

Chapter 10

A Unique Copy: The Life and Identity of Clones in Literary Fiction

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Abstract Cloning is a typical form of human engineering, which is almost universally outlawed because of ethical objections. But are these objections valid, or are they overly influenced by fictional horror stories? In order to investigate whether clones necessarily lead instrumental lives, have a ‘closed future’, or lack an identity because they are ‘someone else’, this chapter discusses fictional accounts of clones. Literary fiction provides a rich picture of clones’ lives, demonstrating that clones do not necessarily have to evoke distrust or horror. The mirror that clone fiction holds up to us shows us possible worlds in which a ban on reproductive cloning is not essential to preserve human dignity. Clones may be copies, but they are also unique and original individuals. If we are afraid of cloning, this is not because clones are different or scary but only because society may treat clones inhumanly.

I knew a little about cloning... but so little that I had not got past carrots, where it all started, to speculate about the notion of duplicating entire higher organisms, such as frogs, donkeys, or people. [...] In thinking about this possibility, I found it alarming. I began to see that the duplication of anything complex enough to have personality would involve the whole issue of what personality is—the question of individuality, of identity, of selfhood. Now that question is a hammer that rings the great bells of Love and Death... (Le Guin 1973)

Human cloning seems to be one of the most far-reaching manifestations of the concept of human engineering. Whereas current forms of artificial reproduction,

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such as IVF, are still dependent on a fertilisation process for which an egg cell and sperm are needed, cloning even skips this last step of the ‘natural’ process of reproduction. A clone can be made out of any single somatic cell from either a man or a woman, combined with an egg cell from which the nucleus has been removed. By inserting this clone into the uterus, a genetically identical copy of the cell donor can be born. This possibility of cloning that can be used to ‘recreate oneself’ has amazed and inspired many.

Nevertheless, current technology does not seem ready for this type of cloning yet. Since Dolly the sheep (1997), scientists have succeeded in producing live clones from somatic cells (that is, regular body cells, not egg cells or sperm cells) of several fully grown mammals. However—unless we are to believe the implausible stories of the Italian doctor Severino Antinori or of the Clonaid company that was founded by the Raelian sect—they have not succeeded in doing so with cells of human beings. Nor will this type of cloning be in use soon: not only does the cloning of human beings require experiments that are highly doubtful in the present state of technology, but reproductive cloning is also strictly forbidden in most countries (Brownsword 2008, p. 36). UNESCO’s Universal Declaration on the Human Genome and Human Rights (1997) states in Article 11 that reproductive cloning should not be permitted because it violates human dignity. Article 3(2) of the Charter of Fundamental Rights of the European Union forbids reproductive cloning of human beings as well, as it violates a person’s right to integrity.

Why is cloning universally disapproved of, and is this a justifiable position? Identical twins are also clones of each other, and society does not object to them. This makes it interesting to further investigate our mistrust or even revulsion of reproducing human beings by means of cloning. Why are we afraid of clones? We do not yet know any clones from real life, and scientific literature can therefore not give us any empirical insights into the life of a clone. This means that we mainly base our image of clones on fictional literature and movies. Images as those from *Brave New World*, *The Boys from Brazil* or *The Invasion of the Body Snatchers* have been engraved into our collective minds. Clones portrayed in fiction are usually no longer humans but products; they do not lead their own lives, but are objects used by megalomaniac individuals or an elitist society. They have no identity because they are actually someone else. Yet that is not the whole story. In other, perhaps lesser-known literary fiction such as *The Cloning of Joanna May* or *Never Let Me Go*, clones are portrayed as normal people leading their own lives. They struggle with the same questions about identity, love and death with which characters in so many other literary works are confronted.

In this chapter, I would like to illustrate the richness of the portrayal of clones in literary fiction, with an emphasis on their life and identity in light of their being clones. How instrumental are their lives in relation to their donors or to society? What does being a clone mean for their sense of identity, and how does society treat them? This journey through the literary landscape will take us through several possible worlds that show how clones do not necessarily have to evoke feelings of distrust or horror. Although the universal ban on cloning renders it quite

implausible that one of these possible worlds will become our future world, this does not make the journey any less relevant. On the contrary, the fictive worlds hold up a mirror to us and invite us to reflect on our own, real world and to think about the future we would like to live in.

Cloning and Identity: ‘If You are Me, Who Am I?’

In order to understand the descriptions in this chapter, some understanding of cloning and identity is necessary. There are roughly two techniques for cloning human beings: embryo splitting and somatic cell nuclear transfer (SCNT). Embryo splitting or embryo twinning is a primitive form of cloning in which a morula (a zygote that has divided a few times, consisting of 8 or 16 cells—i.e., an embryo at an early stage) is split into two or three parts that continue to grow on their own. This process can be repeated several times with the newly developed parts. Embryo splitting regularly happens in nature as well, for this is how identical twins are formed. This type of cloning can be used to create clones that are genetically identical to each other. However, they will not be identical copies of an already existing person.

This last is the most important difference with SCNT, which is the more advanced and complex of the two cloning techniques. In this technique a cell nucleus, taken from any body cell that is not a sex cell or gamete, is transplanted into an egg cell from which the nucleus has been removed. This egg cell can subsequently develop into an embryo and finally into a neonate, first in a test tube and later in the uterus. The resulting clone will have the genome of the donor, although the copy can never be completely genetically identical, because the mitochondrial DNA (a small amount of DNA that is located outside the nucleus) does not belong to the donor of the body cell but to the donor of the egg cell. As described by Wouters (1998, pp. 39–41), mitochondrial DNA has a minimal influence on a person’s makeup. Thus, SCNT does not strictly speaking result in a copy that is completely genetically identical, and can therefore technically speaking not be called cloning. To simplify matters I will leave this distinction aside, as this aspect is neither addressed in fiction nor in the social debate about cloning.

Cloning can have two functions. In *therapeutic cloning*, cloned embryos or cells are used for medical research or therapy. Here, the clones are not implanted and do not grow into human beings. In *reproductive cloning*, the cloned cells are developed further so that they become a ‘reproduction’ of the donor. Unlike reproductive cloning, therapeutic cloning is allowed in several countries, although sometimes under strict conditions. Since I am interested in questions concerning the lives of clones, I will limit the scope of this discussion to reproductive cloning.

As explained in *Where Idem-Identity meets Ipse-Identity* (Hildebrandt et al. 2008), identity has multiple meanings. Paul Ricoeur made an interesting distinction between idem-identity and ipse-identity. *Idem* refers to being the same. From

an external perspective it is determined whether one person is the same as another—for example the same as yesterday, or belonging to a similar group or category. Dr Jekyll is the same person today as he was yesterday and also, in certain ways, the same person as Mr Hyde; his body has continuity in time. Idem-identity thus relates to identification.

Ipse refers to being yourself, as experienced from an internal perspective. Thus, it is concerned with the construction of identity. A person's identity is based on experiences that are used to construct a life story—a process that is stimulated by a sense of self resulting from others' responses to one's self. In other words, ipse-identity is created by interpreting the way others interpret us. This is why Dr Jekyll struggles with his identity: the way in which he is approached as a good, respectable man in social life conflicts with his awareness of his morally bad side, which is taking an increasingly strong hold on him. This is reflected in society's horrified reactions to Mr Hyde's behaviour. While Dr Jekyll shares the same idem-identity with Mr Hyde, he has a split sense of ipse-identity.

A strong interaction exists between idem-identity and ipse-identity. The way others perceive us—for example as Englishman, southerner, school friend, blond or Muslim—influences our sense of identity. Moreover, our ipse-identity influences our behaviour and therefore in turn affects the way others identify us. For clones, this interaction is especially important because the relationship between idem and ipse perfectly illustrates the paradox in the identity of clones. Clones share their donors' idem-identity and *therefore* struggle with their ipse-identity. Being identical makes you struggle with your identity. This paradox is succinctly phrased by Wendy Doniger (1998, p. 136): 'If you are me, who am I?'

Aim and Spoiler Alert

The subject of cloning is present in many works of fiction. However, since the technique has only been known since the second half of the twentieth century, cloning is a less frequent motive or theme than, for example, the Doppelgänger. Aldous Huxley was far ahead of his time when he described the possibilities of cloning in *Brave New World* in 1932. A large number of clone stories were published in the 1970s when the general public, including writers, first began to realise the possibilities of cloning. This can also be seen in the quote by Ursula Le Guin at the beginning of this chapter. In this first period clones could mainly be found in science fiction; other genres followed later, although to a lesser extent, and clones have become widely embraced as literary characters.

In this chapter, I will discuss a selection of novels that include cloning as a key theme. I will limit myself to English literature, where most books concerning cloning can be found. I made a selection of nine novels that cover a wide range of genres: serious literature [Aldous Huxley, *Brave New World* (1932), Fay Weldon, *The Cloning of Joanna May* (1989), Kazuo Ishiguro, *Never Let Me Go* (2005)], suspense literature [Ira Levin, *The Boys from Brazil* (1976)], science fiction [Richard Cowper,

Clone (1972), Kate Wilhelm, *Where Late the Sweet Birds Sang* (1974), Arthur C. Clarke, *Imperial Earth* (1975), Pamela Sargent, *Cloned Lives* (1976)] and young adult literature [Alison Allen-Gray, *Unique* (2004)]. These novels discuss several types of cloning from various perspectives, thus covering a broad spectrum of responses to cloning in literary fiction. I arranged the books according to the different possible functions of cloning: to duplicate extraordinary humans, to reproduce despite infertility, to create a workforce for support and to satisfy scientific curiosity.

Spoiler alert: In this discussion I will give away the plots of several novels. Readers that are unfamiliar with these books (particularly those of Ishiguro and Levin) are urged to read them before reading this chapter.

A Copy of a Unique Original

One of the most important reasons for cloning is to recreate or reproduce a person with unique characteristics. This is not only the case for celebrities with unique characteristics such as Mozart, Gandhi, Einstein or Michael Jordan, who are popular examples of potential clones in the academic literature, but also for persons that one is close to.

In *Unique* (2004) by Alison Allen-Gray, the main character Dominic Gordon discovers that he has an older brother called Nick, whom he has never known. At his grandfather's he finds a photo album containing pictures of someone who looks like himself. However, they depict situations that he has never been in, or where he is older than he is now. He slowly realises that his parents have cloned his older brother, who was a promising scientist, after his tragic early death and that he is the product of this experiment. In his search for what happened a journalist discovers his story, and from that moment on he is pursued by the worldwide press. Dominic is unique because, being a clone, he is the only person in the world that is not unique. The journalist who followed him dies in a cliffhanger scene, and Dominic's story can remain a secret. However, Dominic decides to share his life story with the world, but he combines it with his own message: *all* humans are unique and irreproducible, including clones.

The same motive of cloning a loved one, but this time for very different reasons, can be found in *The Boys from Brazil* (1976) by Ira Levin. After many experiments, Josef Mengele has succeeded in cloning humans as part of his grand plan to recreate his hero, Adolf Hitler: 'his Führer reborn'. He has placed 94 newborn Hitler clones with adoption couples that fit the profile of a young mother and older father employed as a civil servant. Approximately 12 years later the fathers need to be killed, as the death of his father was crucial to Hitler's development. An entire apparatus of killers pays the fathers a visit. It is during these visits that we first encounter the boys from Brazil: arrogant know-it-alls, slightly artistic, with sleek hair. When the original murder plan threatens to fail, Mengele takes the initiative, or rather his Browning, and visits the families himself. When he finally stands face to face with one of the clones he falls to his knees, drooling in worship: 'Mein

Führer!’ Failure seems imminent, since the killers have gotten nowhere near the almost 100 clones who, in Mengele’s calculations, are necessary for having a good chance of reproducing Hitler. Still, there appears to be some hope for Mengele in the end. The novel ends with a description of one boy who dreamily draws a picture of a large stadium with a charismatic speaker in it, ‘sort of like in those old Hitler movies’.

The way in which being a clone influences the clones’ lives differs substantially in these novels. The boys from Brazil do not know that they are clones and neither do their parents, who have adopted the boys. Only one of the boys finds out—from Mengele himself, shortly after he has murdered the boy’s father: ‘You are he, reliving his life!’ It remains unclear how the truth about his existence will affect the boy. His last thought about Mengele is that ‘he was pretty weird’, but at the same time he is very much aware of the power he has over life and death. The novel leaves it up to the reader to imagine what the rest of the boy’s life—and the future of the world—will look like.

Dominic from *Unique*, on the other hand, is well aware of the fact that he is a clone. Although this knowledge seems restricting and alienating at first, eventually it gives Dominic the opportunity to reinterpret his own life. All his life his father has been pressuring him to become successful and to develop in a certain direction, but now Dominic understands that he has been living in the shadow of his older brother Nick, whose success he is expected to repeat. However, Dominic proves to be a different person, because apart from genetics, environmental factors also play a role in shaping a person. For example, Dominic is more interested in arts than in science. *Unique* is a Bildungsroman in which Dominic gets to know himself and, in the end, learns to appreciate himself the way he is: ‘I’d rather be me than anyone else.’ Eventually, he accepts the truth about his being a clone and starts seeing it as a sign of love for Nick and for himself, both of his mother and the doctor who ‘engineered’ him. Having learned from his experience, he can now continue to live his own life.

Diversity in Unity

The cloning of exceptional persons occurs in two other novels as well. It is interesting to discuss them separately here, as the themes of these novels revolve more around the complex relationship between donor and clone, as well as between different clones, than in the previous novels.

In *Cloned Lives* (1976) by Pamela Sargent, a bioscientist called Hidey Takamura convinces the brilliant astrophysicist Paul Swenson to have himself cloned. Paul simply has too many talents for one lifetime. Takamura wants to be the first person to clone human beings in the new millennium, as soon as the worldwide ban on cloning no longer applies. After a process of prenatal development in artificial wombs, five clones of Paul are born: Ed, Mike, Al, Jim and Kira. The novel subtly avoids mentioning how Kira, a female, was born out of a

man's cell—a nice artistic freedom of second-wave feminism, stressing how differences between men and women are caused by nurture rather than nature.

Even though the clones look exactly alike, they develop individual preferences and characters during their youth. Each clone further develops one of Paul's talents, such as writing novels (Jim), mathematics (Ed) and biomedical research (Kira). Despite the fact that the clones grow apart later in life, they have a special connection that sometimes prevents them from having relationships with other people. Also, the outside world treats them as a strange breed of human beings that are a little scary, or even as 'part of the Swenson clone'—thus suggesting that they are one being. Some are more troubled by this than others. Jim is one of the characters who suffer from their heritage: 'He felt he was under an obligation to use his talents for humanity's benefit.'

On the other hand, there are others who confidently follow in Paul's footsteps. Al devotedly continues Paul's work on the moon. When Kira starts to work there too, some sort of family reunion takes place during which the cat is let out of the bag—having been put there by Takamura at the beginning of the story. Paul has been frozen and preserved on the moon, and can be brought back to life because of Kira's efforts. After some starting problems, Paul becomes his old self again and, having been absent for 20 years, continues his life on Earth. In the meantime cloning has gradually become accepted by society, and now humanity faces another fundamental choice: to die, or to continue to a second life in which cloning is no longer necessary because everybody can keep on recreating themselves until the end of time?

The questions with which Joanna May and her clones are confronted in *The Cloning of Joanna May* (1989) by Fay Weldon are a lot more earthly and common: they wrestle with relationships, beauty ideals and ageing. Carl May, a nuclear energy tycoon with cowboy traits and a gigantic ego, had Dr Holly clone his wife without her knowing when she was 30 years old, as she would only get older and Carl rather preferred young women: 'It seemed a pity to let it all go to waste, when you could save it so easily.' The four clones were implanted into the wombs of different women, and grew up separately to become individual persons: Jane, Julie, Gina and Alice.

The novel follows the lives and love stories of all characters during the year that the clones are 30 years old, all struggling with their love lives. The plot twists when the clones meet each other by accident and recognise themselves in one another. They are told by Dr Holly that they are not just twins, but clones. In the meantime, Carl has told Joanna of the cloning during a fight: 'I proved then that you were nothing so particular after all [...] by making more of you, and the more I made of you the less of you there was.'

Paradoxically, however, Carl May has ultimately helped Joanna May become herself by cloning her. After having met her clones, Joanna May no longer feels like Mrs May but refers to herself as 'just Joanna': 'When I acknowledged my sisters, my twins, my clones, my children, when I stood out against Carl May, I found myself.' Jane, Julie, Gina and Alice also learn to live with their new selves in more or less stabilised relationships.

Both novels show how clones develop individually and how their lives differ not only from each other but also from their donor's. The five clones of Paul Swenson and the four of Joanna May have different characters and preferences and lead their own lives. While Joanna's clones only discover that they are clones when they are 30 years old, Paul's clones are aware of their special status their entire lives, all the more so since their environment treats them as clones. Being different marks their lives: 'The others resented us, forcing us together. We had no friends. We sat together, wishing we were like other people.' At the same time, however, they push each other away: 'Oddly enough, their similarities seemed to aid in driving them apart, as if each resented the part of himself he saw reflected in the others.' Their identities are therefore based on their own lives rather than on their common status as clones. Mike, for example, finds the reunion on the moon threatening and dreads 'having to spend time with people who had nothing in common with him except genes. Every meeting and conversation with them threatened his sense of identity.' Because they have strong and idiosyncratic personalities, the clones succeed in developing their own identities and following their own paths.

Jim, the weakest of the group, is the only one who struggles with living in the shadow of his 'father': '*I'm living Paul's life.* [...] He saw himself as a puppet, walking through an ever-repeating cycle.' Jim threatens to commit suicide but his brothers and sister convince him that his life does have value, and he struggles through life as a writer and bohemian. Jim's first novel shows a world full of mirrors and broken glass, thus reflecting his problematic sense of identity: Jim feels fragmented and transparent, wondering who he is when looking in the mirror that are his brothers, sister and father. He still does not know the answer at the end of the novel, but being a writer turns out to be perhaps the most important of all the clones' talents. As a writer he is able to place the technology of the second life in a broader context and to show how this can help in dealing with the human condition. Eventually, he finds his place in the world when Kira tells him, 'You may be the most important of us now, you can write for people, show them how they might realize their dreams. The rest of us don't have much experience with that.'

At the same time, *Cloned Lives* puts the issue of the identity of clones in perspective by portraying a different paradox concerning identity: is a person who is brought back to life after death still the same person? At first the 'man named Paul [...] who sought feebly to imitate Paul's gestures and appropriate his memories' does not resemble the old Paul. As his memories of the past return, he gradually becomes himself again: '*Paul's back.*' However, his memories feel unnatural to him, as '[t]here was no emotional connection with the images of people and far-off places that had settled uneasily into his mind, with the pressured, somewhat frantic individual named Paul Swenson who had existed twenty years before.' He is the same person (*idem*) but not 'his old self': his *ipse*-identity keeps evolving in his second life. The crux of these passages is that they emphasise the relativity and dynamics of identity. This is summarised by Kira in a conversation with Jim:

'I don't know who's in that room, Kira, but it isn't Paul Swenson. He's not the same person'.

'Are you the same person after twenty years? Are you the person he knew before? Think about that. Anyone would be different after so long a time. You're different too'.

This explains why each clone develops his or her own identity and is not bound by the identity of—and the identity with—their donor or fellow clones. A person's self-consciousness (ipse-identity) does not coincide with their genetic construction (idem-identity). It is a combination of genes and environment, nature and nurture, of the clone and the outside world that determines individuality. This combination is unique for every clone.

The Cloning of Joanna May also discusses the formation of identity in human relations, but here cloning plays a different part and is, in fact, a major influence on the identity building of the five women—not because they are treated as clones, but because it holds up a mirror to them and opens their eyes. Through each other they see how they live their lives: relatively dependent and docile in their sexual relations. Together, they learn to take control of their own lives and to be themselves.

The crucial importance of seeing—yourself through the eyes of others—in the development of an individual identity is emphasised in the novel by a word play on the phonetic identity of 'eye' and 'I'. At the start of 'the year of strange events', Joanna reads a story of a girl in Holloway prison that ripped out her own eye, reminding her of Matthew 18:9: 'If thine eye offend thee, pluck it out.' However, this is self-deceit, 'a fine biblical recipe for preserving thy view of thyself as a fine and upright person'. When Joanna hears that she has been cloned she starts wondering who she is: 'The great "I" has fled, say the eyes in the wallpaper: only the clones remain, staring. If the I offend thee pluck it out.' This identity crisis forces her to rediscover herself; all her life she has played the part of 'wife of' but that is not who she truly is. In the course of a year she finds a new identity as an independent woman: 'I, Joanna May. No longer "Eye". Acting; not observing.' The biblical formula for self-deceit can now be reversed: 'I was no longer just a wife; I was a human being; I could see clearly now. If thine eye offend me take a good look at yourself. If thine I offend thee, change it.'

The function of cloning in the novel is to reflect and reinforce Joanna's journey to self-knowledge. Whereas at first having been cloned feels as a loss of identity—'these depletions of my "I"'—eventually the clones strengthen her ipse-identity:

wife I might be, but only part of me, for all of a sudden there was *more of me* left. The bugles had sounded, reinforcements came racing over the hill; Joanna May was now Alice, Julie, Gina, Jane as well. Absurd but wonderful! [emphasis added]

The clones thus provide Joanna with an opportunity to be herself, more than ever before. The cloning of Joanna May, which started out as a man's trick to keep his wife forever young and subdued, backfires on him. It is a liberating act that frees women and allows them to learn how to be themselves.

The Need for Offspring

Reproducing extraordinary individuals may be a plausible reason to clone human beings, but there is another valid reason: the desire or need to pass on one's genes to the next generation. Infertile humans can resort to adoption or to sperm or egg cell donation, but the wish to have genetically related children can be very strong. Moreover, this kind of reproduction may be the only way for human beings to survive in a society where infertility rates are high.

In *Imperial Earth* (1975) by Arthur C. Clarke, Duncan Makenzie wishes to continue his grandfather's dynasty on Titan, one of Saturn's moons. Since Malcolm was genetically infertile, he decided to have himself cloned on Earth in order to have a son. His son Colin had himself cloned for the exact same reason, and now this second clone, Duncan, in turn travels to planet Earth to create a third-generation clone of Malcolm. During his visit on Earth, he starts to wonder about life and his motivations for continuing the dynasty through cloning: 'Duplication was neither good nor bad; only the goal of it was of importance. And this goal was not supposed to be selfish.' When he eventually brings back a clone to Titan, it turns out not to be a clone of Duncan himself but instead of a talented childhood friend, Karl, whom he had run into on planet Earth and who had died unexpectedly. In the end, Duncan decided that Karl's qualities were more useful for continuing the dynasty under the current circumstances than his own qualities would have been.

A much graver situation features in *Where Late the Sweet Birds Sang* (1974) by Kate Wilhelm. The whole world, including its human population, has been destroyed by an ecological disaster, except for a small community on the United States East Coast that had prepared itself in time for the catastrophe. Most people in the community have become infertile, and the only way to save them from extinction is cloning. This technique is developed by David, a young scientist, and his family. The community rapidly takes shape with new generations of clones. However, the younger generations quickly outshine the older ones, and soon there is no more room for the older, individualistic family members: David is banned from society and the others die out quickly. Group identity becomes the new norm; the groups of clones form unities that can mystically communicate and share feelings even over large distances. Some clones become fertile again, but they try to perfect the technique of cloning in order to make sure that there will be no need to resort to a way of reproducing that is unnatural to them.

Slowly it becomes evident that the later generations are degenerating. They are extremely good at literally reproducing what they have learned, but they have lost all creativity and the ability to think for themselves. Mark, the illegal and naturally born son of first-generation clones Molly and Ben, grows up outside the community and does develop individuality and survival skills. In contrast to the community of clones who eventually prove to be incapable of survival because they lack improvisation skills, Mark survives and is able to create a new community elsewhere. After visiting the old colony, which is destroyed and deserted,

he returns home and sees dozens of children full of potential. Mark smiles with happiness '[...] because all the children were different'.

The lives of clones are thematically very different in these novels. In the twenty-second-century world of *Imperial Earth*, cloning is widely accepted, although not common practice. Nobody on Titan is surprised that the Makenzies are clones. Duncan does not experience it as something special; it is sufficiently clear that being someone's genetic copy does not mean having to lead the same life. Malcolm, Colin and Duncan look alike but are different in character, because the subtle differences they had when born were actively stimulated to develop further during their upbringing, so that they would fit best in their time and place. When taking the opportunity to visit the masterpieces of Da Vinci, Picasso and Levinski in the National Gallery of Art in Washington, DC, Duncan becomes aware of the difference between a copy and an original. He recognises the artwork from technically perfect copies, but now he witnesses unique originals. His own decision to break the genetic dynasty underlines that he himself is not only a technically perfect copy but also a unique original.

In the apocalyptic world of *Where Late the Sweet Birds Sang*, clones also differ from their donors. They frequently rebel against the older generation because they feel different, but amongst themselves they are hardly unique individuals. The old generation cannot keep them apart or remember their individual names, and instead provides them with numbers. Every group of around six clones has such a close bond that together they are one being. When one of them experiences pain they can all feel it, and when one of them is in danger in some place the others instinctively know the shortest route there. Their lives are determined by 'the comfort of being brothers and sisters who were as one, with the same thoughts, the same longings, desires, joys'. The novel initially seems to criticise the prevailing individualisation of the Western world in the 1970s; the 'cult of the individual' is a dead end. A clone's sense of self is based entirely on being part of the group: 'We aren't separate, you see. [...] If you turned me inside out, there wouldn't be anything at all there.'

Subsequently, however, as the novel follows its main character Mark in rejecting the community as a goal in itself, it gradually becomes clear that it is the lack of individuality that is the real dead end: 'They're all lies! I'm one. I'm an individual! *I am one!*' The loss of creativity and the ability to improvise that comes with the increasing sense of community turns out to be deadly.

That Mark's identity is related to his artistic ability is no coincidence. His mother Molly, banned from the clone society after an expedition that rendered her individualistic, used to make alienating paintings in the same house where Mark now creates clay statues. Through these statues he tries to give meaning to his life and his environment. The importance of an individual creative identity is expressed by Molly in a key passage:

That other self that speaks to you, it knows what the shape is in the clay. It tells you through your hands, in dreams, in images that no one but you can see. [...] Mark, they'll never understand. They can't see the pictures. [...] You come here because you can find that self here, just as I could find my other self here. And that's more important than anything they can give you, or take away from you.

Mass Production and the Clone Gap

A third reason for cloning humans in literature is to generate an army of support. This motive can already be found as a subtheme in *Where Late the Sweet Birds Sang*, where a community of clones creates a new generation of clones to carry out labour. The work clones are programmed in such a manner that they accept this without complaining: ‘Two castes [...], the leaders, and the workers, who were always expendable. [...] And this would be the final change; none of the new people would ever think of altering anything.’ This passage refers to the most famous dystopia in modern literature: *Brave New World* (1932). In this novel Aldous Huxley imagines a world in which five castes are engineered that each have their own tasks. The highest classes, the Alphas and Betas, form the intellectual and executive classes, while the dirty, manual work is carried out by Gammas, Deltas and Epsilons. These lower classes are produced via the so-called ‘Bokanovsky process’, a simple form of cloning through embryo splitting: ‘Making ninety-six human beings grow where only one grew before. Progress.’ Everyone is conditioned to be happy with his or her caste and place in society. This is achieved through sophisticated prenatal processes while the clones are being ‘bottled’ on the production line, as well as in their sleep during infancy. Moreover, the natural development of Deltas and Epsilons is chemically disturbed during the bottling process in order to produce half or complete imbeciles who will not ask stupid questions. The happiness of citizens is ensured by the availability and carefully controlled distribution of the happiness drug soma—‘Everybody’s happy now.’

This eternal happiness and the subordination of each individual to society are challenged by an outsider, ‘the Savage’, who was born the old-fashioned way by means of a mother and a womb (dreadful obscenities in the new clinical world) and grew up in a reservation. As a circus attraction, this Savage is guided through a world that is unintelligible to him and which he can only describe in the words of Shakespeare: ‘O brave new world that has such people in it.’ Eventually, having shocked the higher castes too much with his utterances and behaviour, the Savage is put away in a hut where he hopes to live his life in seclusion. However, he is soon discovered by tourists who pressure him to join in a group orgy that causes his downfall.

A different gap in society with clones as the lower caste can be found in *Never Let Me Go* by Kazuo Ishiguro (2005). This novel tells the story of Kathy, who at 32 looks back on her nearly completed life. She talks about how she grew up at Hailsham, a closed, protected and elitist institution, and the triangle that developed between her, Tommy and Ruth. Similar to the students, the reader only gradually discovers what they are and what kind of world they live in: they are clones, predestined to donate their organs. After leaving school they start working as carers for older donors and eventually become donors themselves. Unless complications occur earlier, they will have fulfilled their life’s purpose with the fourth donation when they ‘complete’—probably a euphemism for dying.

Tommy and Ruth have an on-and-off relationship. Even though Kathy and Tommy would be a better match, they never managed to start a relationship. After

Ruth ‘completes’ with her second donation, however, Kathy becomes Tommy’s carer, and they can give their love free reign. They hear a rumour that when two clones love each other enough they can receive a stay of donations. The rumour, however, is false, like many of the myths that circulated among Hailsham students. Miss Emily, the former school principal, tells them how grateful they should be for having grown up at Hailsham: ‘Look at you both now! You’ve had good lives, you’re educated and cultured.’

Hailsham turns out to have been an attempt of Miss Emily and others to show the world that clones are humans too, by giving them a proper education and displaying their art: the mirror of the soul. However, the climate changed and Hailsham had to be closed. Society does not want to return to a cloneless world full of illness, but neither can they face the reality behind the system of organ donations. The clones—‘[s]hadowy objects in test tubes’—are now again hidden away in unknown places under wretched conditions. This is possible because they are not ‘like us’; they are ‘less than human’.

Both *Brave New World* and *Never Let Me Go* describe a lower class of clones that consists of humans whose lives are instrumental in relation to the ruling class. However, the books are very different and express diverse meanings. *Brave New World* is not so much about cloning or human engineering as it is about social engineering. It is a political novel showing the consequences of a totalitarian society that has perfect control over economic production processes. The clones exist to serve society, and all of them, including the Alphas and Betas, are conditioned to consume as much as possible in order to keep the economy running. Here planned economy translates into planned life: ‘People are happy; they get what they want, and they never want what they can’t get. [...] [T]hey’re so conditioned that they practically can’t help behaving as they ought to behave.’ Clones who start thinking about their lives and realise that the ultimate goal in life is not happiness or pleasure but rather sharpening the mind and gaining knowledge are seen as a threat to the state and banned to an isolated island.

Huxley shows the problematic consequences of utilitarianism and simultaneously argues against state ideology and totalitarian regimes. His use of reversal as a major stylistic technique is very effective, as exemplified by the word ‘mother’ being an insult and Shakespeare’s works being seen as uncivilised and full of nonsense. Thus, Huxley shows the consequences of society’s constant strive for perfection. This underlines the message from the book’s motto: ‘Perhaps a new century will start; a century in which intellectuals and the cultivated classes will dream of ways to avoid utopias, to go back to a society that is not utopian, less “perfect” and more free.’ Freedom also means making one’s own decisions, including the choice to *be able to be unhappy* (cf. [Chap. 12](#), this volume):

‘But I don’t want comfort. I want God, I want poetry, I want real danger, I want freedom, I want goodness. I want sin’.

‘In fact,’ said Mustapha Mond, ‘you’re claiming the right to be unhappy’.

‘All right then,’ said the Savage defiantly, ‘I’m claiming the right to be unhappy’.

Not to mention the right to grow old and ugly and impotent; the right to have syphilis and cancer; the right to have too little to eat; [...] the right to be tortured by unspeakable pains of every kind. There was a long silence.

'I claim them all,' said the Savage at last.

At the same time, *Brave New World* has some interesting things to say about the life and identity of clones, even though they—literally and figuratively—play a subordinate role in the novel. Society is appalled by the concept of identity. The idea is that everybody loses their sense of identity by dissolving into the community with the help of soma and group orgies. Everybody who is 'somebody', with their own ideas, gets banned. Clones within a Bokanovsky group have no identity apart from a sense of community that gives them the idem-identity of being a group member. Not only do the clones lack an individual ipse-identity, they can also be seen as repulsive as a group. They are described as swarms of insects:

Twin after twin, twin after twin, they came—a nightmare. Their faces, their repeated face—for there was only one between the lot of them—puggishly stared, all nostrils and pale goggling eyes. [...] In a moment, it seems, the ward was maggoty with them. They swarmed between the beds, clambered over, crawled under [...].

The long rows of 'identical midglets', the 'twin-herds', the 'human maggots' and 'lice' form a 'nightmare of swarming indistinguishable sameness'. They exemplify the terrible absence of individuality in a *Brave New World* in which art has made place for shallow 'feelies'—multi-sensory films—for the masses. In the same way that clones connect with their group, every individual connects only with the here and now. The humans, similar to the 'feelies' they experience, only give meaning to the pleasures of the moment, which makes it impossible for them to construct a life story with a history and a future, and consequently to create a unique identity. Just like the clones swarm about in 'indistinguishable sameness', the totalitarian planned economy and the planned life swarm about like a plague of grasshoppers, ensuring that nothing remains of the meaning that could have been attributed to life and being human.

Clones are experienced as scary creatures in *Never Let Me Go* as well. Even though she is concerned with their fate, Madame—one of the school's patrons—shrinks back in fright from the clones: '[...] she saw and decided in a second *what we were*, because you could see her stiffen—as if a pair of large spiders was set to crawl towards her.' A crucial difference with *Brave New World* is that there the clones are seen as sordid inferiors by both the Savage and the reader, which makes the clones seem despicable and creepy. In *Never Let Me Go* the reader sees through the eyes of the clones and gets to know them as ordinary persons. They experience the same developments and feelings, love and sorrow that are part of ordinary human life.

This novel addresses two interrelated ethical objections that are frequently discussed in the academic literature about cloning: the treatment of human life as instrumental and the 'closed future' of clones, which we also encountered in *Unique*. Although the clones of Hailsham maintain the illusion that they can lead

their own lives, they simultaneously and often subconsciously realise that their future is already fixed.

This is underlined by a stylistic technique that is applied throughout the novel. Kathy tells her life story in such a way that the reader feels the story has already been told before: it is as if Kathy and the reader are trying to remember the story together. Episodes are often introduced with demonstratives such as ‘that’, as in the sentence ‘what happened *that day* at the pavilion when we were sheltering from the downpour’ (emphasis added). Kathy also uses the phrase ‘of course’ rather abundantly. For example, when describing her search for a song in second-hand shops in Norfolk—Judy Bridgewater’s ‘Never Let Me Go’, a song that meant a lot to Kathy when she was young—she remarks: ‘Then of course I found it’. Through this technique, the novel subtly suggests that the future is fixed and that everything had to happen the way it did. Perhaps this is the main theme of Ishiguro’s fiction: the realisation that time cannot be reversed, and that choices once made, however sensible they seemed at the time, will have consequences for the rest of your life.

The lives of the clones in *Never Let Me Go* are ambiguous, for even though their future is fixed, the clones can lead full human lives by making choices about the things that matter to them. Possibly, within the limits of their destiny of becoming donors, Kathy and Tommy could have led very different lives, but they realise this only afterwards. Ishiguro’s fiction demonstrates that, at the end of the day, all people have a ‘closed future’. The freedom to make choices—demanded so passionately by the Savage in *Brave New World*—has two sides to it. What are the crucial choices in life is usually not discovered until long after those choices were made, when it is too late to reverse the choice or to change one’s mind. Thus, *Never Let Me Go* suggests how, despite their closed future, the lives of clones are not fundamentally different from those of other humans.

A similar ambiguity can be found in Hailsham. The clones play an instrumental part in the organ donation programme and as such form a lower class, but the students of Hailsham have a privileged position among the clones; they are the elite of the lower class. On the one hand, this is a place that brings happiness to the students; the name can be read as Hails-ham, a home or place of hails, referring to the old English use of ‘hail’ as ‘health’ or ‘well-being’. On the other hand, it is a place where the clones are being fooled into thinking they have health or well-being: it is a Hail-sham. In both senses, Kathy’s identity is largely based on her position as a Hailsham student.

The clones base their identity mainly on the role they are given and the group connected to that role. At school the clones’ identity is determined by the different roles they take on as students, at the Cottages by whether or not they went to Hailsham, and later in life by being a carer or organ donor. The first time the clones realise they are different is when, at a young age, they challenge Madam and see how she trembles with revulsion:

The first time you glimpse yourself through the eyes of a person like that, it's a cold moment. It's like walking past a mirror you've walked past every day of your life, and suddenly it shows you something else, something troubling and strange.

When they grow older they try to find comfort in being a clone by searching for 'possibles', persons that could be their genetic donors: 'We all of us, to varying degrees, believed that when you saw the person you were copied from, you'd get *some* insight into who you were deep down, and maybe too, you'd see something of what your life held in store.' Kathy looks for 'possibles' in porn magazines because she sometimes has strong sexual desires and reasons: 'It has to come from somewhere. It must be to do with the way I am. [...] So I thought if I find her picture, in one of those magazines, it'll at least explain it. I wouldn't want to go and find her or anything. It would just, you know, kind of explain why I am the way I am.'

Even though their identity is partly determined by *what* they are—being treated differently as clones—the question of *who* they are is at least equally important for the clones' identity. This is vaguely filled in by the possible genetic donors, but the 'possibles' are another Hailsham myth that the clones only partly believe in. In the end, their identity is determined, like that of 'normal' humans, by their daily contacts with friends, classmates, companions and loved ones, all of whom will from time to time hold up a mirror in which they will see something 'troubling and strange': themselves through the eyes of others.

The Curious Scientist

Sometimes there is no intrinsic reason to clone except for curiosity: it is interesting to investigate whether cloning is possible and, if so, how it works. In *Unique* and *Cloned Lives* we already encountered curious scientists who were the driving force behind cloning. This can be seen in *Unique* when Professor Imogen Holt explains to Dominic why she made him: 'I wanted to see if it *could* be done.' While the doctors in these novels try to apply cloning to a useful purpose, Professor Miriam Pointer in *Clone* by Richard Cowper (1972) has no such intentions:

'When you first thought of making them, Miriam, did you have any idea what you were doing?—apart from breaking the law, I mean'.

'No, not really,' admitted the Professor. 'It just seemed a rather fascinating piece of research'.

Pointer's main goal was to investigate whether she was able to produce a child with a fully eidetic memory from two special parents. The four clones, Alvin, Bruce, Colin and Desmond were cloned through the simple technique of embryo splitting. As with the sorcerer's apprentice, however, this fascinating piece of science becomes bigger than she can handle. When the clones are 15 they meet each other and discover they have supernatural powers. They change Pointer's head into funny animal shapes and teleport her naked to the hallway. In an extreme

response to these boyish pranks she uses strong chemicals to erase their memories and with that their identities.

It is 3 years later when the main character, Alvin, regains his memory: ‘His lost identity streamed back into his consciousness like sand in a twisted hour-glass. [...] “I am Alvin Forster, an eidetic freak. *And there are four of me.*”’ He reunites with his brothers, and together they are able to take on the entire world: ‘It wasn’t just a case of 4 times 1, but of 1 to the power of 4! Or maybe even 4 to the power of 4!’ They are not human, but ‘a supra-human species of virtually uncalculable powers’. Remarkably, they are not a scary species that threatens humanity. Alvin and his brothers are pure, innocent creatures with ‘qualities of saintliness’. However, humanity is not ready for them, and instead of saving the world they retreat to a parallel world.

The lives of the clones in *Clone* are closely related to their sense of identity. The main part of their lives they are unaware of each other’s existence or of the fact that they are clones. They live normal, somewhat boring lives, especially during the period they have lost their memories. After they are reunited and rediscover their combined strength—they are able, for example, to communicate with their thoughts and manipulate things at a distance—their sense of identity changes radically:

He closed his eyes and opened them again upon Desmond and Colin and Bruce, who were but Alvin and Alvin and Alvin. Four to the power of four. But four what? ‘Clones’ she had called them. ‘I am we,’ he murmured, ‘we are I.’

The four clones increasingly become a unity of four and eventually manifest themselves as one person. Seamus O’Duffy wants to destroy the clones by order of the European chiefs of state because they are seen as a threat to humanity. When he talks to the clone through a video connection and asks, ‘And who might you be, sir?’, the clone blinks his eyes for a moment:

‘Well, do you know,’ he said, ‘I’ve never really thought about it.’ Then his brow cleared. He smiled. ‘My real name could well be Adam,’ he said. ‘Adam Clone.’

The merging into one newborn—or newly engineered—post-human also has a practical reason. All four are in love with Cheryl, their saving angel who accompanied them during all of their adventures. Now they no longer have to compete with each other or be distracted by each other. Cheryl gets four for the price of one.

This witticism, very fitting for the hippie age in which the novel was written, is typical for the humoristic tone of the novel. *Clone* offers a light and casual perspective on the future possibility of human cloning, which makes it different from most of the other novels discussed above. It is also exceptional in clone fiction to plainly portray clones in such a positive light; Cowper’s clones take a great leap forwards in the evolution of humankind. However, this message is buried beneath a layer of humour and slapstick, and the novel does not want to be taken seriously. According to Cowper, clones are nothing but ‘a rather fascinating piece of fiction’.

Conclusion

Our tour through the lives of clones in literary fiction has provided us with a wide variety of images. While in some literary fiction the worries about the instrumental lives and identity crises of clones that contributed to the worldwide ban on cloning are confirmed, we have also seen examples of fictional worlds in which the cloning of human beings is quite compatible with human dignity. In some stories clones are depicted as frightening creatures: as insects (Huxley), as part of the doom scenario of Hitler's resurrection (Levin) and as alien creatures with mystical powers that lack individuality (Cowper, Wilhelm). In several other stories, however, the reader gets to know clones as ordinary people with everyday problems (Clarke, Weldon), even if they are regarded as frightening by the societies they live in (Allen-Gray, Sargent, Ishiguro).

Upon closer examination, the literary works discussed create a fairly nuanced image of the life and identity of clones. The assumed instrumentality of clones emerges as an important theme, especially in cases where the clone is a copy of an exceptional person or has come into existence to save the human species from dying out. For some, such as Dominic (*Unique*) and Jim (*Cloned Lives*), this leads to a 'closed future'. They live their lives in the shadow of their instrumentality and are unable to determine their own path in life.

However, the image of a closed future generally turns out not to be true. Dominic mainly suffers from living in his brother-donor's shadow because his father raises him as if he were his brother. Eventually, he manages to break free from his father's expectations and is then able to live his life the way he wants, together with his mother. The brothers and sister of Jim, too, show us that the donor does not necessarily have to be an oppressive shadow; he can also be a shining example to his clone children. The notion that a clone's future becomes fixed once they encounter their donor—'so this is me in thirty years'—can also be reversed. This knowledge, as suggested by Julie in *The Cloning of Joanna May* ('you might learn something from yourself grown old'), can also be used to make better-informed choices about how to live your life, taking your possible future into account. Whether somebody would experience life as a clone as a burden restricting personal freedom is therefore questionable: in the novels, this only happens when clones with an introverted personality are raised under pressure to fulfil a particular destiny. Although the clones in *Never Let Me Go* lead instrumental lives and are part of an organ donation programme, they are able to lead their own lives within this context. For Kathy, her own choices—or lack of choices—about her relationships are what matters in life. The tragedy of the missed relationship with Tommy is greater than the tragedy of being an organ donor. But the most influential choices only become clear when it is already too late. Also in this sense, clones are just like regular human beings. At the end of the day, the future appears to be closed for everyone.

Ishiguro's fairly deterministic attitude towards life is not shared by Huxley or any of the other writers that champion individual autonomy. Freedom of choice,

including the Savage's choice to be unhappy, is necessary to shape one's own, individual identity. Life as a clone threatens to minimise individuality—as Jim observes, the clones are 'denied even the small pleasure of feeling like unique individuals'. Nevertheless, on average the novels seem to refute this negative view of clones' identity building. At first, Joanna May experiences an identity crisis when she hears she was cloned ('if the I offend thee pluck it out'), but she is soon able to convert this feeling into the positive feeling of a new and more authentic identity ('if thine I offend thee, change it').

Dominic goes through the same phase when he realises that every human being is unique, including himself as a clone. For Kathy and her friends, their upbringing at Hailsham provides them with the capacity to become complete human beings, independent from their 'possibles', their donors. Several novels underline that identity building is a dynamic process in which memories play an important part. Memories are, in fact, the stories of our lives: without memories, Paul in *Cloned Lives* and Alvin in *Clone* would have been nobody, or at least not 'themselves'. The continuous stream of events in a human life has at least as much influence on the sense of self as genes or upbringing. Clones do not differ from other human beings in this respect either. It is as Kira remarks: 'Anyone would be different after so long a time.'

Many novels thus show that clones are perfectly capable of developing and shaping their own identities, but there are also novels that convey a different image. In some novels, clones form groups and possess a strong collective—rather than individual—sense of identity. However, this only occurs in the novels of Wilhelm and Cowper, where clones share a mystical and telepathic bond. In these books, cloning fundamentally changes something in their being, and as a consequence the clones identify with the group instead of with themselves. The clones in these books are no longer human beings. In several other stories a group identity is present as well, but this originates from other causes. In *Brave New World*, group identity is created through technical and social conditioning, while in *Cloned Lives* and *Never Let Me Go* society helps develop group identity by treating the clones as groups.

These last novels show that clones are again not very different from 'normal' humans. The clones from the 'Swenson group' develop individual identities mainly because they recognise themselves in their group members and want to be different, just like Kathy and her classmates at Hailsham. Group bonding is a human trait and a social necessity that helps form identity. From time to time, a mirror is held up to us when interacting with friends, peers and loved ones. In a way, for clones this mirror shows a double reflection: they can directly recognise themselves in the other person as well as see themselves through the eyes of that person. This can complicate their identity, but it can also give them an opportunity to construct a stronger individuality for themselves.

Altogether, it becomes clear from the life and identity of clones in literary fiction that cloning does not necessarily violate human dignity or personal integrity. The social fear of cloning appears to be rooted in spectres from fiction, such as Mengele's boys from Brazil, the human maggots from *Brave New World* and

the mystic clones in the novels by Wilhelm and Cowper. The last two seem a lot less threatening compared to the novels of Levin and Huxley, as the mystic and telepathic clones of Wilhelm and Cowper are clearly fictitious and do not pretend to be real. While Levin's doom scenario and Huxley's dystopia are also unrealistic, they do provide a realistic warning for what might happen if reproductive cloning were to be used on a larger scale to redevelop society in a way that deviates from constitutional democracy. However, the novels also show that the danger does not lie in the clones' genome but in the way they are conditioned. It is authoritarian fathers and totalitarian life that make clones what they are. In addition, the social divide portrayed by Ishiguro is not a dystopia because of the development of clones, but because society has gone too far in its urge to engineer health. As explained to Kathy by Madame, biotechnology has driven humanity out of society:

I saw a new world coming rapidly. More scientific, efficient, yes. More cures for the old sicknesses. Very good. But a harsh, cruel world. And I saw a little girl, her eyes tightly closed, holding to her breast the old kind world, one that she knew in her heart could not remain, and she was holding it and pleading, never to let her go. That is what I saw [...] and it broke my heart.

Anyone travelling through the landscape of clone fiction can see that, instead of horror images, the novels generally give a nuanced image of clones. The mirror that clone fiction holds up to us shows us possible worlds in which a ban on reproductive cloning is not essential to preserve human dignity. Genes only tell a small part of the story. Clones may be copies, but they are as unique and original as their donor. If we are afraid of cloning, this is not because clones are different or scary but because society may treat clones inhumanly. Thus we come full circle: clones are different only because they are seen and treated as different.

This circle can be broken, as shown by our fictitious heroes Dominic, Kira, Duncan, Kathy and the clones of Joanna May. Anyone who treats them as humans gives them the freedom to live their own lives and construct their own identities. Yes, they are different because they are copies, but they are also unique because they differ as individuals from their donor—just as every human being is unique, cloned or non-cloned, enhanced or non-enhanced. Are we not all different?

Bibliography

Fiction (Edition Used Between Brackets)

- Allen-Gray A (2004) *Unique*. Oxford University Press, Oxford
 Brownword R (2008) *Rights, Regulation, and the Technological Revolution*. Oxford UP, Oxford
 Clarke AC (1975) *Imperial earth* (Gollancz, London 2001)
 Cowper R (1972) *Clone*. Doubleday and Company, Garden City
 Huxley A (1932) *Brave new world*. Chatto and Windus, London (Harper and Row, New York 1969)
 Ishiguro K (2005) *Never let me go*. Faber and Faber, London

- Levin I (1976) *The boys from Brazil*. Michael Joseph (Pan Books, London 1977)
- Sargent P (1976) *Cloned lives*. Fawcett Publications, Greenwich
- Weldon F (1989) *The cloning of Joanna May*. Collins, London (Flamingo, London 1993)
- Wilhelm K (1974) *Where late the sweet birds sang*. Harper and Row, New York etc. (Gollancz, London 2006)

Secondary Literature

- Doniger W (1998) Sex and the mythological clone. In: Nussbaum MC, Sunstein CR (eds) *Clones and clones*. W.W. Norton and Company, New York, pp 114–138
- Hildebrandt M, Koops BJ, de Vries K (eds) (2008) D7.14 a: Where idem-identity meets ipse-identity. Conceptual explorations. FIDIS Deliverable. Available on www.fidis.net/
- Le Guin U (1973) On theme. In: Robin SW (ed) *Those who can: a science fiction reader*. Mentor, New York, pp 203–208
- Salgueiro Seabra Ferreira MA (2005) *I am the other*. Literary negotiations of human cloning. Praeger, Westport
- Wouters P (1998) Een gekloneerde toekomst. In: Henriëtte B (ed) *Allemaal klonen*. Feiten, meningen en vragen over kloneren. Boom/Rathenau Institute, Amsterdam, pp 19–43