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## Couleurs à la mode

### Impressionism as an Effect of the Chemical Industry

Wolf Kittler

IN ITS OBITUARY FOR CHARLES FRÉDÉRIC WORTH, which appeared under the title *Le Roi de la Mode, The King of Fashion* on March 11, 1895, the French magazine *Le Gaulois* wrote: »After the fall of the Empire, he harbored a certain melancholia and often complained about the disappearance of high elegance and the traditions of the court. »People have themselves dressed by their chambermaid!« he would sadly say. Each year, faithful to memory, he would send the Empress a big bouquet of Parma violets bound together with a mauve ribbon signed with a golden embroidery in his name.«<sup>1</sup> The quote and the anecdote mark two points which frame, as it were, the beginning and the end of the historical period that is the object of my inquiry: from the glamorous days of the Second Empire under Napoleon III and his wife Eugénie de Montijo to the sober bourgeois culture of the Third Republic at the end of the century. Worth's gift to his eminent customer, the exiled Empress Eugénie, evokes fond memories of a common past. Worth, »the great couturier, the magister elegantiarum, the king of female fashion, the confidant of so many secrets, so many ruins and so many fortunes«<sup>2</sup> as the obituary called him, or, as the journal *La Sylphide* put it already in his lifetime, »a great hand that accouters almost all of Europe's princesses«<sup>3</sup> had moved to Paris in 1846 to work for Gagelin & Opigez, a company specializing in fine fabrics, and in 1858 opened his own high-end dressmaker's salon, Worth & Bobergh, on 7, rue de la Paix. One year later, in 1859, his patroness, the Princess of Metternich,<sup>4</sup>

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<sup>1</sup> *Le Gaulois*, March 11, 1895, under: <http://gallica.bnf.fr/ark:/12148/bpt6k52905op/ft.image.r=Le%20Gaulois,%2011%20mars,%201895.langEN> (15 December 2014). All translations: WK.

<sup>2</sup> *Ibid.*

<sup>3</sup> *La Sylphide. Revue Parisienne. Littérature, Arts, Modes* (July 10, 1869), p. 3, under: <http://gallica.bnf.fr/ark:/12148/bpt6k6113355n/f3.image.r=main%20qui%20habille%20Worth.langEN> (15 December 2014).

<sup>4</sup> Well known in the history of art and photography, see the daguerreotype by Hermann Krone, 1854, showing her in a crinoline; the painting by Franz Xaver Winterhalter, 1860; the portrait at the beach by Eugène Boudin, 1865–67, and the half-length portrait in a yellow blouse by Edgar Degas, 1865.

known as »the best dressed monkey« in Paris,<sup>5</sup> introduced him to the lady who was to become his most famous and wealthy client, Empress Eugénie herself. It was a great time, not just for aristocrats, but for affluent bourgeois women as well. Department stores such as Le Bon Marché, Les Grands Magasins du Louvre, and Au Printemps were flourishing, and their great new rival La Samaritaine, on the Rive Gauche, was to be founded soon, in 1869. (It closed only recently, after more than a century of glamour, in 2005).

We know all this through the eyes of Baudelaire/Benjamin; that is, through the eyes of the *flâneur*, about whom I have to read way too many dissertations. However, due to these men's obsession with prostitutes, we know much less about the real customers of these stores, the fashionable women of Paris. And we know even less about the industry that provided the material basis for their glamorous outfits, which Frédéric Worth, with his birthday present, conjures up so tactfully and precisely. This is not just any bouquet, it is a bouquet of a very specific color matched by the color of the ribbon that holds it together: mauve, the color of a dye obtained from aniline, a new organic compound that was isolated, analyzed, and described by chemists in the first half of the nineteenth century. Without quoting this source, the entry in Wikipedia condenses August Wilhelm Hofmann's history of aniline<sup>6</sup> to just one paragraph, which I quote for brevity's sake:

»Aniline was first isolated by destructive distillation of indigo by Otto Unverdorben, who named it *Crystallin*. In 1834, Friedlieb Runge isolated from coal tar a substance that turned a beautiful blue color when treated with chloride of lime, and he named it *kyanol* or *cyanol*. In 1840, Carl Julius Fritzsche (1808–1871) treated indigo with caustic potash and obtained an oil that he named *aniline*, after an indigo-yielding plant, Añil (*Indigofera tinctoria*)<sup>7</sup>. In 1842, Nikolay Nikolaevich Zinin reduced nitrobenzene and obtained a base that he named *benzidam*. In 1843, August Wilhelm von Hofmann showed that all of these substances are the same substance – thereafter known as *phenylamine* or *aniline*.«<sup>8</sup>

Thus, from the very beginning of their new discipline, chemists had been aware that by studying the composition of aniline they were participating in humanity's long quest for the perfect blue, the color Baudelaire and his friends used to call

<sup>5</sup> Quoted after Gloria Groom (ed.): *Impressionism, Fashion, & Modernity*, New Haven and London 2012, p. 198.

<sup>6</sup> August Wilhelm Hofmann: Class II. Section A. – Chemical Products and Processes, in: *International Exposition, 1862. Reports by the Juries on the Subjects in the Thirty-Six Classes into which the Exhibition was Divided*, London 1863, p. 122.

<sup>7</sup> Corrected from *Indigofera suffruticosa* Mill., a plant that is indigenous not to India, but to the South of the American continent.

<sup>8</sup> »Aniline«, in: Wikipedia, under: <http://en.wikipedia.org/wiki/Aniline> (12 December 2014).

azure: lapis lazuli for the painter's palette, especially for the blue of the Madonna's mantle;<sup>9</sup> indigo for fabrics from antiquity to the mid-nineteenth century; aniline and many other kinds of synthetic dyes for anything thereafter.

The etymology of the words indigo and aniline bear witness to a long and global history of dyeing and trading. I quote the Online Etymological Dictionary:

»**indigo** (n.) 1552, from Spanish *indico*, Portuguese *endego*, and Dutch (via Portuguese) *indigo*, all from Latin *indicum* »indigo«, from Greek *indikón* »blue dye from India«, literally »Indian (substance)«, neuter of *indikos* »Indian«, from *India* (see *India*). As »the color of indigo from 1620s. Replaced Middle English *ynde* (late 13c., from Old French *inde*, from Latin *indicum*).

**aniline** (n.) [...] Portuguese *añil* is derived from Arabic *an-nīl* »the indigo«, assimilated from *al-nīl*, from Persian *nīla*, ultimately from Sanskrit *nīli* »indigo«, from *nīlah* »dark blue«. With suffix *-ine* indicating »derived substance.«<sup>10</sup>

The two words trace the various stations of one and the same trade route from different perspectives. Coined at the consumers' end, *indigo* points to India, the land where the plant *Indigofera tinctoria* L. was domesticated, but also to the product's further trajectory on its way from East to West, from ancient Greece<sup>11</sup> to Rome, and from there to the seafaring powers of early modernity: Portugal, Spain, and Holland. The term *aniline*, derived from a word from the language spoken at the plant's origin, gives a much more extensive account of the ancient (overland) trade route: from India to Arabia, Persia, Greece, and Rome, but also of the new overseas route around the Horn of Africa discovered by Vasco da Gama in 1497.

What the two words no longer document is the last part of this history, the discovery of a new species, *Indigofera suffruticosa* Mill., by Spanish and Portuguese explorers in Guatemala and the so-called West Indies, and then transplanted by colonial settlers to the North American continent, to South Carolina and Louisiana. In the mid-nineteenth century, when chemists started to study the composition of indigo, the plant from which the most common blue dye used to be produced over more than two millennia, *Indigofera tinctoria*, was still being grown by

<sup>9</sup> Michael Baxandall: *Painting and Experience in Fifteenth-Century Italy*, Oxford 1972, p. 11.

<sup>10</sup> Under: <http://etymonline.com/> (12 December 2014).

<sup>11</sup> Describing a blue dye, and not the pepper imported from India mentioned in Herodotus, 3.98, the word »*Ἰνδικός*« is first documented in Pedanius Dioscorides *Medicus De materia medica*, 5.92, which was written in the first century AD; and then again in the Papyrus Graecus Holmiensis, ed. O. Lagercrantz, Uppsala 1913, 11.2, and 9.8, a book that was published around 100 AD. Henry George Liddell and Robert Scott: *A Greek English Lexicon*, 1940, under: <http://www.perseus.tufts.edu/hopper/morph> (12 December 2014).

peasants in Bengal, so exploited by the East India Company that they staged a revolt in 1859, the so-called Indigo Revolt, by simply refusing to seed their fields. At the same time, black slaves in the South of the United States of America were forced to cultivate and harvest the other species, *Indigofera suffruticosa*, together with cotton, thus producing, among other fabrics, such stuff as blue jeans are made from.

But the days of natural dyes and hence of large indigo producing plantations were numbered.<sup>12</sup> Already in 1862, August Wilhelm Hofmann, in his juror's report *On the Chemical Products and Procedures* for the International Exhibition in London, quoted an article which stated a considerable drop in the price of these products: »of three dying materials, hitherto considered indestructible elements of the commercial prosperity of tropical countries, we find indigo diminished in its applications, and cochineal and safflower very notably depreciated, solely and exclusively by the work of the chemist.«<sup>13</sup> As a consequence, Hofmann felt entitled to predict a »strange revolution« that would reverse the direction of dyestuffs traded along the old and the new routes of commerce: instead of importing natural dyestuffs, Great Britain would now export the products of its new chemical industry. Thus, chemistry had created a starting point from which, as Hofmann notes, »the textile manufacturers [...] may spring forward to higher beauty of colouring, and (relatively to that beauty) lower cost of production.«<sup>14</sup> But in order to achieve this double effect, someone had to find a way from the small samples produced in the chemist's laboratory to the much larger quantities of industrial production.

While trying to synthesize quinine, the sought-after cure for malaria, Perkin had discovered that aniline could be partly transformed into a crude mixture which, when extracted with alcohol, produced a substance with an intense purple color, which he first named *aniline*, or *Tyrian purple*, after the well-known natural dye extracted from Mediterranean mollusks (*Murex brandaris* L.). Instead of being simply disappointed because he had not found what he was looking for, Perkin realized the commercial potential of his discovery, sent specimens of his dyed silk to the firm of Pullar in Perth, Scotland, and, after having received a positive reply from the general manager of the company, filed for a patent, which was issued on August 26, 1856, as Patent No. 1984.<sup>15</sup> Against the advice of his teacher Hofmann, who was more into pure research,<sup>16</sup> Perkin founded a factory at Greenford Green,

<sup>12</sup> And also those of sugar cane plantations because, since the beginning of the nineteenth century, sugar could be obtained from European root-beets: Hofmann: *Chemical Products and Processes* (as note 6), p. 119.

<sup>13</sup> *Ibid.*, note to p. 121.

<sup>14</sup> *Ibid.*, p. 119.

<sup>15</sup> *Ibid.*, note to p. 124.

<sup>16</sup> *Ibid.*, p. 136.

near Sudbury, and for the next decade dedicated himself to applying the practical and theoretical knowledge which scholars, in the newly founded discipline of organic chemistry, had distilled from small samples to the large-scale mass production of high-quality fabrics in the dyestuff industry.<sup>17</sup> Perkin's new aniline color, renamed mauve after the French word for the common flower *malva sylvestris* L., and a term for tintured tissues already in the early nineteenth century, was first applied to silk by the dyer Thomas Keith of Bethnal Green in December 1857.<sup>18</sup> It was the beginning not only of a great time of fashion, the sixties and seventies of the nineteenth century, but also the beginning of the modern chemical industry, of which I mention only two German companies: IG Farben, and BASF, Badische Anilin und Sodafabrik; the beginning also, by the way, of Pasteur's and Koch's discoveries in bacteriology because, without synthetic dyes, these researchers would not have been able to distinguish, and thus discover, anything in the samples they studied under their microscopes.<sup>19</sup> Along the way, physicians claimed that aniline was a cure for St. Vitus's dance,<sup>20</sup> while chemists analyzed »the connection between molecular constitution and color in organic compounds.«<sup>21</sup> And fabricants discovered multiple new applications of aniline products in their various industries.

That aniline and other synthetic dyes became such a hit in the mid-nineteenth century is due to three factors:

1. Their luminosity and brightness were so striking that an author publishing in a professional journal for pharmacists felt compelled to write: »Ladies who like pink should avoid to place themselves close to those who are wearing fuchsine pink if they are wearing pinks of carthames, and even more so of cochineal.«<sup>22</sup>
2. They were cheap.

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<sup>17</sup> In 1956, the centenary of the year when mauve was patented, R. Brightman: Perkin and the Dyestuffs Industry in Britain, in: *Nature* 4514 (May 5, 1956), pp. 815–821, published a carefully researched account which shows that Perkin was not only a gifted chemist, but also the inventor of the modern chemical industry. On Perkin see also Simon Garfield: *Mauve. How One Man Invented a Color That Changed the World*, London 2000, the book which first drew my attention to aniline dyes, yet which, while turning Perkin into the only hero, neglects the effects of synthetic dyestuffs on everyday life, literature, and the arts.

<sup>18</sup> Brightman: Perkin and the Dyestuffs Industry in Britain, (as note 17), p. 818.

<sup>19</sup> See Artur Pappenheim: *Grundriss der Farbchemie zum Gebrauch bei mikroskopischen Arbeiten*, Berlin 1901.

<sup>20</sup> Hofmann: *Chemical Products and Processes* (as note 6), p. 133.

<sup>21</sup> Carl Graebe und Carl Liebermann: *Über den Zusammenhang zwischen Molekularkonstitution und Farbe bei organischen Verbindungen*, in: *Berichte der deutschen chemischen Gesellschaft* 1/1 (January-December 1868), pp. 106–108, under: <http://dingler.culture.hu-berlin.de/article/pj194/ar194021> (12 December 2014).

<sup>22</sup> Michel Eugène Chevreul: *Note sur les étoffes teintes avec la fuchsine, et réflexions sur le*

3. There was not just one, but many of them forming a rich palette of equally luminous synthetic dyes. Some of them were produced from the same Naphta<sup>23</sup> basis as mauve with the addition of a few more chemical elements and the use of new procedures, others from different organic compounds such as, to quote but one example, azo dyes developed by Peter Griess and sold commercially starting in 1864.<sup>24</sup> Here is a list of the different names and shades gleaned from some of the many manuals on aniline dyes of the time, including the date of the patent and the name of patent holder:

1856	Perkin	Purple, 1859: Mauveïne
1859	Verguin	Fuchsine, Rosaniline, Magenta
1860	Peter Griess	Aniline Yellow
1861	C. Mene	Aniline Yellow, commercial production
1862	Usèbe	Vert d'Usèbe
1863	Lightfoot	Aniline Black
1863	Hofmann	Violet
1866	Keisser	Iodine-Ethyl Green
1868	Martins und Co.	Bismarck Brown / Vesuvion
1869	Carl Grebe und Carl Liebermann	Alizarin, or Turkish Red <sup>25</sup>

There was but one problem – fading: »If the friends of pink on silk should thank the author who discovered fuchsine, this is not a motif to apply that color to silk destined for fabric wall-coverings, curtains or furniture of any kind; for if fuchsine *has the luminosity of the rose, it has its fragility, too.*«<sup>26</sup> Extremely bright, available in many different hues, much cheaper than natural products but prone to fading with time, the synthetic aniline dyes were not just perfectly suited to the fast turnover pace of modern fashion. They were, in fact, part of the reason for the acceleration

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commerce des étoffes de couleur, in: Répertoire de Pharmacie XVII (July 1860), Paris 1860–1861, p. 62.

<sup>23</sup> As far as I can see, this is the reason why there is an eponymous figure in Thomas Mann: Der Zauberberg, Berlin 1924, remains unexplored.

<sup>24</sup> For good pictures, including mauve, magenta, and aniline green dresses, see under: <http://thedreamstress.com/2013/09/terminology-what-are-aniline-dyes-or-the-history-of-mauve-and-mauveine/> (23 December 2014).

<sup>25</sup> After Alfred von Nagel: Alazarin, Indigo. Der Beginn eines Weltunternehmens, Ludwigshafen 1968, p. 8–22; Jordan (as note 24); Pompeius Alexander Bolley and Emil Kropp: Handbuch der chemischen Technologie, vol. 5: Die Theerfarbstoffe, part I, Braunschweig 1867–1874, pp. 284–350; Stanislaus Mierzinski: Die Teerfarbstoffe. Ihre Darstellung und Anwendung, Leipzig 1878; and August Kekulé: Lehrbuch der organischen Chemie, Erlangen 1866, pp. 588–651; R. Nietzki: Chemistry of Organic Dye-stuffs, trans. A. Collin and W. Richardson, London 1892.

<sup>26</sup> Chevreul: Note sur les étoffes teintes, (as note 22), p. 63.

of that pace. Each year, nay, each season a new color, a new nuance was *en vogue* or à la mode. How fast the fashion world reacted to the inventions of the chemical industry can be seen in the following short note in the journal *Le miroir parisien*: »The nuances in fashion this summer are: mauve, off-white, light Bismarck brown.«<sup>27</sup>

Thus, if R. Brightman writes: »Mauve had a relatively short run«,<sup>28</sup> because it had, already in the mid-sixties of the nineteenth century, been replaced by new and equally bright synthetic dyes, then this is equally true for all the other new dyes that hit the market in rapid succession. Émile Zola, in his serial novel *Les Rougon-Macquart*, registers these ups and downs with almost seismographic precision. In the novel's second part, which, under the title *La Cuvée*, appeared in 1871 and 1872, mauve is the mark not only of one, but of three fashionable women. In the famous opening scene, which takes place in the mid-sixties of the nineteenth century, we encounter Maxime Saccard and his stepmother, soon to be lover, Renée, on their way to the races, her attire, undoubtedly designed by her tailor, the »illustrious Worms«,<sup>29</sup> doubly marked by two different fabrics in the shade of mauve: »Over a dress of mauve silk, with apron and tunic, lined with long pleated flounces, she wore a little coat of a white woolen fabric with lapels of mauve velour,<sup>30</sup> which gave her a grand air of swagger.«<sup>31</sup>

Her predecessor, Adèle Rougon, née Sicardot, shares the taste for mauve, however, on a different scale. As she dies in 1854, two years before Perkin made his famous discovery, she cannot wear a whole dress, but only ribbons in that shade, obviously stained with natural dyes. A decade and a half later, mauve is good enough for a preliminary maneuver such as a trip to the races, but not for a ball,<sup>32</sup> and even less for the decisive strike, Renée Saccard's grand entrance at the actress's ball, the prelude to the seduction of her stepson, Maxime. On this occasion, she does not wear mauve, but green: »When Renée made her entrance there was a murmur of admiration. She was truly divine. Over a tulle skirt embellished with a flood of flounces in the back, she wore a tunic of delicate green satin trimmed with high English lace, which was accentuated and held together by big bunches

<sup>27</sup> *Le miroir parisien*. Journal des dames et des demoiselles. Modes, Littérature, Théâtre, Musique, etc., August 1, 1869, no page number.

<sup>28</sup> Brightman: Perkin and the Dyestuffs Industry in Britain, (as note 17), p. 819.

<sup>29</sup> A not-so-subtle reference to Charles Frédéric Worth in Émile Zola: *Les Rougon-Macquart*. Histoire naturelle et sociale sous le second Empire. II. La curée, Paris 1872, p. 123, 125.

<sup>30</sup> Lapels whose color is mentioned yet again a few pages later, *ibid.*, p. 20.

<sup>31</sup> *Ibid.*, p. 8.

<sup>32</sup> When asked about the dress her friend la Marquise Adéline d'Espagnet was wearing at a ball that was much less glamorous than the one at the beginning of the book, Renée has nothing but contempt: »A mauve dress, pretty badly conceived ...« *ibid.*, p. 275.



of violets; a single flounce lining the front of the skirt to which bouquets of violets – bound with garlands of ivy – attached a light muslin.«<sup>33</sup> Mauve, not part of the fabrics anymore, is only quoted in the flowers: violets like the ones Worth used to send to his former customer, Empress Eugénie. Green, which is by far the most difficult to extract from natural dyes,<sup>34</sup> is, as a search through the journal *La Sylphide* shows, the color à la mode between 1866 and 1869.<sup>35</sup> What Renée is sporting on her flashy satin dress could be either *aldehyde green*, patented as *vert d'Usèbe* in 1862,<sup>36</sup> or *Hofmann's green*, that is, *iodine-ethyl green*, patented by Keisser in 1866.<sup>37</sup>

So much for the second volume of the series. In the second to last volume, *L'Argent*, published in 1891, only a fat old lady with the telling name La Méchain,<sup>38</sup> also known as »le corbeau«,<sup>39</sup> »the raven«, because, as the tax collector Busch's favorite aide, she feeds on the financially sick and dying, is still wearing mauve, however, already mixed with a whole range of other colors: »Her red, puffy, full moon face, with a small mouth whence came a child-like piping voice, seemed to protrude from an old mauve chapeau, tied askew with garnet strings; and her giant bosom and her hydropic belly strained almost to bursting point her mud-stained poplin gown, once green, now turning yellow.«<sup>40</sup>

*Sic transit gloria mundi*: Towards the end of the Second Empire, the time of the novel's plot, a mauve chapeau is literally »an old hat«, and the shades of garnet and green, bright and fashionable colors not too long ago, look faded and worn after only a couple of years.<sup>41</sup>

<sup>33</sup> Ibid., p. 28.

<sup>34</sup> Bolley and Kropp: *Die Theerfarbstoffe* (as note 25), chapter: »Grüne Farbstoffe«, pp. 71–77.

<sup>35</sup> Of the many passages on green I quote but three from the journal *La Sylphide* (as note 3). »Green is particularly in favor.« June 10, 1867, p. 248. »The colors *en vogue* for simple outfits are blue, gray, light and deep mauve on white, and deep green on spring green.« June 20, 1867, p. 261. »Green is the color à la mode, particularly so in daytime.« October 10, 1869, p. 3.

<sup>36</sup> Bolley and Kropp: *Die Theerfarbstoffe* (as note 25), *Usèbe'sches Grün*, p. 334, *Hofmann's Grün*, p. 336.

<sup>37</sup> Rudolf Nietzki: *The Chemistry of Organic Dyestuffs*, transl. A. Collin and W. Richardson, London 1892, p. 20.

<sup>38</sup> Homonym of »la méchante«, the bad one.

<sup>39</sup> Émile Zola: *Les Rougon-Macquart. Histoire naturelle et sociale d'une famille sous le second empire: L'Argent*, Paris 1891, p. 17.

<sup>40</sup> Ibid., p. 16.

<sup>41</sup> This whole passage corrects the sloppy reading of aniline colors in Zola: *Les Rougon-Macquart* (as notes 29 and 39), published too prematurely in my essay *Das orphische Lied von der Erde: La dernière mode, Mallarmés Traum*, in: Herbert M. Hurka and Dierk Spreen (eds.): *Kittler*, in: *Ästhetik und Kommunikation*, 43/158–159, Berlin, pp. 21–38.

According to Hofmann, the new synthetic dyestuffs were not just a boon for scientists and entrepreneurs. For him, they were an important factor in the progress of humanity towards a just and democratic society providing everyone with equal rights and goods.<sup>42</sup>

However, and that is equally important, aniline dyestuff is particularly, if not exclusively, relevant to a certain group, in fact to only half the population: »The new colours, mauve and magenta, had no sooner appeared than they were everywhere eagerly welcomed, especially by the gentler part of mankind; whose raiment, gorgeous with these novel splendours, altered the very aspect of the public streets.«<sup>43</sup> Thus, the modern chemical industry opens a new growth market by targeting a completely new consumer group: fashionable women like Renée Saccard, for instance, who contributes to the ruin of her husband's finances by running up excessive tailors' bills. Men, the other half of the population, unless working in either fashion or the dyestuff industry, were left to stare in awe, in admiration, or desire. Even Hofmann, in his report for the International Exhibition, could not help using the language of love, courtship, and eroticism, however, only under the condition that the beautiful women out on the streets are first replaced by their colorful dresses, the effect of his and his colleagues' work, and then, in yet another step, by the substance of aniline itself, its material cause: »[...] that so interesting substance was not ungrateful at all towards the chemists and manufacturers who courted her so assiduously, and several amongst them, to whom she was quite willing to grant her favors, subsequently acquired very big fortunes.«<sup>44</sup> Thus, aniline, for Hofmann, has the exact same effect as Angèle Sicardot and Renée Beraud du Chatel have on Aristide Rougon/Saccard's life. After having been courted by him, and granting him their favors they end up making him rich, at least for a while.

It is true that the synthetic dyestuff industry initiated a new area in which certainly not each and every one, but a relatively large percentage of bourgeois women could afford luxurious fabrics that had in the past been available only to the happy few. Add to that yet another recent invention, the sewing machine, operated either by the lady herself or, in more affluent households, by her chambermaid,<sup>45</sup>

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<sup>42</sup> Hofman: *Chemical Products and Processes* (as note 6), p. 119.

<sup>43</sup> *Ibid.*, p. 132.

<sup>44</sup> *Ibid.*, p. 330.

<sup>45</sup> For only three quotes on the use of the sewing machine see: *Le miroir parisien* (as note 27) (October 1, 1868), p. 397; *La Sylphide* (as note 3) (March 30, 1869), p. 3; and Stéphane Mallarmé: *La dernière mode*. *Gazette du Monde at de la Famille*, in: Oeuvres, ed. Bertrand Marchal, Gallimard: Paris, vol. 2: 2003, pp. 485–654, quote 552–553. For a complete edition including the texts by Mallarmé's literary friends, see the facsimile edition: Stéphane Mallarmé: *La dernière mode*. *Gazette du Monde at de la Famille*, Paris 1978.

and you can imagine the sudden spike in the number of women showing off their newest creations out in the streets. Worth's customers started to compete with the master himself. Haute couture became a mass phenomenon.

However, at the beginning of this new epoch, there had to be trendsetters, people from the upper class who led the way. One of the candidates often mentioned in this context is Queen Victoria, who is said to have initiated the mauve craze in the early eighteen-sixties. As far as I can see, however, the one who initiated the new trend was not Queen Victoria, but Empress Eugénie of France. I think it is safe to assume that the »robe of mauve silk covered with rich white lacework«<sup>46</sup> she wore in 1861 at the reception for King William III of the United Kingdom of the Netherlands was colored with mauveine, the first product of the soon-to-be booming chemical industry. Thus, while the initial discoveries of aniline dyes had been made by German and British chemists, France, traditionally the country of high fashion, famous since the eighteenth century for the production of fine silks in Lyon, and, under the rule of Napoleon III and his stylish wife Eugénie de Montijo, became the hotspot for the new fashionable colors: »It is uncontestedly recognized that the empire of fashion, in this respect, pertains to the French manufacturers.«<sup>47</sup> Even the Emperor himself left a deeper and more lasting trace in the vocabulary of color adjectives than in the area for which he must have wished to be remembered best: military history. Today, the only two victorious battles he fought in the wake of his much more gifted ancestor, the battles of Magenta and Solferino, June 4, and June 24, 1859, are mostly forgotten,<sup>48</sup> but at least one of them is still part of our public memory, particularly so in computer graphics. The battle of Magenta, after which one of the new synthetic reds was named, is now a cartridge for ink jet printers, or HTML code: #FF00FF.

One more comment on the linguistics of color adjectives: the language of fashion magazines, in its attempt to be as poetic as possible, differs substantially from the terminology of the chemical and dyeing industries. Of course, there had always been fancy and supposedly poetic words even in the age of natural dyes made from plants, insects, and mollusks, such as Tyrian purple, cochineal, madder, woad (*Isatis tinctoria* L.) grown in Erfurt for the Prussian military's uniforms, saffron, and indigo, but after the invention of synthetic dyes and their increased industrial production in the eighteen-sixties, the vocabulary of fashionable color attributes explodes, supplanting the sober and oftentimes hard-to-pronounce terms in the

<sup>46</sup> Journal des débats politiques et littéraires (October 14, 1861), p. 2.

<sup>47</sup> Pompeius Alexander Bolley: Sur le progrès accomplis en teinture et en impression, in: Exposition universelle de Londres. 1862. Classe II. Section A. Rapport sur les produits et procédés chimiques, transl. Pauline Kropp, Paris 1866, pp. 1–18, quote p. 13.

<sup>48</sup> Except for the boulevard Magenta, the train station Magenta, and the rue Solférino in Paris.

professional publications of the chemical industry. The following two passages from *La Sylphide, Journal de Modes, de Littérature, de Théâtres et de Musique*, which was founded in 1839, speak for themselves. The first quote comes from 1841, before the invention of synthetic dyes:

«You could not imagine what fantasy has done yet again for those little outfits of which I just spoke, and all the pretty, rich, and at the same time simple stuff that is sold in that store [l'entrepôt de la rue Vrillière]; – the Beijing silks in lemon and white, the steamy clouds, the mottled pink, lilac or Judea silks, the thousand green carnation stripes, the little checkered patterns leave you in great embarrassment of indecision, from which to exit is all the more difficult as the warehouse sells so cheaply that, when going there to buy one dress, you end up buying two.»<sup>49</sup>

The second quote is from August 1869, about a store for silk fabrics on 53, rue de Rivoli,<sup>50</sup> after the invention of synthetic dyes:

«The lovely scarves for autumn are to be found at the *Colonie des Indes*. There is an enchanting choice of beautiful and new nuances such as: macassa, carob, poet's carnation, claret red, ruby, all of which are purple violets, iris, periwinkle, lapis lazuli, Alpine violet, sapphire, amethyst, and, in the grays, about twenty tones of extreme softness, amongst which we note the silver gray, lavender, roses' ash, La Vallière,<sup>51</sup> water's dust, and milky amber of a delicious sweetness for an evening gown.»<sup>52</sup>

The quotes also show that fabrics tinted with the new synthetic dyes are no longer distinguished by the intricately woven patterns of flowers and ornaments that were so popular during the eighteenth century, the fabrication of which had been automated by Jacquard at the beginning of the nineteenth century, but rather by the luminosity of their colors, which could be best shown off plain, as in the dresses Empress Eugénie liked to wear when vacationing in Biarritz: »Her Majesty Empress Eugénie, vacationing in Biarritz, sets an example of perfect simplicity, pre-

<sup>49</sup> *La Sylphide* (as note 3) 2/4 (1841), p. 50.

<sup>50</sup> Advertisement: »Colonies des Indes, 53, rue de Rivoli. Spécialité de robes et foulards des Indes.« In: *La Sylphide* (as note 3) (October 10, 1867), p. 172.

I should add that, in 1876, »Ernest Hoschedé [...], one of the first enthusiastic collectors of Impressionist work, [...] is made director of the store *La Compagnie des Indes*, specializing in imported cashmeres and silk.« Françoise Tétart-Vittu and Gloria Groom: *Key Dates in Fashion and Commerce, 1851–89*, in: *Impressionism, Fashion, and Modernity*, (as note 5), p. 275.

<sup>51</sup> A color of a much older time named after Louise de la Vallière, mistress of Louis XIV.

<sup>52</sup> *La Sylphide* (as note 3) (August 30, 1869), p. 3

ferring to wear plain foulard, poplin and cashmere gowns<sup>53</sup>, or in various printed patterns from simple stripes, and checkerboard squares, to the more fancy motifs enumerated in the following quote:<sup>54</sup>

»While leaving to stripes the supremacy which the current *vogue* accords them, the *Colonie des Indes* has ordered a choice of little patterns which offer very charming variants to stripes. The seeded models have very small patterns; they reproduce a fantasy like Turkish letters, interlaced vermicelli, double dice, little shells or a flower or even a little untied bouquet. As to the background, the sun that is currently shining imposes very bright colors; as for the rest, the latest fashion does barely allow intermediate tones between black and vivid colors. Thus, among the most worn nuances, we will quote lemon, clear corn, willow green, ash-blue gray, salmon, gilded ochre, etc.<sup>55</sup>

According to histories of the Lyon-based silk industry, this change from intricately woven patterns to either plain colored tissues, simple printed patterns such as stripes and checkerboard, or exquisitely fine printed patterns such as flowers and garlands, which occurred in the mid-nineteenth century, is attributed to the particular taste of Empress Eugénie, but it is obvious that, rather than being merely the result of a personal whim, this is clearly an effect of the chemical industry's new production of cheap synthetic dyes, an effect which could not be, and neither was, in fact, lost on nineteenth-century painters, particularly those who – following Baudelaire – called themselves *peintres de la vie moderne*, painters of modern life. Imagine what they saw: Women in brightly colored dresses not just at the palaces of aristocrats and wealthy bourgeois entrepreneurs, or in closed boxes at the opera, but all over the place, all over Paris, possibly even in their own backyards, in any case, not in their studios but *en plein air*, the new place of painting promoted by Johan Jongkind and Monet's friend and teacher Eugène Boudin. The primary colors they famously discovered outdoors were not only found in the shades of flowers, birds, and butterflies, or in the blue and green shadows of the woods, but also, and perhaps above all, in the various fabrics tinted with the new synthetic dyes. How could they not have noticed? They must have been thrilled. And how could art historians, like the curators of the exhibition *Impressionism, Fashion, and Modernity* in Paris, New York, and Chicago, for instance, while providing ample evidence in the artworks and artifacts they chose to present, only mention the aniline dyes in passing without ever discussing not only their aesthetic, economic,

<sup>53</sup> La Sylphide (as note 3) (October 20, 1868), p. 9.

<sup>54</sup> On textile printing with synthetic dyes see: M. Grace-Calvert: Class XXIII. Woven, Spun, Felted, and Laid Fabrics, when shown as Specimens of Printing and Dying, in: International Exhibition (as note 6), pp.1–8.

<sup>55</sup> La Sylphide (as note 3) (July 20, 1868), p. 1.

and scientific importance, but, above all, their decisive role for both the primary colors and the blacks of Impressionist palettes?<sup>56</sup>

Thus, let us begin with taking a look at some of the last examples of the use and beauty of natural dyes, first at Ingres's painting of *Baronne James de Rothschild* from 1848 (see fig. 1, p. 177). Wearing a plain dress in pure Tyrian purple, the color of the togas of Roman senators, Christian emperors, and Catholic cardinals, M<sup>m</sup>e la Baronne, the wife of the wealthiest man of her time, inserts herself into a long and venerable tradition. In order to appreciate the color of her dress, one must know that 10,000 snails of the species *Murex trunculus* are needed to produce but one gram of Tyrian purple. A portrait of Empress Eugénie by Franz Xaver Winterhalter places her in a different, but equally venerable, tradition, the time of the *Ancien Régime* when artfully-woven fabrics, such as the one she is wearing in a picture from 1853, were very much *en vogue*. Yet another portrait of the *Empress Amidst Her Ladies in Waiting* by Winterhalter, from 1855,<sup>57</sup> shows her in a white dress with exactly the same mauve ribbons as Angèle Rougon in Zola's novel, while her ladies are wearing a whole palette of plain colors: pink, yellow, green, as well as light and dark blue; hence, all the shades that would become so fashionable not more than a decade later, but which were at this time, however, still produced from natural dyes, and that is to say as a clear sign of utmost luxury and wealth.

Only six years later, Winterhalter produced two portraits which parade female dresses in what I would call the color mauve: Countess Alexander Nikolaevitch Lamsdorff, and Princesse Beatrice. Whether the originals were already dyed with *mauveine* and not with the age-old substance of Tyrian purple, we will probably never know, but be that as it may, there is no doubt that pictures from the following decade show the colorful fabrics produced with synthetic aniline dyes. Thus, in Frédéric Bazille's painting *La Reunion de famille*, from 1867, for instance, which was prominently featured in the exhibition *Impressionism, Fashion, and Modernity*, you can find each and every feature described in the fashion journals of the time:

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<sup>56</sup> While stating correctly that, when shopping for fabrics in the eighteen–sixties and seventies, women »could choose from a rainbow of colors«, Debra N. Mancoff: *Fashion in Impressionist Paris*, London/New York 2012, p. 19, never explains why and since when that was the case.

And although the authors of the various essays in the catalogue to the exhibition *Impressionism, Fashion, and Modernity* occasionally refer to the invention of aniline dyes, they never discuss their decisive function for both fashion and art in the second half of the nineteenth century, and the passage on Perkin is no longer than six lines: Mention of aniline or synthetic dyes: Gloria Groom (ed.): *Impressionism, Fashion, and Modernity*, New Haven, CT/London 2012, pp. 29, 39, 76, 92, 104; passage on Perkin p. 271.

<sup>57</sup> Cf. the photograph of the same group by Édouard Delessert, *Empress Eugénie and Her Ladies-in-Waiting at Compiègne*, October/November 1856, in: *Impressionism, Fashion, and Modernity* (as note 56), p. 206.

a dress in bright blue, small printed patterns such as stripes and checkerboards, and all that in the backyard of a bourgeois dwelling, not at the imperial court.

This is the state of things when a young man by the name of Claude Monet enters the stage. The year is 1865. Preparing a painting for the 1866 Salon, Monet was trying to trump his friend and predecessor Édouard Manet at exactly that point where Manet had made his biggest splash so far, his infamously famous painting *Le déjeuner sur l'herbe*, which had scandalized the public because it had placed the traditionally idealized figure of a female nude in a modern setting, more precisely in the company of two young men fully clad in everyday modern garb and another half-naked woman in the background (see fig. 2, p. 178). Since this painting is from 1862, the carelessly dropped blue dress in the foreground is certainly not yet dyed with synthetic, but rather with natural substances like indigo or woad, for instance.

But back to Monet. How do you trump a scandalous picture like that? Not an easy task. Weird as it may sound, Monet's first thought must have been size, a painting of over four meters by six, so big that he had to suspend it by special pulleys while painting and too big to even finish on time. Having had to abandon the picture, Monet placed it in his landlord's cellar, and when he finally resurrected it from there, he cut it up into different pieces.<sup>58</sup> But size does not really matter that much. In order to outdo Manet's *Le déjeuner sur l'herbe*, there had to be another trick, another topic, another motif that would obliterate Manet's scandal of the modern nude. Monet's solution is his rendering of *Le déjeuner sur l'herbe*, which includes the portraits of his future wife Camille Doncieux, daughter of »a merchant, presumably earning his living in the textile trades that dominated the Lyon workforce«,<sup>59</sup> as well as of his friends, the painters Gustave Courbet and Frédéric Bazille. By showing five fully dressed female figures, the picture raises the obvious question: Why would anyone trying to outdo Manet first allude to his *Le déjeuner sur l'herbe*, and then, instead of indulging in even bolder revelations of the female nude, avoid that genre altogether? I think it is because, under the wording of its title, Monet's painting also hides an allusion, this one pictorial, to yet another of Manet's epochal pictures, *La musique aux Tuileries*, also from 1862, famous for being the first group portrait in a casual open air setting, and featuring the painter's friends and family including himself, his brother Eugène, his son Léon Leenhoff, the painters Albert de Balleroy and Henri Fantin-Latour, the critic and sculptor

<sup>58</sup> For the history of Monet's *Déjeuner sur l'herbe*, see: [http://www.musee-orsay.fr/en/collections/works-in-focus/search.html?no\\_cache=1&zoom=1&tx\\_damzoom\\_pi1\[showUid\]=118109](http://www.musee-orsay.fr/en/collections/works-in-focus/search.html?no_cache=1&zoom=1&tx_damzoom_pi1[showUid]=118109) (23 December 2014). In addition to the remaining pieces of the original painting, there is also a small preliminary sketch, now in the Pushkin Museum of Fine Arts, Moscow.

<sup>59</sup> Ruth Butler: *Hidden in the Shadow of the Master*, New Haven 2008, p. 96.

Zacharie Astruc, the critic Champfleury, the composers Jacques Offenbach and Gioachino Rossini, the writers Théophile Gautier and Charles Baudelaire, the journalist and novelist Aurélien Scholl, the baron Taylor, an author and philanthropist, and, prominently positioned in the foreground, M<sup>me</sup> Lejosne, wife of Manet's friend Hippolyte Lejosne, and M<sup>me</sup> Offenbach, both ladies in beautiful off-white/yellow silk dresses which could either still be tinted with a natural dye, be it weld, onion skin, tree bark, or saffron, or already with Mene's aniline yellow, which hit the market in 1861. With one more notable exception, the indigo blue dress of the woman conversing with Manet's brother, all the ladies are wearing only either white or black, enhanced by just a few brightly colored accessories: blue, red, and yellow shawls and ribbons, and, in M<sup>me</sup> Offenbach's hands, a green fan, all of which clearly proves that, for regular people such as the ones portrayed in this picture at least, every inch of dyed fabric was worth a lot, too expensive for bourgeois customers.

Monet superimposes, as it were, Manet's *Le déjeuner sur l'herbe* upon his *La musique aux Tuileries*.<sup>60</sup> From the former he borrows the intimate setting in the woods, the food, as well as the position of the man in the right foreground, however, with the twist that he is the one who, unlike the two men in Manet's version of the theme, has taken off his jacket, whereas all the women are in full dress. From the latter he takes the idea that the focus is not on the men, but rather on two female figures in the left foreground, however, with the even bolder variation that they are not facing the viewer like the ladies Lejosne and Offenbach in Manet's painting, and hence, not shown as carefully painted portraits, but from behind displaying a white and a yellow dress, in a preliminary sketch,<sup>61</sup> and, in one of remaining panels of the final version destined for the Paris Salon of 1866,<sup>62</sup> the same white and yellow fabrics, plus »a stone-gray *petit-costume* comprising a rather short, raised overskirt and trimmings in brilliant aniline red«, to be precise, in Verguin's fuchsine. The yellow dress, on the other hand, an obvious allusion to Manet's *La musique aux Tuileries*, may or may not have been produced by natural dyes.

But the idea to show the two women in the left foreground from behind is, as Birgit Haase notes,<sup>63</sup> inspired by a different source, namely by the genre of contemporary fashion engravings, which, in order to show the complete picture, had to represent their models from both sides. The artist who first adopted this unusual aspect in his pictures may well have been Monet's friend and teacher Eugène

<sup>60</sup> Bazille's *Réunion de famille* can be seen, in turn, as a variation on Monet's *Le déjeuner sur l'herbe*.

<sup>61</sup> Moscow.

<sup>62</sup> Musée d'Orsay, Paris.

<sup>63</sup> Birgit Haase: Claude Monet, *Women in the Garden*, in: *Impressionism, Fashion, and Modernity* (as note 56), pp.100–105, quote p. 92.



Boudin who, from 1863 on, had painted groups of fashionable vacationers seen from behind while watching the sunset at the beaches of Trouville or Dieppe, and who, in his portrait of *Princess Pauline de Metternich at the Beach*, 1865–1867, had represented not one, but two dresses gathered up in the exact same way as the ones in Monet's *Le déjeuner sur l'herbe*.<sup>64</sup> The purpose of skirts hitched up at the seams in this so-called »Eugénie« or »princess style«,<sup>65</sup> which was very much in fashion in 1867, was clearly not »to keep« them »off the damp sand«,<sup>66</sup> as Debra Mancoff would have it, but rather to show off the brightly-colored red or blue petticoat underneath to be revealed in its entirety at a later hour in the lady's boudoir, or perhaps even later in her bedroom.

Two more women in the picture's middle ground are sitting on a white blanket, their upper bodies emerging, as it were, from the huge white clouds of their flounced skirts, their folds put in relief by the famous blue shadows of Impressionism, precursors of the various colors which Monet, almost twenty years later, could not help perceiving not only in the linens on his wife's deathbed, but also in her face. But back to Monet's fully clad version of *Le déjeuner sur l'herbe*. The message of this painting could not be clearer. What matters in what Baudelaire had called the modern life is neither the female nude nor the portrait, but rather »the renewal of fabrics and styles«,<sup>67</sup> which includes the new synthetic dyes: »To this question of fabrics the preoccupation with colors will be joined.«<sup>68</sup> Compared with the textiles shown in Monet's painting, the colors in Manet's *La musique aux Tuileries* appear drab and dull. To quote the pharmacologist M. E. Chevreul's advice from 1860 again, ladies wearing fabrics tinted with natural substances never should go near those who are sporting the products of the new synthetic dyestuff industry.<sup>69</sup>

Thus, what obliterates the modern nude is the modern dress, tinted with synthetic aniline dyes, or more precisely, and in all likelihood unbeknownst to the painter himself, what trumps the modern nude is the modern chemical industry. In Monet's version of *Le déjeuner sur l'herbe*, you find the bright red of Hofmann's rosaniline and the yellow patented by Usèbe<sup>70</sup> combined with all the little details

<sup>64</sup> Haase, *ibid.*, mentions Boudin as well, however, not his portrait of Pauline de Metternich.

<sup>65</sup> See the dress shown in the Gagelin showcase at the 1867 Exposition Universelle, *ibid.*, p. 273, and the Carte de visite from the same year, *ibid.*, p. 303, no. 8.

<sup>66</sup> Mancoff: Fashion in Impressionist Paris (as note 56), pp. 124f.

<sup>67</sup> Mallarmé: *La dernière mode* (as note 45), p. 594.

<sup>68</sup> *Ibid.* p. 580.

<sup>69</sup> Chevreul: *Note sur les étoffes teintes* (as note 22), p. 62.

<sup>70</sup> When I started thinking about the cultural effects of the dyestuff industry in the mid-nineteenth century, I was hoping that I would be able to correlate the dates when particular colors were invented, patented, and marketed bi-univocally to specific impres-

that were still promoted three years later in the ladies' journal *La Sylphide* as being *en vogue*: the tiny printed patterns, and: »These vertically striped *zebraed* gowns with little bias bindings of velour in the shades Havana La Vallière, or moca, with velour of the same shade.«<sup>71</sup> We know that Monet and his future wife were way too poor at that time to afford clothes like that, which is why he had to use lithographs from fashion journals as models for the women's dresses in this and other paintings. But precisely because of Monet's own poverty, it is all the more significant that he does represent a scene like that as if it were well within the reach of a regular bourgeois family.

In the same year 1865/66, Monet made another attempt to outshine Manet. This time, the object was the latter's painting *La chanteuse des rues*, yet again from 1862, famous for its depiction of a woman in full movement, so to speak a snapshot *avant la lettre*, namely before sufficient shutter speeds had been developed to snap such a shot with a photographic camera. In Monet's almost life-size replica, *Femme en robe verte*, *Camille Doncieux*, from 1866 (see fig. 3, p. 179), the movement is very similar, if not exactly the same as in Manet's painting, but instead of facing the spectator, the woman appears, if not completely from behind as the two ladies in Monet's *Déjeuner sur l'herbe*, then at least in a three-quarter view from behind. And in the green dress, after which the picture is titled, and a fur shawl on top of it, she is neither a poor person like the girl in Manet's version of the scene, nor an aristocrat like the women in Winterhalter's portraits, but a relatively well-to-do bourgeois lady. Again the message is clear: it was a great idea to portray a modern woman in full stride rather than immobilized for the purpose, not so much of a painted picture, but of a daguerreotype like the ones produced by Manet's friend Nadar, but why bother with the drab gray dress of a beggar if the streets are filled with ladies

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sionist paintings. It took me quite a while to find out that this is impossible for two reasons:

1. As the history of mauve shows in an exemplary way, there is always a temporal gap between the invention of a product and the moment when it hits the market. While it is thus relatively easy to find out when a particular new synthetic dye was found, it is much harder to determine the date when specific companies like La Colonie des Indes, in Paris, for instance, started selling the product derived from this compound. The history of science is easier to track than that of commercial and trading companies.

2. Since both the science of chemistry and the chemical industry made such fast progress within a very short number of years, there were so many products on the market at one and the same time that it is impossible to tell which company sold the fabrics represented in one of the Impressionist paintings.

As a consequence, the attribution of specific color names or trademarks to the fabrics we now see in Impressionist paintings can only be an estimate.

<sup>71</sup> *La Sylphide* (as note 3) (June 10, 1869), p. 3. For these various patterns, also see Monet's paintings: *Femmes dans un jardin*, 1866–1867, and above all the beautiful flower prints adorning the cradle in *Jean Monet dans son berceau*, 1867.

in the new bright fabrics tinted with aniline dyes? And in the case of Camille Doncieux's dress, which the critic Léon Billot called »the most splendid dress of green silk ever rendered by a paintbrush«,<sup>72</sup> we can almost be certain to see the same shade of green as the one worn by Renée Saccard at her great moment in Zola's *Les Rougon-Macquart*, and if not exactly the same, that is, produced by the same company from the same chemical compound, then at least a very similar one. After all, Zola had been so impressed by the green and black striped silk in Monet's painting of Camille Doncieux at the Salon of 1866 that, in his review of the exhibition, he started a whole paragraph dedicated to this fabric with the exclamation: »Look at the dress.«<sup>73</sup>

If yet another version of *Le déjeuner*, this time not on the grass but at a table at home, from 1868, seems to look less colorful than the two versions of 1865/1866, then one should not forget that Camille Doncieux, who is sitting next to her and Monet's son in the center of the painting, is wearing yet another color à la mode, namely one of the new Havana La Valière, maroon, or moca browns<sup>74</sup> that became fashionable after the first craze of primary colors obtained from synthetic dyes had worn down.<sup>75</sup>

Meanwhile Manet, who was not one to take a challenge lightly, produced his own rejoinder not only to his friend Monet's version of *Le déjeuner sur l'herbe*, but to yet another painter, in fact, one of the people portrayed in this very picture: Gustave Courbet. For the Salon of 1866, Courbet had produced a female nude titled *La femme au perroquet* (see fig. 4, p. 180), which, by means of the loosely scattered clothes on which the figure is reclining, may well refer to Manet's *Le déjeuner sur l'herbe*. Manet's sly riposte, bearing the exact same title as Courbet's canvas, picks up Monet's idea to simply dress the nude again, however, and that is the point, in fact, a subtle pun, rather than fully dressed, *en déshabillé*, thus, neither nude nor completely dressed, nothing but »a long pink peignoir«<sup>76</sup> and a lace trimmed chemise between the viewer's gaze and her bare skin. In her hands, the

<sup>72</sup> Quoted after Gloria Groom: Claude Monet. *Camille*, in: Impressionism, Fashion, and Modernity (as note 56), p. 46.

<sup>73</sup> Émile Zola: Les réalistes du Salon, in: Mes Haines. Causeries littéraires et artistiques, Paris 1879, p. 302.

<sup>74</sup> In terms of the dyestuff industry: Bismarck or Verguin brown.

<sup>75</sup> *Madame Gaudibert*, in Monet's portrait, also from 1868, wears a dress in the exact same shade of brown.

<sup>76</sup> Émile Zola: Édouard Manet. Étude biographique et critique, Paris 1867, p. 38. According to Gary Tinterow: Édouard Manet, *Young Lady in 1866*, in: Impressionism, Fashion, and Modernity (as note 56), p. 29, the peignoir and its color – a pale salmon produced by aniline dye that became available for commercial textiles only after 1860 – were the focus of the critical attention given to the painting when Manet showed it at his private one-man show and again at the Salon of 1868, under the shortened title *Jeune Femme* (Young



Fig. 1 (S. 171): Jean Auguste Dominique Ingres: *Baronne James de Rothschild*, 1848.

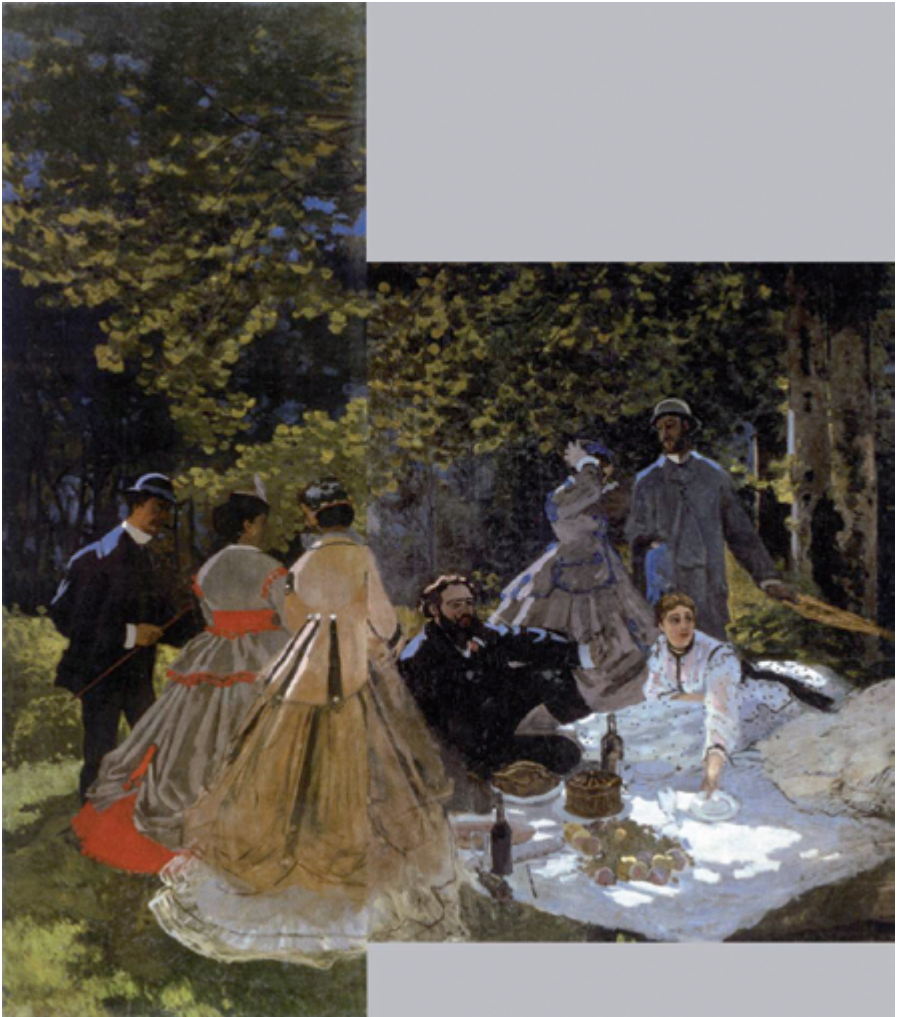


Fig. 2 (S. 172): Claude Monet: *Le déjeuner sur l'herbe*, 1866 (parts of original canvas).

Opposite page: Fig. 3 (S. 175): Claude Monet: *La Femme en robe verte, Camille Doncieux*, 1866.







◁ Fig. 4 (S. 176): Édouard Manet:  
*La femme au perroquet*, 1866.

▽ Fig. 5 (S. 182): Édouard Manet:  
*La Gare Saint-Lazare*, 1872.



lady, a portrait of Manet's model Victorine Meurant, is holding a bouquet of those same violets which, at around the exact same time, the eighteen-sixties, had adorned Renée Saccard's green ball gown, and which Worth kept sending to Empress Eugénie until the end of his days.

Once again, the message is clear: The more or less bright new colors produced by the chemical industry have not only changed, as Hofmann said, what we see out in the streets, or, as Monet showed, in an intimate luncheon on the grass, but also in the much more intimate setting of a woman's boudoir: be it the rose colored fabric<sup>77</sup> of her *déshabillé*, as in the case of *La femme au perroquet*, the model of many lightly colored dresses culminating in James Abbott McNeill Whistler's color *Symphonies*,<sup>78</sup> or the blue tissue of her corset, as in Manet's *Nana* from 1877.<sup>79</sup> Thus, the synthetic colors proudly worn on the outside not so long ago are edging closer to a woman's skin, migrating to the hidden layers of her underwear. In his book *L'art dans la parure et dans le vêtement*, Charles Blanc provides the aesthetic theory for this equally fashionable and erotic move, which we already saw in the gathered-up skirts in Monet's version of *Le déjeuner sur l'herbe*:

»But how many lively expressions are there, which completely go unnoticed by men, and yet all contribute to the impression a woman's toilette makes on them! What air of naïveté and innocence in the navy blue bodice so fitting for young girls with a navy blue cravat and an open collar! And the more discreet the exterior shade, the more generous the color underneath. Against a bodice of gray-mauve cashmere, for instance, or an off-white scarf, lapels in China pink taffetas, in garnet-velvet, in maroon-satin should stand out, for it is in good taste that the garment's richest part is shown the least.«<sup>80</sup>

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Lady). On the function of the peignoir, see also Justine de Young: Fashion and Intimate Portraits, *ibid.*, pp. 120–123.

<sup>77</sup> The lady in Manet's painting *Plum Brandy*, 1878, wears the exact same shade. See also the gorgeous fabric sample from the Marquise de Miramon's peignoir, 1866, in: Impressionism, Fashion, and Modernity (as note 56), p. 28, cat. 8.

<sup>78</sup> Cf. also Monet's *Jeanne-Marguerite Lecadre dans le jardin*, 1866.

<sup>79</sup> I cannot agree with Gary Tinterow: The Rise and Role of Fashion in French Nineteenth-Century Painting, in: Impressionism, Fashion, and Modernity (as note 56), p. 30, who claims that, if fashion had been the artist's primary statement, surely he would have chosen a more elaborate toilette that would have allowed him to exhibit his knowledge of the *dernier cri*, because Manet's *Young Woman* is the very proof that the *dernier cri* did not have to be confined to a woman's outerwear in 1866, but could just as well be shown, in a more intimate setting, in her peignoir, or about ten years later, in a corset »made from luxury materials like satin in colors such as blue, pink, and red.« Valerie Steele: Édouard Manet, *Nana*, *ibid.*, p. 127.

<sup>80</sup> Charles Blanc: *L'art dans la parure et dans le vêtement*, Paris 1875, p. 210.



The author of these lines had already published a *Grammaire des arts du dessins. Architecture, sculpture, peinture*<sup>81</sup> in 1867, a book which, with its theory on complementary colors, was to exert a strong influence on the Pointillism of Seurat as well as on the paintings of van Gogh.<sup>82</sup> Thus, authors like Zola, painters like Monet and Manet, and theorists like Charles Blanc were all feeding off the brightly new colors in women's fashion in the streets.

Manet, for his part, produced an even subtler rebuke to Monet's variation of both his *Le déjeuner sur l'herbe*, and his *La musique aux Tuileries* with his painting *La Gare Saint-Lazare* from 1872 (see fig. 5, p. 180), which is the last portrait of his long-time model Victorine Meurant, according to Philippe Burty, »who saw the work in progress«, »wearing the blue twill that was in fashion until the autumn«,<sup>83</sup> an open book in her hands, and a little dog, counterpart to the cat of the *Olympia*, in her lap. If this looks like a return to the static portraits à la Franz Xaver Winterhalter *avant*-Manet, that is an illusion. For the movement is displaced from the two figures in the foreground to the locomotive in the background behind the iron fence, or more precisely to the steam the locomotive is exhaling down in the deep cut of the Gare Saint-Lazare train tracks.<sup>84</sup> The girl at the center of the composition (the daughter of Manet's neighbor Alphonse Hirsch) is depicted from behind just like the women in Monet's *Le déjeuner sur l'herbe*, but also and more importantly like the blond child in the middle foreground of *La musique aux Tuileries*, who still wears what Philip Ariès has called »the uniform of childhood.«<sup>85</sup> While separating children from adults, it did not distinguish between boys and girls. Hence, the child, the son of Manet's partner Suzanne Leenhoff, is wearing almost the exact same wide white silk dress as the girl in *La Gare Saint-Lazare*, the only difference being that the bow in his back is green, whereas hers is bright blue. It is as if *La musique aux Tuileries* had been reduced to just two figures: a woman

<sup>81</sup> Charles Blanc: *Grammaire des arts du dessins. Architecture, sculpture, peinture*, Paris 1867. This book appeared in several new, and often enlarged, editions well into the twentieth century.

<sup>82</sup> See the chapter on the »Law of Complementary Colors«, *ibid.*, pp. 562–565.

<sup>83</sup> Quoted after Mancoff: *Fashion in Impressionist Paris* (as note 56), p. 43; the same dress as in Manet's painting *The Croquet Party*, 1873, *ibid.*, p. 131–132.

<sup>84</sup> The painting shows the neighborhood, near the Parc Monceau and the new train station, in the North West of Paris, in which Manet had found a new studio, 4, rue de Saint-Petersbourg, visible in the upper left corner. His friends, the poet Stéphane Mallarmé and the painters Claude Monet and Gustave Caillebotte lived nearby. On this neighborhood in the eighteen-seventies, see Isabelle Dervaux: *Manet, Monet, and the Gare Saint-Lazare*, National Gallery of Art Washington, June 14–September 20, 1998, catalogue, under: [www.nga.gov/feature/manet/manetbro.pdf](http://www.nga.gov/feature/manet/manetbro.pdf) (21 December 2014).

<sup>85</sup> Philip Ariès: *L'enfant et la vie familiale sous l'Ancien Régime*, Paris 1973, pp. 48, see also p. 54.

seen up-front and seated at the left side of the painting like M<sup>me</sup> Lejosne in the Tuileries, and a child seen from behind at the center of the composition. The focus of the image, which I cannot but read as a parody of both Monet's *Femme en robe verte*, and his *Le déjeuner sur l'herbe*, is on the big blue silk bow on the little girl's back. But that is not all. There is in this picture an even more daring parody of the portrait tradition as such. It is the face of the girl's adult companion, mother or nurse, as it is reflected in the lower third of the painting in that same blue bow.

The painting gives an answer to a whole range of questions:

1. How do you best represent the speed and movement of modernity?

– Go to a train station.<sup>86</sup>

2. How can you represent movement in a painting?

– Instead of trying to represent moving bodies or objects, just paint the power that drives the fastest and most powerful machine, the steam that drives the steam engine.<sup>87</sup>

3. But if you can show speed, how do you show another important aspect of modern life, the beautifully bright fabrics of fashion?

– The best method to represent just that is to portrait a person, not just in three-quarter profile, but plainly from behind. That way nothing detracts from the sheer beauty of plain white and brightly colored silk.

4. But if you do that, you will have a boring picture which shows, instead of a characteristic face, nothing but a person's backside.

– You can shift the portrait to a corner of the canvas, and if that is not enough for you, just use the silk fabric as a mirror that duplicates the portrayed person's face.

Manet's *La Gare Saint-Lazare* and his *Un bar au Folies Bergère* are his answer to the question of what a man can see day and night in the age of industrialization. Monet, it seems to me, did not respond. After the death of his wife Camille, he retreated into the beauty of pure color that culminated in his lily ponds, leaving to others the task of answering Baudelaire's, Manet's, and Mallarmé's question.

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<sup>86</sup> Hence, »this setting« is anything but »simply an urban pretext, a recognizable Parisian backdrop, to allow Manet to portray his favorite model and detail her splendid blue spring walking dress (perhaps made of twill or light wool), with trendy large buttons on the bodice, and matching hat«, as Gloria Groom: *Spaces of Modernity*, in: *Impressionism, Fashion, and Modernity* (as note 56), p. 170, claims. Dress and urban setting are equally important. They belong together.

<sup>87</sup> See the quote from Jacques de Biez: Édouard Manet, *Lecture*, Salle des Capucines, Paris, January 22, 1884, quoted as motto in Dervaux: *Manet, Monet, and the Gare Saint-Lazare* (as note 89).

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Fig. 1: Jean Auguste Dominique Ingres: Baronne James de Rothschild, 1848, Rothschild collection, Paris.

Fig. 2: Claude Monet: Le déjeuner sur l'herbe, 1866 (parts of original canvas), Musée d'Orsay, Paris.

Fig. 3: Claude Monet: Femme en robe verte, Camille Doncieux, 1866, Kunsthalle Hamburg, Germany.

Fig. 4: Édouard Manet: La femme au perroquet, 1866 Metropolitan Museum of Art, New York.

Fig. 5: Édouard Manet: La gare Saint-Lazare, 1872, National Gallery of Art, Washington.