964, p. 288); others such as Bruce Michelson argue that "the book is a cautionary tale about the ill effects of technology" (Michelson, 1991, p. 610). However, critic Gerald Allen in "Mark Twain's Yankee" takes the debate away from the techno-scientific field to shed light on the significance of the book to "late nineteenth-century American literature because of what it says about that literature" (Allen, 1966, p. 437). As enlightening as these interpretations are, they seem to overlook the (inter)textual significance of Twain's narrative. It is, then, the purpose of the present paper to examine the way science and technology, as used by Twain, have resulted in the creation of a narrative which, judged by contemporary literary standards, can be viewed as a postmodernist work *par excellence*.

2. Methodology

This paper aims to discuss Twain's novel as an experiment in non-mimetic or self-reflexive fiction; or what Raymond Federman refers to as "the new fiction" (Federman, 1981, p. 307). In the first place, I will deal with the relationship between science and literature and its evolution through time. Following that, I will discuss the way Mark Twain uses them as major dynamics in the process of storification his novel rests on. Finally, I will study the extent to which Twain's engagement with the question of textuality aims at establishing an analogy between science and fiction (or art) in the sense that they are both artifacts. It is in the overall framework of postmodern theory that I wish to consider the interplay between science and literature in the present paper. This interplay, I argue, has resulted in the formation of a textual space in which boundaries are deconstructed bringing the old and the new; the scientific and the literary; the high and the low together in a kind of symbiosis.

To get a better insight into the way Mark Twain understands science and invests it in literature through his Arthurian novel *A Connecticut Yankee*, it is pertinent to shed light on the historical development of the relationship between both fields. An investigation of the origin of the word science within Western thought shows that it has gone through a process of alteration of meaning. Though the strong connection with the idea of knowledge that the term suggests is maintained, an element of arrangement and orderliness has been added, through time, to the early understanding of the word science. As Sydney Ross observes: "Science entered the English language in the Middle Ages as a French importation synonymous with *knowledge*. It soon gained the connotation of accurate and systematized knowledge" (Ross, 1991, p. 3; emphasis in original). Going back to the eighteenth century, it is interesting to note that the world of science was even a branch of philosophy known as "natural philosophy" (Aldridge, 2010, p. 39). Since knowledge and philosophy represented the foundations for the assessment of science, the distinction from the world of literature was almost inexistent in early nineteenth-century thought. Virginia Zimmerman makes the point clear as she notes that: "Science and literature were not distinct from one another in the nineteenth century" (Zimmerman, 2008, p. 6).

Change concerning the meaning of both fields will, however, begin to take place by the middle of the nineteenth century as the two "have diverged," explains Robert J. Scholnick, noting that: "Science became the province of the professional, while concurrently poets, novelists, and other

imaginative writers asserted the autonomy of their art” (Scholnick, 2010, p. 1). This divide is actually echoed in the protagonist’s self-presentation at the outset of the narrative (as hinted at above). His self-asserted philistinism paradoxically underscores the techno-scientific background from which he emerges and which informs the narrative. Proudly identifying himself as “a Yankee of the Yankees,” the eponymous character overtly defines the world of science and technology he associates himself with in terms of inventiveness and practicality; whereas the poetic realm he dissociates himself from is relegated to sentimentality. This taxonomy relating to both science and fiction is discussed by science fiction writer Damien Broderick in terms of objectivity and subjectivity, respectively. As he puts it:

Fiction’s home is the heart, while science dwells in the head. Science seeks to condense the empirical into broad generalizations, compress the thousand things into naked equations: *the objective*. Fiction strives to render or construct the contingent, the particular, the fleeting and ambiguous: *the subjective*. (Broderick, 2000, p. 34; emphasis added)

This schism marking the relationship between science and the humanities is even transmitted to subsequent generations. Interestingly, by mid-twentieth century Charles P. Snow writes an essay that reflects on the division of Western society into what he calls “two cultures” (Snow, 1990, p. 2). Yet, with the advent of time, voices calling for the collapse of the boundaries between science and literature started to be heard. The situation is best described by R.J. Scholnick as he maintains that: “the familiar understanding of science as an objective, systematic, progressive, and transcultural means of investigating reality has come under increasing attack from several quarters” (Scholnick, 2010, p. 11). Already, shortly after the middle of the last century in England, Aldous Huxley urged for a dialogue between both worlds stating that: “between the Two Cultures the traffic of learning and understanding must flow in both directions” (Huxley, 1970, p. 62). This attitude is further reinforced by contemporary critic N. Katherine Hayles who, in tune with her theory of fluid dynamics, argues for the necessity of “passages between literature, science, and culture in which the influence is construed as a turbulent complexity, *not a one-way street*” (Hayles, 2010, p. 42; emphasis added). What can, perhaps, be considered as the most remarkable observation concerning this debate over the futility of the division between science and literature is Ilya Prigogine’s and Isabelle Stengers’s contention that both spheres are to be viewed as “fictions” given their status as “conceptualizations of reality” (Prigogine & Stengers, 1984, p. 226). It is precisely at this point where Mark Twain’s innovative treatment of science and literature in *A Connecticut Yankee* can be approached. In Twain’s thought, as will be revealed in the following section dealing with science as text, science is simply story-making. This understanding can be best illustrated by Donna Haraway’s view as she affirms that: “Scientific practice is above all a story-telling practice in the sense of historically specific practices of interpretation and testimony” (Haraway, 1989, p. 4).

Reputed to be “a technologist of the imagination” (Lerer, 2003, p. 472), it is not unexpected to see Twain attempt to reconcile what, by traditional standards up to his time, was irreconcilable. In *A Connecticut Yankee*, science and technology are dislodged from their factual world as they are brought to the fictional through a process of storification; that is, they take “the form of a story,” to reproduce Hayden White’s words (White, 1980, p. 6). Indeed, the relationship between science and storytelling is not something new. Literary history reveals that leading scientists often choose to present their scientific findings in a narrative mode. Galileo, for instance, cloaks the principles of his theory of motion in a story. Likewise, in the twentieth century, Albert Einstein commonly integrates his theory of relativity in storytelling form (Herman, 2004).

Twain’s endeavor “to translate *knowing* into *telling*” (White, 1980, p. 5; emphasis in original) is an illustration of the way science is turned into a fictional text in its own right. In *A Connecticut Yankee*, Twain relies on his protagonist’s broad scientific knowledge as part of a scheme that aims to expose science to the imaginary world. In fact, Hank Morgan – the epitome of late nineteenth-century American techno-scientific progress – undertakes the task of telling how, relying on his expertise, he is determined to experience “the magic of science” (Twain, 1997, p.313). Accordingly, Friedrich Nietzsche’s observation that it is essential “to look at science in the perspective of the artist” (Nietzsche, 1967, p. 19) is, to some extent, accomplished by Twain in his fin-de-siècle narrative.

Storytelling, presented from the outset of the narrative as one of the chief characteristic features of the protagonist, constitutes the generative force in the construction of science as text. Indeed, in the novel’s prefatory section titled “A Word of Explanation” where the supposed author

meets the narrator (Hank Morgan), the former relates how he is impatiently “hoping ... for his [Morgan] story” which, shortly after, the latter “drifted into ... in a quite simple and natural way” (Twain, 1997, p. 10). This story, structured on the time travel motif, depicts Hank Morgan as a nineteenth-century Colt arms’ factory superintendent who, after receiving a blow on the head in a fight, is sent back to sixth-century Arthurian England; then back to nineteenth-century America.

The switch structure underlying the narrative, accordingly, brings into juxtaposition sixth-century feudal England with nineteenth-century industrialized, capitalist America. The world into which Hank Morgan is driven, is filtered through the mind of a technophile who reads, inspects, and interprets external data from his position as one who is thirteen centuries ahead of the people he comes across. His first impressions about them is that they “look like animals” (p.15) whom he compares to “White Indians” (p.21) who are devoid of “brains” (p.23). In a nutshell, as the protagonist explains it: “Measured by modern standards, they were merely modified savages, those people” (Twain, 1997, p. 88). As to himself, empowered with his technological knowledge, the Yankee does not fail to recognize the possibilities of introducing revolutionary schemes. Drifted in the heart of darkness, as it were, Hank Morgan identifies himself with Robinson Crusoe admitting:

I was just another Robinson Crusoe cast away on an uninhabited island, with no society but some more or less tame animals, and if I wanted to make life bearable I must do as he did –invent, contrive, create, reorganize things; set brain and hand to work, and keep them busy. (Twain, 1997, p. 46)

Consequently, the Yankee sets out on his mission, which consists – in his own words – in “the civilizing and uplifting of this nation” (p.108). As he embarks on this project, each scientific and technological injection into medieval Arthurian society is introduced within a context of a specific story; hence the recourse to episodes. The intention is actually openly stated by the protagonist himself fairly early in the novel when he declares that he aims at “turning on my light one-candle-power at a time, and meant to continue to do so” (Twain, 1997, p. 70). These power candles, so to speak, or episodes based on the latest scientific achievements of the author’s time, abound in the narrative. The most remarkable ones are that of the solar eclipse at the beginning of the narrative; the Holy Fountain incident in the middle; and the explosion at the famous Battle of the Sand-Belt at the end.

In the solar eclipse scene, the Yankee displays his astronomical knowledge in very special circumstances: it is a matter of life or death; therefore, he needs to work out his techno-scientific competence for his own survival especially as he prides himself for being “a man of knowledge” and “brains” (p.52). Being told he now belongs to the year A.D.528, he relates how from his readings he knows that the year coincides with the occurrence of an eclipse. To avoid execution, he pretends being able to remove the sun and cause calamity to strike the kingdom by sending it into total darkness. With the eclipse reaching its full phase, awe and terror have had their way into the hearts of the Arthurian community. When Merlin, the Arthurian magician, attempts to escape, Hank Morgan threateningly shouts at him: “Stay where you are. If any man moves –even the King –before I give him leave, I will blast him with thunder I will consume him with lightning!” (Twain, 1997, p. 42). Twain’s burlesque, as it were, heightens as he reduces the King to a pathetic status when he pleads: “Be merciful, fair sir, and essay no further in this perilous matter, lest disaster follow... Name any terms, reverend sir, even to the halving of my kingdom; but banish this calamity, spare the sun!” (Twain, 1997, p. 42). The protagonist’s knowledge and understanding of natural phenomena juxtaposed with the Arthurians’ ignorance raises the Yankee’s status within that society. In fact, he is appointed by the King as his main counsellor and as such is recognized and referred to as “The Boss”.

Simple as it might appear, the eclipse episode has textual as well as extratextual significations. It irrefutably brings rational scientific culture into confrontation with the irrational primitive one. Knowledge triumphs over and defeats barbarism; science ridicules superstition. It is the eclipse which redeems Twain’s character and brings him a new life, one replete with tremendous power. “My power was colossal”, he admits (p.53); hence inferring an equation between scientific knowledge and hegemony. Furthermore, the eclipse episode has far-reaching symbolic implications. In this respect, it is worth referring to David Ketterer’s reading of the phenomenon in his article “The “Science Fiction” of Mark Twain.” According to the critic, the solar eclipse in its displacement of one huge body and its substitution with another one can symbolize, on the one hand, “the transpositions of epochs which Hank experiences,” and on the other hand –which to my mind is much more significant –is the

inference that “reality itself, whether that of the sixth century or the nineteenth is an illusion, a dream” (Ketterer, 1983, p. 68).

In the Holy Fountain episode, Twain further displays the confrontation between science and superstition; epitomized respectively by the Yankee and Merlin the Arthurian magician. Once again, this confrontation allows for the incorporation of a scientific phenomenon in the garment of a story. The events of this story relate how a sacred fountain suddenly goes dry. Despite Merlin’s incantations and necromancy, and despite the Clergy’s prayers, the water is not restored. Self-confident, as he has always been, about his techno-scientific knowledge, Morgan would deliberately postpone his intervention so as to amplify his merit and raise himself to power once restoration at his hands is accomplished.

Fully aware that the problem of the fountain can be solved only by the installation of hydraulic pumps (a knowledge beyond the Merlin’s intellectual capacities), Morgan imposes his own conditions before engaging in the reparation task. Among these conditions is that Merlin begin his work first; then the whole territory be evacuated; finally, that his own work be conducted by the evening. This scheme, in fact, is designed to serve as the framework that would facilitate the emplotment of the scientific proposition; that is, one way of putting *knowing* into *telling*. Aided by two figures that he calls “experts,” the Yankee gives an account about the way the work is initiated. He relates that once his two experts have brought the necessary equipment, “the miracle” is ready to work. As Morgan narrates it:

We put in a little iron pump, one of the first turned out by my works near the capital; we bored into a stone reservoir which stood against the outer wall of the well-chamber and inserted a section of lead pipe that was long enough to reach to the door of the chapel and project beyond the threshold, where the gushing water would be visible to the two hundred and fifty acres of people. (Twain, 1997, pp. 171-172)

What is significant to indicate concerning the narrativization of these scientific instances is the way the protagonist mystifies them in a playful manner to guarantee not just his survival, but also his own social ascendancy. Each of the examples discussed above is given a magical aura provoked by the protagonist for its “effect,” as he commonly speculates. For instance, in the case of the Holy Fountain, Morgan would stage a show before the whole Arthurian people when exhibiting the restoration of the water. This show is infused with certain magical incantations of the Yankee’s own creation, which are nothing but “devastating syllables of this word of words,” as he affirms (p.174). Transcribed by the author, they read as follows:

““Mekkamuselmanmenmassenmenchenmoerdmohrenmuttermarmormonumentenmacher!””

(Twain, 1997, p. 174; emphasis in original).

The novel concludes with the third selected example in this process of the narrativization of scientific exercise, namely that of the Battle of the Sand-Belt, featuring as the penultimate chapter in the narrative. In this scene, as it were, the protagonist’s proficiency in electrical circuitry, in especial, is disclosed. It is the last confrontation with “this dark land” (p.69). The electrical revolution the Yankee introduces to Arthurian England culminates in the electrified fences that Morgan and his followers place around Merlin’s cave. On King Arthur’s death, following the Interdict that also included Morgan, and as the Church has gathered the majority of the people on its side and become powerful, the Yankee has to resort to Merlin’s cave for a siege particularly as the place has already been secretly equipped with an electric plant. In a significant conversational storytelling pattern that brings him together with his Arthurian convert named Clarence, Morgan discloses his technologically ridden defensive plan. Playing the role of an oral narrator, and urged by his interlocutor’s groping for information as when he, for instance, frequently states: “go on” or simply asks: “how have you arranged...,” (p.334), the protagonist explains how the electric wire system is set up. As he puts it:

I start twelve immensely strong wires—naked, not insulated—from a big dynamo in the cave—dynamo with no brushes except a positive and a negative one— ... The wires go out from the cave and fence in a circle of level ground a hundred yards in diameter; they make twelve independent fences, ten feet apart—that is to say, twelve circles within circles—and their ends come into the cave again. (Twain, 1997, p. 335)

Due to its apocalyptic nature (knowing that about 25000 knights are electrocuted), this scene is considered as the most controversial and provocative in the whole novel. Critics have variously pointed

at Twain's disillusionment with techno-scientific progress (Smith, 1964), or noted a frustrating ambivalent attitude (Cummings, 1962). Granted the validity of such interpretations, I argue that the collapse of the scientific project at the end of the narrative is also meaningful from a postmodernist perspective. Bearing in mind that the protagonist considers his feud against Merlin the wizard is a "battle of the gods" (Twain, 1997, p. 306), it is clear that he considers himself as the god of science and technology. It derives, then, that his determination to "civilize" Arthurian Camelot entails the establishment of a new religion. From the postmodern thought, this would be considered as a "grand narrative" (Lyotard, 2010, p. xxiii)–to borrow Jean François Lyotard's expression –that can no longer operate in the way it has done (as a controlling force) and as such brings about its own destruction. Additionally, Twain's loss of faith in progress, as articulated by this final scene, has a prophetic undertone that reflects a postmodern viewpoint regarding that issue. As Kenneth Allan notes: "According to most postmodern thought, things have changed. Society is no longer marked by a sense of hope in progress" (Allan, 2010, p. 52).

If science has enabled Twain to develop a dialogic relationship with fiction, the text that is thus produced tends in its turn to maintain that bond in the sense that, as a fictional work, it aspires for the status of science. Text as science is, therefore, an investigation of the extent to which fiction can be brought to the level of science in and for itself. To begin with, it is a commonplace thought that invention is the essence of science. In literature, it also plays an important role. In this respect, Italo Calvino's view is enlightening. In fact, the critic maintains that: "invention, in literature, is the rediscovery of words and stories that had been lost from individual and collective memory" (Calvino, 1981, p. 77).

Interestingly, through *A Connecticut Yankee*, Twain attempts to rediscover a bygone world as he re-creates a legendary medieval tale which is –by his time– thirteen centuries old, namely Sir Malory's *Le Morte D'Arthur*. Such story, with its medieval archaic language and mythological ideology, is simply condemned to alterity by the techno-scientific nineteenth-century memory. The return to Malory's world is conducted not only through references to the medieval writer and his work, but more importantly through the way Twain dissects, breaks, and excavates the text removing quotes and whole passages to reproduce them in his modern American narrative. For instance, chapter 3 ends with an insertion of a long passage taken from Malory's Book I, chapter 25; chapter 9 is half-way through interrupted by a selection from Malory's Book VII, chapter 28; last but not least, chapter 15 is scattered with various segments taken from different books and sections from Malory's work. In addition to these textual borrowings, the revival of this medieval romance is embodied in the whole setting that Twain chooses for his novel. Camelot, with King Arthur's castle –including its Queen, knights, pages, and commoners –at its heart, stands as the world around which all the events revolve.

In his reconstruction of the medieval story, Twain relies on an important extraliterary device, namely a manuscript handed to him (as the author in story) by the Yankee he gets acquainted with while having a guided tour at Warwick Castle. The manuscript, as the Yankee claims, is supposed to be a record of his time travel experience in sixth-century Arthurian England. "Begin here" (Twain, 1997, p. 12), suggests the protagonist, indicating where the author can start reading the story. On a closer inspection, this manuscript is identified by the author as a "palimpsest" whose main body consists of a "parchment" accommodating "traces of a penmanship" (p.12).

The relevance of the manuscript lies in its palimpsestic meaning to postmodern writing as a whole. Resting on hand-exchanging technology and recycling, the palimpsest teems with symbolic implications. Commenting on the origin of the word, James M. Powell explains that: "Etymologically the word *palimpsest* simply means something that has been rubbed or scraped off for rewriting" (Powell, 1976, p. 44; emphasis in original). Eltjo Buringh, on his part, focuses on the powerful function of the palimpsest to be "frequently recycled ... and reused (*codex rescriptus*)" (Buringh, 2010, p. 18). Clearly, it is this spirit of rewriting and reproducing that interests Twain in the process of the construction of his story. The message that he implicitly sends is that fiction making (or textuality) is a technology; an artifact in its own right. Technology, after all, derives from the word *technē*. In his discussion of the word, David Roochnik explains that: "'technē' was an important term used by the Greeks to refer to knowledge" (Roochnik, 1996, p. 18); further adding that it precisely indicates "'productive knowledge,' or 'craft' ... knowledge of how to shape specific material into useful product" (Roochnik, 1996, p.22). Having established the major components or instruments for his craft,

namely the book (the manuscript), the writer (the Yankee), and the audience/reader (the author), Twain's storytelling machine is set in motion; his story is technologized, so to speak.

The value of the manuscript that Twain uses to generate his story stems from what it tells about the relationship between reading and writing as well as the collaborative and self-reflexive nature of writing. The manuscript creates, indeed, a systematic link between the process of reading that automatically results in the production of the story written by its author. To illustrate this particular point, it is worth considering the unnamed author's statement in the pseudo-preface where he notes: "I turned to the place indicated by my stranger and *began to read –as follows*" (Twain, 1997, p. 12; emphasis added). The main narrative is, thus, symmetrically launched.

Twain's genuine craft in this strategy lies in his deconstruction of the conventional method of writing that breaks material from process. Both reading and writing are concurrently conducted; as if one were the evident consequence of the other; all being involved in a network of a mechanical or generative relationship. Twain's genius in this particular instance is that he has, in a predated manner, performed one of the most important themes of postmodern writing, namely the signaling out of the absence of the writer as originator of the text. The writer is simply a "scriptor ... born simultaneously with the text," for whom texts are not "instruments of expression" but "gestures of inscription," to reproduce Roland Barthes's ideas (Barthes, 2000, p. 145). Additionally, the allusion to the "traces" on the manuscript leads to an understanding that Twain's conception of textuality –like the postmodern one –is interestingly disseminative. Functioning as a pre-text, it opens the lines for a new begotten narrative.

Twain's technologized approach to his novel goes beyond the scope of fashioning the story initiating manuscript. It is consolidated by a carefully designed structure that emanates from a conviction that a text, like science, creates its own rules of the game. One of these is the writer's use of the frame tale. Though the use of the frame as a device is an old practice in literature, it acquires a special significance in *A Connecticut Yankee* for two main interrelated reasons. First, the use of the frame has puzzled Twain's critics especially as it is a practice uncommonly used by the writer in his previous works (Fistell, 2012, pp. 161-62). Second, this technique stands as an experiment in a new kind of writing for the writer and as such brings his work close to postmodern fiction.

In *A Connecticut Yankee*, Twain assumes the role of the engineer who builds his text following well structured design as he frames his narrative. As a matter of fact, he begins his tale with a paratextual unit that he titles "A Word of Explanation". He closes it with a similar section which he calls "Final P. S. BY M.T." The initial part introduces the first-person narrator with his manuscript to the unnamed author (as already previously mentioned); the closing section reveals a few comments and observations about the story itself made by the author –commonly understood to be Mark Twain himself as the initials in the title suggest. Enclosed in between this frame is the main narrative dealing with the Yankee's three-year experience in Arthur's Camelot as he claims having himself written it in his manuscript.

Following this structural scheme, Twain's novel can be said to be governed by a specific narratological mechanism embodying different narrative levels which, which are at once enriching and puzzling. Borrowing Gérard Genette's terminology, one can note the text's use of a complex narrative scheme. In fact, the manuscript, functioning as a frame-story represents the extradiegetic level of the narrative which announces the opening of the story (or its threshold). This is followed by the tale that constitutes the main body of the work. This functions as the narrative's intradiegetic level. Finally, in its closing chapter titled "A postscript by Clarence" (Genette, 2005, p. 352), the narrative announces the beginning of a new story as the character declares: "I, Clarence, must write it for him" (Genette, 2005, p. 353). This section, then, represents the hypodiegetic level of the story. The revelation of a continued (re)writing of the story is an indication, to my mind, of Twain's disinclination to follow the traditional "Chinese box" narrative pattern and his predilection to experiment with what might be considered as a *mise-en-abyme*.

The use of the frame plays an important role as it sharpens the distance between the narrator and the author. It gives the impression that the narrated world is fabricated and that "the word represents itself, cites itself as a fictive word, a word which cannot be accepted directly," as explains it John Frow in "The Literary Frame" (Frow, 1982, p. 26); hence, the fictiveness of the story. Narrative is foregrounded as a fabric; an artifact. Furthermore, one of the important impacts of the frame on the

narrative is that it reduces it to a simple function. According to Frow, “the frame situates the work within nonaesthetic space and thus transforms it into a *function*. The text is “quoted” by and within its context” (Frow, 1982, p 28; emphasis in original).

Quoting is another way by which Twain articulates his craftsmanship in his novel. Since the context already given in the frame fixes the story within the medieval Arthurian romance, Twain turns to Malory’s *Morte D’Arthur* to extensively draw his quotes. By so doing, he helps bring two different zones into a dialogic relationship, namely between the “adopted” and the “adoptive text,” to use Michael Wheeler’s expressions (Wheeler, 1979, p. 2). These quotations, in their playful intrusion into and exits from the text create a certain dynamism in the story; serving as its beating heart, so to speak. In fact, transferred from one specific textual space into another, quotation denotes movement. This movement can be manifested in the act of selecting the needed fragment to be grafted in the quoting space, as well as the back-and-forth itinerary followed in displacing the quoted material. Such movement, however, is essence paradoxical embodying both decontextualization (the extraction of the quotation from its ‘original’ con/text) as well as recontextualization (the placing of the quotation once again in a given con/text, albeit a different one).

Considered from the postmodern perspective, the act of quoting translates the text’s bounding on itself in a self-reflexive manner to be productive. By his heavy use of quotation, Twain participates in the postmodern project that is determined to invert the hierarchical and vertical relation in which literary texts are often placed and posit them not in an horizontal relationship, but rather in a circular frame that cultivates an operation of percolation. The text, thus, follows a rotational movement. As Raymond Federman indicates: “It is from itself, from its own substance that the fictitious discourse will proliferate –imitating, repeating, parodying, retracing what it says” (Federman, 1981, p. 11).

In *A Connecticut Yankee*, Twain makes of his text a patchwork space where he incorporates various issues ranging from philosophic, social, political, cultural, to religious, and economic in a network of closely-knit relationships. The relevance of such issues is the variety of their sources. From medieval to modern, European to American, the blend of those matters and their weaving in a single narrative is a testimony that textuality is a production. It is precisely this discursive nature of the narrative which rightly qualifies it as a pastiche work that aims at removing boundaries between various areas and epochs.

Through *A Connecticut Yankee*, Twain makes his text the open space for hermeneutic considerations; a world for investigation and exploration for the purpose of reaching the knowledge of its hidden dimensions; thereby acquiring the status of science by virtue of its search for knowledge. Barthes, in fact, maintains that a text is to be “conceived as a polysemic space where the paths of several possible meanings intersect” (Barthes, 1981, p. 37).

3. Conclusion

That *A Connecticut Yankee* was written at a time when America was priding itself for its techno-scientific inventions and progress and that the work is impregnated with such issues does not necessarily mean that Mark Twain aims at reflecting the reality of his own period. Twain’s novel, as the paper intends to show, is a subversive piece of writing *par excellence*. Despite the writer’s heavy reliance on both science and technology, these are used simply to function as a general framework for the story. Indeed, they are also used by the author as instruments that allow him to re-build, re-construct, and even re-invent the world as he comes to conceive it.

In this late-nineteenth-century narrative, Twain provides challenging views concerning the relationship between science and literature. He deconstructs the traditional boundaries that used to exist between both spheres and creates, instead, a dialogic link as science is turned into a story and fiction into a scientific space by virtue of its multifarious mechanisms and inventive structures; thus, science is fictionalized and fiction is technologized, so to speak.

By removing his protagonist from the nineteenth-century Hartford, to the sixth-century Camelot, Twain deliberately experiments with a new type of writing that incorporates the old with the new; the modern with the archaic; the technological with the mythological; the rational with the irrational; the factual with the fictional. Consequently, the novel becomes a polyphonic space worth being approached as an example of postmodernist fiction. Indeed, Hank Morgan’s hovering between

the two worlds is an expression of postmodern man's subversion of time and place. As Robert P. Lamb puts it, *A Connecticut Yankee* is "a novel that invents the postmodern subject" (Lamb, 2009, p. 406). For, despite the focus on science and technology, the novel also presents a view on human nature and selfhood, which in many respects, reflects the condition of postmodern subjectivity.

References

- Aeschylus. (1922). *Four Plays of Aeschylus*. Trans. G.M. Cookson. Oxford: Blackwell.
- Aldridge, A. O. (2010). Benjamin Franklin: The Fusion of Science and Letters. In R.J. Scholnick (Ed.), *American Literature and Science*, (pp.39-57). Lexington: The University Press of Kentucky.
- Allan, K. (2010). *Explorations in Classical Sociological Theory: Seeing the Social World*. Los Angeles: Pine Forge Press.
- Allen, G. (1966). Mark Twain's *Yankee*. *The New England Quarterly*, 39(4), 435-446. doi: 10.2307/363416
- Barthes, R. (1981). *Theory of the Text*. (I. McLeod, Trans.). In R. Young (Ed.), *Untying the Text: A Post-Structuralist Reader*, (pp.31-47). London: Routledge.
- Barthes, R. (2000). *The Death of the Author*. In D. Lodge, & N. Wood (Eds.), *Modern Criticism and Theory: A Reader*, (pp. 313 – 316). Harlow: Pearson/Longman. Retrieved from http://lists.ucl.ac.uk/course-materials/ELCS6085_75840.pdf
- Broderick, D. (2000). *Transrealist fiction: Writing in the slipstream of science*. Westport, Conn: Greenwood Press.
- Buringh, E. (2010). *Medieval Manuscript Production in the Latin West*. Leiden: Brill.
- Calvino, I. (1981). *Myth in the Narrative*. In Raymond Federman (Ed.), *Surfiction: Fiction Now and Tomorrow*, (pp. 75-81). Chicago: Swallow Press.
- Carter, E. (1978). *The Meaning of a Connecticut Yankee*. *American Literature*, 50(3), 418-440. Doi: 10.2307/2925136
- Cox, J. (1963). *A Connecticut Yankee in King Arthur's Court: The Machinery of Self-Preservation*. In H. N. Smith (Ed.), *Mark Twain: A Collection of Critical Essays*, (pp.117-129). Englewood Cliffs, NJ: Prentice Hall.
- Cummings, S. (1962). *MARK TWAIN'S ACCEPTANCE OF SCIENCE*. *The Centennial Review*, 6(2), 245-261. Retrieved from <http://www.jstor.org/stable/23737873>
- Evans, A. B. (1989). *Functions of Science in French Fiction*. *Studies in the Literary Imagination*, 22(1), 79-100. Available at http://scholarship.depauw.edu/mlang_facpubs/57/
- Federman, M. (1981). *Surfiction: Fiction Now and Tomorrow*, (pp. 75-81). Chicago: Swallow Press.
- Fistell, I. (2012). *Ira Fistell's Mark Twain: Three Encounters*. New York: Xlibris, Corp.
- Frow, J. (1982). *The Literary Frame*. *Journal of Aesthetic Education*, 16(2), 25-30. doi:10.2307/3332274
- Genette, G., & Lewin, J. E. (2005). *Narrative discourse revisited*. Ithaca: Cornell University Press.
- Gold, C. H. (2011). *"Hatching ruin," or, Mark Twain's road to bankruptcy*. Columbia, Mo: University of Missouri Press.
- Haraway, D. (1989). *Primate visions: Gender, race, and nature in the world of modern science*. New York: Routledge.
- Hayles, N. K. (2010). *Turbulence in Literature and Science: Questions of Influence*. In R.J. Scholnick (Ed.), *American Literature and Science*, (pp.229-250). Lexington: The University Press of Kentucky.
- Herman, D. (2004). *Story logic: Problems and possibilities of narrative*. Lincoln: Nebraska University Press.
- Huxley, A. (1970). *Literature and science: Science, liberty and peace*. London: Chatto & Windus.
- Ketterer, D. (1983). *The "Science Fiction" of Mark Twain*. *Mosaic: A Journal for the Interdisciplinary Study of Literature*, 16 (4), 59-82. Retrieved from <http://www.jstor.org/stable/24777714>
- Lamb, R. P. (2009). *A Postmodern Subject in Camelot: Mark Twain's (Re) Vision of Malory's Morte Darthur in A Connecticut Yankee in King Arthur's Court*. In H. Fulton (Ed.), *A Companion to Arthurian Literature*, (pp. 401-419). Chichester: Blackwell Publishing. doi:10.1002/9781444305821.ch27
- Lerer, S. (2003). *Hello, Dude: Philology, Performance, and Technology in Twain's Connecticut Yankee*. *American Literary History* 15(3), 471-503. Oxford University Press.
- Lodge, D., & Wood, N. (2000). *Modern criticism and theory: A reader*. Harlow: Pearson/Longman.

- Lyotard, J.-F., Bennington, G., & Massumi, B. (2010). *The postmodern condition: A report on knowledge*. Manchester: Manchester UP.
- Marx, L. (1987). Does Improved Technology Mean Progress?. *Technology Review*, 90 (1), 33-41. Retrieved from <http://w3.salemstate.edu/~cmauriello/Course%20Development/IDS271%20Readings/Marx-Does%20Improved%20Technology%20Mean%20Progress.pdf>
- Meier, H. (1958). American Technology and the Nineteenth-Century World. *American Quarterly*, 10(2), 116-130. doi:10.2307/2710077
- Michelson, B. (1991). Realism, Romance, and Dynamite: The Quarrel of a Connecticut Yankee in King Arthur's Court. *The New England Quarterly*, 64(4), 609-632. doi:10.2307/366190
- Nietzsche, F. W., & Kaufman, W. (1967). *The birth of tragedy and the case of Wagner*. New York: Vintage Books.
- Powell, J. M. (1976). *Medieval Studies: An Introduction*. Syracuse: Syracuse University Press.
- Prigogine, I., & Stengers, I. (1984). *Order out of chaos: Man's new dialogue with nature*. London: Heinemann.
- Roochnik, D. (1996). *Of Art and Wisdom: Plato's Understanding of Techne*. Pennsylvania: Pennsylvania State University Press.
- Ross, S. (1991). *Nineteenth-century attitudes: men of science*. Dordrecht: Kluwer Academic Publishers.
- Scholnick, R. J. *American Literature and Science*, (pp.39-57). Lexington: The University Press of Kentucky.
- Smith, H. N. (1964). *Mark Twain Fable of Progress: Political and Economic Ideas in "A Connecticut Yankee"*. New Brunswick: Rutgers University Press.
- Snow, C. (1990). The Two Cultures. *Leonardo*, 23(2/3), 169-173. doi:10.2307/1578601
- Strauss, L. (1984). *Thoughts on Machiavelli*. Chicago: University of Chicago Press.
- Twain, M., & Inge, M. T. (1997). *A Connecticut Yankee in King Arthur's Court*. Oxford: Oxford University Press.
- Wheeler, M. (1979). *The Art of Allusion in Victorian Fiction*. London: Palgrave Macmillan UK.
- White, H. (1980). The Value of Narrativity in the Representation of Reality. *Critical Inquiry*, 7(1), 5-27. Retrieved from <http://www.jstor.org/stable/1343174>
- Williams, J. (1964). Revision and Intention in Mark Twain's *A Connecticut Yankee*. *American Literature*, 36(3), 288-297. doi:10.2307/2923545
- Young, R. (1981). *Untying the text: A post-structuralist reader*. London: Routledge & Kegan Paul.
- Zimmerman, V. (2008). *Excavating Victorians*. Albany: State University of New York Press.