John Constable is one of the most famous English landscape painters. He is well-known for his landscape paintings depicting everyday farm scenes near his home in Sussex, England. Constable also painted studies en plein air, which he intended as quick observations to which he would later refer while he worked on his more finished paintings. Even though they were only intended as rapid sketches, his sky and cloud studies are renowned today, and show Constable’s skill at rendering “atmosphere, color, and texture.”¹

This paper will explore John Constable’s cloud studies, including how Constable connected art and science in them. Constable painted during the 19th century, a time of new scientific development,² and his interest in science is clear in his paintings, especially these cloud studies. During the time Constable painted, there was a growing interest in empirical observations and in the study of nature related to science. “Nature-study” was a common practice especially in schools, and most frequently a little after when Constable would have been painting. The focus of nature-study was everything in the natural world, including the roles of plants and animals, geology, as well as “weather and climate.” The purpose of nature-study was to comprehend nature’s intricate ways and connections, which, according to one article, is the “foundation of science itself.”³

Constable performed his own kind of nature-study in his landscape and cloud-study paintings. He was interested in science, and considered his paintings to be associated with it. In 1836, he gave a speech about his work at the Royal Institution of Great Britain. At one point he said, “Painting is a science, and should be pursued as an inquiry into the laws of nature.” This quote relates to nature-study because Constable does make it sound as though his purpose in painting is to investigate and understand nature’s ways and many connections. Constable also once wrote, “In such an age as this, painting should be understood, not looked on with blind wonder, nor considered only as a poetic aspiration, but as a pursuit, legitimate, scientific, and mechanical.” Again, this quote shows Constable’s view of painting as a serious technique for the purpose of science.4

Constable relied on science in his paintings because while he was painting, there were advancements being made in empirical science, especially new development in the observation and analyzing of the natural world. “Geology, botany, and meteorology” were becoming more widespread and important. Before the new attention to the natural sciences in the 19th century, landscape paintings were mostly “conceptual,” with exaggerated versions of nature.5 When Constable first started painting, the Royal Academy only accepted landscape paintings in the Neoclassical style, which showed idealized landscapes that had to include historical or mythological subject matter, rather than just pure landscapes.6

5 Ibid, 61.
Constable did not paint according to the style supported by the Royal Academy, the style of imaginative or exaggerated landscape painting, because instead, he wanted to be a naturalistic painter. He painted only places around where he lived because they were familiar to him, and he thought he could more naturalistically paint places he knew. He painted in the “Stour Valley, Hampstead Heath, Salisbury, and Brighton,” which were places in “southern England with which he had personal associations.” According to Ronald Rees in an article about Constable and the 19th century nature views, Constable was a naturalistic and “radical painter” because Constable was painting “old brickwork, plowed fields, rotting banks, and slimy posts” at the same time that more traditional artists were painting “dramatic and heroic subjects” in exaggerated or modified landscapes. Constable’s subject matter, the “everyday” scenes in the countryside of Suffolk, was low on the accepted genre hierarchy. Constable’s “everyday” landscapes helped to bring a new attention to landscape painting.\(^7\)

Constable’s painting process reflects the increasing importance of science during this time because he constructed his landscapes according to his actual “experience and observation.” He studied natural objects, such as trees and clouds, and sketched them out-of-doors, directly from nature, because he wanted them to be as true-to-nature as possible. He would refer to many of these sketches later in his studio, while he worked on his more-finished paintings.\(^8\)

When Constable tried to capture a whole scene outdoors, painting directly from nature, he would paint quick sketches before the live scene could change.\(^9\) These sketches were naturalistic in that he wanted to copy the “ever-changing light and movement in the landscape” directly from

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\(^7\) Ibid, 255, 257, 261.


\(^9\) Ibid.
the landscape, but they were not entirely scientific because they did not describe the scene in exact detail. Instead, he intended the quick, loose sketches to record the basic colors and motion of the scene, or his “impressions.” His method is called “alla prima,” which means “at first attempt,” because later, in his studio, he would paint the scene more precisely. According to Rees, the possible exception to this method was Constable’s cloud paintings. Even though when Constable painted outdoors he usually painted fast, more-general shapes for his paintings of actual land formations, he worked with increasing precision on his studies of clouds, even though he also painted them quickly outdoors.11

These cloud studies do not only show Constable’s interest in rendering the sky with scientific exactness, but also his interest in the science of meteorology. He grew up in Suffolk County, England, along the Stour river valley, which caused his interest in “geological combinations of river and sea, vale and farm,” and especially in the “changing patterns of weather that created… enormous cloud formations.” He painted clouds throughout his entire career, but he was especially productive in cloud studies between the years 1821 to 1822, when he painted about 100 cloud studies, which he meant as practice or reference for more finished paintings. For many of these studies, he painted pure sky with little or no land. Throughout them, he depicted all different types of weather, ranging from looming storm clouds to sunny skies with piles of fluffy clouds.12 During the years of 1821 and 1822, Constable lived in a town called Hampstead, which was “on an elevated, open, hilly heathland,” and which caused him to be conscious of the

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constant movement and transformation of the clouds in the sky. He painted many of his sky studies13 “high up on the natural observatory of Hampstead Heath” where he could, “unimpeded,” observe “unending” cloud masses form and disappear.14

Constable chose to study clouds for scientific reasons. He knew that clouds “embody changes of weather,” and the variety of cloud types was “not random,” but evidence of “complicated, dynamic principles.” So, Constable’s sketches are not “decorative” or “symbolic,” but are “real” because they depict the type of cloud to occur within real weather “conditions.”15

On the backs of many of the cloud studies, Constable included brief notes about the weather conditions that he was painting.16 This also reflects the importance of science at the time, especially meteorology. According to an article by Simon Naylor, the early 19th century, the time that Constable was painting, was a time known as the “Second Scientific Revolution” and there was a new emphasis on meteorology. The study of weather became an “instrumental science” in the beginning of the 1800s, and then was finally “[standardized] and [institutionalized]” in the mid-1800s. 19th century meteorologists relied on “techniques” of close “observation” because they wanted to shape an “accurate picture of the national weather.”17

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16 Ibid.
sounds a lot like Constable’s painting methods, because Constable, too, worked from close
observation when he painted outdoors. And even though he was not a trained meteorologist, he
also wanted to accurately represent the specific cloud conditions of his part of the country with
his sky sketches.

The notes that Constable took on the backs of most of his sky studies were not long, but
according to a review I found of John Thornes’s book, John Constable’s Skies: A Fusion of Art
and Science, they indicated that Constable had an “up-to-date… knowledge” of the
“meteorological theory” of the time. In 1972, scholars “catalogued” Constable’s home library
and found a copy of a book called Researches About Atmospheric Phaenomena by Thomas
Forster, published in 1815. This discovery proved that Constable was aware of and interested in
meteorology. The first chapter of Constable’s copy of the book was about the classification of
cloud types, and its margins were covered with Constable’s own hand-written notes. In another
section of the book that Constable also marked described how any one place could experience
almost any type of “atmospheric phenomena” throughout time. In a separate article written by
Thornes, Thornes theorizes that Constable appreciated this passage because he spent his whole
life and painted only in one area of England, so he would like the idea of being able to see most
of the possible sky occurrences even in the limited area where he lived and worked.

Throughout the rest of the book, Constable’s margin notes show that he was also “interested
in the formation of clouds and precipitation,” in understanding and copying the different type of

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clouds, and especially in the “illumination of clouds by the sun.”

Constable’s notes in the margins of Forster’s book showed that he was knowledgeable enough about meteorology to identify “ambiguities within the cloud classification” and to support or disagree with some of Forster’s ideas.

In the brief note on the back of one of his cloud studies from 1821, known as *Horizon of Trees*, Constable recorded the “day, hour, and weather conditions.” In the painting, he included a little bit of land as a reference point: a “fringe of tree tops” from an area of the Hampstead Heath that “[anchor]” the piled “cumulus clouds” that are tipped in fresh white against the deep blue sky. On the other side of the image, Constable wrote, “Noon 27 Sept very bright after rain wind West.” In another cloud study, painted in 1822 and owned by the Tate Museum, Constable painted fluffy gray, white, and buff-colored clouds with no land at all as reference. On the back, Constable wrote, “27 aug 11 o clock Noon looking Eastward large silvery Clouds wind Gentle at S. West.” These quick notes show Constable’s interest in observing weather and the different types of clouds, and give an insight into his thought process as he painted.

In 1821, Constable mostly painted his sky studies with a small reference to the land, usually just the tops of trees, but during 1822 he began painting only clouds in the studies. His 1822

\[\text{\textsuperscript{20}}\text{Ibid.}\]


\[\text{\textsuperscript{24}}\text{“Cloud Study,” Tate Museum, https://www.tate.org.uk/art/artworks/constable-cloud-study-n06065, Accessed April 15, 2020.}\]
studies also became more natural-looking, and more “fully and subtly characterized.” I think this change from sketchier to more precise is apparent in the two cloud studies I mentioned before. While the *Horizon of Trees* study from 1821 does describe semi-realistic clouds, the marks do look slightly rushed and the shapes more generalized. It’s a little unfinished-looking, because the “brown board” he painted on is “clearly visible” through the “rapidly” made marks. I think the 1822 study from the Tate Museum looks much truer-to-nature, more detailed, and more finished, even though both studies probably only took him an hour to paint. If Constable intended the studies as exercises in rendering nature, the change from a sketchier style to more naturalistic could be a sign of his skill improving.

In spite of the change to a more natural style in his 1822 cloud studies, and his attention to different types of clouds and weather, Constable’s 1821-1822 sky studies altogether still have a sense of repetition. Over those two years, Constable continually went outside on Hampstead Heath to look at and copy the clouds. This repeated exercise shows the Constable’s methodical persistence, almost as though he was collecting scientific samples or data. It also shows the eternal change of the sky, because his observations resulted in such related, yet different sketches.

Most of Constable’s cloud studies are 12 by 12 inches, except for several somewhat larger ones. The second of the cloud studies mentioned before, that is owned by the Tate Museum, is one of the larger ones, and is a little over 18 and a half and 22 and a half inches. 

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cloud studies are pretty small compared to many of his finished landscapes. The studies had to be small because Constable wanted to “balance crispness of detail with speed of execution.” They also had to be small because he needed his materials to be portable in order to carry them to and from the outdoors. While Constable’s reasons for working on a smaller scale make sense, I think the small size of the cloud studies is interesting because he was working from the sky, which is such a vast, enveloping subject. But as scientists break things down in order to analyze them, Constable’s reduction of the sky may have been necessary to understand and observe in a scientific way, before using these observations for a much larger, more complete painting.

One interesting thing about Constable’s cloud studies is that he never meant them to be exhibited as “works of art complete in themselves.” He viewed them as “raw materials gathered in the field,” as “empirical research” to which he could later refer while working on his paintings that he actually did intend for display. Yet through time, the cloud studies may have reached the rank or the fame of Constable’s works that he did intend for display. Today, these studies, that he never showed during his lifetime, are just as renowned as Constable’s famous Hay Wain and six-foot Stour Valley paintings. In his article “Constable’s Earth,” David Gervais writes that a current viewer of Constable’s paintings is inclined to think of actual land as “more fitful and fleeting” than how Constable depicted it in many of his completed landscape paintings that

he did intend for exhibition. Gervais compares Constable’s landscapes to “finished set-pieces” because the modern-day viewer might find them too “[placid]” and “painstaking,” as well as too “stable.” Gervais also says that the viewer might “find such ‘natural’” landscapes “a little unnatural” because they were painted slowly and thoughtfully. Gervais instead promotes Constable’s “windswept” cloud studies, which were created “headily and impulsively” outdoors.\(^{32}\)

Although Constable saw his painting of cloud studies as collecting scientific research, the National Gallery’s overview of Constable suggests that at least in his later work, from the 1830s, the sky held emotion for him. An article on the Royal Academy website uses a quote from a letter Constable once wrote to his friend Dr. John Fisher. He wrote, “It will be difficult to name a class of landscape in which the sky is not the key note, the standard of scale, and the chief organ of sentiment.”\(^{33}\) Constable’s 1829 painting, *Hadleigh Castle*, features a sky with turbulent, rolling clouds. Some historians believe that the “sombre, desolate tone of the work… [reflects Constable’s] mood at [the] time,” because his wife, Maria, had died the previous year.\(^{34}\) But in David Gervais’s article “Constable’s Earth,” Gervais writes that Constable’s “fields and skies are there for what they are, not for the projection of his inner joy or disturbance.” The sky in his paintings is too “rough and shifting to reflect merely human moods.” Gervais does recognize the “drama” of some of Constable’s later works, including in *Hadleigh Castle*, but it is


the “drama of perception” rather than the “turmoil of his own spirit.” Therefore, while Constable may or may not have included more emotion in his later paintings, the drama of his cloud studies from 1821 and 1822 probably only communicate the wildness of nature, not his own feelings.

Another reason Gervais gives for what he believes is lack of emotion in Constable’s paintings is that Constable wanted to “see things as they are and not as we imagine them to be.” This supports Constable’s view of himself as a naturalistic, empirical observer. Gervais writes that Constable’s paintings are not only absent of any inner distress, but also of any more positive emotions, and that for all his appreciation of nature, Constable never seems “[exhilarated]” by it. Gervais believes that Constable evaded the ideas of the sublime, and mostly evaded “sense of awe and uplift,” even though he painted when the sublime was popular. It’s true that Constable never “traveled extensively in search of the picturesque or sublime scenery,” which is what many other landscape painters from that time did.

But I don’t think Constable’s sky studies are absolutely without influence from the sublime ideas. While Constable’s cloud studies do not necessarily reflect his emotional state, and he may have only intended them as empirical observations, I think they do embody a sense of wonder, which resonates with the ideas of the sublime, and which elevates them from purely scientific research. Part of this feeling of wonder comes from the fact that most of the studies do not include any land, or any reference to anything from the human eye level. The studies position

36 Ibid, 145.  
37 Ibid.  
Constable and the viewer to be looking up. This also agrees with sublime paintings, which also positioned the viewer to be looking up to create a feeling of awe.

And although the cloud studies are not necessarily expressive of human emotion, and whether or not they are expressive of the sublime ideas, they do evoke certain moods. The viewers of the studies interpret the light and cloud conditions according to their own “[experiences].” In that way, because viewers read the “special character” of the clouds, Constable’s work has “increased expressive power.”

I think that Constable’s cloud studies do suggest some kind of mood, whether dreamy and hazy or grand and dramatic. Viewers might associate the light and the shapes and types of cloud with moods according to their own memories connected to those weather conditions. One example of this is his 1821 *Trees and Storm Clouds* study now owned by the Yale Center for British Art. Even though the work is not directly emotional, the gray clouds in the lower part of the sky, and the masses of imposing darker gray clouds do create a mood of drama because viewers can recognize that they suggest an approaching storm. A later cloud study from about 1825, also owned by the Yale Center, known as *Study of a Cloudy Sky*, or *Landscape with Grey Windy Sky* depicts mostly-gray clouds that appear huge looming over the comparatively small stretch of land. The size, color, and streaky lines of the clouds and the shadowy gray-green of the ground create a dramatic, wind-blown mood.

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When working on his sky studies, Constable painted outside on pieces of board, canvas, or paper, which he kept in his painting box lid on his lap as he worked.\textsuperscript{40} He worked most often on paper with oils because it helped him to paint “fluidly,” and the paper absorbed the dampness from the paint more quickly than another painting surface would. In one of the earlier cloud studies, from when Constable worked in a more painterly way, the paint’s wetness is clear. In this one, \textit{Cloud Study: Stormy Sunset}, painted between 1821 to 1822 and owned by the National Gallery Museum, Constable applied paint quickly and energetically, “wet paint into wet paint.” Constable’s brush marks are visible, heading in multiple directions, and some of his wet colors seem blended, but the image still naturalistically represents the appearance of “light, atmosphere, and movement” in a cloudy sky.\textsuperscript{41}

I think some of the cloud studies are especially striking because Constable didn’t just rely on the most basic sky colors: sky blue, white, and gray. In the \textit{Stormy Sunset} study from the National Gallery Museum, he also used warm grays and cooler grays, pale peach, a dark rose-color, and a warm off-white cream color, which are not the most obvious colors to associate with the sky. One article I found compared the act of looking at Constable’s sky studies to “[leaning] toward” them as we would “lean” to “a window, discovering new colors that surprise and awaken.”\textsuperscript{42} If he only took an hour or so on each cloud study, because he wanted to capture the shape of the clouds and the light before they changed, he probably didn’t have the time to mix so many different complex colors while simultaneously painting. I think he probably mixed the

\textsuperscript{40} “Constable’s Oil Sketches,” \textit{Victoria and Albert Museum}, https://www.vam.ac.uk/articles/constables-oil-sketches#vam_nav, Accessed April 15, 2020.
colors before he actually started to paint, which makes the cloud studies seem a little less impulsive and a little more planned than how Gervais described them in his article “Constable’s Earth.”

In many of Constable’s earlier studies, which were painted slightly less-naturalistically than his later studies, his paintbrush marks are often visible. In Landscape with Grey Windy Sky, Constable used loose, streaky brush marks to convey a blustery day. And in the Stormy Sunset study, a few brush marks on the bottom radiate downwards, from what appears to be the sun. Close above the sun are some thin, low, mostly-horizontal clouds. But Constable painted most of the rest of the clouds for the upper part of the painting with expressive brush marks sweeping to the upper-left or upper-right hand corners. This leads the viewer’s eye in those directions: upwards and out of the painting, as though Constable were suggesting the boundlessness and eternal upward and outward direction of the sky. This makes up for the smallness of the works, because it suggests the continuation of the sky beyond the confines of the small piece of paper Constable was working on.

Constable’s style of “handling” paint was unconventional for the early 19th century. While most other landscape painters worked over the “[surfaces]” of their paintings in a “refined and smooth” way, with indiscernible brush marks,43 Constable often painted with “vigorous movements” which are visible today in the “broad strokes and loose marks” of his paintings.44

He wanted to paint with a variety of “marks, surfaces, and textures” to enhance the mood of the painting, as well as to copy the real textures and shapes he observed in nature.\(^\text{45}\) In his \textit{Stormy Sunset} cloud study, Constable’s animated painting style is noticeable in the fast, curving brush marks heading in multiple directions. These curving marks are expressive, but still naturalistic because they describe the shapes of the actual clouds.

The \textit{Stormy Sunset} study also shows Constable’s penchant for using a variety of textures and of paint thickness. He painted the peach and the darker gray colors with a “fluid and thin” paint,\(^\text{46}\) which permitted the paler sky-blue color “underneath to show through.” In a few different areas of this study, on top of the thinner paint, Constable placed contrasting marks of thicker paint in paler colors, and a few “light touches of pure white.”\(^\text{47}\) Constable often used similar “small smatterings of white” in his landscape paintings to imitate the “flickering light,” and in his cloud studies especially to imitate the illumination of certain sections of the clouds.\(^\text{48}\) This variety of paint thickness and color naturalistically represents the variety found in real clouds.

It is also interesting that even though most of Constable’s other landscapes include humans or some reference to human presence, the cloud studies have no sign of human influence at all.


\(^{46}\) Ibid.


In his article “Constable, Turner, and Views of Nature in the 19th Century,” Ronald Rees writes that Constable often uses humans as a subject in his landscapes, or at least suggests human “toil.” He rarely painted “nature unmodified by man,” and never painted English “gentlemen’s parks,” because he saw them as “unproductive,” and so not truly nature. Instead, he preferred to paint landscapes with “fields, hedges, barges, houses,” and people who “built, ploughed, and harvested.” He wanted these paintings to reflect his “social vision” of “a productive, well-organized countryside” and his belief that the “social and economic stability in England” depended on farming. Constable’s famous six-foot paintings of the Stour River Valley countryside emphasized the “harmony” between nature and human beings.49

But Constable’s pure sky studies make no mention of humans. In his letter to John Fisher, Constable wrote about how previous landscape artists painted their skies to complement or to “sympathize with the Subject.” Yet the historian Leon Wieseltier argues that Constable’s skies from his sky studies are “not above anything, or sympathizing to any subject,” and that the skies are “their own territory and subject.”50 Unlike how Rees described Constable’s landscapes, the cloud studies are free of any reference to human labor, which I think also contributes to the feelings of wonder and elevation in them. But there is also the feeling of unearthliness in the studies. In a different article, Rees quotes a historian who says that part of the appeal of Constable’s finished landscapes is that they show that “Constable felt at home on earth,” and make the viewer also nostalgically “feel at home on earth.”51 This doesn’t really apply to any of

the pure sky cloud studies, which don’t show any earth or human presence at all. Even if Constable did not intend the studies to be anything more than scientific observations, they feel very removed from the human world.

This feeling of removal is especially interesting because Constable painted during the time of the Industrial Revolution, when many other artists from this time period painted scenes of human progress in industry. While J. M. W. Turner, one of Constable’s contemporaries, painted “railways and steam engines,” Constable never did. Instead, he preferred the more old-fashioned subject matter of “barges, horses, sails, and canals,” which could be read either as a nostalgic oversight or as a “balm” during the “time of rapid and radical change.” Constable’s landscapes, and I think his cloud studies especially, can be viewed as “distant, timeless landscapes” because they mostly do not show the more-modern progress that was occurring at the time he was painting.

One article I read said that Constable intentionally disregarded “the great engine of change” that was the Industrial Revolution, even though he would have been conscious of it. Constable’s work contrasts with Turner’s, because Turner was often “a painter of trains, steamships, and industrial towns.” Yet similar to Constable, Turner was also interested in nature related to science, but more in the way nature generated energy for industry. Even though 19th century science, and the relationship between science and nature, influenced both Turner and Constable, it’s interesting that this influence manifested itself in their bodies of work in such different ways. Turner saw nature as a “source of power” and energy, which was a new but

53 Ibid.
“central concept” for 19th century scientists. Constable’s shows a different interest in science, in the way he empirically observed and painted from nature, and made meteorological notes on the backs of many of his studies.

One of Constable’s influences in painting the sky was 17th century Dutch painters, because even though many other artists of the time painted the sky as only a “backdrop” to the main subject, Dutch painters “gave cloud studies more prominence.” Constable emulated the Dutch painters in trying to represent “true” nature and the “drama of sky and light.” Also as the Dutch masters did, Constable “[limited] his geographical range” to communicate his “deep engagement with the landscape,” and he “demonstrated” the value of an ordinary country landscape with everyday subject matter rather than painting the “romantic or scenic view.” Constable’s cloud studies do not feature scenes of everyday farm life, but they still seem everyday because they are so recognizable. And as the Dutch masters painted in a limited area, Constable painted his cloud studies in the single area of Hampstead Heath.

Even though so much of Constable’s subject matter seems nostalgic, throughout his entire career, he focused on “capturing the rural realities of [his] native English landscape without idealization” or any embellishment. He also wanted to infuse his work with “the love he felt for the English countryside and the beauty he saw in it.” He once said, “I should paint my own

54 Ibid, 268.
57 Ibid, 71.
places best,” so his whole life he lived in and painted England, where he had a “deeply personal vision of the countryside.”\(^{59}\) I think that this could be one reason that Constable’s paintings do not suggest the Industrial Revolution. Constable mostly painted old-fashioned-looking farm and field scenes because he lived and painted in that one area of the English countryside, and he wanted to naturalistically represent just what he saw and knew well. Probably nostalgic-looking landscapes were what he saw every day and was familiar with. Even though there is no obvious reference to London industry, historians view Constable’s “subject-matter” as decidedly “English” because Constable was an “undoubting lover of his English earth” and countryside.\(^{60}\)

In “Constable’s Earth,” Gervais describes Constable as an essentially “‘English painter,’ the one who paints England as the English like to see it.”\(^{61}\)

Because he is known today as a nationalistic painter, and because he worked in places that were so personally significant to him, it’s interesting that most of his sky studies do not include any English land as a reference point. In most of the rest of his work, Constable described very specific English scenery as it looked in the late 18\(^{th}\) and early 19\(^{th}\) centuries, but his sky studies are much less specific. They have a timeless, placeless quality that sets them apart from Constable’s finished landscapes. Since they have no specific land as reference point, they could appear to have been painted anywhere in the world. The clouds are based on “real,” not imagined,\(^{62}\) clouds, so the viewer can recognize them and mentally fill in the land that isn’t

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\(^{61}\) Ibid, 143.

present, according to their own experiences and memories related to clouds.\textsuperscript{63} Adding to this ambiguity is the fact that in painting them, Constable was trying to capture the way the sky looked at one exact moment. This defies the inconstant nature of clouds. Even though Constable may have captured the gist of how the sky looked at one moment in time, the moment has since passed. Still, there’s something very eternal and universally recognizable about them because they could be from any place or era.


“Constable’s Techniques, Materials, and ‘Six-Footer’ Paintings.” Tate Museum.


