

# The Electrical Network and the Ideal Community in Zola's *Travail*

Elsa STÉPHAN  
Smith College

*La science, la vérité seule émancipera l'homme toujours davantage.*<sup>1</sup>

## RÉSUMÉ

*Alors que dans les utopies traditionnelles, le bonheur était garanti par une forme parfaite de gouvernement unissant harmonieusement les membres d'une communauté, cet article a pour but de montrer qu'au XIXe siècle le réseau électrique qui active les trains et les machines est perçu comme une technologie destinée à relier les hommes, rassembler les nations et les individus, conduire à la pacification et augmenter l'égalité. Travail (1901) d'Émile Zola offre un exemple pertinent de cette façon de penser. Le roman n'a pas seulement été négligé par la critique; il a aussi été exclusivement considéré comme une utopie politique par les rares chercheurs qui l'ont analysé. Il s'agit donc ici de revenir sur Travail pour insister sur le rôle crucial des machines permettant la création d'une communauté idéale dans laquelle elles libèrent l'homme du travail aliénant des usines.*

When one thinks about nineteenth-century utopias, Henri de Saint-Simon, Robert Owen or Charles Fourier come to mind. The century was marked to such a degree by political utopias that the term utopia became a synonym for “utopian socialism” in nineteenth-century vocabulary. Proudhon, in his essay *Système des contradictions économiques ou philosophie de la misère* (1846), uses the terms socialism, communism, and utopia synonymously.<sup>2</sup> In fact, many nineteenth-century socialist organizations called themselves utopias, confirming the parallel between the genre and the ideology.<sup>3</sup>

However, when Zola published the socialist utopian novel *Travail* in 1901, decades had passed since the publication of Cabet's and Fourier's works, and since the creation of such communities. Utopian experiments from the first half of the century were criticized and questioned. The failure of the revolutions of 1848 and 1871, together with the century's phenomenal scientific progress and the advent of electricity – and oil-driven advances of the second Industrial Revolution – explain why late nineteenth-century utopian designs are often centered on *technology* rather than politics as the key to ideal communities. Machines did improve working conditions, as exemplified by Zola's novel.

However, partly because *Travail* has been criticized as “naïf,”<sup>4</sup> scholarship on the novel is thin. The few scholars who have analyzed the novel, such as Frederick Ivor Case,<sup>5</sup> tend to focus on the political dimension of Zola's utopia, perhaps because of the references to Fourier

---

<sup>1</sup> Émile Zola, *Les Quatre Évangiles: Fécondité, Travail, Vérité, Justice*, in *Œuvres Complètes*, vol. 8, éd. Henri Mitterand (Paris: Nouveau Monde Éditions, 2002) 56. Subsequent references to *Travail* will be taken from this edition and page numbers only will appear parenthetically in the text.

<sup>2</sup> Hans-Günter Funke, “L'évolution sémantique de la notion d'utopie en français,” in eds. Hinrich Hudde and Peter Kuon, *De l'utopie à l'uchronie: formes, significations, fonctions* (Tübingen: Gunter Narr Verlag, 1988) 34.

<sup>3</sup> Manfred Steger, *The Quest for Revolutionary Socialism: Eduard Bernstein and Social Democracy* (Cambridge, UK: Cambridge University Press, 1996) 28.

<sup>4</sup> Alain Morice, “Mysticisme, scientisme et messianisme: La rédemption de la ‘race ouvrière’ vue par Émile Zola,” *Le Monde diplomatique* 10 (2002): 24-25.

<sup>5</sup> Frederick Ivor Case, *La Cité idéale dans Travail d'Émile Zola* (Toronto: University of Toronto Press, 1974).

sprinkled throughout. Even Fabian Scharf's extensive study of Zola's utopias<sup>6</sup> devotes only a few pages to the role of technology in his novels. In contrast, it is precisely technology that is the focus of this article. Of course, *La Crêcherie* is a socialist utopia, characterized by common ownership and democratic control of the means of production. In this society, there is no private property, no authority, no monetary system, no divorce, no judiciary system, no prison, and no class system. However, the new ideal city is rendered possible by technology. Zola likely would have read *Capital*,<sup>7</sup> in which Marx argues that technical innovations lead to social progress; similarly, the view of politics as highly technical was already central in the writings of Machiavelli, Hume, and Hobbes. The idea that *machines* are the cause of men's felicity in *La Crêcherie* contributes to the definition of *Travail* as a techno-utopian rather than a politically utopian novel.

*Travail* was written in an atmosphere of technological enthusiasm, during a period later to be called *La Belle Époque* and which marked the beginning of the Era of the Machine. The novel takes place in the fictional city of Beauclair and describes the slow degeneration of the factory of L'Abîme and the creation and expansion of an ideal community, *La Crêcherie*, where, thanks to electricity, improved working conditions lead men to happiness. The novel is divided into three parts. As Zola explains in his preparatory notes, part one is a dystopia, embodied in l'Abîme, the factory that is a living hell; part two narrates the early stages and difficulties in the construction of *La Crêcherie*; finally, part three describes a utopian city, created by Luc, the main protagonist. In *La Crêcherie*, electricity drives the city's prosperity: in machines, in street lights, in electrical cars. Electricity is so prevalent that Jordan, a scientist and Luc's friend, goes so far as to imagine an electrical sun. The railway network is also celebrated as it is the main production of the new factory. Electricity and the railway thus appear as the key to the characters' new happiness and prosperity.

Zola was writing *Travail* in 1900, the year he visited the World Fair, and he published the novel the following year. It is therefore no coincidence that electricity plays such a decisive role in *Travail*. Zola had always been attentive to technological progress. In 1860, he had written a letter to Jean-Baptistin Baille expressing his enthusiasm for technology:

Ce qui caractérise notre temps, c'est cette fougue, cette activité dévorante; activité dans les sciences, activité dans le commerce, dans les arts, partout: les chemins de fer, l'électricité appliquée à la télégraphie, la vapeur faisant mouvoir les navires, l'aérostas s'élevant dans les airs. [...] Le monde se précipite donc dans un sentier de l'avenir, courant et pressé de voir ce qui l'attend au bout de sa course.<sup>8</sup>

Through the lexical fields of speed and movement, Zola expresses the dizzying pace of the late nineteenth-century technology that will inspire novels such as *La Bête Humaine* and *Travail*. Indeed, he sees the world *running* and *rushing* towards the future. In 1860, in a press article,<sup>9</sup> Zola also advocated for the possibility for writers to combine art and technology, denying the usual division of the two. To him, machines could become characters in literature, as is the case in *La Bête Humaine*, in which the train is personified, gendered female and eroticized. Fascinated by technology, Zola was thus very enthusiastic about the World Fairs.

In 1900, Zola had been asked to write an article on the universal exhibition, but refused, leaving no written testimony of his impressions. However, his daughter Denise remembers how much time his father liked to spend at the exhibition with her and her brother: "Nous y passions des heures. Mon père regardait, écoutait, visiblement intéressé; moi j'avoue que ces masses de fer, de

<sup>6</sup> Fabian Scharf, *Émile Zola: de l'utopisme à l'utopie (1898-1903)* (Paris: Honoré Champion, 2001).

<sup>7</sup> Richard H. Zakarian, *Zola's Germinal: A Critical Study of Its Primary Sources* (Genève: Droz, 1972).

<sup>8</sup> Émile Zola, *Correspondance*, ed. Alain Pagès (Paris: Flammarion, 2012) 1843.

<sup>9</sup> Émile Zola, "Du progrès dans les Sciences et dans la Poésie," *Journal Populaire de Lille* 16 avril 1864.

roues, tournant dans un vacarme indescriptible, ne m’amusaient pas du tout.”<sup>10</sup> But, most importantly, Zola’s fascination is illustrated by the numerous photographs he took during the exhibition, such as a picture of the moving sidewalk, one of the main attractions. His most famous photograph represents the Eiffel tower at night with the Palace of Electricity in the background (see Fig. 1).

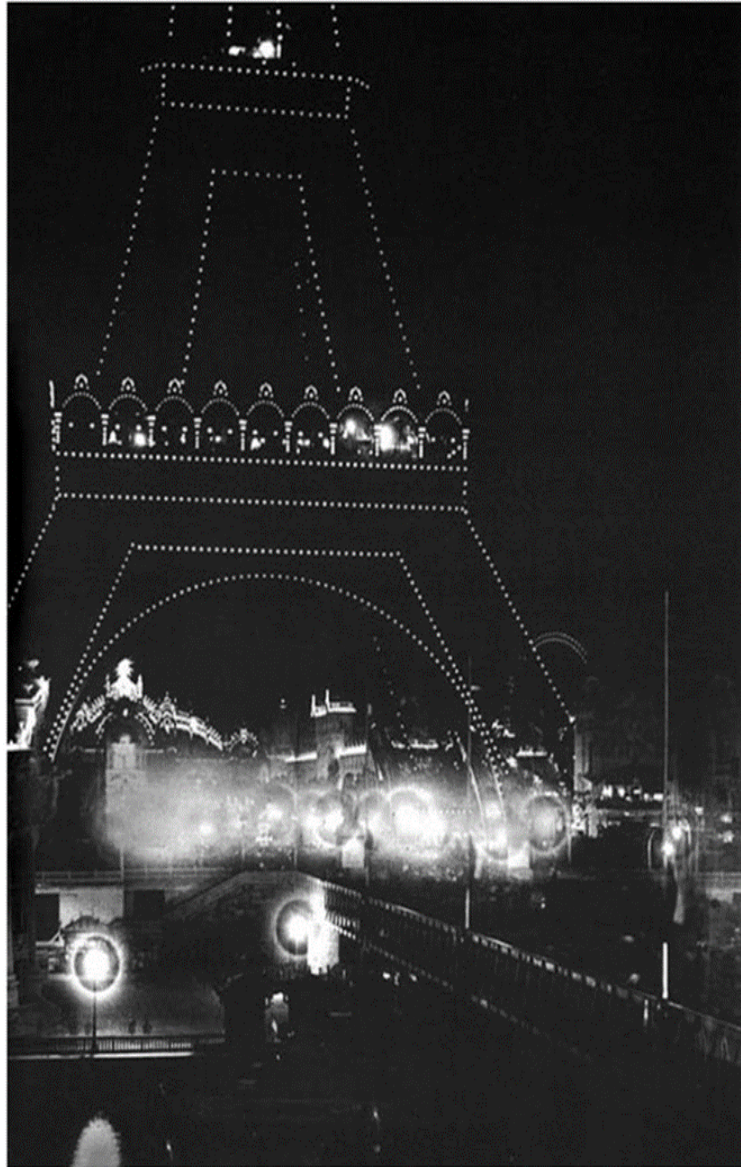


Fig. 1. Émile Zola, *La Tour Eiffel de nuit*, 1900. Musée Émile Zola, Médan.

The first illumination of La Crêcherie is the result of Zola’s visit to the World Fair, during which electricity was celebrated in Paris:

Quand la nuit fut noire, l’usine entière s’embrasa, des milliers de lampes l’inondèrent d’une gaie clarté de plein jour. [...] Jordan, que Scœurette avait enveloppé dans une couverture, par crainte de la fraîcheur du soir, regardait toujours l’usine immense étinceler comme un palais de féerie [...] Il s’émerveillait du succès de cette œuvre dont il était l’artisan le plus ignoré et le plus actif. (142)

<sup>10</sup> Denise Leblond-Zola, *Zola raconté par sa fille* (Lausanne: Cercle du Bibliophile, 1966) 271.

Just as Beauclair is a “palais de féerie,” the electrical palace of the World Fair (see Fig. 2) was often compared to a castle in a fairy tale<sup>11</sup> and inspired Zola's description of electricity in *Travail*. Paris was just starting to be lit by electricity in 1900, which revolutionized the Parisian landscape. In 1900 the Eiffel Tower, formerly lit by gas, was illuminated by electricity thanks to the installation of 5 000 light bulbs. At the time, it seemed like electricity was opening the door to a whole new world, a new perception of urban landscape. In Villiers's novel *L'Ève future* (1886), the apparition of electricity is compared to the phrase “Let there be light” in the Bible. The chapter describing electricity is entitled “Fiat Lux” and the same reference can be found in the text: “N'est-elle pas de vous, cette lumière merveilleuse? On dirait une après-midi d'été! [...] C'est un *Fiat Lux!* que vous avez dû prononcer tout à l'heure!”<sup>12</sup> Villiers expresses here the astonishment that electricity generated at the time.



Fig. 2. Émile Zola, *Le Château d'eau et le Palais de l'électricité*, 1900. Musée Émile Zola, Médan.

In *Travail*, electricity is the condition of the utopia. Before Jordan's death, Luc admits that science was the foundation of Beauclair:

La science reste la grande révolutionnaire, vous me le disiez au début, et chaque pas en avant de notre longue existence est venu me prouver combien vous aviez raison... Est-ce que le Beauclair d'aisance et de solidarité serait déjà possible, si vous n'aviez mis à sa disposition cette énergie électrique, l'agent devenu nécessaire de tout travail, de toute vie sociale? (186)

Science and technology, indeed, change life for factory workers. While in l'Abîme they were enslaved by the burden of labor, men in La Crêcherie are required only to supervise the

<sup>11</sup> Thierry Paquot, “Paris 1900 le Palais de l'Électricité,” *Les Cahiers de médiologie* 10 (2000): 200-07.

<sup>12</sup> Auguste Villiers de l'Isle Adam, *L'Ève future* (Paris: Gallimard, 1993) 70.

labor of machines. Despite the extensive discourse on politics found in the dialogues of the novel and the references to Fourier, toward the end of the novel, the main character, Luc, arrives at the conclusion that it is not politics but technology that contributes to happiness in *La Crêcherie*: “Luc ménageait une surprise à Jordan, voulant le fêter lui aussi dont les travaux de savant allaient plus faire pour le bonheur de la Cité que cent années de politique” (141). Electricity plays an important role in the utopia as it contributes to happiness. At the beginning of the novel, in the dystopian first part and the transitional second part, most of the characters identify with a political ideology. Some are anarchists, while others are unionists or libertarians; and they debate about the best solution for the future of the city. But as the novel progresses, the less it resembles a political manifesto. Science and work predominate, setting ideologies aside. For example, Bonnaire, accused by Ragu of being an anarchist, cries: “Oh! Mon bon ami, j’étais collectiviste et tu m’as reproché de ne plus l’être. Maintenant, tu me fais anarchiste... La vérité est que nous ne sommes plus rien du tout, depuis le jour où le rêve commun de bonheur, de vérité et de justice s’est réalisé...” (177). Ragu’s opinion reflects Zola’s own celebration of science, as the key to managing political problems.<sup>13</sup>

The end of ideologies in the ideal city raises a question: Why would technology guarantee peace and concord in a community more effectively than politics? The crucial phrase in Ragu’s statement is “the common dream” rendered possible by science, a dream that failed to come true while workers relied simply on ideologies. Instead, in Zola’s novel, technology creates a utopia precisely because it has the ability to unite a society – to guarantee happiness, peace, and unity – through action rather than philosophy.

While politics and ideologies divide, Zola suggests, technology unites. Contrary to science, technology, though of course based on scientific knowledge, does not rely on theories but on concrete applications through the construction of machines. Indeed, there are countless ideologies or possible regimes and it is difficult to imagine a government that would satisfy all the members of the community. Zola’s vision in *Travail* demonstrates liberation from the tyranny of ideas to the harmony made possible by technology. Thus, in part one of the novel, the workers in the factory of l’Abîme – conservatives, communists, anarchists, collectivists – debate tensely and at length on politics, but never resolve their conflicts. In part two, the transition begins with the destruction of old factory, and in part three the members of the new community finally reach peaceful consensus – thanks to the triumph of science and the consequent obsolescence of government.

Once government is abolished, the city has no need for a political administration. Lucien Bonnaire and Louise Mazelle celebrate their wedding at the city hall, but by then the building is simply a decorative space for a ball rather than a politically significant edifice: “On dansait sur les ruines de l’autorité, dans cette mairie qui devenait peu à peu la vraie maison commune, où le rôle du maire n’était déjà plus que d’être un lien fraternel, entre les divers groupes sociaux” (148). The metaphor of the ruins reinforces the opposition recurrent in the novel between the old society and the new, implying that politics has come to an end. The numerous weddings between members of different social classes underlines the end of the class system in the city of Beauclair, as the factory guarantees equality between workers.

To reinforce that transition into an apolitical utopia, symbols of state are gradually replaced by scientific symbols. For example, in *La Crêcherie*, prisons are closed and the city hall is replaced by laboratories, as Bonnaire explains to Ragu, who, coming back after a long absence, cannot recognize the city:

---

<sup>13</sup> Giovanni Dotoli, “Zola, écrivain du XX<sup>e</sup> siècle,” in *Émile Zola: aux racines des valeurs européennes* (Roma: Anicia, 2010) 59-91.



Seulement, comme le vieux bâtiment de la mairie tombait de pourriture, on l'a démolit, avec l'école ancienne, où tant de gamins avaient ânonné sous la fêrule. Et, tu vois, à la place, cette série de grands pavillons, les laboratoires de chimie et de physique, où chaque savant est libre de venir étudier, expérimenter lorsqu'il pense avoir fait quelque découverte, utile à la communauté. (174)

Similarly, a school is rebuilt in a new building and new teaching methods are employed, but the city hall is torn down. The city has a "maison commune" (156) in which members of the community can meet, but the authority of the mayor has disappeared. Science has replaced political institutions. Discoveries in physics and chemistry are considered more useful to the community than government.

Zola's utopia questions authority in general. Political and religious authority especially are portrayed as oppressive and prone to conflict. At the end of the novel, Luc's model of La Crêcherie has spread to the rest of the world: "la délivrance volait d'un continent à l'autre, balayant les gouvernements et les religions, unissant les races" (194). Men are thus liberated from politics and religion, which are "swept away." In many fictional utopias, members of the ideal community all believe in the same god and do not have any form of government, as in *Supplément au voyage de Bougainville* (1772) by Diderot.

Similarly, Luc, the founder of the ideal community and leader of the new "apolitical" order in *Travail* does not necessarily have the crucial role scholars have attributed to him. The administration of the city is taken over by the people, under the guidance of Luc. Scholars agree that he is the main character of the novel. However, in the creation of the utopia, the second most important character is Jordan, the scientist and inventor of new machines. Indeed, far from being a secondary character, his role is fundamental since the functioning of the factory is rendered possible by his inventions.

At the end of the novel Jordan and Luc are the last men to die, as if they both had a mission to accomplish: Luc wants to witness the success of his political enterprise, while Jordan hopes to discover a way to develop solar power. As Jordan's scientific and technological inquiries begin to produce results in the second and third parts of the book, Jordan as scientist and inventor becomes more greatly associated with the utopian elements of the novel. Thus Jordan and his scientific discoveries, rather than Luc and his political goals, are most associated with the creation of a utopia.

Jordan does not represent science as a practice, but rather as a value. Zola's scientist is a dreamer, animated by a political ideal. He is often represented "dans une posture de songerie" (321), only going out of his laboratory to admire the application of his discoveries, to which his life is devoted: "Enfermé dans son laboratoire, il y achevait sa tâche, il voulait s'y éteindre, le jour où sa tâche serait finie" (185). Jordan does have a task, indeed, a sacred mission. At the end of the novel, he never leaves his laboratory.

As members of the clergy devote their life to God, Jordan devotes his to science, paradoxically the religion of the novel. Zola even compares him to a priest: "À partir de ce moment, il s'enferma, vécut en moine tout à ses expériences, à sa grande œuvre, qui devint son existence même, sa raison d'être et d'agir" (132). The word "œuvre" reflects the sacred dimension of Jordan's work, as God's work is usually referred to as an "œuvre." Jordan's celibacy also reveals his marriage to science. Instead of having descendants, he leaves his work on electricity as his legacy for the community of La Crêcherie and humanity in general. The role of science in the novel is thus as important as politics and has more of a measurable impact on the foundation of the new "cité du Bonheur" (380).

The electrical network as well as the railway network represent progress in the new ideal community. In *Travail*, transportation implies a stronger connection between men:

Demain, la navigation aérienne sera trouvée, l'homme aura conquis l'infini de l'espace, comme il avait conquis les océans. Demain, il pourra correspondre d'un bout de la terre à l'autre, sans fils ni câbles. La parole humaine, le geste humain feront le tour du monde, avec la rapidité foudroyante de l'éclair... Et, mon ami, c'est bien là cette délivrance des peuples par la science, la grande révolutionnaire invincible, qui leur apportera toujours plus de paix et de vérité. Déjà, depuis longtemps, vous avez comme défoncé les frontières, avec vos rails, vos voies ferrées, s'allongeant sans cesse, franchissant les fleuves, perçant les montagnes, ramassant toutes les nations ensemble, dans les mailles de plus en plus serrées et fraternelles de ce filet géant. [...] l'humanité de demain se réconciliera... (232)

Through this passage, Zola anticipates as early as 1901 the optimistic vision of technology that will later be illustrated by science-fiction literature and cinema. The use of the future tense and the reference to better tomorrows contribute to the definition of new utopias situated in the future rather than on a remote island à la Thomas More.<sup>14</sup> In Zola's text, the network, rather than an ideal government, is what guarantees happiness. The notion of network is suggested in particular by the expression "les mailles de plus en plus serrées et fraternelles de ce filet géant." With the widespread use of the abstract meaning of "network" in the twentieth century, we have tended to forget its concrete origin: the fishing net or *filet*. The term, created in the sixteenth century, evolved and extended its sense in 1839 from "net-like arrangement of threads, wires, etc.," to include the sense of "any complex, interlocking system (originally in reference to transport by rivers, canals, and railways)."<sup>15</sup> While in the eighteenth century the metaphor of the network was used in medicine to describe blood and nerves in the human body, the word becomes more abstract in the nineteenth century: "La grande rupture qui fait advenir un nouveau concept de réseau à la charnière des XVIIIe et XIXe siècles, c'est sa 'sortie' du corps. [...] De naturel, le réseau devient artificiel. De donné, il devient construit. D'outil, il devient machine."<sup>16</sup> As illustrated in *Travail* in the nineteenth century the word acquired its current meaning, in reaction, no doubt, to the Industrial Revolution and its new means of transportation. Zola also highlights the belief in the ability of science to reinforce peace, equality, and fraternity around the globe.

Zola was a man of his time and his novels reflect a widespread conception of technology. This conception of transportation networks as a new vector of utopias is directly derived from Henri de Saint-Simon.<sup>17</sup> Saint-Simon himself, in the *Industrial System* (1822), expressed his desire to see a scientific elite transforming the French territory through the implementation of a new transportation system, which, he claimed, would lead to industrialization and pacification. His disciples theorized a utopia based on transportation.

Michel Chevalier, for example, Saint-Simonian economist, presented Saint-Simon's program in a series of articles published in *Le Globe*<sup>18</sup> in 1832:

<sup>14</sup> Thomas More (1477-1535) wrote the first formal utopian fiction. His novel *Utopia* imagined a complex, self-contained world set on an island.

<sup>15</sup> "network," Online Etymology Dictionary, n.d., Web. 12 Aug. 2014 <[http://www.etymonline.com/index.php?term=network&allowed\\_in\\_frame=0](http://www.etymonline.com/index.php?term=network&allowed_in_frame=0)>.

<sup>16</sup> Pierre Musso, *Télécommunications et philosophie des réseaux. La postérité paradoxale de Saint-Simon* (Paris: PUF, 1997) 34.

<sup>17</sup> See Musso.

<sup>18</sup> The French newspaper *Le Globe* was bought by the Saint-Simonians in 1830, and was the official voice of the movement under the July Monarchy.

Les Chemins de fer le long desquels les hommes et les produits peuvent se mouvoir avec une vitesse qu'il y a vingt ans on aurait jugée fabuleuse, multiplieront singulièrement les rapports des peuples et des cités. Dans l'ordre matériel, le chemin de fer est le symbole le plus parfait de l'association universelle.<sup>19</sup>

These articles, later published in *Le Système de la Méditerranée*, illustrate Chevalier's desire to connect eastern and western countries. In 1838, in *Des intérêts matériels de la France*, he introduces his plan to transform the French landscape, based on the American and British transportation systems. Even though he wants to improve roads, navigation, and ports, he mostly focuses on the railway, which he considers to be the main instrument of pacification between nations, for example, between France and England, nations that he wishes to connect with a tunnel: "moyennant le chemin de fer de Paris à Londres, l'alliance des deux peuples sera intime et indissoluble."<sup>20</sup>

One of the most renowned disciples of Saint-Simon was Barthélemy Prosper Enfantin, the entrepreneur who developed the railway system as well as the idea of the Suez Canal. Enfantin also founded "L'union pour les chemins de fer de Paris à Lyon" in 1845. Many Saint-Simonian engineers and bankers were indeed involved in the creation and funding of the railway system in France, even if many of their dreams were only fulfilled decades after the end of their movement, in the form of the Panama Canal, the Parisian metro, and the Channel Tunnel. For Saint-Simon and his disciples, networks of communications, such as the railway, are the solution to conflicts. Michel Chevalier draws a parallel between democracy and communication: "Améliorer la communication, c'est travailler à la liberté réelle, positive et pratique... c'est faire de l'égalité et de la démocratie. Des moyens de transports perfectionnés ont pour effet de réduire les distances entre les hommes, mais également d'une classe à une autre."<sup>21</sup>

According to philosopher Pierre Musso, the disciples of Saint-Simon made the first step toward the end of politics and the beginning of what he calls a religion of communication:

[...] le politique n'est que détournement et cristallisation des flux sociaux: c'est pourquoi il faut le transformer, voire le supprimer, pour rétablir la fluidité de l'économie et de la religion de la communication. Dès son origine saint-simonienne, l'idéologie de la communication porte en elle la suppression du politique, comme la nuée, l'orage... Le renversement de toutes les hiérarchies, qu'elles soient religieuse, sociale ou institutionnelle, vaut mise au pouvoir de l'association, de la communication et de la communion. Le réseau symbolise définitivement – en acte et en représentation – le lien scellé entre ces éléments dans la religion saint-simonienne, modèle fondateur pour toute idéologie de la communication.<sup>22</sup>

The end of politics in Zola's novel certainly reflects the influence of Saint-Simonianism. To Musso, the disciples of Saint-Simon advocated the replacement of politics by technology: "La question sociale (réduire la distance entre classe) devient une question technique (créer des réseaux de communication). L'ingénieur devient l'artisan-leader de la transformation sociale."<sup>23</sup> In *Travail*, scientific discoveries render utopian values possible in the ideal city: happiness, equality, fraternity, and peace. As mentioned above, the most important of those discoveries is electricity, developed by Jordan in the third part of the novel: "Aussi était-ce une première grande victoire, la Crêcherie éclairée à profusion, la force électrique en abondance aux grands

<sup>19</sup> Michel Chevalier, "Le système de la Méditerranée," *Le Globe* 12 février 1832.

<sup>20</sup> Michel Chevalier, *Des intérêts matériels de la France* (Paris: C. Gosselin et V. Coquebert, 1838) 262.

<sup>21</sup> Michel Chevalier, *Lettres sur l'Amérique du Nord*, vol. 2 (Paris: Librairie de Charles Gosselin et Cie, 1836) 3.

<sup>22</sup> Musso 162.

<sup>23</sup> Musso 191.



et aux petits outils, le bien-être augmenté, le travail facilité, la fortune élargie. Et c'était en somme un pas nouveau vers le bonheur" (142). This happiness goes beyond La Crêcherie. Luc considers electricity to be "le victorieux agent du bien-être universel" (142).

Luc's belief in universal happiness is directly derived from the utopian thinkers read by Zola: Proudhon, and Fourier. While composing *Travail*, Zola wrote: "un ami m'a prêté Fourier et je le lis en ce moment avec éblouissement."<sup>24</sup> Utopian fictions in general are ways to describe an ideal government or society that guarantees happiness for its members, according to Raymond Trousson, in his *Sciences, techniques et utopies*: "La démarche utopique est avant tout quête de la société heureuse."<sup>25</sup> The electrical power also contributes to happiness in La Crêcherie since it is supposed to facilitate men's work in factories. Each machine is so easy to use that children themselves could make them work.

Thanks to the new machines run with electricity, men work only four hours a day and suddenly gain access to free time and leisure, once the privilege of only the wealthy. Zola describes the new ways in which factory workers can spend their time in the new ideal city in which museums, libraries, theaters were built. In La Crêcherie, electricity also produces jewelry, which is no longer a privilege accessible only to the upper class. Indeed, because money disappears from the ideal city, gold is accessible to everyone thanks to electric ovens that produce gold jewelry and precious stones for all. Luxury and pomp are common characteristics of utopian fiction. In Rabelais' abbaye de Thélème in *Gargantua*, the members of the community wear only extravagantly elegant clothes that are made of silk, taffeta and velvet and ornamented with precious stones, silver and gold. The abbey itself is decorated exclusively with silver and gold.

In *Travail*, electricity is associated with abundance because it powers machines that fulfill all of humankind's needs:

Grâce à elles, l'homme achevait de conquérir la nature, d'en faire sa dépendance et son paradis. Et de quelle prodigieuse richesse elles le comblaient, une abondance toujours croissante des fleurs et des fruits de la terre, un luxe de plus en plus grand des objets manufacturés, chaque citoyen regorgeant de tous les biens, vivant en prince de ses quelques heures de travail, lui que la faim étranglait autrefois, après d'abominables corvées de dix heures. (190)

In utopian literature, numerous authors have described utopias as places of abundance – as in a "golden age" or a "land of plenty." For example, Hesiod evokes the countless gifts offered by nature: "Tous les biens étaient à eux: le sol fécond produisait de lui-même une abondante et généreuse récolte, et eux, dans la joie et la paix, vivaient de leurs champs, au milieu de biens sans nombre."<sup>26</sup> That is his Golden Age.

In Zola's utopia, abundance reaches a level of surplus:

C'étaient d'immenses granges, d'immenses greniers, d'immenses salles de réserve, où toute la production, toute la richesse de la cité s'entassait. [...] Et nulle autre part, on ne sentait mieux l'incalculable fortune dont un peuple était capable, lorsque disparaissaient les intermédiaires, les oisifs et les voleurs, tous ceux qui vivaient jadis du travail d'autrui, sans rien produire eux-mêmes. La nation entière au travail, avec sa tâche de quatre heures par jour, amoncelait une richesse si prodigieuse, que chaque habitant regorgeait de tous les biens, satisfaisait tous les désirs, ignorant désormais de l'envie, de la haine et du crime. (177)

<sup>24</sup> Cité dans ed. Henri Mitterand, "Notice" de *Travail*, in Émile Zola, *Œuvres complètes*, vol. 8 (Paris: Nouveau Monde Éditions, 2002) 977.

<sup>25</sup> Raymond Trousson, *Sciences, techniques et utopies* (Paris: L'Harmattan, 2003) 7.

<sup>26</sup> Hésiode, *Les Travaux et les jours* (Paris: Arléa, 2012) (V, 109 sq).

The repetition of “immense” and “toute/tous ” (“toute la production, toute la richesse,” “tous les biens, tous les désirs”) introduces the hyperbolic dimension of this passage and reinforces the impression of abundance in the ideal city. The expression “nulle part on ne sentait mieux” also emphasizes the uniqueness of the utopian space and is commonly found in utopias, such as *Gargantua*, in which Rabelais describes the inhabitants of Thélème as unique: “Jamais ne feurent veuz chevaliers tant preux, tant gualans, tant dextres à pied et à cheval, plus vers, mieulx remuans, mieulx manians tous bastons, que là estoient, jamais ne feurent veues dames tant propres [...]”<sup>27</sup> Like with “nulle part,” the repetition of “jamais ne feurent veuz” emphasizes the exceptional characteristics of the utopia. Thanks to electricity, men work less and can retire early. In *la Crêcherie*, they stop working at the age of forty. Even though hard work is praised by Zola, the novel emphasizes the importance of leisure, as do most of the utopias, such as “The Land of Cockaigne” in which life revolves around pleasure and work does not exist.

Electricity is also a way to dominate nature and to fulfill a Promethean fantasy: “En physique, en matière d'électricité surtout, les inventions continuaient à reculer les bornes du possible, donnaient aux hommes la toute-puissance des dieux, sachant tout, voyant tout, pouvant tout” (190). Jordan even wishes to create an electrical sun, which Luc encourages him to do to “ravir le feu sacré, la divine flamme” (165). Techno-utopian novels of the late nineteenth century often refer to Prometheus to describe the discovery of electricity and humanity's domination of nature. For instance, in *L'Ève future*, Villiers frequently compares Thomas Edison to Prometheus.

Bonnaire considers electricity to be the source of human happiness: “elle est la nature domptée, la foudre asservie, dont notre bonheur est fait” (122). Electricity is the source of happiness because it is considered as a factor of social progress, equality, and peace. To Jordan, it is “le sang de la vie sociale” (142) and everyone should have access to it. Here it is science, not only politics, that conditions equality in Zola's utopia. The electrical network, by easing workers' pain, contributes to the disintegration of social classes in *La Crêcherie*. By working less, men have access to leisure, free time, studies, and culture, which were formerly the privilege of the bourgeoisie and the aristocracy. In *La Crêcherie*, members of the community can do research in the laboratories, go to the theater or the museum built by Luc, and stroll through the numerous parks of the “cité heureuse.”

The second network that embodies Zola's technological utopia is the railway. Despite the absence of actual trains in *Beauclair*, the new factories' main production in part three is the rail. In the novel, the railway network is thought to bring universal peace. In the nineteenth century, it was indeed often imagined that trains would connect men and nations and contribute to the diminution of wars. In *Travail*, it is no coincidence that the dystopian factory of *l'Abîme* produces weapons while the newly built *La Crêcherie* produces rails, as the former are used in war while the latter were, at the time, seen as a means for bringing nations closer. Traditionally, most utopias are defined by concord while dystopias are marked by discord. In Thomas More's *Utopia*, war is shameful: “Les Utopiens ont la guerre en abomination.”<sup>28</sup> Zola draws a parallel between peace and the railway: “L'argent de la France allait surtout aux constructions de paix et de solidarité sociale, aux chemins de fer, aux ponts, aux bâtiments de tous genres, où le fer et l'acier triomphaient” (119). Technology such as bridges and trains did, indeed, build human connections, from which a discourse on pacification emerged.

The notion of fraternity is also traditionally central in utopias and contributes to the peace that reigns in ideal communities. The citizens of literary utopian communities are usually considered as members of a family. References to family relationships appear often in *Travail* – for example, when the members of *La Crêcherie* celebrate labor day:

<sup>27</sup> Rabelais 475.

<sup>28</sup> Thomas More, *Utopie* [1516], Trans. Victor Stouvenel (Paris: Paulin, 1842) 231.

C'était comme une communion fraternelle de la Cité entière, on rompait le pain et l'on buvait le vin publiquement, les tables finissaient par se rapprocher, ne faisaient plus qu'une table, changeaient la ville en une immense salle de festin, où le peuple devenait une seule et même famille (298).

The fraternity that makes the city of Beauclair resemble a family exemplifies a utopia that was thought to take over the whole globe. The utopian thinkers who inspired Zola considered that the development of transportation systems such as the railway could unite nations and create a fraternal society, announcing the technological utopias of the twentieth century.

In *Travail*, Zola anticipates the utopia of the network that can be found in the writings of the founders and promoters of the World Wide Web at the end of the twentieth century.<sup>29</sup> Their discourse on the metaphor of the information highway, in particular, echoes Zola's writings on technology. This discourse went beyond French borders and became a long-lasting obsession with a universal utopia. But the novel does express Zola's ambivalence towards technological improvements. The character of Morfain, the modern Vulcan of the novel, commits suicide by snapping an electrical cable with his bare hands when the installation of electrical furnaces make his work obsolete and unnecessary. At the end of *Travail*, Zola also anticipates the disastrous consequences of technology in conflicts and predicts the First World War, as if, in a moment of lucidity and premonition, he regretted having written his long, utopian novel: "Une moitié de l'Europe s'était jetée sur l'autre. La science avait inventé des explosifs, des engins capables de porter la mort à des distances prodigieuses, d'engloutir brusquement tout un peuple" (242). Rather than reinforcing fraternity, science could also create conflicts. However, the possibility of such a war is eliminated by the author who chose to end the novel on an optimistic and techno-utopian note.

---

<sup>29</sup> *Dictionnaire des Utopies*, eds. Michèle Riot-Sarcey, Thomas Bouchet et Antoine Picon (Paris: Larousse, 2002) 121.