



Beyond the Techno-thriller: Michael Crichton and Societal Issues in Science and Technology

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Abstract: Michael Crichton is primarily known for being an outstanding writer of techno-thrillers and co-creator of the genre. In this paper I suggest that his fictional works can and should be considered under the deeper and wider perspective of his concern for societal issues regarding science and technology with a profound consideration of their effects and on the life of people and the development of society.

In fact this defining feature of his work is inclusive of numerous works by Michael Crichton that would not fit into the techno-thriller genre. It therefore seems a more appropriate way to characterize his work. This idea is further supported by the fact that most of the few works of his that do not fit into this perspective were written during a brief period of time in which Michael Crichton explored other genres, only to return to his humanistic approach to science and technology for the rest of his fiction-writing career.

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The year 2015 has seen the release of the 4th instalment of the *Jurassic Park* franchise that began with *Jurassic Park* (Spielberg), and in 2016 the remake of *Westworld* (Crichton) will be launched in the form of a TV series created by Jonathan Nolan. The two original movies are twenty years and two completely different generations apart and yet they are both the product of the same creator, Michael Crichton.

It seems an appropriate occasion to take a renewed look at the works of this author and to celebrate his prolific fiction creations, which include not only his well-known best-selling novels

and the blockbuster movies based on them, but also early novels written under pseudonyms, short stories, and less known pieces that he directed for TV and cinema.

Michael Crichton is often left out of historical reviews of science-fiction, as his work does not depict realities set in the distant future nor in worlds far away in space. His stories are most often set in a future well within the horizon of the public's lifetimes, focusing on a realistic extrapolation of well-known scientific issues.

On the other hand, or perhaps *instead*, Michael Crichton is commonly cited as one of the creators of a sub-genre known as techno-thrillers, in which the conflict of the stories stems from the use or misuse of a specific technology, existing or imagined, but always described in extensive detail, based on real science and technology (Merriam-Webster, Oxford Dictionaries, Goodreads).

These conceptions of Michael Crichton's work barely touch the surface and miss a substantial number of pieces, including his earlier novels. These he admitted to have written with the only purpose of paying his way through medical school (see for example Golla), but nevertheless need to be included in any analysis that aspires to fully characterise his thinking.

It has already been suggested that some of his novels go beyond being entertaining best-sellers and that an in-depth reading reveals critical reflections on the societal issues related to certain scientific disciplines (Zwart). Here I suggest that this focus on societal issues is indeed the best way to characterise *all* of Michael Crichton's fiction work, beyond the narrow and limiting categorization of his work in the genre of the techno-thriller.

Examples: The Andromeda Strain, ER, and works on robotics

Michael Crichton's best known fiction works comprise over 4 decades of outstanding success (1969–2011), and include novels, screenplays, and short stories. Most of them do indeed fit into the techno-thriller category, as listed in Table 1, thus explaining his identification with this genre.

Let us look more closely at *The Andromeda Strain*, the first novel he wrote under his own name and which soon became a great success, earning Michael Crichton a great deal of fame. It was written at a completely different level from the previous novels he had written under pseudonyms and revealed the Michael Crichton who later became known for the thoroughness in the treatment of the scientific detail and background. As many of his novels, it includes an extensive bibliography section at the end, with references to specialist literature. But his consideration of science and technology does not stop at that. He addresses not only the possibility of a deadly pathogen coming back from space with the probes sent to explore the solar system, but also the drawbacks and human dilemmas stemming from relying solely on technology in high biohazard security installations when things go wrong. Technology is not used only as an instrument to articulate a plot, but explored in the light of its effects and interactions with human beings. He expresses and develops his concern for the dangers that come with scientific and technological progress at a much more sophisticated level. This approach is prevalent in all his techno-thrillers (listed in Table 1), but applies to a wider range of Michael Crichton's works than just these and as such could be considered a more characteristic and profound feature of the thinking behind his writing.

For example, in 1994 Michael Crichton gained the unique distinction of being the only author to have in the same year a number one best-seller (*Disclosure*), a number one movie (*Jurassic Park*), and a number one TV-show (*ER*, Crichton). Now, despite being one of his most successful creations, *ER* would not fit into the techno-thriller category and it would seem odd that one of his most influential works, which shaped 331 episodes over 15 seasons (1994–2009) and inspired numerous other hospital-themed TV shows, would not be part of the corpus of Michael Crichton's works that define his distinctive feature. This anomaly could be overcome if, as suggested above, his legacy as an author was expanded from being a techno-thriller writer (and creator of the genre) to being an advocate of not losing sight of the human aspects involved in the practice and application of scientific and technological development.

Table 1. “Techno-thrillers” by Michael Crichton published/released between 1969 and 2011

Title	Type	“Techno-thriller” themes
<i>The Andromeda Strain</i> (1969)	novel	Space exploration, automated safety measures
<i>The Terminal Man</i> (1972)	novel	Invasive neurosurgery and stimulation
<i>Extreme Close-Up</i> (1973)	screenplay	Remote observation technology
<i>Westworld</i> (1973) & <i>Beyond Westworld</i> (1980)	screenplay/teleplay	Robotics (deception to humans)
<i>Coma</i> (1978)	screenplay	Organ transplant
<i>Congo</i> (1980)	novel	Genetic engineering (breeding), communication technology
<i>Looker</i> (1981)	screenplay	Computer graphics, Virtual Reality
“Mousetrap: A Tale of Computer Crime” (1984)	short story	Computer crime
<i>Runaway</i> (1984)	screenplay	Robotics (weaponization, smart weapons)
<i>Sphere</i> (1987)	novel	Time travel (time loop paradox)
<i>Genes</i> (1989)	screenplay	Frankenstein revisited
<i>Jurassic Park</i> (1990) & sequels	novel	Genetic engineering (in vitro)
<i>Rising Sun</i> (1992)	novel	Video editing software
<i>Disclosure</i> (1994)	novel	Virtual reality
<i>Airframe</i> (1996)	novel	Complex aeronautic systems
<i>Twister</i> (1996)	screenplay	Tornado studies
<i>Timeline</i> (1999)	novel	Time travel (parallel universes)
<i>Prey</i> (2002)	novel	Nanotechnology
<i>State of Fear</i> (2004)	novel	Climate change
<i>Next</i> (2006)	novel	Genetic engineering (transgenics and gene patenting)
<i>Micro</i> (2011)	novel	Miniaturization

The human aspects he draws attention to are not the abstract, philosophical questions addressed by many science-fiction stories and dystopias, as for example about what makes us human, in relation

to robotics in *Blade Runner* (Scott) or *Artificial Intelligence: A.I.* (Spielberg); or to virtual realities in *The Matrix* (Wachowski Brothers).

Michael Crichton's concerns regarding the same themes are clearly more down to earth, closer to the "regular guy's" fears, as depicted in *Runaway* (Crichton), *Westworld* and *Prey*, in the case of robotics, or *Looker* (Crichton), and, in a way, *Disclosure*, in relation to virtual realities.

Earlier Works

Restricting Michael Crichton's work to the techno-thriller genre relies on focussing on the well-known novels and films of Table 1 and also leaves out, in addition to *ER*, a long list of earlier works published in part under pseudonyms up to 1972 (see table 2). As mentioned above, these should not be ignored if a full picture of the ideas behind his writing is to be drawn.

Table 2. Michael Crichton's early writings (1957–1972)

Title	Type
Writings from 1957-1961 published in <i>First Words</i> (Mandelbaum)	poem and short stories
<i>Odds On</i> (as John Lange, 1966)	novel
<i>Scratch One</i> (as John Lange, 1967)	novel
<i>Easy Go</i> (as John Lange, 1968) also appeared as <i>The Last Tomb</i> (as John Lange, 1974)	novel
<i>A Case of Need</i> (as Jefferey Hudson, 1968)	novel
"How Does That Make You Feel?" (as Jefferey Hudson, 1968)	short story
<i>Zero Cool</i> (as John Lange, 1969)	novel
<i>The Venom Business</i> (as John Lange, 1969)	novel
<i>Drug of Choice</i> (as John Lange, 1970)	novel
<i>Dealing</i> (as Michael Douglas, 1970)	novel
<i>Grave Descend</i> (as John Lange, 1970)	novel
"The Most Powerful Taylor In The World" (1971)	short story
<i>Binary</i> (as John Lange, 1972)	novel, adapted screenplay

The volume *First Words* includes four early writings from Michael Crichton. One of them, entitled "The Most Important Man In The Lab" already shows his discomfort at the lack of feelings and humanity displayed by a man of science running a student lab. Written by Michael Crichton at the age of 18 in 1961, it can be considered a piece significantly representative of his concern about the loss of humaneness that an overreliance on science and technology can come hand in hand with. These concerns can be found with gradually increasing depth in all of his subsequent works from this period, with the exception of *Scratch One* and *Grave Descend*. As they are less well known, let us cast a quick glance over their stories.

In his first novel, *Odds On*, computing technology of the sixties is used to plan a robbery. Michael Crichton wrote this at a time in which the term “cybercrime” was not in anyone’s mind. Over 30 years would pass before such activities boomed in the 1990s and 2000s. Before that Michael Crichton would revisit the concept again in the short story “Mousetrap: A Tale of Computer Crime”, published in *Life magazine*.

Easy Go is set in the familiar context of archaeological excavation in the Middle East and alludes to the danger of being led by greed in such endeavours and the plundering of sites in other countries. This would not qualify as a techno-thriller, but does, again, include a concern about the abuse of science.

Then came *A Case of Need* and *Zero Cool*. *Zero Cool* is one of the only two of his early works he expanded himself for re-issue in the 2000s. Just as *Odds On* was about using computer programming for criminal purposes, *Zero Cool* draws from anatomical and surgical knowledge to set up a plot in which it is used by gangsters for their dubious purposes. It must be noted that the treatment of this is very much “light-touch” and very far from the depth in which it appeared for example in *A Case of Need*. It actually seems significant that the latter is one of the only two novels from among the early works under pseudonym that he considered worth re-publishing later under his own name (the other one being *Binary*). This fact supports the idea that Michael Crichton’s focus was very much on the human side of science and technology, rather than just the technical aspects of it.

Understandable in terms of the social trends and international politics at the end of the 1960s is the fact that no less than four novels followed on the theme of drugs and venoms, and their misuse: *The Venom Business*, *Drug of Choice*, *Dealing*, and *Binary*. In the light of his previous works it lies close to see this as just another warning against the misuse of a product of scientific research.

Among these early works there are also two short stories published by the magazine *Playboy* (November 1968 and September 1971). In the first one, entitled “How Does That Make You Feel?”, Michael Crichton writes (as Jeffery Hudson) about the misuse of psychological therapy techniques by a therapist who tries to get away from being shot by the angry husband whose wife he is seeing, and who has abused his position as therapist to start the affair in the first place. The final twist shows that he was actually being played by his patient, but this does not take away the idea that this misuse and abuse of a science-based practice is a danger Michael Crichton is pointing out to the readers.

The second *Playboy* story, “The Most Powerful Taylor in the World”, tells about the initial inability of the White House science adviser to reach a simple solution to a problem, because his focus on its scientific aspects simply distracted him from the more mundane and simple facts. Again, I do not think it is a stretch to interpret this story as a warning against the dangers of excessive reliance on science and technology, in this case in the context of political decision-making.

The majority of these works would not fit into the techno-thriller genre, but show to a lesser or greater degree the same societal concerns about science and technology in Michael Crichton’s mind as he would later develop further and deeper in the better-known works of the late 1970s and after. These concerns constitute a distinctive feature of his writing and link both writing periods described above and at the same time provides a more profound interpretation of common themes in his work.

A Parenthesis of Fiction of Different Genres Emerges

So, it seems that this wider and at the same time deeper consideration of Michael Crichton as a humanist concerned with the effects of science and technology on people and society neatly encompasses all of his works involving science and technology and not only those falling under the techno-thriller genre. Even so, it would be naïve and futile to try and shoehorn *all* of his fiction works into one single category. A few of his works explore other themes. Interestingly, they seem to be confined to a very specific and very brief period in his fiction writing career in the early 1970s.

At that time he turned his attention to historical settings, writing the novel *The Great Train Robbery*, later adapted and directed as a homonymous film by Crichton himself. This was followed by *Eaters of the Dead*, which became the film *The 13th Warrior* (McTiernan and Crichton) and *Pirate Latitudes*, which was published in 2009, after his death, but according to various pieces of evidence he had been working on in the 1970s (Warren). With yet a completely different approach, that of a counsellor in relationship issues, he wrote three teleplays for the Insight series (Kieser) between 1971 and 1974. After this period Michael Crichton's fiction writing returned to science and technology themes, thus closing this brief parenthesis, and allowing him to create the novels that would earn him most of the fame in his life.

However, a short mystery story by Michael Crichton without a science or technology theme entitled "Blood Doesn't Come Out" appeared in 2003 in a collection of short stories by various well-known authors. This would be a single outlier to the pattern just described, and one cannot help wondering whether he had not written this short story in the 1970s as well and only left it unpublished until he was asked to contribute to this volume, just as he had kept *Pirate Latitudes* unpublished for decades.

Conclusion

From the above we can conclude that there is sufficient evidence to consider that what defines Michael Crichton as an author is a deep concern about the role of human beings and society in a world increasingly influenced by scientific and technological advance. Limiting and reducing his legacy to being a successful writer and creator of the techno-thriller genre disregards important works from the period in which he was a well-known author, as well as most of his earlier works. It also fails to do justice to the depth and transcendence of his concerns and thinking, which are of far greater significance and social relevance than just writing best-selling stories.

The fact that virtually all his works that do not fit into this wider and deeper definition of Michael Crichton's fiction were written in a brief and limited time period in the 1970s in which he explored other fiction writing approaches that he then did not pursue, reinforces the idea that his humanistic thinking about the societal issues of science and technology is a more appropriate way of defining the legacy of Michael Crichton.

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