# Controlling the Clones

Cloning and Reproduction in Aldous Huxley's Brave New World

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# **Table of Contents**

1.	Introduction	3
2.	Theoretical Framework	5
3.	Method	12
	3.1 Materials	12
Ĵ	3.2 Procedure	12
4.	Results	12
5.	Discussion	13
6.	Conclusion	19
7	Bibliography	20

### 1. Introduction

Human cloning has been a topic of discussion for a long time. These discussions have ranged from the possibility of human cloning to the moral justifications that go hand in hand with cloning. Would a clone have a soul? Would a clone of a forty-year-old man genetically be forty years old? Are genetic memories real and would the clone know what the original knew?

In 1952 the first animal, a tadpole, was cloned. Since then many other species have been cloned. It was only in 1996 that the first mammal, a sheep named Dolly, was successfully cloned. The method that was used to clone Dolly is called cloning by somatic cell nuclear transfer. This means that nucleus of an ovum is removed and replaced by the nucleus of a somatic cell. The nucleus of a cell contains nearly all of the genetic material. Therefore, the resulting embryo contains the exact same genetic make-up as the donor of the somatic cell. The method of cloning used in *Brave New World* is embryo splitting: the artificial reproduction of the process that also occurs naturally to produce identical twins (Gurnham, 198).

Cloning is a very useful method of reproduction and used much more often than most people realise. For example, many plants are cloned nowadays. Horticulturists can grow plants with certain desirable qualities, like height or colour, through cloning. Many plants even use cloning as their natural way of reproduction. They grow shoots along the soil and those grow into plants that have the exact same genetic structure as the original plant.

The idea of cloning is a source of inspiration for science fiction writers. Aldous Huxley's *Brave New World* describes a world that exists almost entirely of clones:

One egg, one embryo, one adult-normality. But a bokanovskified egg will bud, will proliferate, will divide. From eight to ninety-six buds, and every bud will grow into a perfectly formed embryo, and every embryo into a full-sized adult. Making ninety-six human beings grow where only one grew before. Progress. (Huxley, *Brave New World* 

The novel features the idea that clones are the perfect humans and only few individuals are needed. This brave new world is a world of clones that are only given the amount of intelligence they need. The controlled intelligence and an especially engineered drug called soma ensure that the society is controllable. As a precursor to adulthood controlling the infants are conditioned:

Books and loud noises, flowers and electric shocks--already in the infant mind these couples were compromisingly linked; and after two hundred repetitions of the same or a similar lesson would be wedded indissolubly. [...] "They'll grow up with what the psychologists used to call an 'instinctive' hatred of books and flowers. Reflexes unalterably conditioned. They'll be safe from books and botany all their lives." (Huxley, *Brave New World* 14)

To date there has been little agreement on what the true effects of cloning humans would be on society. A considerable amount of literature has been published on cloning. These studies have mostly focussed on the ethical dilemmas of cloning. Especially the successful cloning of Dolly caused many new discussions, because it was conclusive proof that mammals and therefore humans could be cloned. *Brave New World* can be considered one of the worst possible outcomes of human cloning, according to Huxley in *Brave New World Revisited*.

Previous studies have shown that soma is a very important part of the nightmare that is *Brave New World*. Many other science fiction novels have used the concept of a drug to control the general population and to keep them satisfied. For example, Phillip K. Dick's *Do Androids Dream of Electric Sheep* features a device that artificially induces emotions through chemicals.

The research to date has tended to focus on the ethical issues of cloning rather than on

the controlling that is implicit in the capability to clone. The purpose of this study is to examine the different ways in which the cloning and reproduction processes in Huxley's *Brave New World* are used to control the population of that world.

### 2. Theoretical Framework

The most important literary sources that were used for this thesis are further investigated below.

Most importantly, Aldous Huxley's Brave New World is the primary source and the topic of this study. It is a dystopian novel about the evolution of mankind. The dystopian nature of the novel suggests that it is somewhat of a cautionary tale. Therefore, some of the meanings of the author are close to the surface of the story and easily caught by the readers. It is supposed to be a tale about a perfect society where all humans are happy. They evolved into a society that has implemented some very socially and sexually liberal ideas. Some of the people of this community have been limited in their psychological development during their 'hatching'. In the book this is described as the most logical way to control the major population and keep the peace. In the four years from birth to adulthood, the children are indoctrinated in the ways of their class; ranging from Alpha to Epsilon. Alphas are almost like contemporary, naturally born humans while Epsilons are bred to be learning impaired through lack of oxygen during their time in Petri dishes. The people living in that society think that they have reached the end of their evolutionary progression and are the best they can be. They do not see evolution as an everlasting process of change. To the reader it soon becomes apparent that their world is not perfect. A good example of this is Bernard, who is the result of an accident. At first it seems to the reader like Bernard is an isolated case but it soon turns out that he has a friend who is similarly unique. Bernard's friend Helmholtz has ideas that are considered very dangerous and should have been erased during his childhood. Even simple

things, like his ideas about poetry, are not to be spoken of in public. In fact, this New World can be seen as a case of devolution. The people are not allowed to think for themselves and there are severe repercussions for not living conform to the ideas of the World Controllers. Bernard is a character that can be related to by the readers because he seems to be the most like contemporary humans in the story. That is until the Savages are introduced to the reader. The Savages are the only people unaffected by technology in *Brave New World*. They do use it, but are not controlled by it like the clones. John the Savage is the character that is most like contemporary humans. He is a rational being and possesses a curiosity that the 'civilized' people lack. Through his curiosity, he instigates a small revolution. He starts a revolt at a soma distribution point, but this does not seem to have any serious consequences for the community. None of the consequences of John's actions are explicitly written in the novel. The only thing that is mentioned is that he causes Lenina to be distracted during the inoculation of embryos. Twenty-two years, eight months, and four days from that moment, a clone dies of trypanosomiasis. The significance of this small fact at the end of the novel is to show the reader that the perfectly evolved state of cloning is very fragile. Even one missed injection is a cause of genetic diseases. This can be explained by the fact that each embryo is divided into 96 embryos. With every division there is a small chance of mutation and the genetic mixing makes the clones vulnerable to genetic diseases. Perfection is a precarious balance.

One of the other sources that investigates cloning is 'The Mysteries of Human Dignity and the Brave New World of Human Cloning'. In this article, David Gurnham investigates the ethical debate about cloning with a focus on the ethical notion of human dignity. The focus of Gurnham's study is the implication of many arguments against cloning that there are things about human life that should remain a mystery. "The problem with cloning is that it upsets this basic order" (Gurnham, 198). Gurnham considers the idea of dignity to be at the base of

this argument. Although human dignity is a vague concept, he ascribes to the idea of autonomy as the core of dignity. The ability make decisions and consider the perspective of others is considered an integral part of dignity in this article.

However, Gurnham also states that "central to the cloning debate is a struggle over what is meant by 'dignity'' (199). He believes the difference in being pro- or anti-cloning is closely linked to the definition a person has of human dignity, but also mentions that "dignity is found to be normative rather than empirical" (199-200). Dignity is not something quantifiable nor something that can be found by empirical observations and investigations. This view brings a new element into the discussion, namely the intent with which cloning is carried out. Gurnham explains this point by giving the example of a clone whose life choices have been pre-determined and whose dignity has thereby been infringed upon. According to Gurnham, cloning undermines the mystery that is human life and that is how cloning is connected to control. The control can come from both a lack of mystery and from too much mystery. Lack of mystery is a concept that not only Huxley uses, but also authors like George Orwell and Margaret Atwood. Orwell's novel 1984 describes a distinct lack of privacy and a world where everything is controlled by the government. Too much mystery is a more intricate form of control. Margaret Atwood describes a world in *The Handmaid's Tale* where there is too much mystery in the protagonist's life. She knows very little about the people who surround her and this controls her freedom and subsequently the way she lives. In cloning, too much mystery is related to the issue of the familial ties of the clone. For example, if a couple were to have a child that is created from the genetic material of the mother, this child would in essence be her sister as well as her daughter. The complication arises from the incestuous nature of such a relationship: it is the same as with a child that is born from a father and his daughter. Gurnham connects this issue with the human dignity that is so integral to his study. He concludes that "the mysterious foundation of our dignity is important because it stands in

for a lack of empirical certainty" (211). Mystery is why the ethical arguments against cloning are reasonable and "saves them from becoming empty slogans" (Gurnham, 211).

Aldous Huxley's Brave New World by Sharon Yunker is a study guide in which Yunker summarises each chapter and gives her interpretation of events that happen in it. One of the first things Yunker explains is that the readers must keep in mind that although cloning is not exactly farfetched for contemporary readers, eighty years ago, in 1931, it was pure science fiction to have children born from Petri dishes who had no mother, father or other family except for 95 identical twins. In her book, Yunker concentrates on the relationships that exist between the different characters and the world around them. She shows insight into the working of Huxley's world that many readers would not be able to achieve on their own. Her analyses often contain connections that are surprising and lead to the conclusion that Yunker has researched not only the novel and its background but also the author. For example, Yunker remarks that Huxley has incorporated some familiar elements to give the readers a little sense of familiarity amongst all the strangeness. She explains how the use of Greek letters to classify the level of intelligence and identify the classes of the clones gives the readers a system they are somewhat familiar with. Like Gurnham, Yunker considers identity and integrity important parts of life that are lost in the cloning process.

Many of the analyses in *Aldous Huxley's Brave New World* compare the New World with the Savage Reservation. Huxley cleverly implemented the character of John the Savage to highlight the differences between these two world. Although the Savage Reservation has certain Native-American elements, it also contains many ideals and morals that were normal to most readers in the 1930s. Yunker especially comments on the coldness of the New World. This is an element of the New World that is very contradictory to the ways of the Savages. The ultimate example of this is given in the dying scene of John's mother Linda. She has been in a soma-induced coma and even in her final moments she does not recognise her son, but

instead imagines him to be her lover Popé. Although Linda used to describe the New World as a perfect place, John has come to recognise that this is not true. At least, not for him. His mother has been conditioned to fit in the New World and is not aware enough to notice that she has become a curiosity in Ward 81. Yunker observes that the cultural gap is enlarged in this scene because the reader tends to take John's side in the confrontation. His reaction of grief to the death of his mother is very natural. His feelings of pain, sadness and disappointment easily turn to anger when a group of Delta children rushes in and disturbs his final moments with his mother, even though she has just crushed his last vestige of hope for the brave New World he had hoped to come to. John's hope for the "Brave New World that has such people in it (Shakespeare, 91)" ends in disappointment, much like Miranda's in Shakespeare's *The Tempest*. John and Miranda's naivety led them to believe the best of people and gave them hope that another world, a New World, would be a perfect place. In the case of John, his hopes are dashed by a world that has no place for feelings. The New World has been voided of emotions through the cloning and conditioning of the humans that live in it. This problem is highlighted by the fact that John's confrontation in Ward 81 is with a group of twins who are all exactly the same and behaving in a way that is perfectly natural for them. The death conditioning is just another part of growing up in the New World, but it stands in stark contrast with John's values of family life and love, most of which he has learned from Shakespeare's plays, such as Romeo and Juliet, The Tempest and Othello. The clones that John has come to know are all disappointments to him. "Bernard's professed friendship is a sham. Lenina has become a wanton whore. Helmholtz has laughed at the human situations in Shakespeare's plays. Linda dies with the name of her Indian lover on her lips. John has no one and no place" (Yunker, 85).

In *Brave New World Revisited*(1958), Aldous Huxley writes about his thoughts and ideas about *Brave New World* and how the world has changed to become more like it since he

wrote it:

Twenty-seven years later, in this third quarter of the twentieth century A.D., and long before the end of the first century A.F., I feel a good deal less optimistic than I did when I was writing Brave New World. The prophecies made in 1931 are coming true much sooner than I thought they would. (Huxley, *Brave New World Revisited*)

Brave New World Revisited is a fresh look on the novel, taken by the author himself. It takes into consideration new developments and ideas that had been produced since 1931, when Brave New World was being written.

One important problem that Huxley observes is the problem of overpopulation. In 1931 the world population was just under two billion. In 1958 that number had risen to 2.8 billion. Huxley notes that commodities such as Penicillin, DDT and clean water have become available to even the poorest countries. This allows every country a certain measure of death control. However, many of these countries have not achieved similar control over births. The death rates have been dropping all over the world, while the birth rates have remained at the same level as they were. This is causing the world population to grow rapidly, as could be considered proven by the fact that at the moment this paper is written, the world population has just crossed seven billion. "In the Brave New World of my fable, the problem of human numbers in their relation to natural resources had been effectively solved" (Huxley, Brave New World Revisited). In the New World of Brave New World an optimum population number has been set. Generation after generation the same number of people live in the New World. With the accelerating increase in world population, Huxley considers Communism to be a very serious threat. He proposes that "it is a pretty safe bet that, twenty years from now, all the world's over-populated and underdeveloped countries will be under some form of totalitarian rule -- probably by the Communist party" (Huxley, Brave New World Revisited).

Another danger of overpopulation is biologically poorer quality genes. In Brave New

World some of the clones are inhibited in their growth and psychological development. Huxley suggests that the same principle might apply to children born in overpopulated countries where mothers may not have enough nutrition for their babies. Consequently, this could lead to underdeveloped and less intelligent children. In addition, children who were born with hereditary defects used to have a very small chance of survival, but through the development of new and better sanitation, pharmaceutical advancements and financial aid, these children have a greater chance to reach maturity and procreate. Huxley states that "the physical health of the general population will show no improvement, and may even deteriorate" (Huxley, \*Brave New World Revisited\*). This leads to a moral debate. For example, if a group of scientists were to go to an island and eradicate malaria, they would potentially save thousands of lives. However, these people now have to live on the island's limited resources and cause the island to become overcrowded. They have been saved from a quick death from malaria, but are now forced to suffer through live in poverty. Although saving lives is generally perceived as a very admirable goal, in some cases it can lead to even worse situations than are already there.

Although Huxley certainly had interesting views on the way his novel had slowly become more of a reality, it should be taken in consideration that *Brave New World Revisited* was written over fifty years ago. Some of his predictions have already been proven wrong. However, some of the problems he described are even worse than he imagined, such as the overpopulation of the earth. Therefore, although *Brave New World Revisited* contains some impossibilities, Huxley did accurately predicted some of the current world problems and issues.

### 3. Method

### 3.1 Materials

The most important source of this study is the primary source, namely *Brave New World* by Aldous Huxley. The secondary sources include *Brave New World Revisited* by the same author, David Gurnham's *The Mysteries of Human Dignity and the Brave New World of Human Cloning*, and the Max Notes study guide *Aldous Huxley's Brave New World* written by Sharon Yunker. Many of the other sources are also about cloning or are in another way connected to Huxley's *Brave New World*.

### 3.2 Procedure

Prior to the analysis, most of the sources were found through the Omega database. Following this, they were examined in their relation with *Brave New World*. For the purpose of this study, it was important that the sources were relevant on the topic of the novel as well as on specific aspects of the novel, namely reproduction and control. Finally, once the most important sources had been decided upon, they were more thoroughly examined in relation to the other sources and the novel.

### 4. Results

There are three major ways in which the cloning and reproduction processes in Huxley's *Brave New World* control the population of that world. First of all, the people are controlled by their lack of life choices. Even if a woman would want to have a child, most of them would be biologically incapable of it, nor do any of the clones have the possibility of ever reaching anything beyond their class. Secondly, the people are under control because of their lack of identity. They have to fit in the community, because they are nothing on their own. There are always 95 others who look exactly the same and presumably are very similar to each other. Also, anyone who stands out is targeted and cast out of society. Finally, perhaps the most

important factor is the conditioning that happens during the childhood of every clone's life.

This is essentially the basis for all other forms of control that is placed on the clones, with the exception of soma.

### 5. Discussion

The goal of this investigation was to find how control is exuded over the population in Aldous Huxley's *Brave New World*. The most striking result to emerge is the fact that the clones are controlled through their very existence as clones and therefore lack individuality and life choices.

The lack of individuality is a phenomenon that Gurnham also remarks upon. It is part of the lack of mystery that he has found to be an argument against cloning. He connects having no individuality with having no dignity. Yunker notes that there is a sense of coldness in the New World that is connected to the lack of individuality of the clones. Individuality comes largely from personality and emotions. The clones have suppressed their emotions and with that a large part of their personality. This is also apparent in the way they treat their sexuality. It does not matter to the clones who they bed exactly. There is little difference between the men Lenina sleeps with except for their classes and sexual mentality. Even that mentality is warped. Lenina's co-worker Fanny remarks on Henry Foster being in a sexual relation with more than one woman:

"Trust Henry Foster to be the perfect gentleman--always correct. And then there's the Director to think of. You know what a stickler ..."

Nodding, "He patted me on the behind this afternoon," said Lenina.

"There, you see!" Fanny was triumphant. "That shows what he stands for. The strictest conventionality." (Huxley, *Brave New World* 66)

It does not matter to Lenina what type of men she attracts. The only thing she really notices at first is his class and his appearance. Bernard Marx is a somewhat dubious figure in the New

World society because of the speculation that something went wrong when he was still an embryo. However, Lenina does not care about this; she simply finds him somewhat attractive and that is enough for her to consider going on a trip with him to the Savage Reservation. Meanwhile, Henry Foster encourages Bernard to try sex with Lenina. Both Henry and Lenina show very little dignity in this matter. Dignity is something closely related to self-esteem and self-worth. Lenina find her value not with herself, but with how many men will take her. Henry does not care about monogamy and even encourages possible lovers. This shows that he has no sense of belonging or even possessiveness in regard to Lenina. Another man's dignity or pride might be hurt if his woman slept with another man, but Henry and presumably most men in the New World do not feel this.

Another definition that Gurnham gives of dignity is having autonomy. For a person to be able to make his or her own life choices is something very valuable. The people of the New World cannot make the same choices that contemporary humans can make. They cannot choose a profession, if they want to have a child, nor if they want to marry someone.

Although at first glance it seems like the clones lead a free life, they are really confined in a small world. They go to work and to the feelies but for something like a trip to the Savage Reservation they need express permission from no less than three instances: the World Controller's Office, a World Controller and the Director:

"A permit for you to initial, Director," [Bernard] said as airily as possible, and laid the paper on the writing-table.

The Director glanced at him sourly. But the stamp of the World Controller's Office was at the head of the paper and the signature of Mustapha Mond, bold and black, across the bottom. Everything was perfectly in order. The director had no choice. He pencilled his initials—two small pale letters abject at the feet of Mustapha Mond—and was about to return the paper without a world of comment or genial Ford-speed, when

his eye was caught by something written in the body of the permit. (Huxley, *Brave New World* 145)

Not only does Bernard not have the autonomy to go on a simple vacation without formal approval, the Director has no choice but to grant him the time off. There is no mention of what will happen if the Director tries to bend the rules in his favour, but the reader can easily assume that it will be quite degrading for a man with such a high position.

There is a great deal of pressure on the clones to fit in. They have to try to be the same as the other 95 men or women that came from their egg. It seems that the greatest fear of the people in the New World is that they will stand out and be considered strange.

"Wasn't it wonderful?" said Fifi Bradlaugh. "Wasn't it simply wonderful?" She looked at Bernard with an expression of rapture[.] [...] Hers was the calm ecstasy of achieved consummation, the peace, not of mere vacant satiety and nothingness, but of balanced life, of energies at rest and in equilibrium. A rich and living peace. [...] "Didn't you think it was wonderful?" she insisted, looking into Bernard's face with those supernaturally shining eyes.

"Yes, I thought it was wonderful," he lied and looked away; the sight of her transfigured face was at once an accusation and an ironical reminder of his own separateness. (Huxley, *Brave New World* 130-131)

Lenina, Bernard, Helmholtz and John are all characters who have one thing in common: all four of them are different from the other clones. Bernard is different from the moment he is born and understands that he is not normal. He feels guilty about not being able to participate fully in his Solidarity Group session. Even though he does not gain anything by going, he still feels like he has no choice but to go to this meeting.

Lenina seems to be somewhat predisposed to monogamy, a fact which bothers her even though she does not recognise it as such. In the beginning of *Brave New World* Lenina

mentions that she has been having Henry Foster for only four months, to which her friend Fanny replies:

"Only four months! I like that. And what's more," Fanny went on, pointing an accusing finger, "there's been nobody else except Henry all that time. Has there?" Lenina blushed scarlet; but her eyes, the tone of her voice remained defiant. "No, there hasn't been any one else," she answered almost truculently. "And I jolly well don't see why there should have been." (Huxley, *Brave New World* 64)

Both women try to make the situation more humorous, but Fanny does implore Lenina to have another man as "it's such bad form to go on and on like this with one man" (Huxley, *Brave New World* 64). The Controllers object to intense emotions and relationships.

Essentially, the clones have no choice but to live on the life path that has been set out for them. An Epsilon-Minus Semi-Moron is a clone from the lowest caste, who is very happy to be ordered around and to the simple, repetitive work that he has been bred for. However, clones such as Helmholtz Watson are more aware than an Epsilon-Minus. Helmholtz and Bernard connect because they both feel as though something is missing from their lives. When they talk in Helmholtz's apartment, Bernard becomes afraid that someone is listening in, thus causing him to be revealed as someone who does not fit in. Helmholtz is more at peace with his abnormalities. He is an Emotional Engineer and writes for the radio, feelies and hypnopædic rhymes. His superiors even find him to be too able in his work. Helmholtz and Bernard are both individuals; they stand out. Helmholtz because of his excessive intelligence and Bernard because of his physical deficiency. This does not help them in their lives, on the contrary. When Helmholtz decides to cut off his committees and his girls for two weeks, the College, his employer, has been making "a hullabaloo" (Huxley, *Brave New World* 105). Even a man who has everything he could want in the New World is controlled by his lack of choice. He has to continue doing what he was meant to do or suffer the consequences.

Finally, the most important way of controlling the clones lies in conditioning. The clones undergo intensive conditioning from the moment they are divided in a Petri dish to the end of their childhood. The first part of their conditioning is to determine their level of intelligence and development. "The lower the caste," said Mr. Foster, "the shorter the oxygen." The first organ affected was the brain. After that the skeleton. At seventy per cent of normal oxygen you got dwarfs. At less than seventy eyeless monster. "Who are no use at all," concluded Mr. Foster (Huxley, Brave New World 22). Epsilon clones are the lowest level clones and are allowed the least percentage of oxygen during their foetal stages. This causes them to be the least intelligent of all the clones and to be the shortest. Each level above the Epsilons will have more oxygen and develop to be more intelligent. Even the eggs and sperm that are used to create gametes are selected on their quality (Huxley, Brave New World Revisited). Following their birth, or rather decanting, the children are taught the basic rules of their society. Through regular lessons, hypnopædic night time messaging and even the shocking Pavlovian conditioning the children learn what they should like, what they should avoid and how to behave in relation to other people. They even try to make the children like that they are conditioned to like certain things. "And that," put in the Director sententiously, "that is the secret of happiness and virtue--liking what you've got to do. All conditioning aims at that: making people like their unescapable social destiny" (Huxley, Brave New World 25). Because of the lack of identity and therefore identification with other people, the inhabitants of the New World take the sometimes brutal conditioning in stride and even marvel at it from a purely scientific perspective. In the beginning of Brave New World a scene is described where babies are conditioned on Pavlovian principles. They are placed in a room with flowers and books. When the babies crawl towards them and take the roses and books there are maddeningly loud noises, such as violent explosions, alarm bells and shrill sirens. After that the floor is electrified:

"Offer them the flowers and the books again." The nurses obeyed; but at the approach of the roses, at the mere sight of those gaily-coloured images of pussy and cock-adoodle-doo and baa-baa black sheep, the infants shrank away in horror, the volume of their howling suddenly increased. [...] "They'll grow up with what the psychologists used to call an 'instinctive' hatred of books and flowers. Reflexes unalterably conditioned. They'll be safe from book and botany all their lives." (Huxley, *Brave New World* 33-34)

This kind of conditioning is impossible to overcome. Childhood trauma is a phenomenon of all times. Children who are accidentally locked in the attic can easily become afraid of the dark, just as child who is bitten by a dog can fear all dogs for the rest of his or her life. Fear can be a very powerful controller and take a firm hold of a person's life.

The children are also taught to be sexual beings. Even very small children have classes such as Elementary Sex. The older children are allowed to explore in the bushes or even in public:

In a little grassy bay between tall clumps of Mediterranean heather, two children, a little boy of about seven and a little girl who might have been year older, were playing, very gravely and with all the focussed attention of scientists intent on a labour of discover, a rudimentary sexual game.

"Charming, charming!" the D.H.C. repeated sentimentally. (Huxley, *Brave New World* 48)

These children are taught to let their baser needs run free. They are even encouraged to do so and it they do not participate they are considered ill:

"[T]his little boy seems rather reluctant to join in the ordinary erotic play. I'd noticed it once or twice before. And now again to-day. He started yelling just now..." [...] "And so, " she went on, turning back to the Director, "I'm taking him in to see the Assistant

Superintendent of Psychology. Just to see if anything's at all abnormal." (Huxley, *Brave New World* 49-50)

In Lenina's case, it is a combination of lack of choice and the sexual conditioning that leads her to believe that it is indeed strange for her to have only Henry for nearly four months. The sexual conditioning also is something that Gurnham finds disturbing. He writes that although lack of mystery is a problem, too much mystery can cause trouble too. In this case too much mystery involves not knowing who the parents of the clones are. Perhaps many of the Beta eggs come from the same woman; even more eggs could have been implanted with the semen of one man. This could mean that many of the clones are in fact related to each other, causing incestuous relationships of unheard of proportions. This also relates to the lack of identity, because many people believe that it is important for a person's identity to know his or her ancestry. All the clones in the New World lack this knowledge and have been conditioned not to care about it either.

The savages in the Savage Reservation are also conditioned but by very different means that the clones. The savages are taught to be part of the community as much as the clones. This becomes apparent when John speaks of the refusal of the town to allow him the rite of passage to adulthood. Without this ritual he feels that he is not truly a man.

## 6. Conclusion

The main purpose of this investigation was to study the different ways in which the people in *Brave New World* are controlled by cloning and reproduction. There are three important and interweaved methods for control over the population in the novel. The most important and extensive method of control is conditioning. The clones are conditioned to do their work and only like certain things that are conducive to consumerism. Another method is the lack of identity that is shared by the clones. They have few and only superficial emotions, value others largely for sexual prowess and lack a certain dignity in general. The final method is

lack of life choices, which are another part of dignity. The clones are set on a life path that they cannot defy. From early infancy the choices have been made for them.

However, these data must be interpreted with caution because this was a relatively narrow study of the novel. Many aspects could be further discussed and investigated. For example, this study has largely disregarded the use of soma in controlling the clones and in future investigations it might be possible to take into account the cultural differences between the New World and Savage Reservation. Further research should be done to investigate the workings of the social networks of the clones and Savages to fully understand the extent of control that the Controllers have over them.

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