

Aesthetics: Kant, Dewey, Ayers towards Shelley, Global Pulse

When one looks at a map, or a piece of art, or goes to a theater, they are effectively being exposed to a piece of cultural memory, and that piece of cultural memory has with it an embedded sense of the world that is unique unto that time and place. What is fascinating today however, in 2011, is the unquestioning nature of that embeddedness. Rarely will you see a piece of art questioned if it is placed in a gallery, or taught by a professor, or shown on the appropriate stage. There are many manners in which the validity of such display can be questioned, and this research will attempt to explore the manner in which data visualizations are analyzed and the validity of their appropriation into common usage, examining, in particular, a work of Ward Shelley's¹ and contrasting those with a work from Visual Complexity.² By examining such data visualizations and what determinations are being made, we can gain a fuller understanding of how information is being presented to us, and challenge the information in new ways.

Before we begin with an examination, however, we must frame how we are to examine these visualizations, and what qualities we will be examining, and why it is important to examine such qualities. We will similarly be contrasting Kant's aesthetics with those of Dewey, in order to better approach the data visualization from a philosophical perspective, as questioning these pieces without a framework would be a difficult analytical undertaking. Because these two philosophers have views which examine the artistic object differently, taking some time to explain how they do so, and how they are useful in analyzing visual material is a way to start understanding the system under which the aesthetic image is created.

Starting with Dewey is useful, in a sense, because his analysis of the aesthetic object, in this case, the visualization, is one which starts before the object is necessarily a part of the aesthetic sense. In effect, his aesthetics consist of an experience, and that an experience is a unique perceptive construction which defines not just memory,³ but a casing for that memory, a space

1 Shelley, Ward. "Ward Shelley Homepage." Accessed December 12, 2011. <http://www.wardshelley.com/>.

2 Chowdhury, Abdur et al. Visual Complexity, "Global Pulse." Last modified 2011. Accessed December 12, 2011. <http://www.visualcomplexity.com/vc/project.cfm?id=766>.

3 Leddy, Tom, "Dewey's Aesthetics", *The Stanford Encyclopedia of Philosophy* (Winter 2011 Edition), Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/win2011/entries/dewey-aesthetics/>. "Art products exist externally and physically, whereas, on his view, the work of art is really what the physical object does *within* experience"

where that memory can be perceived by the senses. In a similar manner, the final object is a resulting work, an aesthetic experience, partly for the artist, but also for those who then view that object. The object houses an experience all its own, one that is unique, but the user, the individual "experiencing" the object is themselves having a unique experience qualified by the unique object,⁴ which the object in question provides. Thus there is a unique connection between the user and the art, and the art and the artist, but these two things can be mutually exclusive. The experience is thus a construction by which the individual can "take part" in the artist's memory. The memory is then an imperfect representation, but beautiful in the sense that one is able to take part in it uniquely.

Perhaps the difficulty then of calling a data visualization art at all may lie in the fact that the experience is itself unqualified, that the experience has a necessary quality that is not understood without a memory that is disconnected from the unique experience the piece is intended to provide. Not only is the experience and its representation imprecise, but the visualization is one in constant flux, and thus the way in which it is represented is not unique. The fact that the unique experience's representation is undergoing constant change may represent an evolution of what art now is as a result of our interest in dynamics, but it proves difficult to argue that such information provides an experience that is consistent or unique. Similarly, because the experience is intended to be encompassed in some form or fashion, the revisionist reality of such pieces calls into question whether or not a piece of art that changes dramatically based on one's interaction with it is an artistic experience, or a different kind of experience that remains yet unqualified.⁵ The experience tends to be qualified as having a set of qualities that defines it uniquely, and while it is certainly possible for the data visualization to have such signifiers, they tend to be what constructs the object itself rather than the representation of the experience, which can only be replicated by freezing the visualization at some point in time, by forcing it to conform in a manner which is only intended for convenience.

On the other hand, we have Kant's aesthetics, which are comprised greatly of how an object

4 Leddy, Tom, "Dewey's Aesthetics", *The Stanford Encyclopedia of Philosophy* (Winter 2011 Edition), Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/win2011/entries/dewey-aesthetics/>. "The artist's thought is more immediately embodied in the object as she works and thinks in her medium."

5 Ibid., "'An experience,'" is also marked off from other experiences, containing within itself an individualizing quality."

is structured and then through cognition, entitled to a definitional construction of beauty, should it meet the requisite qualities of what defines a beautiful object. Effectively, in order for an object to be considered beautiful, one must consider what beauty is outside of concepts of beauty, as well as outside of what is agreeable.⁶ Merely stating that one likes an object is being agreeable, or that the object has a color, which is a concept, is not something considered necessary of the beautiful object. Rather, the object itself takes upon itself a substantial consideration of the "free play of the faculties" in combination with the object's "purposiveness."⁷ These are terms defined by Kant himself to define the beautiful object, though they are unfortunately somewhat vague. They are attempting to clearly define an object both through one's perceptive feeling as well as the more pragmatic or consumptive "use" of the object, but neither are entirely satisfactory.⁸ Even so, they do give a more readily available manner in which an object, in our case a data visualization, may be considered beautiful, and entitled to that beauty, should we follow Kant's aesthetic judgments.

Perhaps what makes Kant's judgments useful, however, is that because what we are judging is a representative cognitive feeling, there is little that cannot be qualified as beautiful, and a great deal of granularity can be applied to what specifically is beautiful and what is entitled.⁹ For example, a data visualization on the whole may not be beautiful, but a particular part that is well-executed may be. While Dewey's take on the beautiful object considers more holistic constructions, looking only perfunctorily at specifics, Kant's aesthetics allow us to be quite specific in what we are specifically analyzing as beautiful, or what merely constitutes being agreeable to the terms of accentuating such beauty. Similarly, because Dewey's analysis focuses on the experience, rather than a feeling towards a particular object, it is much harder to know if what is being enjoyed or classified as beautiful is the object in question, or the specific instances of experience that occurred

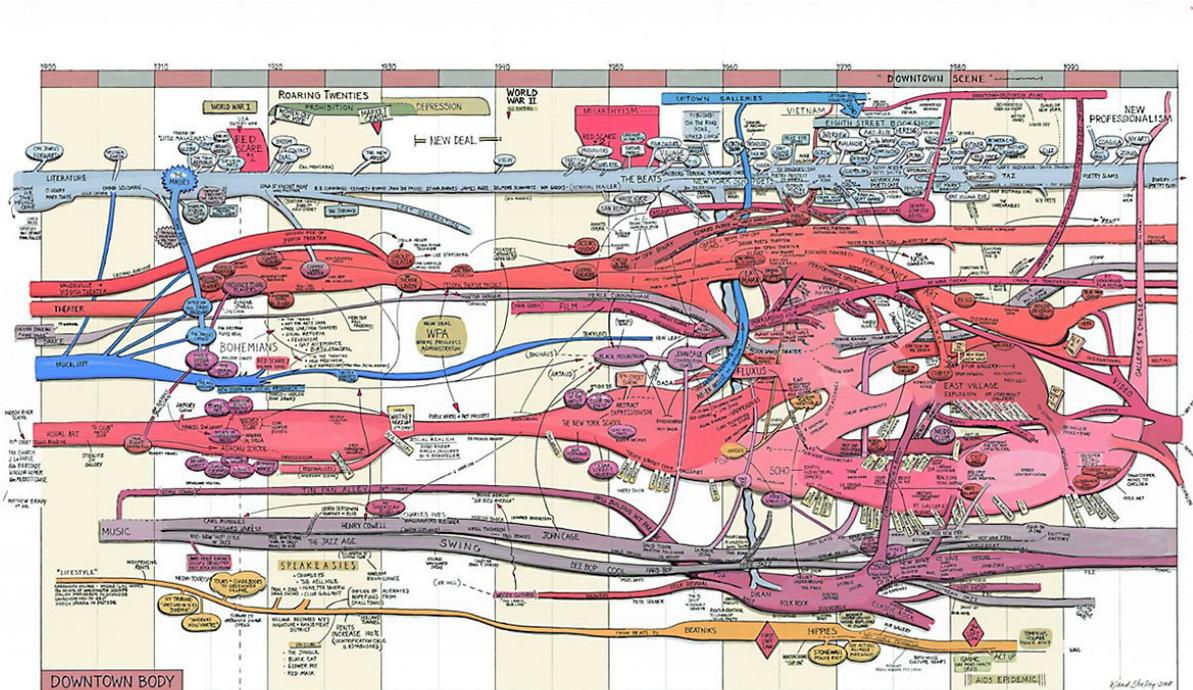
6 Ginsborg, Hannah, "Kant's Aesthetics and Teleology", *The Stanford Encyclopedia of Philosophy (Fall 2008 Edition)*, Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/fall2008/entries/kant-aesthetics/>. "According to Kant's official view there are three kinds of aesthetic judgment: judgments of the agreeable, judgments of beauty (or, equivalently, judgments of taste), and judgments of the sublime."

7 Ibid., "He describes it as perceived both in the object itself and in the activity of imagination and understanding in their engagement with the object."

8 Ibid., "judgments of beauty are unlike judgments of the agreeable in not involving desire for the object; more importantly and centrally, they make a normative claim to everyone's agreement."

9 Ibid., "Kant appeals to this account of pleasure in the beautiful in order to argue for its universal communicability: to argue, that is, that a subject who feels such a pleasure, and thus judges the object to be beautiful, is entitled to demand that everyone else feel a corresponding pleasure and thus agree with her judgment of beauty."

around the object. In a sense, Kant's aesthetics are honed on the object, while Dewey makes an argument based temporally around objects.¹⁰ Because what we are focusing on are the objects in question, this also allows us to consider even highly dynamic systems as being beautiful with much greater ease using Kant's aesthetics, simply because there is no necessity for a quality or reproducibility of memory. Dewey is thus better situated for discussing non-dynamic systems, or objects which do not change (or at a stretch, experiences that are set in a closed loop, such a non-online videogame), simply because the experience represented by them is not prone to change.¹¹



In having an idea of how these objects function under these frameworks, let us examine one object and start with Shelley and Dewey. In Downtown Body, we see a perceptual "map" which attempts to trace history in an organic manner, starting in the 1900s and ending roughly in the present day.¹² While such a map could be qualified in any number of ways, the way in which I, as an individual, would likely perceive it would be through an experiential representation of the work. Seeing it represented online then, and then downloaded on to my computer to make reference to, is

¹⁰ Leddy, Tom, "Dewey's Aesthetics", *The Stanford Encyclopedia of Philosophy* (Winter 2011 Edition), Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/win2011/entries/dewey-aesthetics/>. "Dewey thinks it important here to distinguish mere recognition from perception. Recognition uses matter as means. Perception, by contrast, entails the past being carried into the present to enrich its content."

¹¹ Ibid., "Excess of doing, or excess of undergoing, may interfere with experience."

¹² Shelley, Ward. "Ward Shelley's Homepage." Last modified 2008. Accessed December 12, 2011. <http://www.wardshelley.com/paintings/dtbody/downtownbody.jpg>.

significant in that it colors the experience under which I am experiencing the work. Thus, the work, though I may examine its specifics in greater detail, is enriching based on my perception not necessarily of how I feel toward it or what use it may have, but whether or not the experience is sufficient to come to mind as an experience, either of the work itself or of Ward Shelley. The experience of the work thus depends on the individual's effective aesthetic recognition, to an extent, of the work and its relative ability to be representative of either the work itself, the artist, or the corpus in a more holistic sense.¹³ The tentative status of internet objects is difficult to resolve with Shelley, as the mere renaming of the object on the internet puts the experience itself in question. If, for example, Downtown Body were to be renamed on the site to something else, I would be unable to accurately share such an experience with others, as the malleability of the digital object is different from, let's say, a work on canvas. In a sense, the work on canvas has greater potential for a similar experiential reception, due to the nature of its "existence" which is at least normatively intended to go unchanged after the work is finished.

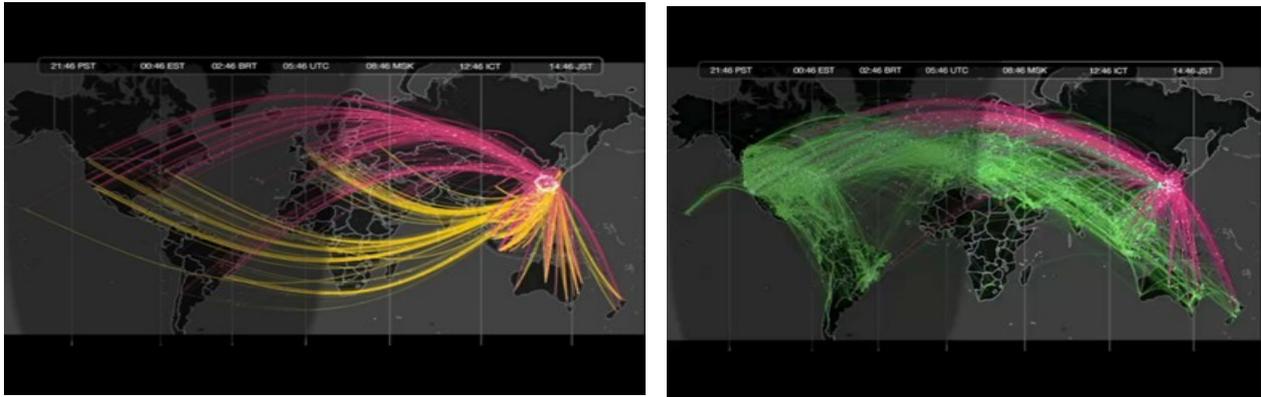
Kant, then, would look at Downtown Body and ask whether or not the piece itself meets the qualifications for the considerations of beauty. When examining Downtown Body, we must ask what feeling, in a sense free from reason, the object imposes upon us, and similarly whether or not its "purposiveness" is effectively defined by the nature of the work itself.¹⁴ Determining whether or not a work such as Downtown Body meets the definition of beauty becomes an examination of ourselves as much as the artist, and our faculty for perceiving the meaning unmolested by concepts or structures. In effect, while it is probably fair to say that the work is striking, there is often a good deal of questioning regarding the purposiveness of Shelley's work. As such, whether or not such works are beautiful are likely in question, though this does not necessarily disqualify the work from being entitled to beauty.¹⁵ Rather, it means that there is a necessity for looking inwards at the work

13 John Dewey, "The Act of Expression," and "The Expressive Object," in *Art as Experience*, Perigee Books, New York, NY, 1934: 64. "The real work of art is the building up of integral experience out of the interaction of organic and environmental conditions and energies."

14 Immanuel Kant, "Analytic of Aesthetic Judgement, Analytic of the Beautiful," *Critique of Judgment*, James Creed Meredith (trans.) Oxford University Press, 2007: 35. "The judgment of taste, therefore, is not a cognitive judgment, and so not logical, but is aesthetic—which means that it is one whose determining ground *cannot be other than subjective*. [...] The one exception to this is the feeling of pleasure or displeasure."

15 *Ibid.*, 51. "An end is the object of a concept so far as this concept is regarded as the cause of the object (the real ground of its possibility) and the causality of a *concept* in respect of its *object* is purposiveness (*forma finalis*)."

and attempting to understand its necessary qualities, and with such questioning, there may be a great degree of purposiveness in the mappings which Shelley makes, systemically unqualified though they may be.



Global Pulse,¹⁶ the piece we are examining from Visual Complexity, is an interesting piece in that it details the failures of examining aesthetic experience based on temporality, and thus, memory. From Dewey's perspective, the Global Pulse piece is a difficult piece to analyze simply because it evolves based on the interaction of Twitter with temporal imperatives that are grafted onto snapshots of what the object "was" rather than what the object "is." Effectively then, any experiential sharing that occurs is an imperfect sharing of a cognitively mapped phenomenon that occurs as a result of the system's interaction with Twitter and its resultant representation. Thus, one can never truly share a definitive "experience" of the object in question, the Global Pulse, because it is constantly evolving based on a representative memory that is reminiscent of a mapping of Twitter exchanges.¹⁷ As a result, such aesthetic judgments of Global Pulse can only really be made of snapshots, which is not representative of what the system portends through its representation. Examining its aesthetic through a subjective temporality, then, is ineffective, and, more widely, not useful unrestrained dynamic systems.

Kant's approach to Global Pulse, however, would be radically different, and would instead, again, attempt to examine its feeling and purposiveness. While there is clearly a well-defined purposiveness to a project which intends to map a dynamic system and represent it visually, the

16 Chowdhury, Abdur et al. Visual Complexity, "Global Pulse." Last modified 2011. Accessed December 12, 2011. http://www.visualcomplexity.com/vc/images/766_big02.jpg and http://www.visualcomplexity.com/vc/images/766_big01.jpg

17 John Dewey, "The Act of Expression," and "The Expressive Object," in *Art as Experience*, Perigee Books, New York, NY, 1934: 67. "The notion that expression is a direct emission of an emotion complete in itself entails logically that individualization is specious and external."

question in this case is opposite. What feeling can be gained from a dynamically defined system, and is that system, properly represented, entitled to a definition of beauty? Though there is a clear, pragmatic imperative, such imperatives are true of most visually defined systems. Effectively, they intend to represent information which they want the consumer to pay attention to, which they may not otherwise do.¹⁸ But such an argument largely points to its purposiveness, not to whether the representation meets, satisfactorily, the goal of being a "free play of the faculties" that also informs us in a manner which is aesthetically enriching. While I believe such to be the case with Shelley, I find myself questioning how striking visually represented information can be, if not constrained in a manner that allows it to represent itself beautifully. Effectively, there is a clashing question of whether a dynamic system can, in a continuous manner, represent what is beautiful, or if what is beautiful is the realization of the complex system's undertakings, realizing the system as beautiful, rather than what the consumptive mind takes away from viewing the object. These two things may not be mutually exclusive, it may indeed first require a beautiful system to be represented before one can actually see the object representing them as beautiful, but Kant does attempt to focus on the object, and here we are left to question where the object and our analysis of it effectively ends.¹⁹ Is the analysis of the beautiful one which requires an analysis of the system, or can the representation of the system stand alone as beautiful? It is a difficult question to answer, and unfortunately, outside of the purview of this paper, but definitely one which deserves further analysis. The end result is that we find ourselves somewhat stuck on how to analyze the representation of the dynamic system as beautiful, as tracing where the object of analysis ends is rather difficult.

For synthetics Shelley's work is one of art, while Visual Complexity's Global Pulse are of artifice. Shelley's work contains an artistic experience which is representative of his experience,

18 Immanuel Kant, "Analytic of Aesthetic Judgement, Analytic of the Beautiful," Critique of Judgment, James Creed Meredith (trans.) Oxford University Press, 2007: 60. "There are two kinds of beauty: free beauty (*pulchritudo vaga*), or beauty which merely dependent (*pulchritudo adhaerens*). The first presupposes no concept and, with it, an answering perfection of the object."

19 Immanuel Kant, "Analytic of Aesthetic Judgement, Analytic of the Beautiful," Critique of Judgment, James Creed Meredith (trans.) Oxford University Press, 2007: 62. "in the universal communicability of the sensation (of delight or aversion)--a communicability, too, that exists apart from any concept--in the accord, far as possible, of all ages and nations as to this feeling in the representation of certain objects, we have the empirical criterion, weak indeed and scarce sufficient to raise a presumption, of the derivation of a taste, thus confirmed by examples, from a deep-seated ground, one shared alike by all human beings, underlying their agreement in judging the forms under which objects are given to them. For this reason some products of taste are looked on as *exemplary*--not meaning thereby that by imitating others taste may be acquired."

while Visual Complexity's Global Pulse are merely filling space with the pragmatic system laid bare before it, which is itself an ugly instantiation of pointless messages (Twitter), kept by Congress because the act of storage is no longer a means of quality, but quantity. Shelley's diagrams are of perceptive history from the analytic standpoint, while Global Pulse is a system for restructuring data into a visual format placed on a map. The value of either Global Pulse or Downtown Body is specious, simply because art itself is of specious value. But because the actual act of creating a visual piece is instantiated within Downtown Body, it must inherently carry value beyond that of Global Pulse, which carries only the value of time, and a manner in which that time is mapped according to the system it analyzes.²⁰

To conclude, what we find is that the ability to analyze these objects as beautiful is difficult not just because of the long-running question of what defines beauty, but because these objects are far more complex in their analysis, and far deeper than previous visualizations had ever been able to go. We find ourselves asking questions about not what determines beauty nearly so much as where lines are drawn between the interplay of systems, temporality, and beauty. Understanding where an object effectively ends becomes a difficult question, and while Shelley's works have defined boundaries, the more systemic data visualization is difficult to consider as a beautiful object without first being able to not only define beauty, but also the way in which the system is represented, whether it be via snapshots or a more holistic consideration of a system which visualizes itself "outside of time."²¹ This is not to say that these systems have timelessness to them, but that they themselves require human interaction and human restraints in order to give themselves a representation which is cognizant to human faculties. Thus, to understand their beauty may ask us to appreciate the system itself as beautiful, and if it fails such a requirement, that any visualization of the system will itself be flawed, and thus, not beautiful. This greatly calls into question the

20 Macdonald, Graham, "Alfred Jules Ayer", *The Stanford Encyclopedia of Philosophy (Winter 2010 Edition)*, Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/win2010/entries/ayer/>.

21 Leddy, Tom, "Dewey's Aesthetics", *The Stanford Encyclopedia of Philosophy (Winter 2011 Edition)*, Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/win2011/entries/dewey-aesthetics/>. "In aesthetic experience there is concern for the connection between each incident in a series and what went before. Interest controls what is selected or rejected in the developing experience. By contrast, in non-aesthetic experience we drift, evade, and compromise. The non-aesthetic is a function either of loose succession or mechanical connection of parts. Since so much of experience is like one of these we take this to be the norm and place aesthetic experience outside everyday life. But no experience has unity without aesthetic quality."

representation of systems, as it requires first a beautiful system be established before the information is mapped upon it. However, if one takes the representation outside of the system and considers it independently, it may be the case that what is required is a beautiful representation, while the system is only tertiary to its creation.