CHAPTER IV

Colonial and Racial Overtones in Asimovian Robotics

Discrimination is a global issue with multiple ramifications as in race, class, nation and gender. Science fiction has often dealt with the problems of racism and colonialism. Usually, SF works present an empirical world of natives, settlers, spacers and aliens. In most of these works, the Earthpeople triumph over the plausible people of the outer worlds. Aliens are often viewed as monsters and hence, most of the stories depict the ultimate victory of the colonising Homo sapiens over the species of the other worlds. Certain works like satires could also in such cases open up horizons to study the problem of oppression - particularly the attitude of the colonisers towards the colonised. Asimov's SF works, particularly the Foundation trilogy, open up issues for debating the salient feature of colonisation. Similarly, robots allegorically represent the colonised people.

Ania Loomba defines the phenomenon of colonialism as "the conquest and control of other people's land and goods." She also says, "Colonialism is not just something that happens from outside a country or a people, not just something that operates with the collision of forces inside, but a version of it can be duplicated from within." Frantz Fanon, however, emphasises the economic and racial aspects of colonialism when he writes as follows in The
"Wretched of the Earth" (1965): "In the colonies the economic structure is also a super structure. The cause is the consequence; you are rich because you are WHITE, because you are rich [...]. This Marxist viewpoint of 'thingification' also helps to link colonialism with racism.

Dinesh D'Souza in The End of Racism (1995) lists the main features of racism as follows:

[...] In order to be a racist, you must first believe in the existence of biologically distinguishable groups or races. Second, you must rank these races in terms of superiority and inferiority. Third, you must hold these rankings to be intrinsic or innate. Finally, you typically seek to use them as the basis for discrimination, segregation, or the denial of rights extended to other human beings.

While racism has been a worldwide phenomenon as in the domination of the Aryans over the Dravidians, Europeans over Negroes, Mongoloids and others, Loomba points out that "[...] the real Other for the white man is and will continue to be the black man." The black people are the worst hit by colonial as well as racial oppressions.

The genre of SF deals with the problems of the entire class of Homo sapiens. It finds plausible solutions for varied problems of humanity, which might arise in the future or in the near future. It is possible to examine robotic SF from a colonial point of view, if one equates robots to the colonised, and
human beings to the colonisers. From such a perspective, an attempt has been made to analyse the attitude evinced towards robots by humans in all the four robotic novels by Asimov. Similarly, one could also think of robots as a different race of beings, and the conflict between human beings and robots would then take on the shades of racism. Such attitudes are analysed in this chapter with special reference to two short stories namely, “Strike Breaker” (1956) and “Christmas Without Rodney” (1988).

I

Among the novels *The Caves of Steel* (1954) deals with the oppression of the Spacers by the Earthmen. Even though the Spacer world is described as self-sufficient, it relies on Earth for police force and the investigation processes. Julius Enderby, the Commissioner of Police who is a much-trusted man in the Spacer world visits them often. Readers are lately informed that Enderby has attempted to smash the unique property of the Spacers, namely, the humaniform robot R.Daneel Olivaw who was the replica of Dr. Sarton - his maker. Accidentally, Dr. Sarton was killed due to his resemblance with the robot. Hence, the first novel itself exposes the imperial power of the human masters over the spacers and the robots belonging to them.

Elijah's attitude of a 'White man' is noticed throughout the novel by the exhibition of his unreasonable anger against the metallic robot Sammy. He gets
irritated whenever Sammy calls him 'Lije'. Quite often, Elijah as a representative coloniser exhibits his imperialistic tendency towards the humaniform robot Daneel. Though in appearance and status Daneel equals Elijah, the latter distrusts the former several times. Perhaps, due to robophobia Elijah quite often expresses his anguish towards Daneel. Recalling the past incidents Elijah introspects his own action, "Twice he had accused R.Daneel, once as a human being in disguise, and once as an admitted and actual robot, each time as a murderer. Twice the accusation had been bent back and broken." As a coloniser Elijah might have had an ingrained fear that the colonised in the form of a humaniform robot might topple the imperial set up. Also, Daneel informs Elijah that there is a kind of disagreement among the Spacers: "There are some who think that a modernized Earth will be a dangerous and an imperialistic Earth." Thus, Elijah does not take Daneel into confidence throughout the novel and tries to segregate him from the rest of the human society. His anti-robotic attitude also comes to the fore in the following derogatory remark he makes about human-robot (C/Fe) culture: "C/Fe, damn it! C/Fe! You're so full of the benefits of a C/Fe culture[...]."

In addition, Elijah's attitude does not change while he interrogates a blue collared worker Francis Clousarr at the New York Yeast factory. It is worth noting that the factory is also segregated from the rest of the human dwellings in New York City. Elijah suspects that the worker might have a hand in the medievalistic activities. He does not mind using a 'guide rod' on
him. Thus, Elijah's mental process is seasoned to find culprits and misfits not in his own class but to locate them in workers' class, which is nothing short of an imperialistic attitude.

Dr. Fastolfe a Spacer also advises Elijah regarding the process of colonising the outer worlds with the help of robots. He correlates the present process with human history:

A group of displaced men as you call them, are what we need to serve as a nucleus for colonization. Your ancient America was discovered by ships fitted with men from the prisons [...]. Yet those very robots can accompany humans, smooth the difficulties of initial adjustment to a raw world, make colonization practical.201

In turn, Police Commissioner Julius Enderby also exhibits the same kind of an attitude of a coloniser. He emphatically states that the Spacer robot should not be allowed to solve the murder mystery. In other words, he instructs Elijah to find the solution for himself. Julius provides clues which are insignificant and ultimately complicate the case. Enderby puts the blame on Elijah even before the table is turned on him. Later he states that in order to save his wife Jessie, Elijah might have used the tool to smash R. Sammy. Thus, it can be inferred that imperial attitude is the inner current in the novel.

The imperial power of the Earthmen over the Spacers is reflected in *The Naked Sun* (1956) also, though there is a considerable amount of
transformation in their ideology by validating the C/Fe culture - a hybrid culture between human and robot forms in equal proportion in this novel. The detective Elijah reports to his boss Albert Minnim that depending too much on robots is bad. Further, The Naked Sun describes a topsy-turvy position in imperial rule. For example, Albert Minnim occupies the highest position in the novel. The novel brings out a contrasting description of the coloured and the white respectively:

Undersecretary Albert Minnim was a small, compact man, ruddy of skin, and graying, with the angles of his body smoothed down and softened. [...] Baley felt sallow and raw boned in comparison. He was conscious of his own large hands, deep set eyes, a general sense of cragginess.\(^{202}\)

The above viewpoint with regard to imperialism is further modified in The Robots of Dawn (1983). Wilson Roth, who was an alien to the 'mother country', has replaced the Commissioner of Police Julius Enderby. Elijah analyses:

Julius, with all his shortcomings, had been a friend, as well as a superior; Rath was merely a superior. He was not even City-bred. Not this City. He had been brought in from outside.\(^{203}\)

Since Albert Minnim was promoted as the Vice-Secretary, a woman by name Lavinia Demachek had succeeded him. Lavinia is not only a woman but also a non-white official who has occupied the position of the Secretary-General.
Lavinia Demachek was authoritative, knowledgeable and efficient. The implied transformation of both gender and race hierarchies is significant. The novel validates the transformation with respect to the attitude of imperialism in lieu of this particular character:

She was quite tall and sat stiffly upright in the chair. Her uniform was not very different from that of a man, nor was her styling or facial adornment [...]..

Thus, it can be inferred from the names of these two characters that they might be non-Europeans. The utterance and the description of these two fictional characters indicate that Asimov has tried to modify the existing imperial attitudes.

In *The Robots of Dawn* (1983) there is a considerable transition from the former ideology. Elijah witnesses the benefits of the C/Fe culture. Earth seeks the help of Dr. Fastolfe because with his help alone Earth could attempt to colonise the uninhabited fifty Worlds. Optimistically, with unerring prediction Elijah sends his only son Bentley initially as a pioneer settler to colonise the ‘Other Worlds’. By his persistent effort Bentley succeeds in establishing the Baley World.

Psychologically, the attitude of colonial revolt springs up in the minds of the Spacer leader Kelden Amadiro. With a feeling of superiority and also with an evil intention Kelden carries out underground activities to smash mother Earth by activating the radioactivity on Earth.
Meanwhile, the Settlers in the attire of traders - represented by D.G.- also exhibit their imperialistic attitude. Ownerless unused robots on Solaria form commodities for the Settlers. D.G. seeks the help of Gladia to colonise Solaria. Hence, history repeats itself with the Settlers. Yet it is Daneel who is entrusted with the responsibility of shaping the future worlds. He is a well-balanced hybrid - human/robot. That is to conclude Asimov advocates a hybridization of the native with the colonised in equal proportion in these works.

The ideas and ideals of Empire novels and the Robot novels converge in *Robots and Empire* (1986). In the earlier robotic novels the titles of each chapter focus on incidents and characters. But in the last novel the entire work is divided into Worlds namely, Aurora, Solaria, Baley World and Earth. The focus is thus on the colonial aspect. Quite often, Elijah, the protagonist has expressed his philosophy that for the salvation of the Earth people, they must colonise fifty other uninhabited Worlds. The theme gyrates around the possible experiments and solutions for the survival of humanity.

It can be inferred from the novel that the Earth has been decaying due to enormous uninterrupted radioactivity. The opening scene in the last novel describes Gladia's vain attempt in locating Solaria in the night sky. Aurora has lost its hope of colonising the Outer Worlds. The project of establishing the Auroran Robotic Institute, in spite of its able leader Kelden Amadiro's best efforts, could bear no fruit. The idea of manufacturing and utilising
humaniform robots to work as scouts - to start the process of colonisation - has been an utter failure. While the C/Fe hybrid culture is not encouraging, human efforts give much hope to the people of Baley World. They are dynamic and hard working. They are not only settlers but also global traders. Particularly, the character Deejee fulfills their dreams and aspirations. His trick of the trade is to manoeuvre the Solarian people in order to capture the unused commodity, namely, robots as properties. Moreover, at the end of the novel series robot Giskard transfers his unique gift of telepathic abilities to Daneel. While doing so, he instructs Daneel to transform humanity by making them migrate to the Outer Worlds. Asimovian fictional ideology is reflected in the last phase of the novel by the prediction that humanity will survive whether it is in the form of Spacers or Settlers. The ideology might indicate the benefits of colonisation. The present argument has been elaborately dealt in *Foundation and Earth* (1986) by the author. There is a convergence of the ideas of the robotic novels with the foundation series in this novel.

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II

Akin to colonial problems, racism also poses certain grave issues. It is easy to differentiate any human race by observing the skin colour, bone structure, facial appearance, speech and so on. But it is difficult to distinguish two robots of a similar make. In this regard, it is interesting to study the nature of robots or computers, which are endowed with all the human qualities.
As a branch of Science fiction, Robotics deals with the change in the behaviour of man in a technologically advanced society with robots. Interestingly, Bertalanffy discusses the behaviour of man as a robot in the twentieth century. Human behaviour, according to Bertalanffy, is basically governed by 'utilitarian principles'. Therefore man too is programmed just as robots are. The toilet training in the early childhood days, the setting up of economic goals to derive maximum benefits with minimum expenses which includes a student striving to score the highest marks, or an adult attempting to maximise his earnings are a few examples to cite. Man is a machine because his nervous system is trained to function in the desired direction only. Bertalanffy observes, "Stimulus-response, input-output, producer-consumer are all the same concept, only expressed in different terms." It seems that the theory of psychohistory propounded by Isaac Asimov in *Foundation* series is an extension of Bertalanffy's idea. Asimov has applied this principle in *The Caves of Steel* and *Robots and Empire* to measure the change in the behaviour of man when he is placed in a robotic society. Similarly, in the story "Strike Breaker" (1956) one can read implications of robotification of some human beings by others. While there are apparently no robots in this story, the tribal Ragusniks are so dehumanised as to be viewed as machines or robots as evident from the following analysis:

The locale of Asimov's "Strike Breaker" (1956) is the airless Elsevere planetoid. While equality prevails among the settlers, the original inhabitants
who have been colonised, are treated as outcasts as observed by Steven Lamorak, a sociologist of the earth, who pays a visit to the planetoid to study the prevailing sociological conditions in that colonial society. Initially, Lamorak observes that there is a comfortable division of labour prevailing in the social setup, with equal status to men, women and children. Naturally, inter-caste marriage is prevalent in the society.

During an arranged tour, Lamorak learns that water, air, food, and minerals are recycled. Since everything needs energy, waste materials are quickly reconverted into raw materials. As the visitor passes through an industrial belt, he is informed that there lives an original settler named Mikhail Ragusnik. The Ragusniks are the aboriginal tribes, whereas the Elsevere are the invaders. Ragusnik is an outcaste by profession, as he is placed in charge of reprocessing human waste. The sociologist correlates his profession with that of "untouchables in ancient India" and "Swine herds in ancient Judea." Lamorak observes that the residence of Ragusnik has been ostracised. Though all modern amenities are available, Ragusnik's children are prevented from mingling with others. Ragusnik's wife is born to an orphaned woman. While no one visits the family, the family members too do not visit others on the planetoid.

Ragusnik has been assigned the task of processing human waste and recycling the waste to form useful raw material. The process does not, however, involve handling human waste manually as the machines carry out
every process automatically. Still, society looks down upon Ragusnik as an
caste and has segregated him from mainstream society. Humiliation of the
family has increased in arithmetic progression from generation to generation.

At the time of the visit of the earthman, Ragusnik announces that he
will be on strike until his family is treated like human beings. He declares that
the strike would continue until his demands are met. In an interview Ragusnik
passionately pleads with the authorities to fulfill his rightful demand:

Why must we live in isolation as if we were all monsters, unfit
for human beings to be near? Aren't we human beings like
others, with the same needs and desires and feelings? Don't we
perform an honorable and useful function?207

As a 'Strike Breaker' Lamorak works to pacify both the councillors and the
sewage worker. Further in the course of his argument Ragusnik demanded:

Answer me: isn't it an honorable and useful function? It is your
waste made into food for you. Is the man who purifies
corruption worse than the man who produces it? [...] Let all of
Elsevere die of disease — [...] My family will be better dead of
disease, than living as now.208

The inhuman treatment of the people and the rightful claim of Ragusnik stir
the feelings of the earthman. Lamorak questions the councillors whether his
demands are unreasonable and unacceptable to them. Adamantly the Elseveres
brand Ragusnik as 'A dealer in excrement'. Lamorak tries to get a substitute
for Ragusnik but in vain. No Elsevere is prepared to take up the job, since it is viewed menial. After a considerable lapse of time, voluntarily Lamorak as a 'Strike breaker' works in Ragusnik's place. As a result of his persistent effort Lamorak establishes contact with Ragusnik over the image-reception and explains to him about his missionary zeal in convincing the people of the galaxy that the Ragusniks had been inhumanly exploited. Though Lamorak assures him that he would try to protect his human rights, Ragusnik turns down the proposal for a face to face talk.

The earthman moves heaven and earth to succeed in his attempt but in vain. Lamorak is ordered to return home. The councillors declare that if at all they require any further information from earth, Elsevere will not entertain Lamorak again. In case of emergency they would prefer another earthman to Lamorak. Hence, in their estimate the 'Strike breaker' also becomes an outcaste. However, optimistically at the end of the story Asimov hints about the possibility of an agreement fulfilling Ragusnik's demands.

Robots are treated as subhuman though they belong to the same technological society in which human beings live. Similarly, Ragusnik is also treated as an outcaste though he lives in the same class of society. While the story attempts to raise the status of the people of the depressed class like Ragusnik, it also implies the need to elevate the status of robots. The trials of Lamorak might have proved futile. But the social engineer in Asimov with a sense of positivism suggests that sociological problems such as the racial
discrimination in future societies might be solved. The author in this story hopes for a transformation in the attitude of the oppressors at least in the near future.

In the second story "Christmas Without Rodney" (1988) by Asimov, there are two robots of different make and age. The younger of the two supposes that the older is not worth consulting for housekeeping. Also a human character Le Roy kicks the older robot and exhibits the imperialistic attitude. The younger generation also segregates the earlier model from the rest of the family. The inhuman treatment shown by Rambo and Le Roy confirms the racial discrimination.

"Christmas Without Rodney" (1988), marks the last phase of Asimov's robotic works. The story is unique as no popularly known characters like Susan, Donovan, Powell, Lanning, and Elijah Baley figure in the story. But Asimov's nostalgia has still survived in the story as it retains the initial letter 'R' for naming robots. The writer explains the reason:

And frankly, it's my opinion that's the reason human names just don't start with R any more. You get Bob and Dick but not Robert or Richard. You get Posy and Trudy, but not Rose or Ruth. Sometimes you get unusual R's. I know of three robots called Rutabaga, and two that are Ramases.

Howard and his wife Gracie possess a housekeeping robot Rodney. Though it is an old model, they are satisfied with its performance. In this
regard Gracie expresses her deep love by uttering, "I just adore Rodney." For her it is a 'person' and she proposes to her husband that it might be given a holiday during Christmas as it had uninterruptedly worked for a number of years. The idea appears funny to him since logically the robot as a machine does not require any leisure, but for servicing and maintenance if at all some fault is discovered in its functioning. It may be recalled that Grace had commanded Weston in Asimov's first story "Robbie"(1940) to return the robot to the factory. But in this story Gracie pleads with Howard to declare a holiday for admirable Rodney. So it is to be a Christmas without Rodney!

De Lancey, the son of the Howards, their daughter-in-law Hortense, grand son Le Roy and their personal modern robot Rambo arrive well in time for the Christmas celebration. Rambo is assigned to look after the house keeping business. Howard and Gracie opine that Rambo is not as competent as Rodney. Rambo is advised to learn the operational techniques of handling the electronic gadgets from Rodney who is on vacation. But Rambo's egoistic tendencies are exhibited in his utterance:

Madam, there is nothing in my programming or in my instructions that would make it mandatory for me to accept orders given to me by another robot, especially one that is an earlier model.
Robots are programmed to follow instructions given by humans and not by a robot. Hence, Howard learns the housekeeping from Rodney and passes on the orders to Rambo.

Meanwhile the Christmas tree is installed. In keeping with a child's curiosity, Le Roy is worried about his Christmas gift. On earlier occasions, Rodney would arrange everything at the appointed time. But now, the boy enquires with Rambo about it to no avail. Then he questions Rodney, "How about you, stink-face."²¹³ Out of modesty alone Rodney answers that everything will be attended to at the proper time. In an attempt to exhibit his superiority Le Roy kicks the robot in the shin and gets injured in his toes while kicking Rodney. Deliberately, the boy falls down and starts weeping. Though Howard and Rambo are witnesses to the rude behaviour of the boy, astonishingly the kid turns the table round. Hortense appears on the scene and orders that the robot should be dismantled immediately. Despite the attempts made by Howard to convince her that Rodney could not harm a human being, Hortense argues that since Rodney is very old, the effect of the first law might have been lost.

The next morning Hortense and her family members leave Howards' house. Thus, it is a horrible Christmas to the entire family. Howard explains that the fuss was due to the declaration of holidays to Rodney. He assures Rodney that such a thing would never happen again. Most intelligently
Rodney replied, "Thank you sir, I must admit that there were times these two days when I earnestly wished the laws of robotics did not exist."\(^{214}\)

Howard ponders over the problem all the night. If he reports Rodney's words to the company, Rodney would have been scrapped instantaneously and a new robot model would have replaced him. But, Gracie is emotionally attached to Rodney. Further, Howard begins to think how dangerous it is to live with a robot, which has wished the absence of the three laws of robotics: "From wishing they did not exist to acting as if they did not exist is just a step. At what moment will he take that step and in what form will he show he has done so?"\(^{215}\)

In conclusion, the story brings out the conflict between the ideals of an old robot model with that of a new model. At first Rambo revolts against the system and later agrees to gather information from the older model through the human master. Gathering inadequate information results in the disaster. Indirectly, the story deals with the problem of racial discrimination. As an earlier model Rodney had won the hearts of the inmates of the house. All was well till the invasion by the younger generation. Allegorically, they form another race. The attitude of the entire race is represented by the words of Rambo and the inadvertent action of Le Roy. It can be noticed that Rambo discriminates against Rodney though it needs Rodney's guidance in housekeeping. Similarly, the imperialistic attitude is also witnessed in the unwarranted action of Le Roy. He wishes to derive benefit without giving
respect to the aged and the experienced robot. Except in two stray cases as in "The Bicentennial Man" and *Robots and Empire* the ill-treatment of robots by man either in words or in action in Asimov's robotic works is not depicted. Here however, Roy kicks the robot. The story as a whole creates an impact on the readers to consider the evil effects of racial discrimination. Rambo's views in respect of following orders issued by Rodney are not acceptable. Living in the same section of society, the individuals think that they are independent. They are not open minded to consider that they are also a segment of the whole class. In other words, they have to understand that Homo sapiens is one single class, where the birth of an individual is not a choice. They should also consider the resulting humiliation; if the situations had been reversed, in turn they would have been treated as 'others'.

In racism there is a need for the suppressors to understand and uplift the suppressed class. If the members of the Howard family belong to one race, and the robot Rodney to a coloured one, then the words of Gracie in respect of her adoration exhibits her inner desire to elevate the coloured ones. In the same way they confirm a possible solution for the racial discrimination.

In "Christmas Without Rodney", being a modern robot Rambo rejects the idea of taking instructions from the older model Rodney. It fails to accept Rodney as a member of its own class. In point of fact, the housekeeping becomes miserable for the members of the family in the absence of Rodney.
Instead of demonstrating superiority to the older model, Rambo should have joined hands with him in performing the routine work.

The story thus also experiments with the problems emerging out of the generation gap. As a result the youngsters put the blame on the elders. Thus, the story reflects that the entire culture is shaky without the co-existence and proper understanding of the two generations.

Ultimately, the problem of discrimination is not solved in the story. It seems that Howard has a longing to demonstrate his optimism towards machinery, but instead, in the actual world, he is not confident enough to come out of the closed form of his own environment. Inwardly, he is afraid of comments by society. What concerns him most is to imagine a life where robots might not follow the laws of robotics. However, one way of solving the problem is to start a process of transformation in the attitudes of Hortense, Rambo, and the youngest of the younger generation represented by Le Roy. In this regard, Asimov suggests through his characters that human beings too should be bound by laws. These are called Laws of Humanics. These laws are prescribed in the fictional world. However, Asimov reflects elsewhere what these laws could be:

I Law: A human being may not injure another human being, or, through inaction, allow a human being to come to harm.
II Law: A human being must give orders to a robot that preserve robotic existence, unless such orders cause harm or discomfort to human beings.

III Law: A human being must not harm a robot, or, through inaction, allow a robot to come to harm, unless such harm is needed to keep a human being from harm or to allow a vital order to be carried out. 216

Though these laws are similar to the Laws of Robotics, these laws cannot be imposed on human beings because they are not manufactured as robots are.

On the whole, it is possible to trace an attempt to overcome imperial power in Asimov's robot novels. Initially, imperialistic attitude is noticed in The Caves of Steel as in Elijah and Enderby's attitudes. But there is a transformation in the attitude of the characters in The Naked Sun. The positive effects of the C/Fe culture are also felt. The imperial tendencies gradually diminish from novel to novel. In The Robots of Dawn there is a complete transformation in the attitude of the fictional characters. Lavinia Damachek and Albert Minnim in these later novels occupy positions in the higher circles of society. Above all, Robots dominate in the last novel namely Robots and Empire. The robots in the novel advocate that like robots, human beings should also be bound by laws. Hence, they formulate the laws of
humanics. Further, using telepathic powers, they try to decide the fate of humanity. Daneel and Giskard attempt to reverse the imperialistic set up.

This chapter has also dealt with the problem of racial discrimination. Bertalanffy visualises that man is also robot as his behaviour is conditioned by social impositions. In this regard, Asimov’s proposition of psychohistory is one such extension. Asimov deals with the issues of racism in the story “Strike Breaker”. His fictional character Ragusnik though an outcast in the beginning is given all the rights to live in the same society at the end. The plight of Ragusnik is similar to the status of robots. In the story “Christmas without Rodney” Rambo and Le Roy ill-treat the older model Rodney. Rodney is doubly exploited. It could be interpreted that the discrimination against Rodney is due to the class to which it belongs. He is segregated from the rest of the family. But at the end of the story the head of the family expresses his optimism in bridging the racial bias in future.

In another Asimovian story, however much robot Andrew tries to get human status, he is declared . “The Bicentennial Man” only at the time of his death. The robot character leaves a message to humanity which reflects the possible solution to solve the racial discrimination:

[...] a man has the right to give a robot any order that does not involve harm to a human being, he should have the decency never to give a robot any order that involves harm to a robot, unless human safety absolutely requires it.217
End Notes


192 Loomba, 12.


194 Fanon, 31.


196 D’souza, 28.

197 Loomba, 144.


199 Asimov, Caves, 60.

200 Asimov, Caves, 261

201 Asimov, Caves, 124.


204 Asimov, Dawn, 26.

205 Ludwig von Bertalanffy, Robots, Men, and Minds: Psychology in


215 Asimov, “Christmas […]”, Visions, 431
