ARTH 375 Final Paper

Aesthetician Charles Henry and His Influence on 19th Century Artistic Thought

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12/16/19

Introduction

The late 19th century was a formulative period for artistic avant-garde movements, both in terms of style and thought. During this time, art movements such as the Barbizon School, French Realism, and Impressionism gave way to a Post-Impressionist theory—a deep fascination with a more synthesized approach of execution, meaning, and portrayal rather than pure expertise and a faithfulness to an observable naturalism. For perhaps the first time in art history, the metric of artistry—what "good" art was and what art was mainly about—had begun its momentous shift away from demonstrative skill to something more conceptual[1]. This is the pivotal importance of the late 19th century, and what this essay will attempt to contextualize from an aesthetician's viewpoint.

This essay will focus solely on the contributions of Charles Henry in an attempt to explain some of the theoretical developments seen in Post-Impressionism. It will begin with a survey of Charles Henry's aesthetic literature, then detail how his theories influenced its surrounding community (Seurat, Signac, Chevreul, etc.), and finally conclude with a brief evaluation of his theories when juxtaposed to early-20th century art. While Charles Henry wrote extensively about the aesthetics of rhythm and sound, which went on to influence Symbolist literature and poetry, this essay will restrict its scope purely to his writings on visual art.

Survey of Charles Henry's Scientific Aesthetics

The 19th century saw a burgeoning of thinkers who investigated the realm of visual art beyond just its visuals. Many were preoccupied with the question of representation (and how that tied with beauty) and sought to tackle their questions from new perspectives. Charles Henry is no exception. One of Henry's biggest contributions to late 19th century aesthetics is his development of scientific aesthetics, a theory which sought to explain the fundamental, causual conditions of evocative art. In his earliest work,

Introduction to Scientific Aesthetics (1885), Henry shifts the focus of art and aesthetics onto the reality instead of the objective nature. In other words, he defines art as an exercise in visualizing the world's relationship to a viewer[2]. For Henry, an artist who paints a pleasant sunrise with warm, vivid colors attempts to convey the feeling of happiness he sees in the sunrise before him. The sunrise's *relationship* to the artist—not the sunrise itself—is the topic of the art piece, and how expertly the artist is able to translate his sense of happiness onto canvas is the metric by which to judge artistry. Aesthetics, then, is the evaluation of said metric: it is the database which informs the artist *how* to translate immaterial emotion into material portrayal and the informed critic which labels *what* the artist has created: positive or negative, beautiful or not.

Having refocused aesthetics, Henry approaches the questions of beauty through a more objective methodology. Whereas previous writings on aesthetics sought solutions through metaphysical truths—*a priori*, superficial, and unproductive—[3], Henry instead sought them through scientific truths—*a posteriori*, relatable, and pragmatic. It is through this lens Henry is able to fully expound the "scientific" adjective in "scientific aesthetics", as now the solutions to questions of beauty can be revealed through scientific experimentation and defined in tangible forms. These tangible forms—direction (line) and shading (color)—have happy and sad attributions[4], and when combined in complex ways through art, evoke positive and negative sentiment. When applied to canvas, positive directions create pleasing lines, which in turn create beautiful shapes. An example of a positive direction is one that goes from left to right or bottom to top, as it both naturally takes the least amount of effort at the subconscious level to read and is the most effective at moving the viewer towards action[5]; an example of a positive shade is one that emits the highest wavelength on the visual spectrum (reds, yellows, oranges), as it is the most easily perceived wavelength and most excitable shade[6]. The ease with which something can be digested by the viewer is one that offers the least amount of subconscious resistance and most naturally moves the viewer to feel—a grouping of properties Henry believes to manifest as happiness. Thus, positive forms are those

which are associated with positive/happy emotion; negative forms are those which are associated with the opposite. (This draws inspiration from Charles-Édouard Brown-Séquard's theory of dynamogeny and inhibition, which is detailed later on in the "The Henrian Model" subsection.)

Henry's Influence on the Post-Impressionist Theorist Community

Henry was undoubtedly in communication with the Post-Impressionist theorists community, even going as far as generating two new tools for his contemporaries: the aesthetic protractor and his own version of the color circle (both attributed as "Henrian" in the rest of the essay). The following sections will demonstrate the two-way influence Henry had with that late 19th century artistic landscape and the influence they had on him by detailing correspondences, overlaps in art theories, and explicit use of his generated tools.

The Henrian Model and Charles-Édouard Brown-Séquard

Perhaps the biggest foundational theoretician from whom Henry was inspired by was Charles-Édouard Brown-Séquard, an extremely influential physiologist and professor of experimental medicine at the College de France from 1878 to 1894[7]. As mentioned at the conclusion of the first section, Henry based his positive tangible forms on Brown-Séquard's theory of dynamogeny and inhibition[8], which defined psychobiological stimuli that increases the activity or function of an organism as dynamogenous; stimuli that decrease the activity as inhibitory. Just as dynamogenous stimuli was pleasant and therapeutic, dynamogenous or "positive" lines, colors, and sounds were pleasant and beautiful. By drawing from a field as research-based as biology, Charles Henry not only grounded the core principles of his thinking in scientific evidence (from a reputable biology professor, nonetheless) but also began pulling aesthetics away from the investigation of the metaphysical to the investigation of the factually experimental. This shift towards artistic truths empowered by empirical data is deemed as the Henrian

Model (by this essay), and paved the way for subsequent aestheticians and artists both. (Henry credits Camille Duruette's *Musical Aesthetics* in 1855 as the first investigation of music using math[9], but the Henrian Model remains the first comprehensive, explicitly scientific theory about visual art.) Notably, Seurat and Signac will closely follow suit in 1886—one year after being in dialogue with Henry's *Introduction to Scientific Aesthetic* essay; even more notably, analytical aesthetics in the latter half of the 20th century will do the same[10], establishing the principles of modern aesthetics through investigation of ahistorical and intrinsic qualities of objects and verifying its conclusions with empirics—all in the same way the Henrian Model did.

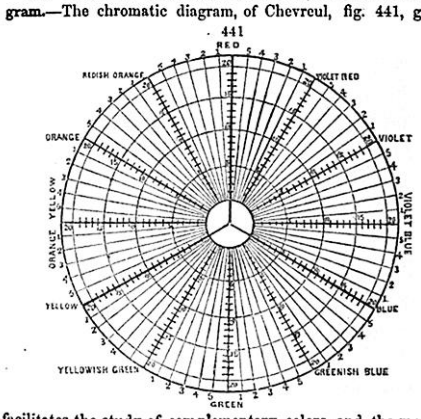
Charles Henry would go on to reference many works from other scientists, but the most substantial reference is the one made to Brown-Séquard. Brown-Séquard's biological basis of pleasure serves as the Henrian aesthetic basis of beauty, and the fact that a seemingly ascientific field of inquiry can be initiated from a scientific framework was the first significant contribution Charles Henry made to the art theorist community and future communities alike.

The Henrian Color Circle, Michel Eugène Chevreul, and Charles Blanc

Before the Henrian Color Circle's invention, two precursor theorists set up the foundations of color theory: Michel Eugène Chevreul and Charles Blanc. Chevreul was the first to formally investigate the perceptive qualities of light and color, which were scrupulously detailed in his 1855 manual, *The Principles of Harmony and Contrast of Colours, and Their Applications to the Arts*. Chevreul had two major contributions that would play out in the Post-Impressionist scene: the invention of his 1855 chromatic circle and the theory of contrasting colors. In summary, Chevreul's chromatic circle not only gave a taxonomy to colors—both in function and relationship to each other—but also gave visual representation to them in a way that was spatially coherent and readily accessible[11]. Below is Chevreul's chromatic circle in diagram form from the same source.

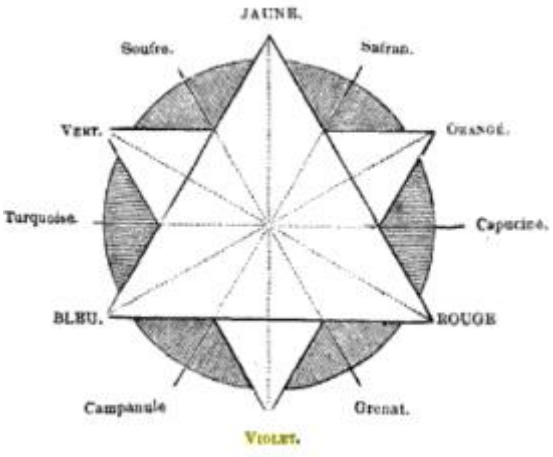
800. **Chevreul's classification of colors, and chromatic diagram.**—The chromatic diagram, of Chevreul, fig. 441, greatly

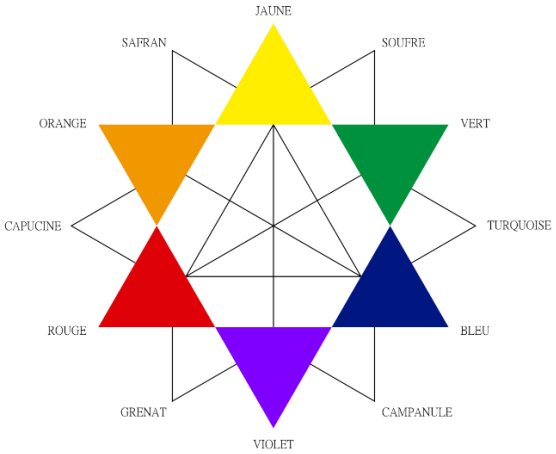
441



facilitates the study of complementary colors, and the modifications produced by their mutual proximity.

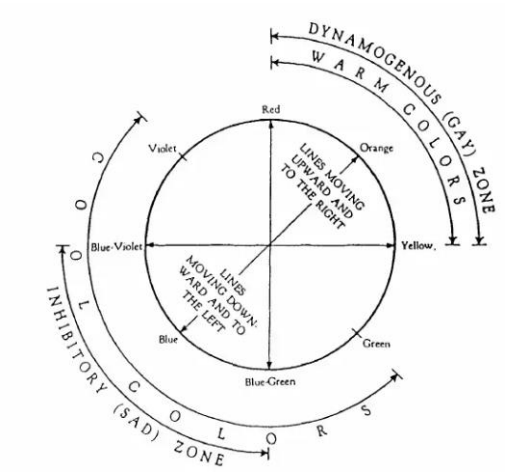
Chevreul's theory of contrasting colors gave utility to his chromatic diagram, instructing artists the proper way to brighten or dim colors through the use of its neighboring colors. In painstaking detail, Chevreul reviews every single combination of colors—from single, isolated colors to up to five colors grouped in relationship to one another—in order to determine which combinations are agreeable, harmonious, and/or superior[12]. His fascination with discovering a scientific hierarchy to color combinations implies that there are superior color sets, which in turn suggest color sets which artists should more often adopt in order to create chromatically potent work. Twelve years later, Charles Blanc, a French art critic, would also go on to develop his own miniature of the chromatic circle known as the color star in 1867 (seen below with a coloring creation)[13].





Blanc built upon Chevreul's colors with his own theory of light, which would go on to influence the Chromoluminarism technique best exemplified and adopted by Neo-impressionist painter George Seurat. This theory claimed that through proper juxtaposition, colors would appear in their maximal luminosity to the eye when it remained pure on the canvas (mixing paints on the palette had a poor side effect of dulling the colors) or when it was neighboring its direct complementary color. Artists could brighten or dim their colors indirectly with surrounding colors rather than directly mixing in white or black[13].

It is from these two perspectives that Charles Henry would begin to posit his own adjustments to the tool of representation—the chromatic circle/color star itself. In direct response to Chevreul, Henry admitted his distaste for the "arbitrariness" of the Chevreulian color circle in his 1885 essay, *Introduction to a Scientific Aesthetic*. Believing the circle to not implement positive directions and intentional angular degrees, Henry postulated that the ideal color circle to be one that had "the contrasts of colors separated… by a section of the circumference expressed by a number of forms 2^n, the prime number of 2^n+1, or their product"[14]. Henry would also go on to indirectly critique Blanc's color star, stating that the circle (which is a manifestation of a cyclical direction) is one of the most pleasing shapes, given its ability to be defined with one focal point and a length of a radius[15]; The color star, which is made of overlapping triangles, would therefore not represent color in a beautiful way. He would eventually fully develop his own Henrian color circle in 1888 for public use, visualized below[16].



In his 1888 essay, *The Chromatic Circle*, Henry remarked more completely on his "scientific aesthetics" version of the chromatic circle[17]:

1) colors were placed in the proper location in accordance to their associated direction (red is the most vertical color, given its highest propensity to excite),
2) colors are directly opposite their complementary colors according to the theories of vision proposed by physicist Hermann von Helmholtz (red is scientifically the opposite of blue-green and is arranged as such; the Cherveulian circle has red opposite of green, which is a result of a poorly spaced circle), and
3) combined primary colors visually result in white while other tiers of mixing result in black; this is accurately and two-dimensionally mapped onto the Henrian color circle (where as previous color circle tools did not possess this quality).

It is worth noting that in creating the color circle, Charles Henry also created the aesthetic protractor to easily identify the harmonious angles mentioned above (2^n, the prime number of 2^n+1, or their product). Accompanying the release of his aesthetic protractor tool, Henry published in that same year an essay titled *Aesthetics Protractor* as an explanatory guide. Mostly mathematical in length, this essay details the specificities of beautiful angles, which he calls natural selections. Henry has this to say about the differences between his equipment and those of other non-aesthetical ones:

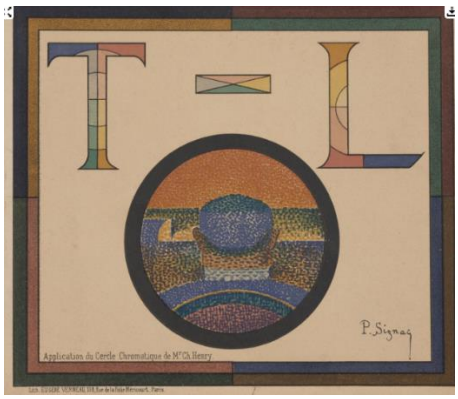
> "The aesthetic protractor differs from ordinary protractors in that it presents immediately and exactly the simplest natural sections of the circumference and most useful to aesthetics… while the ordinary [protractor] evaluate the angles in a unit arbitrarily called degree." – Charles Henry[18]

Ultimately, Charles Henry sought to remove the lack of intentionality behind the design of artistic tools—something he constantly refers to as a distasteful arbitrariness. In this quest, he personally invented two powerful aids: the Henrian color circle and the Henrian aesthetic protractor. Though the protractor was secondary to the impact of the chromatic wheel, both inventions together represent his second major contribution to the Post-Impressionists. It is a clear example of Charles Henry's two-way dialogue with the artistic scene, since he released not only the tools but also the explanatory essays along with them. While the essays are mathematically dense, Henry's tools are accessible to a fault—they exist a sort of ready-made, black-box device that automatically applied the color mathematics of a more complex theory. However, the ease with which the tools could be utilized is intentional and a testament to Henry's dedication in making his scientific aesthetics accessible to the Post-Impressionist community. That he directly spoke about previous iterations of a chromatic circle also suggests that Charles Henry was at the very least in communication with other theorists and was not generating tools for a non-existent audience.

The Applied Henrian Theory, Paul Signac, and Georges Seurat

Along with proving the possibility of a scientifically-based aesthetics and creating brand new equipment for artists to use, Charles Henry also directly inspired the artwork of Post-Impressionists George Seurat and Paul Signac. While his influence on these artists is large and spread across many works, this section will detail a specific piece from each artist that best demonstrates correspondence.

The first artist is Paul Signac and his piece, *Application du Cercle Chromatique de M. Charles Henry*[19]. This piece serves as an obvious tribute to Henry's theories, evident in the title of the art piece. For starters, its focal icon emulates the cyclical forms of the color circle, generally follows the location of where colors are seen on the circle (warm on top, cool at bottom), converges to a theater chair in the same way the colors turn to winter at the center, and solidifies into black in the same way the colors fade to black at the perimeter.



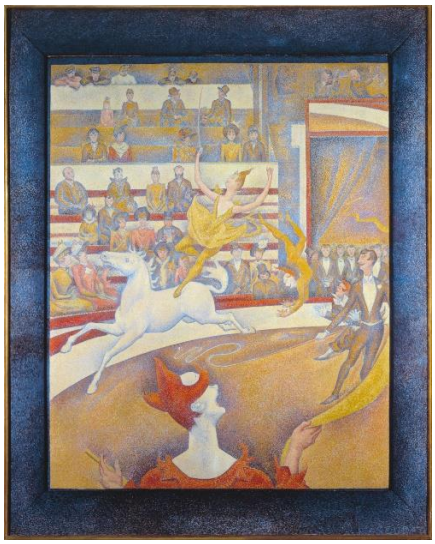
Additionally, complementary colors fill in the opposite corners, as faithfully described by the Henrian circle. Sections of the ideal natural selections (aesthetic angular degrees) are filled in with the same repeating primary colors and cutout in the shape of the initials T – L, which stand for Théâtre Libre (Free Theater)—the theater whose playbill this piece was originally illustrated for.

However, there are some divergences from Henry's theater that cannot be ignored in Signac's piece. For example, there is an overall stagnancy to the work, as evoked by the the inhibitory forms of the calm, horizontal and vertical lines (as opposed to excitory diagnoal lines). There is a strong balance between positive and negative colors, with no pariticular part of the piece being highlighted with constrasting colors. Signac allows the viewers' eyes to mix the individual pure colors in the center icon, but otherwise ignores this technique with the rest of the cover. Lastly, even in the topic choice does Signac err. The Théâtre Libre, established by André Antoine to showcase previously untried, unknown, or unsuccessful plays, utilizes naturalistic staging—setups that are very realistic and immersive. Antoine is said to have used real beef carcasses as a prop, believing in the effect of the real object itself must bring. These sentiments are heavily invested in portraying a "real" reality, or one that is faithful to observation, rather than Henry's belief in portraying a "subjective" reality, or one that is faithful to emotions.

Regardless of accuracy, Signac's piece is testament to Henry's concrete fame in multiple fields. A theater built for the free admittance of the commonfolk, Théâtre Libre allowing Signac to choose such a subject matter suggests that theatergoers must have at least tangentially recognized Henry's chromatic

circle. Henry's theory itself also is recognized by name and explicitly attributed to him, necessary pre-conditions that need to be met in order to evaluate a specifically Charles Henry's contribution rather than *some* general public consensus about art. This partially apt application/partially inept application of Henry's theory may also suggest a general uncertainty theorists had with his work, given how academically dense they could be.

The second artist is Georges Seurat and his piece, *Le Cirque*[20]. A paradigm of Henry's scientific aesthetics in action, Seurat's piece details a tense but awe-struck audience (conveyed through the horizontal, resting line) sitting before over-zealously animated performers (conveyed through the excitable diagonals). The color palette is undeniably warm and predominantly utilizes the three primary colors in isolation (red, blue, yellow) and in combination (white) as a means to evoke emotional response. The blue frame itself can be said to highlight the entirety of the painting, whose generally tint appears to be yellow. The positive directionality of lines and color, as well as, the use of complementary colors in accordance with the Henrian color circle are evident in this painting.



In short, both artists are examples of the Henrian aesthetics put not only into practice but also in the public eye. Charles Henry's work would then have been well trafficked, given his audience's adoptions of his work.

Charles Henry in the Early 20th Century

Charles Henry's influence would receive mixed reviews come the early 20th century and the onset of the abstractionist theory. In 1920, Le Corbusier, Paul Dermée, and Amédée Ozenfant would release a publication titled the *L'Esprit Nouveau* as a literary platform for their new, reactionary movement: Purism. One year later, the magazine would publish Henry's last essay, "La Lumière, la couleur, la forme"[21], claiming Henry's scientific aesthetics to be a companion theory to their own Purist manifesto. Victor Goloubew, who writes the introduction to Henry's essay in the 6th edition of *L'Esprit Nouveau*, parallels Henry's beautiful ratios found in the canvas's line to the beautiful ratios found in architectural schematics. He ends with the following translation:

> "Engineers concerned with the problems of construction [can be] led… to the achievement of a beautiful form by a beautiful calculation [and] will find, in [Henry's] work, formulas which will certainly be suggestive to them." – Victor Goloubew[22]

At least among Purists, Charles Henry's work continued to inspire and teach future artists well into the early 20th century.

On the other hand, that same year coincided with the first Dadaist exhibition at the *Salon des Independants* in Paris. What Henry had tried methodically to construct in his theory of aesthetics was rejected by Dadaism, a new anti-art movement which sought to establish an order that ignored the rules of the previous. Whereas Henry's scientific aesthetics sought to create art that was pleasing and positive, Dada sought to create art that offended, downplayed, and undid. The following quote by Marcel Janco, a co-founder of Dadaism, aptly sums up the intention of this new art movement:

> "We had lost confidence in our culture. Everything had to be demolished. We would begin again after the 'tabula rasa'. At the Cabaret Voltaire we began by shocking common sense, public opinion, education, institutions, museums, good taste, in short, the whole prevailing order." - Marcel Janco[23]

As Dadaism took Western Europe by storm, Henry's carefully crafted, scientific approach to aesthetics was cast aside in favor of this newfound pre-war, anti-art sentiment.

Ultimately, Charles Henry and his work paralleled the desire of late 19th century artists to apply a type of artistic ethics to their craft. This theory sought to formulate the causual links between the mechanical movement of the brush to tangible emotional response. This would, in turn, not only create an objective standard to judge art, but also outline a method of how to make it. His theories were well trafficked, given the range of his contributions: 1) establishing the Henrian Model of a scientifically based aesthetics, 2) creating new tools to be used by the art community, and 3) directly inspiring works of artists. Nevertheless, his late 19th century aesthetic of scientific rules for normative beauty received mixed reviews come the early 20th century—some like the Purists respectful of his contribution; others like the Dadaists disdainful of what he had created. Whether his theories were accepted or not, the Henrian Model of aesthetics was undeniably instrumental to the formation of modern analytical philosophy. The following quote aptly resonates Henry's longstanding belief in his scientific aesthetics and highlights its unique qualities:

> "The problem [of aesthetics] is essentially scientific. …[A]ll excitation is determined by chemical phenomena. …I consider it a fact that pleasure and pain are correlated with dynamogeny and inhibition." – Charles Henry[24]

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