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Clone Stories: 'shallow are the souls who have forgotten how to shudder'

The announcement of the birth of Dolly – the first cloned mammal – in 1997 gave rise to extensive bioethical debate and, at the same time, evoked longstanding cultural and mythological preoccupations with regard to the potential for human cloning. In the popular imagination the clone is less than human but has the appearance of the human. As Roger-Pol Droit emphasises, the very idea of a human clone has the power to suggest an abyss that lies beneath basic assumptions about individual identity:

> In effect, the clone is the same as its...its what? its original? of which it is a copy? its parent, whose twin it is? itself, of which it is...an other? This blurring of the contours that found identity explains the apparently vertiginous character of the possibility of human cloning.[1]

The possibility of human cloning poses a threat to the idea of the human being as a unique individual with independent consciousnesses and free will. It follows then, that much of the bioethical discourse around cloning constitutes an attempt to define and police the boundaries of what Valeri Hartouni calls, 'humanism's unique, self-contained, self-determining individual'.[2]

At the same time the fear – and sometimes revulsion – that the figure of the clone inspires in many ways serves a protective function against more diffuse, complex biotechnological threats. If our fears can be projected onto the recognisable form of the embodied human being then they are perhaps more manageable. In some ways, the bioethical rush to ban human cloning is the clearest example of this protective function. In order to understand and expand upon current debates on cloning it is necessary to understand cloning as a *fictional* event in that, whilst there is no immediate prospect of widespread human cloning, scientific breakthroughs such as Dolly evoke spectres that live, in a cultural sense, by means of powerful fictional framings. W.J.T. Mitchell's analysis of the clone as an *image* is invaluable in this respect.[3] Drawing on Roland Barthes, Mitchell conceives of the image as a 'living organism' which functions as a figure of speech, vision, graphic design, and thought. Images are the objects of 'double consciousness': that is to say, objects of critique and contemplation, but also of magical and religious fervour. Mitchell points to the way in which the image of Dolly has taken on a 'life of its own'. He also explores the ways in which discourses on cloning are modelled on religious notions of iconoclasm, in that the idolater is always an other: it is *you*, not *we*, who worship false idols.[4] Cloning may fascinate, and maverick organisations and individuals may express the desire to clone individuals, but mainstream discourse on cloning invariably attributes the desire to clone to a morally misguided *other*. Whether it is a wealthy egomaniac aiming for immortality or bereaved parents attempting to recreate a child, the desire to clone is frequently represented as, at best, a desperate measure, and at worst a deeply misguided narcissism. We are told, as we will see, that anybody who is not shocked by cloning has quite simply forgotten how to 'shudder'.

Clones, then, clearly live as images in public discourse. However, the tendency of much of this broadly bioethical discourse is, as suggested already, to quarantine cloning in a framework of otherness. Literary fiction provides one potential area in which this approach might be challenged. If nothing else, it is striking that the fictional dimension of discourses on cloning has become more complex and nuanced in recent years. When

the cloning of Dolly was announced, the repertoire of cloned characters in fiction constituted a relatively meagre resource for the ethical imagination. As Glenn McGee argues, fictional clones have frequently been portrayed as subhuman puppets: 'Mostly, clones have been dupes and dopes, only occasionally rising above Frankenstein's guttural longings'.[5] A typical example would be the robotic housewives in *The Stepford Wives* (1975). In more recent times, as Mitchell suggests, the Hollywood movie *The Sixth Day* epitomises the link between 'ancient religious law and modern technophobia'.[6] Drawing on the biblical imagery of the day on which God created human beings, these fictional clones are false idols. They have the appearance of their human originals, but imperfections in the copying process mean that they are psychopaths. In general, fictional clones have projected an aura of otherness, and of what we might call deficient uniformity. In fiction, cloned humans are seen to lack diversity, vitality and self-determination. In contrast, one significant feature of some of the more recent fictional explorations of cloning, such as Kazuo Ishiguro's *Never Let Me Go* and Sarah Hoffman's *The Secret* is that clones are the narrators of these fictions.[7] Although both of these narratives arguably use clone characters as devices for wider novelistic preoccupations, they have the virtue of presenting the cloned life, however problematically, as an imagined and embedded social and psychological experience. After looking at the scientific and bioethical context to contemporary – post-Dolly, as it were – debates on cloning, the final part of this essay will concentrate on *The Secret* and *Never Let Me Go*. Although both novels provide useful resources for expanding the imaginary scope of the representation of clones, it will be argued that Ishiguro's novel is ultimately more successful in breaking away from existing discourses of bioethical alarm.

Before looking in some detail at these two novels, it is necessary to place cloning technologies within a wider scientific and bioethical context. The successful cloning of Dolly was preceded by experiments with cloning that reach back to the first half of the twentieth century. In general scientific terms, cloning must be seen in the context of developments in the fields of biotechnology and reproductive technologies. As far as ethical debates are concerned, cloning has served as a form of shorthand for the dangers of an engineered humanity. Both *The Secret* and *Never Let Me Go* engage with this context to depict cloning as a social reality. In doing so, the novels manage – most successfully in the case of *Never Let Me Go* – to imagine what we might call *clonality* as a lived experience.

Cell Nuclear Transfer

Although cloning at the molecular and cellular level had been a relatively common practice for quite some time, in the wider public imagination Wilmut and Campbell's announcement of the cloning of Dolly in 1997 was a watershed moment. Human cloning no longer belonged in the realm of science fiction; it was a real scientific possibility. A cloned individual can be produced in one of two ways: *naturally*, as it were, as the result of embryo splitting, which can give rise to monozygotic twins, triplets or quadruplets; or by means of the technological process of Cell Nuclear Replacement (CNR) or Cell Nuclear Transfer (CNT). The nucleus (i.e. the DNA) of a donor cell – taken from fetal or adult tissue: mammary tissue in Dolly's case – is introduced into an *enucleated* (i.e. the nucleus has been removed) egg by fusion or injection. Chemical or electrical stimulation is then used to promote the development of embryo.

Human cloning would by definition reconfigure conventional lines of filiation: a 'first generation' human clone would be the genetic child of the parents of its 'progenitor' (nucleus donor). That is to say, its grandparents would also be its genetic parents. However, there is a fairly important proviso regarding the precise nature of a clone's genetic inheritance. The genetic makeup of a cloned individual comes primarily from the DNA contained in the nucleus, but the cytoplasm of the egg also plays a role, since it

contains mitochondrial DNA. Mitochondria are energy producing structures contained in the cytoplasm of the egg. They act as tiny powerhouses scattered throughout the cell that convert food into energy. Human clones would inherit, potentially, genetic material from *three* individuals: the two individuals, who reproduced sexually to produce the donor nucleus, and the mitochondrial DNA of the female egg donor. (This means, John Harris claims, that the genetic inheritance of a clone developed from a separate egg donor would have a 'richer' genetic inheritance than 'normal' individuals resulting from sexual reproduction.[8]) It is thought that the genetic differences between a clone and its progenitor produced by mitochondrial DNA may affect parts of the body which have a high demand for energy. That is to say, it would manifest itself most clearly in areas such as muscle, heart, eye, and brain. It is also thought that the phenotypic expressions of these differences might well be more marked in humans than other mammals. Of course, a daughter cloned by using the mother as nucleus donor and egg donor would inherit mitochondrial DNA from her own mother.

The other main *non-reproductive* application of CNR is cell therapy, commonly referred to as 'stem cell' technology. 'Therapeutic' cloning of this kind offers the possibility of using the nucleus of an adult cell in order to create embryonic stem cells that can be used to regenerate damaged tissues or organs. An embryo created by CNR in this way would only be grown to blastocyst stage, at which point the stem (ES) cells could be harvested from the inner cell mass. Crucially these cells are genetically matched to the recipient, and would not provoke immune rejection.

Cloning in context

Historically, experiments with cloning can be traced back to the early twentieth century. These early experiments focused on amphibians, largely because amphibian eggs are many times bigger than mammalian eggs and are produced in greater quantities. Jacques Loeb and Hans Spemann undertook cloning experiments on frogs and sea urchins in Germany in 1938. Jean Rostand's significant publication *Can Man Be Modified? Predictions of Our Biological Future* in 1959 refers to the experiments on nuclear transplantation carried out by Briggs and King in 1955.[9] In the 1960s John Gurdon, working at Oxford, did further work on the cloning of frogs. Scientific focus in the 1970s switched to cloning mammals (cattle, sheep, mice). In 1978, David Rorvik published *In His Image: The Cloning of a Man*.[10] The book, which claimed to be based on fact, is narrated by a medical journalist who is enlisted to help a wealthy man who wants to have a cloned son. In 1984 the Danish scientist Steen Willadsen succeeded in cloning a sheep from embryo cells . Dolly, whose birth was reported in 1997, was the first cloned animal produced from adult mammalian cells. In 2002 the Raelian sect, which has links with a company called Clonaid, claimed that they had cloned a child called Eva. The claims remain unverified and have been treated with a good deal of scepticism. In the scientific mainstream, however, cloning technologies continue to develop and in August 2009 American researchers announced the birth of four baby monkeys with 'three mothers'.[11] Using both IVF and a cloning technique, scientists were able to replace the defective mitochondrial DNA (mDNA) in their mother's egg with mDNA from a seperate female monkey donor. This means that these monkeys have inherited most of their genetic makeup from the chromosomes of their 'conventional' biological parents, *plus* a tiny amount of mDNA from the female egg donor.

Two important scientific factors should be borne in mind with respect to the debates around cloning. First, the cloning of Dolly was not carried out with a view to subsequent human cloning. The work was undertaken in the context of a wider project for the genetic manipulation of animals. Much of the work at the Roslyn Institute was focused on 'pharming': that is to say, the genetic alteration of animals in order to create

what Ian Wilmut calls 'living drug factories'.[12] Second, although Dolly constituted a major scientific breakthrough, every animal species that has been cloned has presented an extensive range of often severe abnormalities. The prospect of cloning healthy, 'normal' individuals is still remote.

In a broader scientific context, it is also important to understand that discussion on cloning has taken place in the context of a pendulum swing in favour of a broadly genetically determinist view of inheritance. The assumption is made that a cloned human being would, in effect, be an exact copy of the person whose DNA s/he shares, and would consequently develop in the same way that the 'original' individual did. As numerous commentators have pointed out, however, such a genetically determinist view does not stand up to scrutiny. Notwithstanding the fact that, as we have already seen, a clone would not be an exact genetic copy, environment plays an important role in development. What is more, the proportion of brain development that takes place postnatally is particularly large in humans.[13] In fact, as the French biologist Henri Atlan points out, the scientific success of technique of nuclear transfer itself runs counter one of the main tenets of genetic determinism; namely that the genome is a genetic 'programme' that contains the genetic blueprint for an organism.[14] It was originally thought that cloning by nuclear transfer would be impossible because a somatic cell nucleus would contain genes that had been modified by the developmental programme contained in the DNA. In his influential book *The Biological Time-Bomb*, published in 1966, Gordon Rattray Taylor speculated that, although it seemed that humankind might be on the threshold of major 'evolutionary perturbation', it seemed unlikely that human cloning could ever be achieved using adult somatic cells

> If the vegetative reproduction of people is ever achieved, it is much more likely that it will be done by taking a few cells from an early embryo than by shaving off a piece of skin, say, and growing on from there. The more specialized a cell has become, the harder it is likely to be to force it back up the stream of development to the unspecialized state from which it could be derived, by re-specializations, the whole range of specialized cells – nerve cells, kidney cells, muscle cells, and so on – which go to make up a living body.[15]

The cloning of Dolly, however, appeared to be experimental proof that the genome of an adult somatic cell could be 'reprogrammed' to act like an embryonic cell. Nuclear transfer shows that cytoplasmic proteins play an important role in the way in which the development of the genetic information is interpreted. It now seems, Atlan suggests, that the organism controls the activity of the genome, just as much as the genome controls the development of the organism.

Bioethics

Valeri Hartouni has neatly summarised four broadly bioethical objections to cloning: eugenic implications; the potential to 'commodify' human life; the disruption of kinship structures; and the undermining of conventional understandings of individuality and identity.[16] It is certainly the case that cloning has frequently been associated with fears relating to eugenics: that is to say, attempts to 'improve' the human gene pool. A key work in this respect is, of course, Aldous Huxley's *Brave New World*.[17] On one level, the clones in the novel are the products of Fordist standardisation and mass production, and 'Borkanovsy's Process' is a technique for cloning and deliberately arresting the development of embryos in order to produce Gammas, Deltas or Epsilons. Although Huxley was intrigued by the possibility of an engineered humanity, *Brave New World* is undoubtedly a dystopian critique of the control of minds and bodies by means of rigidly

controlled mass biological reproduction. After the Second World War eugenics lost any vestiges of respectability and became inextricably linked in both the public and ethical imagination with Nazi racial politics and Nazi eugenic experiments. (It is significant in this respect that Ira Levin's successful 1976 thriller *The Boys from Brazil* turns upon a plan to produce clones of Hitler.[18]) In the post-war era a discourse of human rights and human *dignity* was elaborated in order to protect the individual against eugenics. The individual is acknowledged to have an inalienable right to his/her 'own' DNA, which has not been manipulated by others, and the possibility of state-sponsored eugenics now appears to be remote. Any contemporary eugenics would come 'through the back door': it would be a eugenics that emerges from individual therapeutic choices.[19] What is more, these choices will seek to preserve or enhance the health and wellbeing of individuals or those close to them (siblings). At the same time the growing influence of genetic determinism has reinforced the idea that a manipulated or 'second-hand' genome constitutes an infringement of human rights. The emergence of molecular biology in the post-war era introduced the idea that DNA seemed to offer the key to understanding – and possibly manipulating – life itself, and it was in this context that the field of bioethics began to develop.

The geneticist Joshua Lederberg inaugurated a bioethical debate on human cloning in a 1966 article in *The American Naturalist*. Lederberg predicted that human cloning would faciliate eugenic practices based on the successful combination of sexual and clonal reproduction in the field of horticulture. He viewed cloning, or 'clonality' is as he called it, as being simply a technological extension of human endogamy: 'Leave sexual reproduction for experimental purposes; when a suitable type is ascertained, take care to maintain it by clonal propagation.'[20] Other commentators were not quite so sanguine. In 1972 James Watson published an influential article entitled 'Moving Toward The Clonal Man: Is This What We Want?' in 1971.[21] Watson suggested the possibility of a worldwide ban on human cloning in anticipation of technological developments. In general terms, the 1970s were marked by a growing realisation of the potential impact of biotechnology, which was emerging in the 1970s, and cloning was a way of talking about and dramatising the emerging field of bioethics.

Today, human reproductive cloning is effectively universally banned. The UK government, for example, drafted the Human Reproductive Cloning Act in 2001. This universal ban on human cloning is the legal expression of a widespread intuitive and visceral rejection of cloning. Leon R. Kass, a biochemist and ethicist at the University of Chicago took an initial stand against Joshua Lederberg's views and he has latterly articulated an uncompromising position on human cloning in his role as chair of the President's Council on Bioethics. He elevates the feeling of 'repugnance', which he claims is the most common reaction to cloning' to the status of a sort of common sense ethical wisdom:

> We are repelled by the prospect of cloning human beings not because of the strangeness or novelty of the undertaking, but because we intuit and feel, immediately and without argument, the violation of things that we rightfully hold dear. […] Indeed, in this age in which everything is held to be permissible so long as it is freely done, in which our given human nature no longer commands respect, in which our bodies are regarded as mere instruments of our autonomous rational wills, repugnance may be the only voice that speaks up to defend the central core of our humanity. *Shallow are the souls that have forgotten how to shudder.*[22] [Emphasis added]

In anthropological terms sexual reproduction is, Kass suggests, a biological truth that structures our views of identity, individuality and filiation. Kass, preoccupied with a defence of the nuclear family, sees cloning as the 'perfect embodiment of the ruling opinions of the new age'. The clone is the logical conclusion of contemporary narcissism, and is the ultimate 'single parent child'.

The widespread notion that cloning constitutes a threat to human *dignity* brings together issues of kinship and individual identity. DNA belongs to the individual and sexual reproduction guarantees that each individual will be the owner of unique and also, as it were, 'unpredictable' genetic material. In commonsense terms, although we know that we will inevitably inherit a whole series of characteristic from our parents, we also know that sexual reproduction is a genetic 'dicethrow', and that the precise nature of genetic inheritance is uncertain. Each time the two genomes will recombine in new ways. Philosophers and ethicists, most notably Habermas in recent times, have tended to express this concept of human dignity in terms of the Kantian categorical imperative.[23] We should never, it is claimed, treat a human being exclusively as a means, but rather as an end in itself. Habermas and others have extended the principle to include the general object to any individual being genetically pre-determined. (Rather than cloning, Habermas bases much of his discussion on the issue of genetic screening of embryos.) He argues that such genetic pre-determination would contradict Arendt's principle of *natality*, whereby the contingency of birth is a foundational event for the existential liberty of the individual. In other words, dignity is extended to encompass the principal of *autonomy*. This Kantian ethical principle is frequently expressed in the claim that a cloned child would live a life 'in the shadow' of the individual from whom they were cloned (the progenitor). The widespread cultural belief in genetic essentialism only serves to reinforce the assumption that a cloned child is in some sense 'reliving' a life that has already been lived.[24] The argument as also made that a clone would be the victim of confused and ambiguous family relationships, and would inevitably become the victims of discrimination.

Although the Kantian ethical stance has a self-evident validity, it is at the same time important to view debates on cloning in the context of the development of the idea of *reproductive rights*.[25] The idea of reproductive rights emerged in the post-war era in the context of artificial insemination. *In vitro fertilisation* was first carried out successfully when Louise Brown was born in 1978. IVF has been the most successful and flexible of ARTs (assisted reproductive technologies). IVF means that conception takes place *in vitro* before the embryo is implanted in the womb. By the mid-2000s it was estimated that around 1 million babies round the world had been created with the help of IVF. It is widely acknowledged that IVF has increased the rate of monozygotic (identical) twinning by a factor of three or more. In some senses these children are, in technical terms, clones. The refinement of IVF techniques has also facilitated PGD techniques (pre-implantation diagnosis), whereby embryo can be screened for inherited genetic disorders such as Tay Sachs disease and cystic fibrosis. A number of commentators have invoked the notion of reproductive rights in order to question the assumption that cloning is self-evidently unethical and that it contravenes basic human rights. John Harris, one such voice, describes a number of scenarios in which cloning might be an attractive option for 'normal' individuals and couples.[26] Cloning might, for example, work in tandem with IVF. Along these lines, he proposes the example of a couple in their forties who have been trying to have a child for a number of years, and IVF finally enable them to produce a single healthy embryo. Cloning would enable them to reimplant embryos a number of times until successful pregnancy is achieved. Cloning might also be used as a form of genetic screening. For example, a woman who knows she has a severe inheritable genetic disease could use her partner's genome combined with her own egg.

The couple's child would be a 'clone' of the father, but would have genetic components from the mother's egg. It should also be noted that, although the National Bioethics Advisory Commission ultimately rejected human cloning based on reproductive rights, it did, in its report, consider reproductive scenarios in which cloning might be used.[27]

The Uncanny: Freud, Žižek, Baudrillard

It is not surprising that bioethical discourse on cloning has attracted the attention of cultural theorists. Bioethical alarm at the prospect of human cloning is clearly linked to a fear of the *uncanny*, in the sense that the clone constitutes a crisis of the 'proper' and of the 'natural'; a comingling of the familiar and the unfamiliar. The uncanny is the revelation of what is private or hidden: that which should have stayed secret but has been revealed. There are two dimensions to this sense of the uncanny as it pertains to human cloning. First, there is Freudian sense of the uncanny as *double*.[28] Freud's thinking on the uncanny was, of course, influenced by his fascination with the doubles that populate the work of E.T.A. Hoffman. Freud interprets the fictional figure of the double or *doppelganger* as the return of the primary narcissism of the infant as well as the return of that which has been suppressed by the reality principle in the construction of the superego. Second, there is a more general sense that there is something wrong about delving too deeply into biological life process (of reproduction and development) that should properly remain hidden and unknown. As Nicholas Royle puts it, this is the feeling that, 'we are taking ourselves, and our world, to pieces; and this is happening in ways and at speeds that are beyond our control.'[29] Taking things slightly further, William Ian Miller suggests that the prospect of human cloning engenders feelings of disgust that are provoked by a recognition of the threatening 'messiness' of reproductive fecundity: 'Cloning is about making us pond scum, with all its disgustful associations with excess surfeit and eternal reduplicative recurrence'.[30]

Slavoj Žižek points to tensions that lie at the heart of this bioethical alarm over the uncanniness of the clone.[31] He argues that there is a significant shift in the fictional representation of the doubles at the end of the eighteenth century. Previously, doubles figured primarily in comic plots of misrecogntion. However, from this point on we see the depiction of feelings of uncanniness, of horror and anxiety, which are provoked by the possibility of meeting one's double. These feelings are distinctively 'modern', in that it is the Kantian subject, conceived as somehow 'substanceless' – as 'pure transcendental apperception' – which encounters its double as an *object*.[32] In a critique aimed at Habermas' ethical objections to cloning, as well as those of the Christian church, Žižek argues that the cloning of the genetic base is confused with a cloning of the 'Soul'. The drive to prohibit the cloning of humans paradoxically acknowledges a genetically determinist view of subjectivity.[33] The fact that genetic science promises an 'objective' knowledge of each individual's genome, gives rise to the fear that we will be robbed of our subjectivity.

Žižek, then, dismisses the fear of the clone as double, precisely because it is based on an outmoded and illusory understanding of subjectivity. In countering this notion Žižek draws, unsurprisingly, on Lacan. Neither genetics nor environment can fully account for the psychoanalytic dimension of the traumatic encounter, out of which we construct intricate symbolic systems: 'the fantasmatic core inaccessible to my conscious experience'.[34] And yet, cloning still appears to constitute some sort of threat to subjectivity for Žižek. In 'No Sex, Please, We're Post-Human', he makes what looks in effect like a fairly conventional bioethical point. 'Genome identification' is 'uncanny' to the extent that it reveals knowledge – about genetic diseases for example – upon which we may not be able to act. As far as cloning is concerned, once it, 'supplements sexual

difference, the game is over'.[35] In this way, Žižek expresses a sense of what we might call the contemporary biotechnological uncanny.

Cloning also features as a recurrent theme in much of Baudrillard's work, and he incorporates the image of the clone into his general critique of simulation and simulacra. Like Žižek, Baudrillard focuses on the symbolic dimensions that he feels would be lost with asexual reproduction. For Baudrillard, the clone cannot enter into any of the dramas of socialisation and identity – essentially Freudian dramas – that have their roots in sexual reproduction. In short, cloning entails a 'monstrous' parody of the mirror stage. There is no longer any image into which the subject can project itself, and consequently cloning abolishes the imaginary.[36] He goes further in identifying cloning with a wider, collective death drive. In an essay provocatively entitled 'The Final Solution' he points to the paradoxical struggle between mortality and immortality that lies within the cells of the human body.[37] That is to say, our cells have the potential to express pathological immortality in the form of cancer. Non-pathological cells, on the other hand, signal our mortality, in that they are destined to die. In this sense, evolution is the process whereby 'immortal' beings, which reproduce asexually, become mortal, sexed beings. Cloning, therefore, constitutes a 'great involution' a misguided attempt to liberate humanity from sex and death: 'Where once living creatures strove, over millions of years, to pull themselves free of this kind of incest and primitive entropy, we are now, through scientific advances themselves, in the process of recreating precisely these conditions.'[38] Cloning expresses a 'primitive fantasy' of a state of humanity before sex, differentiation and individuation: 'And so we are individuated, and proud of it; but somewhere inside, in an unconscious still deeper than the psychological unconscious, we never overcome, we never fully accept this separation and this individuation.'[39] For Baudrillard, cloning is symptomatic of the contemporary drive to extend the reign of the Same in order to suppress the threat of the Other. The clone in this sense is the ultimate avatar of both the biotechnological focus on the disembodied genetic code and the general allergy to otherness that characterises the standardisation and simulation of contemporary life: 'By becoming transparent in its genetic, biological and cybernetic being, the body even develops an allergy to its own shadow.'[40] In claiming that we are in the process of reversing millions of years of evolution and recreating a state of 'incest and primitive entropy'.[41]

There is something unsatisfactory in both bioethical and theoretical discourses on cloning. Both are caught in what W.J.T Mitchell calls a double consciousness, combining critical thinking with the magical thinking of iconoclasm. In short, the hysterical fear of the uncanny never seems far away. Literature, on the other hand, offers the potential for these images to resonate, as Mitchell puts it, without smashing them. *Never Let Me Go* and *The Secret* both add new dimensions to the bioethical and philosophical approaches that have been dealt with up to this point. They do this by inhabiting and exploring the repulsion that characterises so many of the reactions to human cloning look at so far. As far as *The Secret* is concerned, although the portrayal of a cloned human's struggle for identity adds compelling nuance to existing discourse, ultimately the fictional treatment of the clone narrator's disgust and shock at the realisation of the circumstances of her conception ultimately reinforces Hoffman's fairly clear bioethical rejection of human cloning. Similarly, on one level, the cloned characters in Ishiguro's *Never Let Me Go* stand as a warning against the brutal instrumentalisation of human life. There is, however, something more in *Never Let Me Go*. Whereas Iris in *The Secret* eventually becomes fully 'human', the cloned characters in *Never Let Me Go* remain different: they are not, and cannot be *like us*. At the same time, they also remind us of something about *ourselves* which is not like us.

The Secret

Eva Hoffman's *The Secret* explores the struggle for individuality of a clone. The novel, set in the near future, is narrated by a young woman – Iris – from the United States, who recounts the process by which she becomes aware that she is the cloned twin of her mother. Iris' struggle to assert her own individuality is, in one sense, a fictional representation of the bioethical notion of a 'life in the shadow'. Once she finds out that she is a clone, she has an acute sense of living a life that, in some senses, is not hers. The novel also draws on the bioethical theme of reproductive cloning as an expression of narcissism. Iris' mother, Elizabeth, is a high-achieving single parent who, once she had attained a certain level of success in her career, suddenly feels 'flat'. Elisabeth's motives for having a cloned child are clearly narcissistic: an expression of the competitive and neurotically controlled 'downshifting' of the contemporary high-achieving middle classes. 'She had me. I became her new project, her great enterprise' (2): 'In New York she had hustled in an antheap of collective activity, the press of a thousand bodies. I was to be an individual, a creative work. Paradoxically. Ironically' (4).

In a wider sense, the novel is also a Baudrillardian fable of contemporary life: cloning is an expression of a society characterised by simulation. Iris is hothoused, surrounded by a range of 'virtual' toys and experiences and provided with intense attention her mother. After a successful career in 'global finance' in New York, Iris' mother moves to a less brash environment in a small college town. Here, Iris experiences a 'simulacrum' of a happy childhood in what is artfully designed to look 'big rambling house'. Iris is effectively locked in claustrophobic and asocial relationship with her mother and she is not able to experience and understand the social differentiation (distinction between parents and children, building of friendships, etc.) that is part of a 'normal' upbringing. Otherness is provided not by interaction with other children, but by 'robodolls, cuddly and talkative, of all races and colours' (6).

Iris' psychological struggle might also be seen as a fictional exploration of Baudrillard's claim that the clone is unable to experience the mirror stage. The mirror stage is, of course, a phase of self-recognition *and* separation. Iris is unable to achieve this separation from her mother. 'My mother was enough for me; she supplied all my needs. She focused on me and cuddled me and loved me half to death' (5). She describes looking at her mother as being like looking into an 'enlarging looking glass', in which she becomes indistinguishable from her mother: 'My unformed, liquid sounds blended with her responding voice […] Then I had a languid sense of fullness, of safety' (6). Her early childhood is described in explicitly womblike terms:

> We moved in our own special atmosphere, as if in a semi-liquid surround, an amniotic fluid that incorporates us both and within which there was a connecting passage or cord […] (16)

Around the age of seven, she starts looking at herself in mirrors 'like an addict', and her face in the mirror starts to break up into separate features, which seemed to have nothing to do with me, with being Iris.' (p. 15)

The novel is punctuated by Iris' counselling sessions with her 'Adviser', and the recurring theme of these discussions is the fact that any kind of Freudian framework is inappropriate for her dilemma. The Adviser suggests broadly Freudian psychoanalytic explanations for these feelings: the sense of not 'fitting in' is the expression of a 'narcissistic wound'. Iris, however, contests this Freudian reading:

> Freud. The grand anatomist of the individual self, the diagnostician of its late civilized ailments, the herald of its disintegration and demise. I wonder what he would have made of my dawning twenty-first-century condition. As it is, and

> much as I might wish it otherwise, he is no more relevant to me than those kings and queens of yore. (15)

Iris' intense closeness to her mother results, unsurprisingly, in a disturbed family relationship when Iris' mother meets a new partner, Steven, who is alarmed by Iris' desire to sleep in the same bed with him and her mother Elizabeth. Iris is not 'acting her age' in two ways: she is behaving like a very small child who craves the physical presence of parents, but also, she is sharing in her mother's sexual attraction to Steven. (Towards the end of the novel, as part of the process of resolving her fractured development, she does, as a young woman, sleep with Steven.)

Iris begins to develop the sense that there is something – IT, as she labels it – that is not-her; her 'mineral self'. [A]n intuition of another kind of Being, inorganic, non-biological, non-human entirely. The Weirdness. The Thing. The black matter lurking in the back of myself' (13). Although her Adviser suggests that this IT equates in some way to the unconscious, Iris insists on a keener material sense that there is something in her which is not her. The suggestion is clearly that Iris is in some way aware that she is inhabited by a genome that is not entirely her own. She is, in this respect, conscious of her own uncanniness. The final revelation that Iris is a clone, which comes when uncovers her birth certificate, pushes these feelings to crisis point, and Iris travels to New York to confront the scientist who cloned her. She literally 'meets her maker' and experiences a vertiginous sense of dislocation as she confronts the details of her 'conception': I was merely animated matter, programmed into a semblance of life by carefully applied moisture and heat. (102)

After separating violently from her mother and visiting her aunt, Iris briefly experiences a delayed 'healthy' mirror stage. She dresses in her aunt's clothes whilst staying in her apartment and looks at herself in the mirror:

> As I looked at myself in the mirror, in one of Janey's well-cut suits, I felt transformed into a three-dimensional object, a solid that could be seen from the outside and therefore could be inferred to have real, internal existence. For I was beginning to learn that you cannot be a subject without being an object, visible to others, with distinct outlines and occupying a distinct space. (177)

It is only when Eva engages in a relationship with Robert, a scientist whom she meets on an Internet chat group, that she finally and belatedly moves through her prolonged stage of primary narcissism. She sees Robert as 'Someone Else', someone who is 'Not Me', as she puts it, and begins to experience herself as an 'authentic being': 'Authenticity is a two-person experience', the Adviser had pronounced. I had to give him credit' (255).

In *The Secret* it seems that the traditional fictional sense of clonality as a lack of depth has now been transferred to the clone herself. Iris seems to confirm the bioethical fear that a clone would be caught within constraints defined by distorted lines of biological filiation. As Hoffman herself indicates in an interview which appeared shortly after the publication of the novel, *The Secret* is a literary exploration of a fairly conventional set bioethical fears.[42] The novel displays its bioethical stance in the episode where Iris attends a panel discussion on 'human design' in New York: a debate between a pro-design 'evolutionary aestheticist', Dr Margaret Donaldson, and a 'radical-conservative ethicist', Professor V. Parakash. Iris' narration of the event portrays sees the evolutionary aestheticist as glibly confident in her assertion that 'artful play' is justified as a serious act of creativity and that technology is a form of nature:

> She wasn't suggesting anything extreme, she assured us; but play was at the very heart of creativity, and let's face it, in relation to life, we were now the creators.

> Therefore we should take responsibility for our role; and the most responsible way to go about redesigning ourselves was to be playful. (106)

For Hoffman, cloning is disturbing because it exposes how we are made, robbing life of some of its 'mystery': it 'commodifies' the human. Iris' disgust at the thought of her scientific conception evokes the doubly uncanny sense of being confronted with what should properly have remained hidden and which reduces her origin to that of 'pond life':

> There was no way to put together what I was and what I now knew. I'd seen how I was made and by whom; and the knowledge turned me into a ludicrous joke. I had looked into the whirling vortex of the vat, into the back-time before my own birth, as it is forbidden to do. (101)

At the same time, human cloning is also a fictional device that allows Hoffman to explore broader themes of attachment, exile and identity. On the one hand, the novel uses Iris' status as a clone to investigate a purely psychoanalytic conflict between mother and daughter. Iris' problem is, Hoffman admits, one of symbiosis and differentiation. Iris' status as a clone is, in this sense, merely a fictional device to explore a particularly intense bond between mother and daughter: a form of attachment to which Hoffman is sensitive, being the post-war child of immigrant Holocaust survivors from Poland. On the other hand, the cloning is presented, as we have seen, as an inevitable technological consequence of the contemporary narcissitic, individualistic and consumerist tendencies of society in the United States. Although Hoffman claims that her intention was to stage an encounter between psychoanalysis and radical new possibilities in the fields of genetics and neurobiology, it is hard to disagree with Brenda Webster assessment that, in the novel, the 'psychoanalytic view "wins" in the end.'[43] Although the novel does give dramatic narrative form to bioethical issues, it fails to stage an encounter between new technologies and psychoanalysis. The novel does not, as Hoffman hopes, reveal interesting ways in which Iris' subjectivity is 'constructed' from a new set of circumstances. Instead, Hoffman shows us the process whereby Iris comes 'into her humanity'.[44]

Never Let Me Go

In *Never Let Me Go* a pervasive sense of the uncanny can be read, following Žižek, through the indeterminate subjectivity of the clone narrator. Ishiguro conveys this indeterminacy by employing what, as Martin Puchner argues in a perceptive review of the novel, initially appears to a familiar technique from his previous fiction.[45] A single narrator recounts earlier episodes from his or her life in a measured but also apparently neutral, even bland, way, but at the same time hints at repressed traumas or crises. The narrative effect in *Never Let Me Go*, however, is subtly but significantly different. In 'England, late 1990s' Kathy H., aged thirty-one, talks about her current life as a 'carer' and her education at a boarding school called Hailsham. Gradually, Kathy reveals, almost in passing, that all of the children at Hailsham are clones who are destined to become 'carers', nursing older clones through a series of organ donations and eventually becoming 'donors' themselves. At the end of this process of organ donation, the cloned humans are said to 'complete'. This may be a euphemism for death, or it may indicate some form of vegetative state. It seems that the school sees its role as in some sense as progressive, in that it seeks, in contrast to other similar establishments, to provide a 'humane' environment and education. On the other hand, the school also instills a sense of difference in the pupils. The pupils learn, usually by a process of insinuation, but occasionally more directly, that they are clones. They also become aware that their

presence gives rise to barely concealed feelings of revulsion in some of the guardians. Miss Emily, the 'head guardian' at Hailsham admits to this revulsion – as well as her determination to overcome it – when she is visited by former pupils of the school:

> We're all afraid of you. I myself had to fight back the dread of you almost every day I was at Hailsham. There were times I'd look down at you all from my study window and I'd feel such revulsion. (264)

Although Kathy does clearly see the facts of the clones' lives as significant, she does not present them as being in any way shocking. It is this disjuncture which, Puchner suggests, is uncanny: Kathy simply does not seem to recognise the full horror of what she is telling the reader:

> The lack of outrage more than anything else makes one wonder whether she is not somehow deficient, perhaps in a way one might expect from a manufactured creature. It is in this sense that Kathy H.'s voice can appear *uncanny*, a term that captures the disturbing mixture of the familiar and the unfamiliar characteristic of nonhuman automata and doubles, to which Sigmund Freud first attributed the term.[46]

The reader is left to wonder why Kathy H. – an otherwise apparently perceptive, sensitive individual, who clearly has a recognisable interior life (a 'soul') – can accept her difference and her fate with such equanimity. It may be that the pupils are simply conditioned into a passive acceptance of their fate. However, there are also suggestions within the narrative that the pupils may have been genetically manipulated in some way. They are told, for example, that they cannot have children, and for this reason the school is relatively tolerant of precocious sexual activity amongst the pupils.

As Puchner points out, there is another important layer of indeterminacy in the narrative, in that the reader is, on at least one occasion, addressed directly as a fellow clone when Kathy H. says: 'I don't know how it was where you were, but at Hailsham we had to have some form of medical almost every week' (13). Ultimately, the reader is drawn into, included in the psychological reality of the clone's existence. The clones are not *copies*, but rather *copiers*. In a neat reversal of the Romantic *doppelganger* as a sinister and fantastical harbinger of death, the pupils from Hailsham cultivate the hope that they might be able to locate their 'possibles', in other words the individuals from whom they were originally cloned. In this way, the novel might be read as an attempt to show that the clones are 'like us'. We, too, are copiers, and their vain search for 'possibles' constitutes an affecting parallel with our own efforts to give narrative coherence to conventional biological kinship relations.

However, there is also a sense in which Ishiguro's clones reveal even more profound shared uncertainties with non-cloned humans. Shameem Black analyses the novel along these lines in order to read it as a critique of art as a vehicle for humanist empathy.[47] Art plays a key role in the life of the students at Hailsham: their art work is collected as evidence of the fact that, contrary to received wisdom, they have 'souls'. Consequently, a general economy of art and artworks develops within the school: students are encouraged to develop their creativity and, as well as particularly notable work being collected and archived by the teacher known as Madame, the students themselves participate in 'Exchanges', where they buy and sell their work. Kathy and her fellow students hear rumours that their art is valued as evidence of their human 'souls', and they invest hope in the notion that evidence of this kind may allow them in some instances to 'defer' their donations. Rather than conferring humanity upon the students, however, this economy of artworks has the effect of reinforcing the hold that the

ultimately inhuman system Hailsham and its complicity with the programme of 'donations' has over the students. The aesthetic economy of exchange at Hailsham is not mirrored in the outside world, where the students' organs are regarded, precisely as 'donations'. Tommy is the only pupil who appears to experience anger at his fate. He refuses to participate in the art economy at Hailsham and when he does produce his own work in the hope of deferring his donations, it appears to depict animals as inhuman, mechanistic systems:

> The first impression was like one you'd get if you took the back off a radio set: tiny canals, weaving tendons, miniature screws and wheels were all drawn with obsessive precision, and only when you held the page away could you see it was some kind of armadillo, say, or a bird. (171)

Significantly, Kathy finds herself 'fantastically drawn' to these creatures, partly because she recognises an appealing vulnerability in them. In a similar way, the reader is also invited to perceive the vulnerability of Kathy and her fellow students. What is more, we might also recognise the inhuman workings, the 'tiny canals, weaving tendons' – the coils of DNA perhaps – that characterises our own humanity.

In focusing on the portrait of Hailsham as a concentrationary universe Black evokes one of the central problems that an event such as the Holocaust posses of art as a medium for empathy. Any attempt to represent these experiences aesthetically seems to undermine the very idea of empathy as a vehicle for 'understanding' the lives of the cloned children. Black suggests that we should go further than simply seeing the fate of Kathy and her fellow clones as in some way mirroring or even illuminating our own existential situation. Instead, the common ground we might share with Kathy and her fellow pupils is contained in the cryptic statement made by one of teachers at Hailsham who says, 'you've been told and not told. You've been told, but none of you really understand' (81). We have been told about cloning, but we have not recognised fully its 'inhuman' significance. In one sense, the Kathy and her fellow students might be viewed as fictional exemplars of the Kantian bioetical imperative discussed previously: they are human beings treated as a means. However, from another perspective, they remind us of both the pervasive instrumentalisation of much human life, and the fact that we are composed of 'inhuman' mechanisms that can be abstracted - and even *extracted* – from our bodies.

Conclusion

In the popular imagination, the figure of the clone gives rise to what Mitchell calls iconoclasm: the clone is a false idol, created by an other, and it must be rejected. This iconoclasm is a significant component of bioethical discourse on cloning: we should, we are told, be repulsed by the figure of the clone. Along similar lines, the clone evokes a sense of the uncanny, of that which is simultaneously familiar and disturbing. In short, our imaginative resources for dealing with cloning are impoverished. A range of fears provoked by biotechnological developments are projected on to the clone. So, the clone is either the avatar of an engineered, or an increasingly narcissistic humanity. It may be that the possibility of human cloning suggests that we are, at some level, 'pond scum'.

By placing cloning in a wider context, it may be possible to expand these imaginative resources. Bioethical debates have tended to see cloned life as wholly instrumentalised. However, on a scientific level, cloning has developed within the context of a range of reproductive and genetic technologies, including IVF and stem cell technology. Whilst few would wish to challenge the current universal ban on human cloning, it remains possible that cloning techniques will in the future become part of the

repertoire of reproductive technologies, as is the case with IVF. In addition to these bioethical concerns, cloning raises questions about our understanding of the human. Much bioethical discourse conceives of life as sacred in a secular sense, and yet it is doubtful that Kass' 'shudder' at the very thought of the clone will help us to negotiate the politics of manipulated human reproduction. As Black suggests, Ishiguro's *Never Let Me Go* suggests ways in which ethics might be reconfigured and expanded for a posthumanist age. We may well not wish to clone humans, but it may also be that we are able to develop a more sophisticated ethics of concern for the mechanisms of life that science reveals. Humanist ethics invite us to feel empathy for that which is irreducibly human within ourselves and others. In a posthuman context, it may be necessary to extend these feeling of empathy to encompass the aspects of our own, and other lives that, as Black puts it, 'are less than fully human'.[48]

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[1] Roger-Pol Droit, 'L'identité perturbée', in Henri Atlan, et al, *Le Clonage Humain* (Paris : Seuil, 1999), p. 117 [My translation]
[2] Valeri Hartouni, *Cultural Conceptions: On Reproductive Technologies and the Remaking of Life* (Minneapolis: University of Minnesota Press, 1997), p. 118
[3] W.J.T. Mitchell, *What Do Pictures Want? The Lives and Loves of Images* (Chicago/London: University of Chicago Press, 2005)
[4] Mitchell, *What Do Pictures Want?* p. 19
[5] Glenn McGee, 'A Pragmatic Approach to Human Cloning' in *The Cloning* Sourcebook, edited by Arlene Judith Klotzko (Oxford: OUP, 2001), p. 175
[6] Mitchell, *What Do Pictures Want?* p. 23
[7] Kazuo Ishigoro, *Never Let Me Go* (London: Faber & Faber, 2009) & Eva Hoffman, *The Secret* (London: Secker & Warburg, 2001)
[8] John Harris, *On Cloning* (London: Routledge, 2004), p. 5
[9] Jean Rostand, *Can Man Be Modified?* Trans. Jonathan Griffin (London: Secker & Warburg, 1959)
[10] David Rorvik, *In His Image: The Cloning of a Man* (London: Hamish Hamilton, 1978). See also Barbara J. Culliton, 'Scientists Dispute Book's Claim That Human Clone Has Been Born', *Science*, Vol. 199. March 24, 1978. p.1314-1316.
[11] See Masahito Tachibana, et al, 'Mitochondrial Gene Replacement in Primate Offspring and Embryonic Stem Cells, *Nature*, vol. 461 (17 September 2009), pp. 367-372.
[12] Ian Wilmut and Roger Highfield, *After Dolly: The Uses and Misuses of Human Cloning* (London: Little, Brown, 2006), p. 41
[13] See Leon Eisenberg, 'Would Cloned Humans Really Be Like Sheep?' in *The Cloning* Sourcebook, pp. 70-79
[14] Henri Atlan, 'Possibilités biologiques, impossibilités sociales', in *Le Clonage Humain*, pp. 21-23
[15] Gordon Rattray Taylor, *The Biological Time-Bomb* (London: Thames & Hudson, 1966), pp. 25-26.
[16] Hartouni, *Cultural Conceptions*, p. 120
[17] Aldous Huxley, *Brave New World* (London: Chatto & Windus, 1932)
[18] Ira Levin, *The Boys from Brazil* (London: Random House, 1976)

[19] See Troy Duster, *Backdoor to Eugenics* (London: Routledge, 2003)
[20] Joshua Lederberg, 'Experimental Genetics and Human Evolution', *The American Naturalist*, vol. 100, no 915 (September-October 1966), p. 527
[21] James D. Watson, 'Moving Toward the Clonal Man: Is This What We Want?' *The Atlantic Monthly*, Volume 227, No. 5 (May 1971), pp. 50-53.
[22] Leon R. Kass, 'The Wisdom of Repugnance' in *Flesh of My Flesh: The Ethics of Cloning Humans*, edited by Gregory E. Pence (Oxford: Rowman & Littlefield, 1998), p. 20
[23] Jürgen Habermas, *The Future of Human Nature*, trans. William Rehg, Hella Beister & Max Pensky (Oxford: Polity, 2003).
[24] See Søren Holm, 'A Life in the Shadow: One Reason We Should Not Clone Humans', in *The Cloning Sourcebook*, pp. 203-207
[25] See Daniel Callahan, 'Cloning, Then and Now', in *The Cloning Sourcebook*, pp. 106-107. Callahan argues that, given the fact that reproductive rights have become almost a 'moral absolute', they represent the most potentially powerful argument to be deployed at some future point in favour of human cloning.
[26] Harris, pp. 31-33
[27] Callahan, 'Cloning, Then and Now', p. 107
[28] Freud, Sigmund, *The Uncanny* (London: Penguin, 2003)
[29] Nicholas Royle, *The Uncanny* (Manchester: Manchester University Press, 2003), p. 3
[30] William Ian Miller, 'Sheep, Joking, Cloning and the Uncanny', in Martha C. Nussbaum & Cass R. Sunstein, eds, *Clones and Clones: Facts and Fantasies About Human Cloning* (New York/London: W. W. Norton & Company, 1998), p. 84
[31] Slavoj Žižek, 'Of Cells and Slaves', in Elizabeth Wright and Edmond Wright, eds, *The Zizek Reader* (Oxford: Blackwell, 1999), pp. 301-320.
[32] Žižek, 'Of Cells and Slaves', p. 315-316
[33] Žižek, 'Of Cells and Slaves', p. 313
[34] Žižek, 'Of Cells and Slaves', p. 313
[35] Žižek, 'No Sex, Please, We're Post-Human'. http://www.lacan.com/nosex.htm. Accessed 15/01/10
[36] Jean Baudrillard, 'Clone Story', in *Simulacra and Simulation*, translated by Sheila Faria Glaser (Ann Arbor: University of Michigan Press, 1994), p. 97
[37] Jean Baudrillard, *The Vital Illusion*, edited by Julia Witwer (New York: Columbia University Press, 2000)
[38] Baudrillard, *The Vital Illusion*, p. 8
[39] Baudrillard, *The Vital Illusion*, p. 13
[40] Baudrillard, 'The Hell of the Same', p. 122
[41] Baudrillard, *The Vital Illusion*, p. 8
[42] See Webster, Brenda, 'Conversation with Eva Hoffman', *Women's Studies*, vol. 36 (2003), pp. 761-769.
[43] Webster, Brenda, 'Conversation with Eva Hoffman', p. 766
[44] Webster, Brenda, 'Conversation with Eva Hoffman', p. 767
[45] Martin Puchner, 'When We Were Clones', *Raritan: A Quarterly Review*, vol. 27, no. 4 (Spring 2008), pp. 34-49
[46] Puchner, 'When We Were Clones', p. 36
[47] Shammem Black, 'Ishiguro's Inhuman Aesthetics', *Modern Fiction Studies*, vol. 55, no. 4 (Winter 2009), pp. 785-807.
[48] Shammem Black, 'Ishiguro's Inhuman Aesthetics', p. 803