The Early Revolution

Pitlessie Fair  David Wilkie, 1804  National Gallery of Scotland, Edinburgh

This multi-figured rustic composition is divided into three broad horizontal bands.

The foreground is composed of many small groups of adults and children in various activities. People chat, eat, drink, barter, play, fight, etc. The general feeling of familiarity pervades. Livestock and domestic animals intermingle among the groups. In the visual center, a tent-like structure is set up. Underneath, a woman faces a group of four well-dressed figures.

In the middle ground, a band of solidly built domestic structures moves the eye from left to right. The closely placed houses appear in no particular linear order, and with the exception of two, are approximately the same size. Roofs, made of slate or thatch, appear to have broad chimneys with smoke rising from them.

In the background, additional houses and figures blend into a line of trees. The trees contours mimic the lines of the houses. The soft textured contours of the trees contrast with the hard angular edges of the structures.

Background

Country fairs, such as this one, were mainstays in an agricultural society. Pitlessie, north of Edinburgh on the River Eden in Scotland, was, in the 18th Century, an agricultural area. After 1750, linen production (as well as linen bleach fields) became important in the economic development of the region. In addition to it being a social outlet, the country fair offered an opportunity for rural inhabitants to come together to sell handmade items as well as livestock.

Providing a panorama of rural life, Wilkie humorously illustrates the many groups and activities that coexist within this river front community. In the left hand
foreground, bales of fibers stand immediately in front of pottery jugs. Sales of goods take place informally on the village lanes, as well as underneath a centrally located tent.

There is no public manufacture in this part of the country for wool, but a considerable domestic one, as all over Scotland; every housewife and family spins; has the yarns wove, dyed, etc. at her own expense. Having clothed her family, she sells the overplus.

A Scottish Correspondent; Annals of Agriculture, 1788

I viewed the Cloth Hall on a market day, and the scene was animated; but I could not help being struck with the reflection, that such an immense number of men were idle, twice a week, to come from all parts of the clothing country, in order for a half dozen to execute business which might as well be performed by one woman; or, if these men inhabited towns, who would, instead of a day, lose not more than an hour: one third of the productive time of such multitudes thus lost, to say the least, is a disadvantage attending this mode of spreading a manufacture.

Arthur Young, near Leeds: 1793
This evening landscape includes highlighted figures and objects in silhouette.

A bright orange, blue and white light draws the viewer's attention left of center. Two trees are silhouetted in the foreground. Continuing to the right, a small shaft of light moves down the hill illuminating two figures and two horses leading a wagon. Immediately below the large fiery light, an arched opening frames a lit interior casting light on the figure immediately to the right. Although dark, the illuminated arch is reflected in the water below.

The composition is painted in somber, earthy tones, the brightest spots being the illuminated fires. Diagonally across from the fires, hints of reds appear in the right foreground.

**Background**

Lime was an important aspect in the smelting of iron ore, getting rid of its impurities. Kilns, devised to separate the mineral from the rock, created strong light, particularly in the evening. At Darby's ironworks in Coalbrookdale, strong blasts of air raised temperatures in coke-fired furnaces, melting large amounts of iron ore.

Turner was interested in the effects of light - as well as the sublime aspects of nature. In this evening scene, the light forms the central focus and illuminates the workers at their tasks. Aspects of the natural landscape are subliminated to the light and its effects. The workers, who work within the mines and at the kilns, are
incorporated into the land itself. Nature has been simplified to silhouettes, allowing for stronger focus on the light.

What is a limekiln?

Feeling stifled by ‘the prodigious piles of coal burning to coke, the furnaces, the forges, and the other tremendous objects emitting fire and smoke to an immense extent, together with the intolerable stench of the sulphur.’
Charles Dibdin, on his visit to the Severn Gorge near Coalbrookdale, 1787

**Coalbrookdale by Night** Philip James de Loutherbourg, 1801 Science Museum, Science and Society Picture Library, London

This composition is dominated with strong hot colors occupying the top diagonal right hand side. Billowing clouds of reds, oranges, and yellows serve as a backdrop to silhouetted structures in the left middle ground. Further along in the right background, smaller structures (chimneys)—some triangular—spout additional smoke that is absorbed into the background. In the visual center, the billowing clouds consume a lone chimney, its silhouette barely visible. Immediately in front of the central chimney, several figures doing manual tasks are barely visible as well.

In the central foreground, placed on a diagonal, a team of workhorses draws a wagon filled with goods. One man leads the team, while another sits on the wagon. All of the figures glisten with the reflected light of the billowing clouds. The diagonal line of action created by these figures leads the viewer’s eye deep into the composition. The receding diagonal of houses on the left complements this line, creating a point that is visually enunciated by a lone figure right of center. Objects scattered in the left and right foreground help to balance the composition.
Background

de Loutherbourg, an émigré from France, came to England in 1771. An academic painter, de Loutherbourg began work as a set designer with David Garrick's Drury Lane Theater in London, remaining there until 1785. He was interested in the occult and illusionist practices, and after 1790 developed the Eidophusikon, a theatrical light system that gave the illusion of movement using shifting lights. de Loutherbourg was an acquaintance of Turner, both being fellow members of the Royal Academy. Both ascribed to sublime representations in landscape painting, arousing 'feelings that invigorate and elevate the mind.' (Burke)

de Loutherbourg's interpretation of Darby's Coalbrookdale, using massive amounts of hot colors, focuses on the awe-inspiring aspects of the flames of the iron furnaces. Coke, stronger than charcoal, served as the fuel for blast furnaces to smelt iron ore. Bigger and taller furnaces were developed to handle the ever-increasing demand for iron. By the end of the 18th Century, the fires at Coalbrookdale and the technology of Iron Bridge became tourist attractions.

de Loutherbourg's vision of Coalbrookdale focuses on the sublime aspects of natural forces overshadowing man. His theatrical associations translated the fires into an awe-inspiring background of an industrial location, idealizing the actualities of iron making processes. The workers are small in comparison.

...beautiful sheets of hanging wood... and yet too beautiful to be much in unison with the variety of horrors...the noise of the forges, mills, &c. with all their vast machinery...the flames bursting from the furnaces with the burning of coal and the smoak of the lime kilns, are altogether sublime.
Arthur Young, describing Coalbrookdale, 1776

...Pond’rous engines clang
Through thy coy dales; while red the countless fires,
With umber’d flame, bicker on all thy hills
Dark’ning the Summer’s sun with columns large
Of thick, sulphureous smoke
Anna Seward; The Swan of Litchfield, 1785
The large arcing iron bridge, spanning the river, is the central focus of this river landscape composition. Massive concrete abutments flank either side of the central light and airy structure. In the immediate center foreground is a small boat holding four figures. The right hand figure appears to be steering the boat, while three well dressed figures (not facing the viewer) look upstream. The gentleman at left points upward, and appears to be conversing with the women. Two working boats on the right and left side of the composition balance the central boat. Above the river scene, crossing the span, a horse drawn carriage approaches the center. The lacy guardrail has additions of tall lantern like structures at both ends and in the center.

In the center of the composition, the river winds to the background. Diagonally slanting masts of ships eventually fade from view. On the left bank, a white horse and red carriage move along the dirt road next to the river. Dotting the right bank are several seemingly domestic structures. Small masted boats are moored alongside the shore.

A smoking chimney occupies the central background. Silhouetted against a subdued sky, the viewer's eye is drawn to the plumes of smoke and neighboring structures - all of which contribute to the whole of the hill on the right hand side.

**Background**

The world's first iron bridge, spanning the River Severn, was completed about 1779. Abraham Darby (grandson of Abraham Darby - Coalbrookdale) spearheaded this project, along with thirteen fellow financial subscribers and ironmasters, as an advertisement for their product: cast and wrought iron.
The Iron Bridge, as illustrated, was a new and major technological feat, the figures in the central boat pointing up and discussing the novelty. Spanning 98 feet and constructed at a cost of about $4,800, the bridge allowed for easy access, as illustrated by the horse and carriage on the span.

The span itself, arching above the center as well as in the reflection below, frames the iron works at Coalbrookdale. This facility was the center of the Darby family's iron industrial activity that included a blast furnace.

The Bridge itself makes a light and elegant appearance tho’ apparently no ways deficient in strength. In viewing it either up or down water, it resembles an elegant Arch in some elegant Cathedral.

Samuel Butler; 1782
This moonlit landscape cradles a multi-windowed building. The seemingly insignificant building has regularly patterned lit windows, made more apparent by the dark structural shape and landscape surrounding them.

Sharing the building's central vertical axis is a cart and wagon in the foreground, a large moonlit cloud and brightly silhouetted moon directly above the building. To the left of the building, hills gently fall into the center middle ground. A moonlit walled path leads the viewer's eye into the hills. To the right, a larger hill and its greenery - silhouetted in the moonlight - overshadows the central structure. The dark evening sky, cloud forms barely visible, balances the darkened foreground area.

**Background**

Richard Arkwright, developer of a water frame powered by a waterwheel, constructed Cromford Mill, on the River Derwent, in Derbyshire. The water frame made stronger lengthwise cotton warp threads to be used in textile looms. This was the first cotton mill purposely built to house working spinning machines, spinning four spindles of cotton threads at a time.

Arkwright's mill was new, employed many people, and created a new economy. The drama of working long hours and into the night was exemplified through the artist's concept of painting the moonlit scene.
The term Factory, in technology, designates the combined operation of many orders of work people, adult and young, in tending with assiduous skill a system of productive machines continuously impelled by a central power. This definition includes such organizations as cotton mills, flax mills, silk mills, woolen mills, and certain engineering works; but it excludes those in which the mechanisms do not form a connected series, nor are dependent on one prime mover. Of the latter class, examples occur in iron works, dye works, soap works, brass foundries, etc...I conceive that this title, in its strictest sense, involves the idea of a vast automation, composed of various mechanical and intellectual organs, acting in uninterrupted concert for the production of a common object, all of them being subordinated to a self regulated moving force...The principle of the factory system then is, to substitute mechanical science for hand skill, and the partition of a process into its essential constituents, for the division or graduation of labour among artisans.

Andrew Ure, The Blessings of the Factory System; The Philosophy of Manufactures, 1835

Steam engines...create a vast demand for fuel; and, while they lend their powerful arms to drain the pits and to raise the coals, they call into employment multitudes of miners, engineers, shipbuilders, and sailors, and cause the construction of canals and railways: and, while they enable these rich fields of industry to be cultivated to the utmost, they leave thousands of fine arable fields free for the production of food to man, which must have been otherwise allotted to the food of horses. Steam engines moreover, by the cheapness and steadiness of their action, fabricate cheap goods, and procure in their exchange a liberal supply of the necessaries and comforts of life, produced in foreign lands.

Andrew Ure, The Blessings of the Factory System; The Philosophy of Manufactures, 1835
An atmospheric rendering of a metropolis dominates the background and two thirds of the picture plane. Horizontal bands of buildings fade out in the distance with tall smoking chimneystacks adding vertical and diagonal movement. An occasional tall church spire complements the vertical lines of the chimneys.

The horizontal band of the middle ground is sparsely populated with open land, trees, and domestic buildings. The contrast is sharper than in the background.

The darkened and sharper foreground is peopled with figures in various attitudes of work. Two figures on the left hold a large piece of cloth between them, while another large piece rests on the ground near them. On the right, two figures wrap what appear to be parcels as they use the stone wall for support. In the right foreground, outside of the wall, figures are in movement, both by foot and on mules. They too hold parcels as they appear to be climbing a hill.

The circular movement of the strong wall in the foreground, through to the line of domestic buildings leads the eye directly to the smoking factory buildings in the background.

**Background**

Leeds, a center in the wool and flax industries in the 18th and 19th centuries, is depicted here as a growing metropolis - spread out onto the flat plains of the background and slowly encroaching onto the hills of the domestic middle ground. The activity of the cloth workers outside the mills is pictured in the foreground. Rolls of cloth are brought up the hill, away from the mills, to be washed and dyed, hung to
dry and then folded. This activity was an important one, as the fabric needed to be
dyed and sized after initial production in the mills. The inclusion of a human element
in the tasks of the textile workers strongly contrast with the smoke filled industrial
city in the background. Although the viewer focuses on the activities of the workers' outside activities, one cannot but wonder about the conditions within the mills themselves as no reference to the human condition is exhibited, only an atmospheric one.

Originally conceived as a picturesque watercolor, this image was eventually lithographed for inclusion in an edition of Dr. Whitaker's 1823 edition of the History of Leeds. The original watercolor was purchased by noted British art critic John Ruskin. Ruskin attributed to Turner his own pessimistic views about the impact of industrialization on civilization and the environment.

A Gentleman from York passed through this city a few days ago, who gave us a new confirmation of the flourishing state of the woolen trade in that county. He says, that although so many machines have been erected, yet the trade has thereby been increased to that degree, that at this time no less than seventy additional machines are now set up in the neighbourhood of Leeds, Bradford and Huddersfield. One manufacturer assured this gentleman, that he was in such want of hands as to be driven to the expedient of procuring from the workhouses in London, 500 poor children to be employed in his workshops.

Annals of Agriculture, 1791

The representation of facts... is the foundation of all art; like real foundations, it may be little thought of when a brilliant fabric is raised on it; but it must be there... And thus, though we want the thoughts and feelings of the artist as well as the truth, yet they must be thoughts arising out of knowledge of truth, and feelings arising out of contemplation of the truth...nothing can atone for the want of truth, not the most brilliant imagination, the most playful fancy, the most pure feeling,... not the most exalted conception, nor the most comprehensive grasp of intellect, can make amends for the want of truth, and that for two reasons: first, because falsehood is in itself revolting and degrading; and secondly, because nature is so immeasurably superior to all that the human mind can conceive, that every departure from her is a fall beneath her, so that there can be no such thing as an ornamental falsehood...

John Ruskin; Modern Painters, 1843

As soon as one mill is at work, occupying two hundred hands, we try, by means of it, to set another mill at work, occupying four hundred. That is all simple and comprehensible enough—but what is it to come to? How many mills do we want?

Last week I drove twenty miles from Rochdale to Bolton Abbey... naturally, the valley has been one of the most beautiful in the Lancashire hills; one of the far away solitudes full of old shepherd' ways of life. At this time there are not—I speak deliberately and I believe quite literally—there are not, I think, more than a thousand yards of road to be traversed anywhere, without passing a furnace or mill.

John Ruskin; The Two Paths, 1859
This hazy, horizontal composition is divided into two distinct sections: a warm-color toned foreground and a cool-color toned background. Soft edged silhouettes define items in both the foreground and background. Items in the foreground appear to converge to a central point in the visual center, occupied by a relatively empty space.

In the immediate central foreground, a waterway is apparent - as evidenced by reflections. Left of center, dark toned buildings rise from the water and contain tall smoking chimneys. The smoke is carried further to the left, into the sky, and eventually off the composition. A barely visible boat appears to be moored in near the buildings. Right of center, there is evidence of more human activity. Several packet boats are moored against the shoreline. The boat closest to the viewer contains the letters M and __, and slants diagonally towards several other boats with figures that are barely visible. On the extreme right, several lightly colored figures tend a packhorse. In the middle ground, immediately behind the moored boats, is a triangular shaped area in vivid oranges and reds. Tall chimney-like shapes are defined by brighter contrasting colors - the strongest of which appears to be in a pale yellow tone. Colors diminish and move upwards, fading into the cooler colors of the background.

The background is defined with misty, cool silhouetted forms that are further defined by a lighter sky. Left of center, immediately above a smoking chimney, a tall church spire stands above the surrounding distant buildings. Right of center, on a hill formation, there are ruins of a castellated structure with catching reflected light.

**Background**
Dudley, an ancient market town near Tipton in the Midlands, was a large and active industrial town in the 19th Century. The town once contained a Benedictine Priory and Castle, but both were in ruins by 1830, the time of Turner's visit. Viewing Dudley from the vantage point of the canal basin afforded Turner sights of its past and present legacies, all illuminated by the fires of the coal furnaces in the middle ground. The fires hot glow is reinforced due to an evening representation.

Present, as pictured in the warm colored foreground, contains evidence of the industrial activities of Dudley. Canal boats are active in the loading of goods from their surrounds. Coal furnaces are active with their glowing fires. Industrial buildings and limekilns are busy with their smoking chimneystacks. The viewer's eye moves from left to right, and back again, following the activities on the water's perimeter. Reflections and cast light stabilize the composition.

Past is pictured in the cool colored silhouettes of the ruined priory and castle battlements, towering above the industrial activity below. A medieval church steeple looms in the farthest background, a symbol of the light of a penitent and peaceful distant past. Diagonally placed to the right, lights of a fiery present contrast in motion filled activity.

Turner fills this image with symbols representing faith, tradition and current industrial activities.

Riveted to the spot, one continues gazing at the interesting landscape...The chimneys of many remote iron smelting furnaces are now distinctly to be seen. The fires which spout upwards from their tops are no longer rendered comparatively dim by the brighter glare of sunshine. As the obscurity increases, these fires all begin to brighten the view, and when darkness finally prevails, the lights resemble stars reflected from the surface of a dark lake spread out before you...In addition to the fires of the furnaces, the countless heaps of blazing coals, ignited for the purpose of being reduced to coke, flash up at intervals over he adjacent fields.
Zachariah Allen, 1825-30

The Dudley Port Furnace and other iron complexes are iron works"...themselves, are, in every possible instance, situated on the banks of a canal, in order to facilitate the transit both of materials and of the metal."
William Hawkes Smith, 1835

Dudley...“abounds in mines of coal, iron, stone and limestone which furnaces employment for a great number of the inhabitants. The manufactures are iron, nails, glass and fire irons. In 1801, the populations amounted to 8,000 and upwards; and in 1811 to 13,925, but it has increased rapidly since that time.”
Text accompanying Turner's England and Wales series, 1835
This line and watercolor drawing focuses on figures in the center and the surrounds of a large well-lit room.

In the central foreground there are three groups of eight young girls. Dressed in white empire waisted dresses, trimmed with pink bands, the girls are barefoot and wear their hair in curls around their heads. Each group has two or three girls in a dance action, while the remaining figures face towards the center. Their shadows are cast on the planked wooden floor beneath them.

To the right, two well-dressed men stand beneath a hanging map of Western Europe. A pointer rests on the ground. They look on at the girls as they dance. Behind them, at the corner of the room, three musicians play violins and share the same sheet music.

To the left, a large group of well-dressed onlookers sit beneath a wood paneled second story gallery. White clothes hang over the gallery’s ledge, and three faces are seen peeking out.

In the middle ground, several groups of well-dressed figures sit on a long wooden bench beneath the tall window. Many of the women wear simple white long sleeved empire waist dresses. All of the women wear bonnets, some carry purses.

The view through the tall windows show a panorama of simple, multi-windowed buildings. At the second story level there is a series of murals depicting animals in their habitat.

Background
In 1785, entrepreneur David Dale and inventor Richard Arkwright, began to develop a new cotton-spinning mill on the banks of the River Clyde, near Glasgow. In harnessing the waterpower of the Clyde with large water wheels, Arkwright's spinning machines could do the work of thousands of hand spinners. By 1793, 6000 spindles were operating in Mill #2. New Lanark eventually developed into the largest cotton-spinning mills in Britain. Children were needed to operate the "jennies" in the mill room. Most of the children were pre-adolescent - some as young as six. A dormitory was provided for the 'orphans' of the surrounding parishes. Village children would receive a wage, while a dormitory and maintenance was provided for the 'orphans' of surrounding parishes.

Robert Owen, a pioneer of the co-operative movement and of Utopian ideals and son in law to David Dale, became manager of New Lanark in 1800. Owen began a course of 'improvements' for New Lanark, focusing on organization and discipline. In 1814 his essay, The New View of Society or the Formation of Character, was published. In 1816, Owen established England's first 'Infant' (elementary) school for the education of the village's children. Paramount to Owen's educational philosophy was the nurturing of the senses through singing, dancing and an appreciation of nature. The school remained open in the evening for the education of older children (ten - twenty year olds) who worked in the mills.

This drawing illustrates the success of the model educational system operating within the community of a busy and prosperous cotton-spinning community.

The houses of the poor and working classes are generally all together unfit for the training of young children...these considerations created in me the first thoughts respecting the necessity of infant education to be based on the true principle of forming character from the earliest period at which infants could leave their parents. Robert Owen, early 19th Century

The upper storey is divided into two apartments. One, which is the principal schoolroom...is about 90 feet long, 40 feet broad and 20 feet high. It is surrounded, except at one end where a pulpit stands, with galleries which are convenient when this room is used, as it frequently is, either as a lecture room or a place of worship. The other apartment on the second floor is of the same width and height. The walls are hung round with the representations of the most striking zoological and mineralogical specimens including quadrupeds, birds, fishes, reptiles, insects, shells, minerals, etc. At one end there is a gallery adapted for the purpose of an orchestra and at the other are hung very large representations of the two hemispheres. This room is used as a lecture and ballroom and it is here that dancing and singing lessons are daily given. The lower storey is divided into three apartments. It is in these that the younger classes are taught reading. Robert Dale Owen, early 19th Century