

**Long Essay**

Rob Chambers

Student Number 0558109

Tutorial: Thurs 11:00

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170.105 Art in the Age of Modernism

**Prompt:** By examining the art produced between the late nineteenth century and 1945 it is clear that attitudes towards mechanization and technology were deeply polarized.

Discuss this polarization in respect to a selection of art works.

**Images:**

**Manet: The railroad**



**Boccioni: Dynamism of a Cyclist**

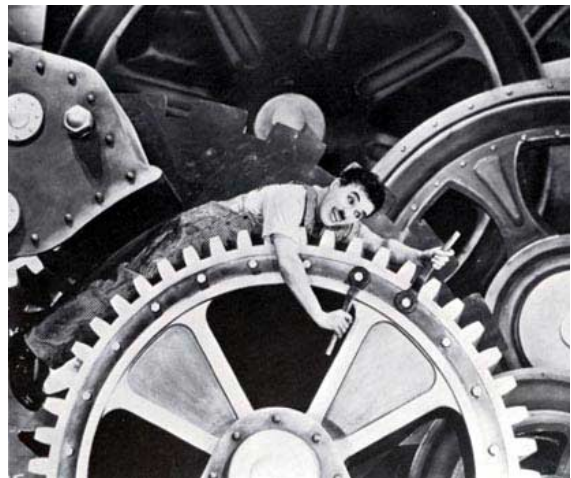


**Epstein: Rock Drill**



Jacob Epstein, *The Rock Drill*, 1913-15 (Rekonstruktion 1974), IKat.-Nr. 601

**A Frame from Modern Times**



“It was the best of times, it was the worst of times . . . it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us.” As Dickens would have expected, his commentary on the stark juxtapositions of modern civilization was just as fitting to the early 20<sup>th</sup> century as it was to the late 18<sup>th</sup> and mid 19<sup>th</sup> centuries. At an unprecedented pace, the turn of the 20<sup>th</sup> century saw everyday life transformed nearly simultaneously by cars, telephones, electricity, and radios. Underlying these changes were technologies and management techniques revolutionizing industry and propelling standards of living to new highs.

Yet, many commentators peered through the dizzying haze of new urban prosperity and foresaw the bleak, disastrous, and inhumane future that technology, if put to the wrong uses, could create. Certainly, this scenario was abundantly clear by 1918 when the Battles of Verdun and Somme inflicted an estimated 1 million casualties each without either side winning a victory. What was the artistic manifestation of the West’s obsession with technology before the Great War and the Great Depression, and then of its subsequent disillusionment? Perhaps most representative of the former is the work of the Italian Futurists. More moderate and critical is that of the British Vorticists; finally, among the most disillusioned is Charlie Chaplin’s film *Modern Times*.

Up until the turn of the century, relatively few artworks specifically addressed technology. Certainly, the later 19<sup>th</sup> century paintings such as those of the Impressionists were a reaction to the experience of modernity that was brought on, primarily, by changing technology. Yet, they did not explicitly comment on the technology itself. For

instance, even Manet's *The Railroad* (1872-73) concentrates not on the railroad as such, but on the subjects' reaction to it. The Vorticists and Futurists of the early 20<sup>th</sup> century, though, focused explicitly and intensely on technology and the best methods of its representation.

The Futurists, more so than the Vorticists, held up speed and machinery as the modern messiah without reservations.<sup>1</sup> Telephone lines, ocean-liners, airplanes, and submarines took the place of the religion that inspired the futurists' ancestors.<sup>2</sup> Numerous manifestos extolled the wonders of technology, with Marinetti, the founder of the movement, claiming that "Speed is the new beauty".<sup>3</sup> So consuming was their infatuation with speed and technology, the Futurists insisted that "all subjects previously used must be swept aside in order to express our whirling life of steel, of pride, of fever and of speed."<sup>4</sup>

Fundamentally, the Futurists were entranced with what they termed the *dynamism* of the new world taking form around them. The incessant, violent activity of cars and railroads inspired and fueled the young artists, who then undertook the mission of expressing their experience to others. As noted by Clough, "the Futurists wanted to paint sensations and especially the sensation of velocity . . . which they thought they had grasped better than others."<sup>5</sup> To capture the sensation, the artists naturally focused on the technology which enabled such speed and dynamism.

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<sup>1</sup> Stephen Kern. *The Culture of Time and Space*. Harvard UP, Cambridge. 1983. p98.

<sup>2</sup> Umbro Apollonio. *Futurist Manifestos*. Thames and Hudson, London. 1973. p25.

<sup>3</sup> Tim Mathews. "The Machine" in *The Violent Muse*. Manchester UP, Manchester. 1994. p131.

<sup>4</sup> Apollonio, 30

<sup>5</sup> Rosa Clough. *Futurism: the Story of a Modern Art Movement*. Philosophical Library, New York. 1961. p87.

Machinery, indeed, was as real a subject to the Futurists as the young girls in *The Railroad* were to Manet. Marinetti's car in the Futurists' founding manifesto is his "beautiful shark,"<sup>6</sup> which responds to his commands as an obedient animal. He later commented that "the machine is the symbol of the 'mysterious force' of the infinite—it is the symbol of life."<sup>7</sup> Thus, the Futurists created artwork as a response to the previously unknown speed and power brought on by the machine age, and as such were frequently confronted with the difficult job of expressing the dynamism of machinery—its speed and energy—on a two-dimensional canvas.

Typical of this effort is Umberto Boccioni's *Dynamism of a Cyclist* (1913). The subject matter alone is highly representative of the qualities that the Futurists valued. Cycles, as opposed to cars, are notorious for their vulnerability to accidents. Furthermore, the acute downward angle of the cycle's motion arouses nervousness and excitement in a viewer, who imagines the dangerous, uncontrollable speed that would be quickly reached, and the violent fate that the cyclist might meet. Finally, the blackened face of the anonymous cyclist forces the observer to focus on the machine's speed and energy, as opposed to the cyclist's expression, keeping the focus on technology and dynamism.

Like other Futurist paintings, *Dynamism of a Cyclist* exhibits an obvious distinction between the movement of the subject and its surroundings. And, unlike most previous paintings, the observer is placed in the same reference frame—that is, the same speed and direction of motion—as the subject. Besides effecting in the observer the same sensations that one might expect the subject to experience, this technique shows excitement over Einstein's groundbreaking special theory of relativity, introduced in

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<sup>6</sup> Apollonio, 21.

<sup>7</sup> Clough, 136.

1905, with which the Futurists would have surely been familiar. This theory showed, for the first time in history, that the experience of a moving observer was just as valid as that of a non-moving observer; moreover, it showed that there was no way to even define a moving or non-moving observer. All that mattered, according to Einstein's theory, was how fast a subject was moving relative to something else. Furthermore, the objects buzzing by in the background would be literally stretched and elongated, and frozen in time. Certainly, these phenomena were not lost on the Futurists, and are throughout their work.

Several painting techniques are used in *Dynamism of a Cyclist* to express the dynamism that the Futurists so admired. Most obviously, the background and the moving parts of the cycle blur into vague, stretched-out clouds of color while displaced air forms prominent streak lines. As described by Kern, "man, cycle, and air interpenetrate in a composition of abstract volumes and lines of force, pumping limbs, and swirling eddies of light and air."<sup>8</sup> The bright colors only add to the atmosphere of exhilaration, excitement, and intensity.

Altogether, the viewer is left with a clear impression of speed and energy, even though the painting itself bears limited relation to what a person would actually see in such a situation. This impression, of course, is what the Futurists were attempting to create with their abstract painting. Clough notes that once the artist had transferred his impression onto the canvas the observer "was to go through the inverse process, and from changes of color and form to reproduce feelings of motion, thus coming into contact with

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<sup>8</sup> Kern, 99.

the ‘dynamic source of things’”.<sup>9</sup> Through this process, the dynamism of a scene could actually be transferred through a two-dimensional canvas.

The Vorticists, in certain respects, were similar to the Futurists. Both, for example, had a rather revolutionary, progress-oriented philosophy. Both also were especially focused on technology and machinery. And, even if the Vorticists did not have quite such a passion for speed, they made up for it with a determined zeal for the representation of the power of machinery in painting and sculpture.

Perhaps most striking of the Vorticist works is Jacob Epstein’s “fierce icon of mechanized man”<sup>10</sup> entitled *Rock Drill* (1913). Virtually every aspect of this sculpture evokes feelings of power and mastery. The rock drill itself, which Epstein even considered powering pneumatically to complete “every potentiality of form and movement in a single work,”<sup>11</sup> is thousands of times stronger than any human. It overpowers the very earth that we stand on, allowing the placement of dynamite to cut deep gashes in its mountains, and enabling miners to drag minerals and jewels from thousands of feet below its surface. It is the ultimate example of form over function, constructed of cold, hard iron and drawing its shape only from the necessities of its task.

The anthropoid form atop the drill is somewhat similar; it takes on the sharp, hard, utilitarian form of the drill. Yet, the figure is not itself strong, and its menacing pose belies its frail arms and bare ribs. Although it exudes confidence and power, it alone would be impotent. The figure’s power is, ultimately, given to it by the rock drill; however, the rock drill’s power could not be used if not for its master. The figure hovers over the rock drill as a jockey over a horse; it is the most dominant element in the

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<sup>9</sup> Clough, 83.

<sup>10</sup> William C. Wees, *Vorticism and the English Avant-Garde*. Toronto UP, Toronto. 1972. p5.

<sup>11</sup> Wees, 152.

sculpture. The rock drill, in turn, is subservient to the figure but superior to the ground that it drills. Fundamentally, *Rock Drill* is a powerful, if idealized and somewhat naïve, commentary on man's harnessing of the machine to control nature. What, then, caused Epstein to claim in later years that *Rock Drill* possessed "no humanity", and that it represented "the terrible Frankenstein's monster we have made ourselves into"?<sup>12</sup>

The event that disillusioned Epstein, as well as the bulk of the Western World, was the onset of World War I. Here, modern engineering's greatest metallic triumphs—airplanes, tanks, submarines, and machine guns<sup>13</sup>—displayed their incomprehensible ability to destroy the soft flesh that had conceived them. Over 27 million soldiers were wounded,<sup>14</sup> many in fruitless suicidal charges through no-man's land.

Although the Italian Futurists remained firm in their faith in war—"the world's only hygiene"<sup>15</sup>—the Vorticists were able to see the senseless destruction that their beloved machinery and technology had created.<sup>16</sup>

Indeed, many of the British Vorticists were forced to confront the war first-hand. Six out of the ten male signatories of the 1914 Vorticist manifesto took part in the war. Brzeska in 1914, and Hulme in 1917, died. The Vorticist ideals of "energy, aggression and strength, once considered fitting attributes for 'modern life,'"<sup>17</sup> had been wholly manifested on the field of battle. After seeing the result most artists, and especially those from the European countries involved, could no longer praise these ideals as they had before. Thus Wyndham Lewis, in 1920, officially declared Vorticism dead.<sup>18</sup>

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<sup>12</sup> Edwards, 56.

<sup>13</sup> R. J. Q. Adams. *The Great War, 1914-1918*. Texas A&M UP, College Station. 1990. p2.

<sup>14</sup> Adams, 1.

<sup>15</sup> Paul Edwards. *Blast: Vorticism 1914-1918*. Ashgate, Aldershot. 2000. p22.

<sup>16</sup> Pollonio, 183.

<sup>17</sup> Edwards, 22.

<sup>18</sup> Edwards, 23.

Perhaps Brzeska's realization soon before his death in the trenches, published posthumously in *Blast* 2, most eloquently describes the Vorticists' change in disposition. After picking up an enemy rifle, Brzeska observed that "its heavy unwieldy shape swamped [him] with a powerful IMAGE of brutality." After much deliberation, he came to the surprising realization that he didn't like it. In his own words, "I broke the butt off and with my knife I carved in it a design, through which I tried to express a gentler order of feeling, which I preferred."<sup>19</sup> Surrounded by the energy, aggression, and strength that he had sought as a Vorticist, Brzeska had come to the same realization as Epstein had at home; in hindsight, *Rock Drill* was seen as a "prophetic symbol ... of the impending war," and after the war Epstein therefore concluded that it should no longer be a part of his sculpture.<sup>20</sup> Lewis, likewise, later lamented the case of extremism—"that disease that visits artists"—that afflicted him in his early career.<sup>21</sup> The Vorticists, in abandoning their movement, did much to reject the ideals for which it had stood.

Because of the barbaric destruction of World War I, it became increasingly difficult for man to see himself as master of his own destiny. Technology, it seemed, had usurped that roll. This change can be seen in the evolution of World's Fair mottos. While the 1904 St. Louis Fair's motto was "Nothing Impossible," the 1933 Chicago Fair claimed that "Science Finds, Industry Applies, Man Conforms." As Cheryl Ganz explains,

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<sup>19</sup> Edwards, 22.

<sup>20</sup> Edwards, 56.

<sup>21</sup> Wyndham Lewis. *The Demon of Progress in the Arts*. Methuen: London. 1954. p3.

The enlightenment's aggressive conqueror of nature had become a passive subject to science and technology. . . . The roles of human and robots, intellect and forced labor, had been reversed.'<sup>22</sup>

In *Grapes of Wrath* Steinbeck, through literature, comments on the inhumanity of the corporate structure, which is "something else than men. . . . It's the monster. Men made it, but they can't control it."<sup>23</sup> His words paint a mental picture of the massive tractors that displaced farmers from land their families owned for generations:

The tractors came over the roads and into the fields, great crawlers moving like insects, having the incredible strength of insects. . . . The man sitting in the iron seat did not look like a man; gloved, goggled, rubber dust mask over nose and mouth, he was a part of the monster, a robot in the seat. . . . The monster that built the tractor, the monster that sent the tractor out, had somehow got into the driver's hands, into his brain and muscle, had goggled him and muzzled him—goggled his mind, muzzled his speech, goggled his perception, muzzled his protest.<sup>24</sup>

This dehumanizing effect of technology and machinery was among the most important subjects of art in the first half of the 20<sup>th</sup> century.

Following World War I, artistic interpretation of the dreadfulness of mechanized warfare was, perhaps, somewhat redundant considering the millions of witnesses walking—or often, no longer walking—the streets of every Western nation. Yet, artists were definitely called upon to highlight the problems that Steinbeck articulates. The earth, once the livelihood of millions of people, was increasingly patrolled by cold,

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<sup>22</sup> Cheryl R. Ganz. "Science Advancing Mankind," *Technology and Culture* 41.4 (2000). p785.

<sup>23</sup> John Steinbeck. *The Grapes of Wrath*. Penguin: New York. 1939. p45.

<sup>24</sup> Steinbeck, 48-49.

unfeeling machines. Even worse, the machines were controlled by men who bore closer resemblance to robots than to the farmers who were forced from their land.

This sentiment is echoed in Charlie Chaplin's immensely influential film *Modern Times* (1936). Chaplin's character endures the epitome of mindless labor. He performs a tightly predetermined action, over and over: two wrenches tighten two bolts, on a certain number of parts each hour, for a certain number of hours each day. The action is of utmost simplicity, and is performed in mind-numbing repetition.

Besides causing mental anguish, such a job is depressingly unfulfilling. Chaplin receives no praise, but is tormented with criticism when he falls behind schedule. The job is monotonous and a constant race against time to improve efficiency. Furthermore, as his actions are wholly predefined, he loses all sense of individuality: "the conditions of factory work legislate against unsynchronized individual quirks."<sup>25</sup> If he for a split second acts on a whim, even to scratch an itch, he spends minutes catching up again.

Even more importantly, Chaplin is no longer master of his own destiny. His role in the entire film is either predetermined or accidental. His actions and lunch hour are determined by his employer. His nervous breakdown is caused by the machine that the corporation forced him to test, and his subsequent trip to jail is forced upon him by the policemen. Ironically, the one decision that he does consciously make—he wants to stay in jail—is vetoed by the warden. So many of the ideals held sacred through history—freedom, independence, and creativity—are being scraped away in the relentless pursuit of material productivity.

Clearly, the jubilation over technological progression experienced in the first years of the 20<sup>th</sup> century was severely tempered in the ensuing decades. Both the

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<sup>25</sup> Peter Conrad. *Modern times, modern places*. Thames and Hudson, London. 1998. p436.

senseless destruction enabled by technology and mechanization, and the subsequent dehumanization resulting largely from Taylorism and rapid Industrialization, created a new school of thought that was deeply suspicious of technology. The events of World War Two, which led to an even more atrocious loss of life than World War I,<sup>26</sup> and the introduction of the atomic bomb, which finally gave humanity the power to completely destroy itself, only confirmed these fears. While technological progress continued and will continue to provide countless benefits, the identification and expression of its perils remains a vital calling for artists.

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<sup>26</sup> Clive Emsley et al. *World War II and its Consequences*. Open UP, Buckingham. 1990. p58-9.

## Bibliography

- Adams, R. J. Q.. *The Great War, 1914-1918*. Texas A&M UP, College Station. 1990.
- Apollonio, Umbro. *Futurist Manifestos*. Thames and Hudson, London. 1973.
- Clough, Rosa. *Futurism: the Story of a Modern Art Movement*. Philosophical Library, New York. 1961.
- Conrad, Peter. *Modern times, Modern Places*. Thames and Hudson, London. 1998.
- Edwards, Paul. *Blast: Vorticism 1914-1918*. Ashgate, Aldershot. 2000.
- Emsley, Clive et al. *World War II and its Consequences*. Open UP, Buckingham. 1990.
- Ganz, Cheryl R.. "Science Advancing Mankind," *Technology and Culture* 41.4 (2000). p783-787.
- Kern, Stephen. *The Culture of Time and Space*. Harvard UP. Cambridge. 1983.
- Lewis, Wyndham. *The Demon of Progress in the Arts*. Methuen: London. 1954.
- Mathews, Tim. "The Machine" in *The Violent Muse*. Manchester UP, Manchester. 1994.
- Steinbeck, John. *The Grapes of Wrath*. Penguin: New York. 1939.
- Wees, William C.. *Vorticism and the English Avant-Garde*. Toronto UP, Toronto. 1972.