

## CHAPTER 7

# Little Nell in the Cyber Age

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Neal Stephenson's ambitious science fiction book *The Diamond Age* is an unusual and complex ensemble of post-cyberpunk sci-fi concepts,<sup>1</sup> Confucian theories, dystopic scenarios, and Victorian, more specifically Dickensian, structure and influences. Stephenson's book has in fact been defined as 'an ambitious Dickensian work of science-fiction' (*The Complete Review*), a kind of '*Great Expectations* with nanotechnology', or, even more significantly,

If one can conceptualize the marriage of Dickensian structure and underlying pauper to princess themed plot to that of a cyber-oriented, globally identifying world of nanotechnology, the materialization would mirror the world created by Neal Stephenson in *The Diamond Age*. (Kelley n.pag.)

Complementing the approaches to the 'Dickensian' in Chapter 6, which explored the role of humour, and Chapter 8, which centres on Dickensian realism, this chapter will explore the peculiar articulation of Dickensian literary inspirations, from a more superficial structural level of narration to an elaborated and rich grade of conceptual developments. Owing to the intricacies and complexities of the novel's plot and setting, a preliminary summary is necessary in order to understand the following investigation.

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The story takes place in a not-so-far away future, in a post-nation Shanghai and its surroundings, where the population is divided into *phyles*, or tribes, gaining their respective power and relevance from powerful nanotechnology. The *phyles* have replaced nations; people are instead grouped together according to common shared values and cultures, while historical backgrounds are no longer important in the definition of identity. There are hundreds of different tribes, but the dominant ones are New Atlantis (or the Neo-Victorians), Nippon (the Japanese tribe), and the Han Chinese tribe, which is divided between the Confucian Celestial Kingdom and the more Western Coastal Republic. The so-called *thetes* are the tribeless, the poorest people at the bottom of the social ladder. Another two groups are worth mentioning, although more enigmatic and not officially recognised: the CrypNet and the Drummers, whose subversive role is connected to the development of a technology alternative to the dominant one controlled by New Atlantis. The CEP (Common Economic Protocol) is an inter-tribe organ with the purpose of guaranteeing political and economic equality between *phyles*.

In Stephenson's futuristic scenario, nanotechnology has evolved in such a pervasive way as to form the basis of the economic system and of ideologies and beliefs as well: as Rafael Miranda Huereca writes, 'the uses of nanotechnology then range from health care to bio-politics and mind control. In *The Diamond Age*, nanotechnology is responsible for the propagation of capitalistic ideologies, consumerism, tribal ethics and bio-politics' (50–1). The book's title refers to the new technology's capability of easily assembling diamond-like structures:

In diamond, then, a dense network of strong bonds creates a strong, light, and stiff material. Indeed, just as we named the Stone Age, the Bronze Age, and the Steel Age after the materials that humans could make, we might call the new technological epoch we are entering the Diamond Age.<sup>2</sup> (Merkle 25)

Nanotechnology in *The Diamond Age* makes it possible for everyone to be equipped with an MC (matter compiler), from which a wide range of goods can be artificially created. MCs depend for their existence on the Feed, a sort of electric grid which breaks raw materials into atoms and conveys them to the matter compilers to create new things. In turn, the Feed takes its power from the Source, a molecule disassembly line which provides it with a stream of recycled molecules. The control of the Source (which is also called Source Victoria) rests in the hands of New Atlantis, making it the most dominant and potent *phyle*.

Although the plot of the novel is extremely convoluted and elaborate, for the purpose of this chapter it is sufficient to give a brief summary. The main character is, arguably, the Primer (the novel's complete title is *The Diamond Age: Or, A Young Lady's Illustrated Primer*), a virtual interactive book created to be the

instrument of intellectual and moral development of a young Neo-Victorian girl. All the different characters and vicissitudes presented in *The Diamond Age* gain their respective relevance in the plot according to their relationship with the Primer. Nell, a little *thete* girl whose growing up and complex evolution is the main line of the narrative, comes to be in possession of a copy of the Primer, determining all her subsequent experiences and adventures. Thanks to the Primer's help, Nell escapes her degraded social surroundings and becomes a highly educated young Neo-Victorian. However, her striving for independence and autonomous thinking leads her away from the 'Vickys' (a nickname for the members of the New Atlantis *phyle*) too, and catapults her into the middle of a revolution, where she finds herself as a leader. Stephenson's book can be called a *Bildungsroman*, which is also what the Primer itself is, a book on personal development which *enacts* personal development – and it does it through storytelling. A complex series of *mise en abymes*, touching the meaning and powerfulness of literature itself, is at play here, as I shall explore in this chapter.

John Percival Hackworth is the nanotech engineer who creates the Primer and who is subsequently involved in all its consequences and developments: first he serves a Neo-Victorian equity lord who commissions the Primer, then he works as a double-agent for the Celestial Kingdom, which has its own interest in the Primer; he is also a character in the Primer itself and, eventually, he becomes the promoter of the Seed, the technology which is meant to overcome New Atlantis's Feed. His picaresque quest for the mysterious Alchemist (which is forced upon him by Dr X, a member of the Celestial Kingdom) reveals itself to be an Oedipal one: Hackworth discovers that *he* is the Alchemist himself. Miranda is the ractor (actor in interactive and virtual realities) who reads and interprets the Primer for Nell and who, through this, begins to feel a motherly attachment for the little girl, which eventually leads her to embark on her own personal expedition to find Nell. This pursuit, in turn, results in Miranda joining the Drummers, the mysterious underwater community developing the Seed, which Hackworth too has joined.

Another important figure in *The Diamond Age* is the Neo-Victorian equity lord Alexander Chung-Sik Finkle-McGraw, the one who commissions the creation of the Primer, having in mind the purpose of educating his granddaughter to question the status quo, with the only-apparently paradoxical purpose of reinforcing the status quo itself: the Neo-Victorian society, in Lord Chung-Sik Finkle-McGraw's eyes, is experiencing an intellectual stagnation that only an education meant to foster criticism and independent thinking can change. Among the numerous other characters populating *The Diamond Age*, I would like to mention just two others: Elizabeth Finkle-McGraw, the equity lord's granddaughter and original recipient of the Primer, and Fiona Hackworth, John Percival's daughter, for whose benefit the engineer steals a copy of the Primer.

Hence, Nell, Elizabeth, and Fiona are the three girls whose experience with the Primer deeply influences their upbringings. As Sherryl Vint points out,

‘although each girl starts out with an identical database of cultural information, the stories that the Primer tells them are different because their social circumstances are different’ (141). The Primer adapts its storytelling and its content to each little girl’s different surroundings and cultural and social situation. Owing to her specific difficult circumstances, the Primer has a bigger influence on Nell than on the other two girls, becoming for the *thete* girl a veritable survival tool, teaching her to recognise danger and to fight it. Nevertheless, the outcomes of the Primer’s teachings are different for each of the three girls, and different from what Lord Finkle-McGraw had in mind with its creation. Thus, the somehow extreme personality traits of Elizabeth make her interaction with the Primer the initial source of the rejection of the Neo-Victorian values the Primer was supposed to reinforce. Elizabeth chooses rebellion and joins the subversive CrypNet *phyle*. Fiona’s melancholic and dreamy nature causes her to use the Primer as a way to escape reality and to be in touch with its creator, her missing father. Eventually, Fiona becomes a member of *Dramatis Personae*, a sort of unusual participatory theatre with surreal features.

### Dickens and *The Diamond Age*: transparency, contradictions, zig-zagging paths, and powerful women

As the short summary above might suggest, *The Diamond Age* is a multifarious work, with multiple diverse influences and topics. Nonetheless, among the sources of inspiration, Dickens and a peculiarly Dickensian Victorian culture can be considered one of the most pervasive. Furthermore, reading the book with a Dickensian viewpoint helps to give a better grasp of its convoluted ramifications, and the parallels with Dickensian works give an illuminating perspective. This comparison works also as a further proof of the far-reaching power of Dickens’s works. As Chapter 6 and Chapter 8 of this volume further show, the feature of *being Dickensian* can encompass different narrative elements, from plot structure (see what Jacklosky says about *The Goldfinch*’s narrative construction) to character description and building up (see again the discussion on characterisation in *The Goldfinch*, Chapter 6). Furthermore, as Laurena Tsudama highlights in Chapter 8, ‘Dickensian Realism in *The Wire*’, the meaning of Dickensian itself can be discussed, enlarged, and seen with different theoretical lights. I will proceed now in showing the peculiar ways in which *The Diamond Age* translates this multifaceted term ‘Dickensian’.

First, the title. As discussed, it refers to the scientific manipulation of atoms and creation of *diamondoid* structures made possible by nanotechnology. However, diamond can also be thought of as the perfected version of glass and crystal: 19th-century Victorian England was deeply embedded with a ‘mythography of glass’ (Armstrong 204) that came to be seen as a ‘glass culture’.<sup>3</sup> The Crystal Palace of the Great Exhibition worked as a symbol of this ‘poetics of transparency’: ‘the gleam and lustre of glass surfaces, reflecting and refracting

the world, created a new glass consciousness and a language of transparency. The glass fountain at the Crystal Palace epitomized this environment and drew out a poetics of glass' (Armstrong 1). Stephenson creates a neo-Victorian environment where the past is transposed into the future with the eyes of the present (Brigg), and his reference to diamond is a metaphor for this transposition. In other words, the diamond material, as seen through contemporary scientific speculations and as metaphorically associated with the 19th-century Victorian glass culture, epitomises the peculiar encounter of nanotechnology and Dickensian scenarios realised in Stephenson's book.

Furthermore, Dickens himself was concerned with the problematic side effects of glass culture, whose most powerful symbol and expression was the Great Exhibition. Armstrong emphasises how *Bleak House* is an 'anti-Exhibition novel' (246), dealing with the inner contradictions and more sinister aspects of the Victorian glassworld, and showing how in it 'epiphenomena of glass is everywhere' (247): from the omnipresence of fog and the satirical counterpart of glass's transparency to the frequent use of description of windows and reflections, to the recurrence of Exhibition motifs (247–50). Armstrong highlights how the grotesque can be an offspring of the self-exaltation and excesses of the Victorian glass culture (250–1) and how Dickens exploits grotesque-related narrative devices to analyse and criticise this culture. She writes,

the Grotesque, offspring of glass culture, makes room for thought by seizing contradictions and confronting them. The implicit question ... is whether the Grotesque imagination is sufficiently creative to make room for thought and deal with contradiction. (250)

This problematic is taken up and expanded in *The Diamond Age*. The potential danger of Victorian glass culture has completely realised itself in the Neo-Victorian diamond reality: technology-related excesses and risks, amplification of the economical discrepancy between rich and poor, elimination of boundaries between materials and species, the presence inside the bosom of the society of insoluble contradictions. It is the proposed way of dealing with contradictions which is different: Dickens proposes the stylistic use of the grotesque imagination to convey a criticism of these contradictions, while in *The Diamond Age* the final, complex solution Nell reaches is to embrace contradictions. I shall come back to this pervasive and fundamental topic.

Moving from the title and its semantic ramifications, we can now consider how Stephenson's novel is formally constructed as a typical Dickens novel, giving descriptive headings at the beginning of each chapter to summarise the content. The writing style, too, is a certain kind of Dickensian that speaks to the elements discussed by Rob Jacklosky in Chapter 6: long paragraphs, elegant and formal prose, detailed descriptions, alternating with more crude representations of violent scenes, indulging in the depiction of cruelty and moral abomination (especially with reference to the domestic abuse Nell experiences as a

little child). For example, for one chapter we get the following headings: 'more tales from the Primer', 'the story of Dinosaur and Dojo', 'Nell learns a thing or two about the art of self-defense', 'Nell's mother gets, and loses, a worthy suitor', and 'Nell asserts her position against a young bully' (Stephenson 181), while the alternation between descriptive, elegant style and explicitly brutish and grotesque images can be seen in this paragraph:

One day the Shanghai Police had come to arrest Tony, and he had plugged one of them right in the living room with his skull gun, blowing a hole in the guy's stomach so that intestines fell out and trailed down between his legs. The other policemen nailed Tony with a Seven Minute Special and then dragged their wounded comrade out into the hallway, while Tony, bellowing like a cornered, rabid animal, ran into the kitchen and grabbed a knife and began hacking at his chest where he thought the Seven Minute Special had gone into his body. ... They bonded four handles onto the shrink-wrap and then carried him out between them, leaving Nell to clean up the blood in the kitchen and the living room. . . . (Stephenson 184–5)

Another important Dickensian echo is an obvious one: the main character's name, Nell, which is taken from the Little Nell of *The Old Curiosity Shop*. Stephenson's equivalent to Nell's grandfather is Constable Moor, a retired soldier and constable of the Dovetail community, the Neo-Victorian environment where Nell stays after having run away from home. He offers Nell guidance and support, and looks after her during her years in the Neo-Victorian school until she completes her education and becomes a young woman. He is the only adult, apart from Miranda, who really helps and loves Nell. Their relationship and vicissitudes, however, differ from their Dickensian counterparts: Constable Moor at some point realises he has to let Nell go and grow up, and that he cannot constantly look after her, while Nell, although caring for him, decides to leave and find her own independent path, and appears as a more problematic character than the angelic Nell Trent. While Nell Trent's journey exhausts her and leads her to her well-known tragic premature death, Nellodee's (the complete name of Stephenson's character) journey reinforces her personality and her strength, and produces a starkly different outcome.

Lastly, *The Diamond Age* mimics Dickensian novels in the way the plot is constructed. There are several different parallel plot lines, with the goal of gradually revealing the various interconnections and bringing the main characters together. This structural pattern is typical of Dickens's works, from *Oliver Twist* to *Great Expectations* or *Nicholas Nickleby*: novels where the process of *denouement* progressively disentangles the plot's knots, arriving by degrees at the final revelations and conclusions. What Orwell calls 'the crossword puzzle of coincidences' (305) in Dickens's main works is recreated in *The Diamond Age*, where the stories of Nell, Hackworth, Harv (Nell's brother), Lord Finkle-McGraw,

Miranda, Fiona, Elizabeth, Carl Hollywood (Miranda's employer), Dr X, and Judge Fang start and diverge in different directions, then intersect and in the end unite.

However, while the Dickensian scenarios are held together by a teleological purpose, a *shape* which superimposes a form to the plot's events and which makes possible for the different complex ramifications to come to a complete resolution, in *The Diamond Age* Stephenson is more prone to recognise the final absence of a precise, clear order, acknowledging the force of chaos which post-modern narratives celebrate. Edgecombe recognises that 'even as, over time, this 'geometry' imposed its patterns on plot construction – all the time with our willing collusion – contingency lapped at the edges, and eventually broke a few dykes during the rise of realism' (174), and this is particularly evident in Dickens's later works, but the strong pull of happy coincidence and conventional endings is enacted throughout his *oeuvre* and has come to be associated with the Victorian novel itself. *The Diamond Age*, on the other hand, follows this orderly structure until the last chapters. Here, it seems that Stephenson loses control of his own plot development. The end is actually not clear at all and it is not even a proper resolution: what will happen to Miranda, after Nell has saved her from the Drummers? And will the Drummers be able to fully develop the Seed? And is the Seed a good thing or not? What will Nell and her army of Chinese girls do? What will Nell's next step be? All (and more) of these questions remain unanswered. The 'linear narrative' (Edgecombe 174), with all the ramifications shown in a clear, final resolution, gets lost in *The Diamond Age*'s conclusion. This is in line with Stephenson's message, and with the other discrepancies present in *The Diamond Age*. This conceptual pattern, formally visible in the final deviance to Dickens's ordered model, is rendered most clearly in the following passage:

there was a Chinese belief that demons liked to travel only in straight lines. Hence the bridge zigzagged no fewer than nine times ... from the point of view of some people, including Dr X, all of that straightness was suggestive of demonism; more natural and human was the ever-turning way, where you could never see round the next corner... (Stephenson 127)

### Victorians and Neo-Victorians

The social structure depicted by Stephenson places 'Vickys' at the top, the Neo-Victorians of New Atlantis, who control most of the nanotechnology resources and who consider themselves as having inherited and perfected the original 19th-century Victorian values. This is a rather unsubtle nod to 20th- and 21st-century views of what it meant to be 'Victorian': when Hackworth is asked by Lord Finkle-McGraw why he joined the New Atlantis *phyle*, he replies that his



own life experiences and historical studies led him 'to the conclusion that there was little in the previous century worthy of emulation, and that we must look to the nineteenth century instead for stable social models' (Stephenson 24). Charles Rubin notes that 'the rise of New Atlantis is presented explicitly as a reaction against the moral relativism and mindless egalitarianism of the late twentieth century, just as the original Victorians turned against Regency-era excesses' (137). Strict moral rules, class divisions, special attention to education, impeccable manners, and self-confidence are all features which distinguish the Neo-Victorians. What appears clear from the progression of the narrative is that the Vickys also inherited the flaws and contradictions characterising the original Victorian era, worsening and emphasising them. As Brigg recognises,

while nanotechnology may allow the fobs on gentlemen's watch-chains to be devices that receive e-mail, the New Victorians retain the pomposity, excessive displays of manners, debilitating moral inflexibility, and blindness to their own faults for which we castigate the original Victorians... (120)

It is well-known how Dickens used his literary influence to highlight the social issues and the problems of his times, resulting in a powerful social critique realised throughout his novels – also with the potential for unanticipated, long-lasting impact, as emphasised by Joanna Hofer-Robinson in Chapter 1. The dark sides of the Industrial Revolution and of rapid urbanisation, as well as the miserable conditions of the working class and the abuses suffered by orphans and poor women, are all topics Dickens deals with in many of his novels. *Oliver Twist* is an obvious example; its passages about the ill-treatment of children in workhouses having become among the most quoted sentences on the topic of Victorian England's social degradation and, as shown in Chapter 1, invoked in changing the very landscape of London. The scene of Oliver asking for more soup is 'the most familiar incident in any English novel' (Sanders, 412), and the motif of child abuse comes back in *The Old Curiosity Shop*, *Nicholas Nickleby*, and *David Copperfield*, among others. This topic is taken up in *The Diamond Age*, where, just outside the luxurious world of the rich Neo-Victorians, little Nell and her brother, Harv, are invisible to any kind of social support, do not have access to a proper education, and are constantly beaten and abused by their mother's different boyfriends. Harv's whereabouts with his gang of little thieves echo the group of pickpocketing children led by the Artful Dodger in *Oliver Twist*.

Dickens realises an even more complete and detailed depiction of the inequalities and injustice in Victorian England in *Bleak House* and *Hard Times*. These novels explore a broken legal system, the deficiencies of health care, the lack of education for the poor, and overcrowded housing in the poorest areas of big cities. Descriptions of dark, foggy, dirty places abound. *The Diamond Age* gives equal attention to the problematics of the nano era, and the Leased Territories, where Nell originally lives, look a lot like the London slums of Dickens: for



instance, 'it was always foggy in the Leased Territories, because all of the immunocules in the air served as nuclei for condensation of water vapor' (Stephenson 59). The fog, Dickens's most significant and widespread symbol to signify the side effects of industrial London, functions in a similar way in Stephenson's Leased Territories, where it is connected to the presence of 'an aerial buffer zone infested with immunocules', meant to be defensive tools for the rich New Atlantis area but damaging at the same time the health and living conditions of the tribeless people inhabiting that space. The buildings in the Leased Territories have all turned black because of the 'cineritious corpses of airborne mites' (Stephenson 333) and the same process affects the lungs of people living there: Nell's brother, Harv, finishes his days in a hospital, attached to a machine supplying him purified air, and 'his body was bloated, his face round and heavy, his fingers swollen to puffy cylinders; they had been giving him heavy steroid treatments' (333).

On the other hand, the rich Victorians live completely unaware and untouched by the conditions of the *thete* people, the immense discrepancy between the two groups being further emphasised by the scene where we see Nell, grown up as a proper Neo-Victorian lady, visiting the Leased Territories to see her dying brother. She is riding a chevaline (a robotic horse), her outfit is impeccable, and she is wearing a special veil, 'a field of microscopic, umbrella-like aerostats programmed to fly in a sheet formation a few inches in front of Nell's face' (Stephenson 331), to protect her from the eyes of *thete* men and from the harmful nanosites which have ruined Harv's health. Her way of speaking is polished and refined, while Harv's is vernacular and sometimes gross; she is beautiful and healthy, while he is physically deformed and extremely ill. Their meeting is tragic; the two have nothing in common anymore, and Nell's visits look like a pitiful gesture towards a person who has become estranged to her. Nevertheless, they still love each other, and Harv's last words during his meeting with Nell are warm declarations of affection, while Nell cannot control her tears. This disparity between them, accompanied nevertheless by sincere affection and good feelings, evoke the relationship between Pip and Joe in *Great Expectations*, even though Joe's destiny is less harsh and cruel than Harv's.

Despite the different chronological settings, there are significant similarities between the culture of the Victorians of the 19th century and the Neo-Victorians of *The Diamond Age*: their offspring, caused by a previous moral relativism, their focus on manners and proper education, their pride and sense of superiority, their dominance over other cultures, their partial blindness towards the conditions of the poor. What clearly emerges from the post-cyberpunk reinterpretation of Victorian customs is the insolvable presence of deep, embedded contradictions. Lord Finkle-McGraw sees these contradictions but claims the Neo-Victorians' superiority over the originals: if in the 19th century moral stances were often found guilty of hypocrisy, covering up wicked behaviours, the New Victorians' goal is trying to acknowledge this hypocrisy and working on overcoming it. In Lord Finkle-McGraw's own words,

No one ever said that it was easy to hew to a strict code of conduct. Really, the difficulties involved – the missteps we make along the way – are what makes it interesting. The internal, and *eternal*, struggle, between our base impulses and the rigorous demands of our own moral system is quintessentially human. It is how we conduct ourselves in that struggle that determines how we may in time be judged by a higher power. (Stephenson 191)

The Primer is supposed to be an educational tool meant to promote a positive outcome to this struggle, but what Finkle-McGraw is not able to predict is the real impact of this positive outcome: the actualisation of a sincerer code of morality is going to provoke revolt against the New Atlantis *phyle* itself. The violent rebellion which did not happen in the old British Victorian Age comes to life in the futuristic Neo-Victorian scenario.

### Nell

The construction of the various levels of society in *The Diamond Age* reveals a playful approach to stereotypes of the Victorians that emphasises contradiction, and the character of Nell is similarly imbued with Dickensian conflict. These Dickensian connections are used to function both as inspirational traits and also as conflicting elements, making Nell a puzzling creature, half Dickensian and half post-cyberpunk heroine.<sup>4</sup> At the beginning, Nell is more Dickensian in the sense rejected by Bjørnstjerne Bjørnson, as discussed in Chapter 2, or as emphasised in the completions of *Drood* that do not permit Rosa Bud to evolve, as explored in Chapter 5; she is naïve, innocent, and abused and her brother, Harv, is protecting her. Men dominate Nell, her mother's boyfriends abusing and beating her, and Harv playing the role of her bodyguard. The arrival of the Primer in Nell's hands is the beginning of a turning point: inspired and encouraged by it, Nell rebels against the violent Burt, hurting him with a screwdriver and persuading her brother to run away from their house for good. When Nell begins her new life as a Vicky, Harv, because of his turbulent past as a little criminal, is banished from the Victorian *phyle* and has to go back to the Leased Territories. This dialogue between Judge Chang and his magistrates, speaking about Nell and Harv, is meaningful:

'Is the boy rotten wood? His father certainly was. I am not certain about the boy, yet.'

'With utmost respect, I would direct your attention to the girl,' said Chang, 'who should be the true subject of our discussions. The boy may be lost; the girl can be saved.' (Stephenson 104)

Hence, Nell has to get rid of the men surrounding her, both negative and positive ones, in order to embark in her own personal improvement. The last male

protector is the Constable, whom, as discussed, Nell also has to leave behind. This focus on a woman who not only does not need men (even her suitors are all rejected) but is also much better without them, is certainly a less Dickensian development, and in *The Diamond Age* 'the female circles, apparently free from class struggle and ferocious ambitions, focus rather on socially concerned programs, spiritual labor and mutual care' (Miranda Huereca 108) as opposed to the brutal, scheming, or both, nature of most of the novel's male characters.<sup>5</sup>

However, even if during the course of her story Nell distances herself from a weaker Dickensian female character, she still retains other features which associate her with characters from Dickens's works. Just as *Oliver Twist* retains his goodness in spite of the machinations of Fagin, Monks, and Sikes, a similar process occurs to Stephenson's Nell: the abuses inflicted on her during her childhood do not modify her good nature and kindness, and the long stay among the Vickys does not make her snobbish and proud. In what follows, Nell works in a brothel (as a writer of ractives – interactive sexual performances) but she does not lose her elegance and composure; then she is kidnapped, beaten, and raped, and still she remains good, equal, and balanced. Both Oliver and Nell's terrible vicissitudes fail to have a negative influence on the strong, perennial inner goodness of the two children. This is perhaps a kind of rewriting of the 'fallen woman' that *Oliver Twist*'s Nancy represents: Dickens's controversial representation of a prostitute as a force for good in that text haunts the shadow of Nell, who is able to overcome it.

Another parallel which can be drawn between Nell's character development and Dickensian scenarios is in respect to her social evolution. Pip from *Great Expectations* offers here the optimal comparison. Pip experiences the typically Victorian rags-to-riches theme, going from the life of a poor orphan working in a forge to the luxurious existence of a Victorian gentleman. Both Nell and Pip have to 'learn to perform a whole new identity' (Bowen n.pag.), different ways of dressing, speaking, behaving, eating. However, neither achieves a complete identification with the new social status. Pip is constantly haunted by his past as a poor orphan, and in the end the discovery of who really was his true benefactor further undermines his certainties: as Bowen states, 'as his 'criminal' past appears in the present in the shape of Magwitch, he is almost destroyed by the discovery, and his whole sense of self is simultaneously tainted and emptied out.' Nell too remains an outsider, despite her perfect Neo-Victorian education and appearance; when she is leaving the posh Academy for Neo-Victorian girls where she has been educated, Miss Matheson, the head teacher of the Academy, tells Nell something significant in this respect:

'Your destiny is marked in some way, Nell. I have known it since the day Lord Finkle-McGraw came to me and asked me to admit you – a ragged little thete girl – into my Academy. You can try to act the same – we have tried to make you the same – you can pretend it in the future if you insist, and you can even take the Oath – but it's all a lie. You are different.' (Stephenson 353)

At first Miss Matheson's words may seem to depict a scenario where Nell's status as an outsider would mean isolation and lack of a solid identity, as in Pip's case. Yet the rest of the dialogue between Nell and Miss Matheson tells a different story:

'Are you suggesting that I leave the bosom of the adopted tribe that has nurtured me?'

'I am suggesting that you are one of those rare people who transcends tribes...' (Stephenson 354)

This is the main, fundamental difference between Pip and Nell. The fluctuation from the bottom to the top of the Victorian social pyramid does not give Pip any real sense of stability; it simply destroys his naivety and makes him feel perennially lost and out of place. Dickens does not offer any solution to this: the peasant life of Joe and Biddy turns out to be more idyllic and sincere than the luxurious life of a London gentleman, but for an in-between character like Pip there is no peace in either of the two dimensions. The Cinderella myth is shown by Dickens with all its possible flaws, but no solution is offered. On the other hand, Nell finds that, despite the difficulties and loneliness often connected to it, the uncertain and indefinable nature of her condition is precisely its strength: it is only outside the stability and comfort of a fixed social status that all the potentiality of one's personality can be truly realised. Embracing contradictions is what Nell chooses to do, and her last dialogue with Constable Moor, before departing towards the outside China, shows her complex and amplified perspective:

'Which path do you intend to take, Nell?' said the Constable, sounding very interested. 'Conformity or rebellion?'

'Neither one. Both ways are simple-minded – they are only for people who cannot cope with contradiction and ambiguity.' (Stephenson 356)

Nell thus does not need a tribe to have her identity defined, nor does she need to embrace a black or white view of the world by choosing one of the two extremes, rebelling or conforming. If the old Victorian era was an age of contradictions and complexities, the Neo-Victorian period has even more complications and paradoxes, created by a more powerful technology and an extremely complex social and historical background. But the presence of more contradictions in some sense allows for more ramifications and possibilities: with the character of Nell, Stephenson does not offer a specific, always valuable, solution, but he shows what attitude can bring positive outcomes. And it is precisely Nell's status as an outsider, the same status which in Pip's case provokes his negative lack of identity, which in the context of *The Diamond Age* makes her the ideal person to find a way to navigate the difficulties of her time – her own personal contradictions mirroring those of the outside world.

## The power of fairy tales, literature, and education

The central element of Stephenson's novel is the Young Lady's Illustrated Primer. As mentioned, Lord Finkle-McGraw requires its creation from nanotech engineer Hackworth as an educational tool for his granddaughter Elizabeth. It accidentally falls into the hands of little Nell, changing the course of her life, and a copy is also used by Hackworth's daughter Fiona. The original purpose behind its creation is Lord Finkle-McGraw's intention of refreshing the cultural stagnation of his *phyle* by promoting a more critical and independent perspective, but its actual effects go beyond Finkle-McGraw's predictions. The basic and fundamental assumption behind the Primer's role is the Jungian idea that 'in myths and fairy tales, as in dreams, the psyche tells its own story' – considering the psyche as both a cultural and social phenomenon and a personal, individual one. The Primer constructs its stories based on the cultural and social surroundings of the little girl it comes in contact with, but also on the specific nature of the girl herself. As Rubin summarises,

Hackworth explains to Finkle-McGraw that children's stories have always mapped universals onto the specific characters prized or objected to in a given culture. The *Primer* takes the next step by doing so in relationship to its owner's particular circumstances, using highly sophisticated surveillance of its surroundings, so that it incorporates information collected about its owner into its stories. (137)

In Nell's case, then, the Primer begins with the story of Princess Nell, trapped in a tall, dark castle from which she needs to escape, and of her companions: her protector Harv and her four friends Dinosaur, Peter Rabbit, Duck, and Purple (Nell's four stuffed animals). Following Nell's growing up, the Primer evolves from the structure of a basic fairy tale to a more complex and elaborated narration, where Nell undergoes more cryptic and intricate challenges, like when she finds herself in Castle Turing and has to figure out the mechanisms of increasingly complicated Turing machines. The Primer mirrors Nell's situation from different perspectives: social, cultural, practical, emotional, psychological, and intellectual. 'The Primer simulacra make use of inter-texts, collages, pastiches, mythologies, narratives and quotes that compel the users to re-arrange all of these elements into new personal, meaningful structures' (Miranda Huereca 138): the education provided by the Primer fosters awareness, critical thinking, and intellectual development.

Even if the Primer is a complex virtual tool made possible by sophisticated nanotechnologies, it has the appearance of a beautiful 19th-century book and the goal of re-enacting a 19th-century approach to the importance of education. McGinnis highlights that 'Stephenson's decision to center his novel around girls reading books is another way in which he sets the novel in dialogue with the Victorian past' (483); education came to be at the centre of debates in the

Victorian age, and there were different conflicting opinions about what children should read (and also about what *women* should read). Dickens is again a crucial reference here: he pointed out several times the relevance and necessity of a more widespread education,<sup>6</sup> and his books meant to educate, and to do so also through the means of re-elaborating myths and fairy-tale motifs. As several studies have shown (to name a few: Harry Stone's *Dickens and the Invisible World: Fairy Tales, Fantasy and Novel-Making*; *Social Dreaming: Dickens and the Fairy Tale* by Elaine Ostry; and *The Fairy Tale Literature of Charles Dickens, George MacDonald and Christina Rossetti* by Cynthia DeMarcus Manson), Dickens exploits fairy-tale elements, integrating and developing them in his novels (we have already considered how he used the Cinderella myth, for instance). Hence, both Dickens's books and Stephenson's Primer recognise the primary importance of working with fairy tales as educational maps: mythological narratives deeply embedded in mental archetypes are the raw materials utilised to construct a powerful method of education through literature. In *Dombey and Son* Dickens writes about the teaching method of Mrs Pipchin that it was 'a part of Mrs. Pipchin's system not to encourage a child's mind to develop and expand itself like a young flower, but to open it by force like an oyster' (8), implying that the opposite should be the case: the gradual developing and expanding of the mind like petals of a blossoming bud, which is the approach promoted by Nell's Primer.

However, the Primer is not infallible, and the outcomes of education are not always predictable. As Lord Finkle-McGraw explains,

To make a long story short, the three girls have turned out differently. Elizabeth is rebellious and high-spirited and lost interest in the primer several years ago. Fiona is bright but depressed, a classic manic-depressive artist. Nell, on the other hand, is a most promising young lady... . (Stephenson 367)

The reasons behind these different results are several, but what Finkle-McGraw has to acknowledge (and the same happens with Hackworth) is that, despite intentions, trying to control the educational device he has decided to create is impossible and would mean the failure of that same device. The Primer cannot boost subversion if the same subversion cannot be directed against the Primer itself. Nell understands the limits of the Primer when she manages to fully realise the fundamental relevance of individual creativity and personal experience. Her own reflections are as follows:

Princess Nell's recent travels through the lands of King Coyote, and the various castles with their increasingly sophisticated computers that were, in the end, nothing more than Turing machines, had caught her up in a bewildering logical circle. In Castle Turing she had learned that a Turing machine could not really understand a human being. But the

Primer was, itself, a Turing machine, or so she suspected; so how could it understand Nell? (Stephenson 403)

The Primer can understand Nell because of Miranda, who reads it for her, and who has formed a sincere motherly affection towards her. The tool itself, with all its elaborated system, could not operate without the presence of a real personal experience and a real personal relationship.

Dickens faced the same sort of difficulties: Victorian readership was becoming vast and anonymous, due to increasingly efficient printing systems and the diffusion of literacy, making the direct link between authors and readers much less immediate. In this sense, the necessary strong relationship with readers was undermined by these factors, and Dickens fought against it by devising specific writing strategies which created his own persona as the ideal author, and his own readers as sort of 'ideal readers,' that he could construct and lead.<sup>7</sup> What Dickens aimed to build was what Valerie Purton defines as his 'tight authorial embrace' (120). On the one hand, it can be said that Dickens would perfectly understand what the presence of Miranda means for Nell and her education: the need of some sort of human connection and relationship in order to make teachings more effective. On the other hand, he is guilty of the same mistake Lord Finkle-McGraw commits: the desire of directing his readers where he wants them to go. A famous letter he sent to Catherine Dickens is worth quoting here: after having parts of his works read aloud to a group of friends, as it had become his custom to do in order to study the readers' response to his narratives, he wrote to Catherine 'If you had seen Macready last night – un-disguisedly sobbing, and crying on the sofa, as I read – you would have felt (as I did) what a thing it is to have Power' (*Letters* 4:235). The power of the Primer has to be dissolved in order for Nell to become really independent and really subversive. 'The gap between her experience and the Primer allows her to gain a critical perspective on the Primer's advice, the space for agency and resistance comes from this doubling of perspective' (Vint 164), and Nell's final victory is against Hackworth himself (and, consequently, Finkle-McGraw as well), the creator of the Primer, who gives her the keys to the Primer itself. By having the book be the central character of his novel and subverting the power of that book, Stephenson does something emphatically un-Dickensian. Nonetheless, it can be argued that what happens to Finkle-McGraw's Primer, meant to strengthen his Neo-Victorian social tribe and actually ending up in promoting effective subversion against it, is, to some extent, what happened to Dickens's novels too, which have been read and used as means to promote revolutionary thinking by Marxist readers, Egyptian revolutionaries, and more, going in this way far beyond Dickens's original purpose as the Primer goes against Finkle-McGraw's purpose of promoting criticism and awareness but not real, violent subversion against the status quo.

I hope to have given an introduction to Stephenson's fascinating book *The Diamond Age*, by highlighting an essential part of its meaning and construction:



its relationship with the Dickensian heritage. Many elements from Dickens's novels are to be found in the text, from the more formal aspects such as style and headings to the main character's name. The content, too, interacts with the idea of the Dickensian also explored in Chapters 6 and 8 of this volume, drawing on scenarios, characterisation, and narrative techniques found in Dickens's works, from the depiction and criticism of the Neo-Victorian society, modelled on a Victorian one, to the emphasis placed on the importance of literature and education. Finally, Dickens's own restricted perspective on books and education is overcome in the alternative solutions proposed by *The Diamond Age* that push the reader to find power in themselves, not in the books they read.

### Endnotes

- <sup>1</sup> An accurate study of the post-cyberpunk genre is offered by Rafael Miranda Huereca's doctoral dissertation, while Person defines it as follows: 'Post-cyberpunk uses the same immersive world-building technique [as cyberpunk], but features different characters, settings, and, most importantly, makes fundamentally different assumptions about the future. Far from being alienated loners, post-cyberpunk characters are frequently integral members of society (i.e., they have jobs). They live in futures that are not necessarily dystopic (indeed, they are often suffused with an optimism that ranges from cautious to exuberant), but their everyday lives are still impacted by rapid technological change and an omnipresent computerized infrastructure.'
- <sup>2</sup> For a more comprehensive and detailed analysis of the technical aspects of the relationship between diamond structures and the use and development of nanotechnologies, see Merkle's article 'It's A Small, Small, Small, Small World', *MIT Technology Review*, 1 Feb. 1997.
- <sup>3</sup> To better understand what it is meant by 'a culture of glass' see Armstrong, *Victorian Glassworlds* (2008), where the Victorian culture is explored as 'a dazzling semantics of glass' (1), taking into account several different aspects: from scientific discoveries to novels, to decorative objects, to architecture, to new optical tools...
- <sup>4</sup> It can be argued that Nell's characterisation, half Dickensian and half post-modern, follows the 'recombinative strategies of adaptations' expressed by Jacklosky in Chapter 6.
- <sup>5</sup> Miranda Huereca also points out how this emphasis on strong and good female characters differentiates Stephenson's post-cyberpunk from earlier examples of cyberpunk novels (108–24). See also McGinnis 481.
- <sup>6</sup> Many scholarly accounts of Dickens's attitude towards education exist; see for instance Philip Collins, *Dickens and Education* (1963).

- <sup>7</sup> About these authorial strategies, see Carolyn Oulton's *Dickens and the Myth of the Reader*.

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