The Arrhythmic Blues: The Rhythm of Learning and How Humanity's Natural Propensity for Arrhythmia May Doom Civilization

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Introduction

In this essay, I explore the imbroglios of human activity. Two concepts will be critical for this inquiry: rhythm and timing. Both concepts have broad implications for human life and demarcate the zone in which process ontologies are built and affirmed. Drawing on Henri Bergson, Martha Russell, and, to a lesser extent, John Dewey, I explore rhythm as an aspect of any educative experience, and I explore how it creates a particular duration,¹ successfully timed through a series of bodily contractions (repetitions, complete circuits, or beats). The very *intellectual* process of recognizing rhythm, however, can lead to the arrhythmia of being(s) in process. An imbroglio happens when *elan vital*, in any of its manifestations, loses rhythmic timing by its overutilization or underutilization of the spatializing function of symbolic activity, which then leads to discoordination and exponential arrhythmic "build up." Bergson reveals how the human animal (unfortunately) has a natural propensity to become arrhythmic and thus find itself in an imbroglio. Imbroglios can have disastrous consequences on the individual, cultural, and (especially) civilizational, level.

In the first place, rhythm in our everyday experience has to do with a feeling of the regularity and repetition of movement or sound. Such experience is rhythmic in so far as we recognize it as a repetition. We feel assured by a "beat" in our own body, for example, the pulse of our heart, our pattern of respiration, or the repetition of our gait as we walk. We also perceive it in the world around us, in the tickings of the clock, the transformation of day into night (and vice versa), in the cycle of seasons, and in the flow of a piece of music we have come to love. Arrhythmic experience has a completely different effect, especially when concerned with what in Bergson's philosophy is called, "the image that I call my body." Arrhythmic activity is not only uncoordinated but also ill-timed. If my heart is arrhythmic, I become concerned. I could be having an immediate health emergency, such as a heart attack. If I trip or I stumble, I may be drunk or too much in my "habit-memory," too rigid in my repetitions, for my virtual space to align with the actual distances I am navigating in action.4 If the clock is ticking erratically we perceive that it no longer serves its function, and if the music loses its rhythm, not only does the music lose its quality and value, but arrhythmia seems to build steadily; that is, if the music is left uncontrolled by a "governing idea" or if the music is unguided in some fashion. 5 Obviously then, insofar as there is a rhythm, there is a certain sense of timing, and insofar as there is arrhythmia, there is a sense of ill-timing. We are thus led to ask: On the experiential and ontological scale, how does rhythm work, and what is its relationship to timing? Moreover, as in the case with arrhythmic music, why does experience imbroglio?⁶ Bergson, Russell, and Dewey offer a way to explore these questions.

ORGANIC CIRCUITS AND PHRASE-FORMS

To understand Bergson's thoughts on timing and rhythm, a brief overview of Dewey's criticism of the reflex arc concept and Russell's theory of the "phrase form" is instructive. These concepts are a helpful primer for Bergson.

Early in his career, Dewey criticized a then-popular methodological "simple" in experimental psychology called the "reflex act" or "reflex arc." Building on of the work of William James, Dewey attempted to move beyond this type of narrow mechanical experimental modeling. The reflex arc is best understood by the example of a child and a candle. The flame of a candle (stimulus 1) hits the child's eye. The child's nerves are stimulated to propel the child to go and touch the flame (response 1); the flame burns the child's finger (stimulus 2); and the child pulls its hand away (response 2). In this model, the reflex of the body sends an "arc" of energy to the central nervous system that subsequently "decides" a "response" which is then further modified by further stimuli. There is a constant "arc" of stimulus, reflex, and response, of "inner" and "outer" world. Dewey thought this model was helpful, but that often psychologists had committed a fallacy by assuming that stimulus and response were real objects in the world in *just* the way in which the model framed it.

Dewey's critical reflection on the reflex arc model ends with his conceptualization of the richer process of mutual adaptation that he called the "organic circuit." This enriched concept included the idea that the "response" anticipates the stimulus. Bergson also recognized this relation of anticipation between stimulus and response. For Dewey, to understand what a light is, to objectivize, requires one already to have had to responded to "it," that is, for it already to have already become a "thing." To respond to something means a completed circuit of action. Stimulus and response for Dewey are interdependent. I must coordinate the seeing-light-muscle-touch-coordination to touch said light, and if the light is not an "it," there is no "it" to give a response. It takes skill to coordinate hand and eye to reach out and touch a "something." More importantly, the "object," is not formalized for the child; a desire for determination (caused by a previous problem posed in action) of the object calls fourth the next action. When the child's fingers are burned there is a new enriched notion of the object of inquiry. The object becomes further determinate. It

In Dewey's model, as long as our habits meet our needs, our body is rhythmic, coordinated, and has timing; that is, until the accumulated total "habit-memory" (in Bergsonian terms) is insufficient to make our impulsions actual. In such arrhythmic moments, a delay of action allows for the colonization of the present unfolding by memory. This colonization blends memory with the present and generates a horizon of possible actions that Bergson calls the "virtual." The virtual, for Bergson, is what we are conscious of, and it is also, from the perspective of the radical empiricist, real. The better we can reconstruct and alter an arrhythmic problem in our experience toward a more rhythmic arrangement, the more easily we find what in Deweyan terms we might call a "punctuated-equilibrium," having affirmed some sort of repetition, and having reassured our body of the consistency of the object of inquiry. If our habits, passive or active, are correctly predictive, we have gained some useful knowledge about an "it." Only insofar as we experience repetition as

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constancy of rhythm can we claim what Dewey calls "warranted assertability" in the flux of existence. Only then does the reliability of the continuity of the universe feel guaranteed. Russell was also interested in this punctuated equilibrium, but not for the sake of causality, or the amelioration of objects. She instead wanted to account adequately for the experience of the musician.

Russell (1875–1951) was the founder of a movement known as Creative Motion. After graduating from Northwestern University with a degree in music theory, and after a brief period doing research in London, she went to work and conduct research with Jacques Dalcroze in Hellerau, Germany. Dalcroze was not only a contemporary of Bergson but also worked for the International Bureau of Education of the League of Nations with him. Bergson and Dalcroze were in the same social circles, and Bergson even attended at least one of Dalcroze's concerts. Further, Bergson likely influenced Dalcroze's theory of eurhythmics (good rhythm). Russell's own theory is rooted in the work of Dalcroze. At the very least, as Pete A.Y. Gunter has recently noted about Creative Motion, "if Creative Motion wasn't derived from Bergson, it certainly could have been."

Whatever the case may be, Russell's idea of the "phrase-form" is critical to a theory of the imbroglio. In the foreword to her book, *A Music Lens on History* (written by a friend), phrases are described in the following way:

Every activity or complete unit of experience, no matter how large or small, can be thought of as a phrase. Simple actions may consist of a single phrase, while more complex activities will be made up of a number of phrases which, taken together, form one large phrase, but the structure of phrase-form is always the same. This structure is essentially two-fold, like breathing with its inspiration and expiration. By analogy with her classification of Folk-sons into "Feeling" or emotional and "Action" or pattern types, Mrs. Russell expresses the relationship between the two interrelated parts of a phrase, as the "Feeling" and "Action" loops of a figure 8. Perhaps the words "Feeling" and "Action" can be clarified by saying that the feeling loop refers to the creative, dynamic, emotionally colored quality of our action; reliance on the intuitive; flowing with our activity; timing, we call it in sports. On the other hand, the action loop refers to the constructive, definitive, intellectual, shaping quality of the activity which follows the emotional release of the climax; it is the sum-up of the phrase experience. Even the smallest phrase is controlled by what Mrs. Russell calls a "governing idea." In it the phrase is conceived whole. Just before the phrase begins there is a split second gearing of our minds and bodies for the immediate need. This gearing, which takes place instinctively in response to our idea, may be compared to the lighted fuse of a rocket which precedes the action.²⁰

There are many examples of such a Russellian "phrase-form." All complex activity includes certain successful "organic circuits" of activity that have turned into habit-memory. Russell's model helps us think beyond the young learner objectifying and spatializing their world, to the timing of a duration in later development. For example, think of a dancer attempting to complete a new complex dance routine.

The dancer begins with the idea of "completing the routine," she²¹ then launch into the routine (that is, the impulse). The overall governing idea, the routine, must continue throughout the phrase to keep her from forgetting what she is doing. If she goes too deeply within the intensive experience, she may not complete the sequence in the prescribed way. On the other hand, if she spends too much time thinking through every step, she will formalize the dance, and the piece will become lifeless and stilted, or even worse, the *mechanical-loop* (the action part of a phrase) will

dominate the *intensive-loop* (the feeling part of a phrase), and her slower moving thoughts will not keep up with her body. She will trip, stumble, or in some way, fail to complete the dance. The buildup of arrhythmia will be too much. One must keep a certain calm poise throughout the system of phrases and finish in such a way as to launch elegantly into the next system of phrases (whether that be the next dance, driving home, or whatever else is next). Bergson illuminates how this very process of a phrase is related to beauty, grace, and learning.

GRACE, BEAUTY, AND LEARNING

Bergson leaves all easy modeling behind. Instead, we turn to a number of different inquiries he made throughout his lifetime in order to understand the imbroglio. Returning to the example of the dancer from earlier, Bergson discusses how an audience member experiences the phrase-form of the dance. What makes a dancer graceful for an audience? Bergson approaches this question with a very helpful spatial analogy that reveals something about the experience of watching a talented dancer:

If curves are more graceful than broken lines, the reason is that, while a curved line changes its direction at every moment, every new direction is indicated in the preceding one. Thus the perception of ease in motion passes over into the pleasure of mastering the flow of time and of holding the future in the present. A third element comes in when the graceful movements submit to a rhythm and are accompanied by music. For the rhythm and measure, by allowing us to foresee to a still greater extent the movements of the dancer, make us believe that we now control them.²²

The dancer is not the only one who feels the complete phrase. When we watch a dance performance, we feel we can follow the future trend of the durational epoch, especially when accompanied by music. As in the case of the curved line, the consistency of the direction makes us feel that something *will* be completed in a certain way. As with any successful organic circuit, the consistency of rhythm makes us feel that there is predictability. Bergson likens this to being in a sort of trance. In such a sympathetic state with the dancer's phrase form, we are given *suggestions* by certain movements, and certain trends in the rhythm of the music, that certain events *ought* to happen. The more graceful the dance, the more the future enters the present.

For Bergson, art (for the viewer) is successful not in virtue of how expressive it is, but in virtue of how *suggestive* it is: "By placing ourselves at this point of view, we shall perceive that the object of art is to put to sleep the active or rather resistant powers of our personality, and thus to bring us into a state of perfect responsiveness, in which we realize the idea that is suggested to us and sympathize with the feeling that is expressed."²³ This eloquently summarizes the more perfected state Russell believes we are capable of in any complete phrase in our lives. The more artistic we are, the more we are able to complete these complex actions without overinternalizing or overexternalizing them. Bergson concludes, "the feeling of the beautiful is no specific feeling, but that every feeling experienced by us will assume an aesthetic character provided that it has been *suggested*, and not *caused*."²⁴ All of our experiences (our phrases) are beautiful if they are timed and completed in such a way. We become open and receptive to certain suggestive possibilities. This richness of experience is what Dewey explores in his book *Art as Experience*. It is what Russell attempted to teach her students to do when they played music and lived

their lives. The beautiful is the quality of these completed experiences. It is the rich experiential side of something successfully learned.

In *Matter and Memory*, Bergson explores the learning experience in further detail. In one example he discusses physical exercise. He analyzes not only how "habit is formed by the repetition of an effort," but how "the true effect of repetition is to decompose, and then to recompose, and thus appeal to the intelligence of the body."²⁵ He then spells out the implications of repetition: "In this sense, a movement is learnt when the body has been made to understand it."²⁶

To understand what Bergson means, let us return to the dancer as they are learning the new dance. Further, let us say this dance is far more complex than previous dances they have learned. The dancer certainly recognizes the beautiful suggestiveness of the whole, however, the parts are lost in the flux of the movement. They then learn to decompose the pieces of dance into steps, phrases, and longer sequences. They are careful not to spend too much time on any individual section; they make sure the dance fluidly recomposes in a new whole reflexive version of the phrase-form. The first time they complete the phrase-form it is rough and awkward. This individual experience will not be like any other experience they have, or will have, of the dance. For Bergson, it is a unique individual memory they can recall in all of its qualitative richness that never again will happen in their life. As in theater, no two performances will ever be exactly alike. What they learn through repetition is the dance as a new reflexive-whole; in other words, the dance becomes spatialized, habituated, and continuous. The phrases become continually more seamless as the repetition "appeals to the intelligence of the body," as it suggests and secures to the body a certain feeling of uniformity. The dance seen, and the dance learned, of course, can never be *exactly* the same, except in the symbolic sense. With each dancer and each dance, the qualitative whole is irreducibly unique.

THE IMBROGLIOS OF CIVILIZATION

If the dancer were to write down a chronologically ordered list of the names of the various moves that make up the dance, this list would not, of course, be the dance. Also, if they thought about the dance too much while actually carrying out the phrase, they would not find it easy to complete the dance. Their intellectual activity would not align with their bodily activity, and they would stumble and fall. Even worse, this "stumble" has broader consequences for the future experiences already prefigured in the present. The accessed past "builds up;" if there are other dancers, they cannot seamlessly continue their sections as our dancer is in their way. If the fall is bad enough, the other dancers are stuck, and there is an imbroglio. Our dancer has let the *mechanical-loop* of the phrase overwhelm the *intensive-loop*.

Russell thought what I call imbroglios happened on a cultural level. A few short days before the Second World War began, Russell wrote a vivid description of everything she thought was wrong with the present:

For an amazing amount of water has run under the bridge in the past years and [an] amazing amount of debris has been carried downstream with it. Unfortunately, the current of our thinking has not been strong enough to sweep the channel clear and the waste has just been swept a little further along. There it is piling itself into an obstruction that threatens to block the evolutionary flux and flow and flood the world with unthinkable disaster.²⁷

She continues with this metaphor throughout the introduction:

we are still allowing *outer event* to control our *inner thinking*, we act accordingly. Some of us run up and down the bank looking for a loophole in the barrier. Some rush forward to lend a hand at strengthening defense against the inundation. Others are busy pouring oil upon the troubled waters, and there are still those who lean perilously over the bank hoping to salvage this and that of a past security from the wreckage. Those in authority climb the bridge to scan the obstruction from a higher vantage ground, but always they return to the same side of the stream.²⁸

In other words, humanity had *overthought* its own activity. Humanity had *overplanned*, and not allowed itself to critically evolve and adapt as a world community. Strange as this idea may seem, today on the verge of climate disaster, for all of our planning and strategizing, for all of our great knowledge, have we not in some way failed to recognize the feeling and movement through the phrase-form of our current epoch? Civilizations have, with full knowledge of their actions, imbroglioed themselves before, and it seems to be happening yet again. Why do civilizations seem to always run into such an arrhythmic problem?

We can find the roots of this "disease" in the very nature of the human animal. In chapter 2 of Creative Evolution, Bergson explored the elan vital as it has manifested in divergent trends of evolution. Bergson started with the differences between animal and vegetable trends, and continued through the animals, to the vertebrates, and finally to humans. Bergson found within these trends two further divergent trends of intelligence and instinct: "instinct perfected is a faculty of using and even of constructing organized instruments; intelligence perfected is the faculty of making and using unorganized instruments."29 In other words, instinct is the intensive ability to move, adapt, and reconstruct the environment (though only on a narrow direct field of interests), and intellect is the ability to abstract, deaden, create, and manipulate "things," in order to move, adapt, and reconstruct the environment (broadening the field of action, but distancing from life). It is the latter trend that has made the human animal particularly unique and also particularly problematic. The freedom of all life, for Bergson, has the problematic trend that has particularly expressed itself in us: "Our freedom, in the very movements which it is affirmed, creates the growing habits that will stifle it if it fails to renew itself by a constant effort: it is dogged by automatism. The most living thought becomes frigid in the formula that expresses. The word turns against the idea."30

Put another way, as soon as animals (via evolution) steadily have more opportunity to not act, and have the space for creativity, mechanization starts gnawing at that creativity. In the case of humans, our very instrumental intelligence, our intellectual ability to stop and decompose and recompose an "object," our symbolic life, can dominate (though not necessarily) the idea it expressed:

The letter kills the spirit. And our most ardent enthusiasm, as soon as it is externalized into action, is so naturally congealed into the cold calculation of interest or vanity, the one takes so easily the shape of the other, that we might confuse them together, doubt our sincerity, deny goodness and live, if we did not know that the dead retain for a time the features of the living. The profound cause of this discordance lays in an irremediable difference of rhythm.³¹

We, as instrumental creatures, become so obsessed with our artificial tools that we often forget that they are "symbolic creations" and we fall out of the rhythm of life.

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Symbols can be vital and dynamic, the dancer and the painter (or any artist) can use symbols to *revitalize* human activity, especially for their audience, but another part of us always seems to want to deaden the symbol in order to make it fully determinate. It was the very act of intellect that made us free, our symbolic life that makes us distinct, but it also gave humans the propensity to overburden spatialization, and "kill life." Our greatest gift often estranges us from ourselves and tends to propel us in the direction of overprivileging the *mechanical-loop* of our phrases. Civilization is the outcome of humanity's intellectual and technological development. Civilization thus has, on an exponential scale, an individual human's ability to *overthink*. Civilization always has a high risk of imbroglio.

As has been suggested in this analysis of the imbroglio, education not only helps us recognize rhythm, but it can help us maintain rhythm and timing as individuals, as communities, and as civilizations. Russell's phrase-forms were a pedagogical device to help her students develop such educational receptivity and balance. Dewey's sense of equilibrium also articulates such an orientation as an ideal state for human growth. Educators ought to think harder about how to help students develop the *intellectual* and *intuitive* skills to respond to the present with timing. Hopefully, human civilization can then, on a larger scale, also respond to its present situation. Appreciating the beautiful aspects of timing and rhythm is not enough. That alone does help us respond to the problems of life and civilization. Rather, the expressive beautiful experience must be in equilibrium with the mechanical technical skills that help us adjust to our ever-unfolding situation. Hopefully, this essay can provide some inspiration for more applied discussion of how to cultivate such an education.

^{1. &}quot;Duration" is a technical term in Bergson's philosophy and might be summarized as the *quality* of time that we abstract to utilize "clock-time." It is the way we spatialize time. For more on this concept see Henri Bergson, "The Multiplicity of Conscious States/The Idea of Duration," in *Time and Free Will:* An Essay on the Immediate Data of Consciousness, trans. Frank Lubecki Pogson (1885; repr., New York: Dover Publications, 2001), 75–139.

^{2.} Another technical concept in Bergson's philosophy. For more on this concept, see Henri Bergson, *Matter and Memory*, trans. Nancy Margaret Paul and William Scott Palmer, (Digireads, 2010 [1912]), 9–40.

^{3.} Habit-memories are *the unreflective movements* that "the image I call my body" accumulates over time as it negotiates the world. For more on habit-memory see Henri Bergson, *Matter and Memory*, 42–43.

^{4.} It is such rigidity, in its myriad manifestations that Bergson believes was behind laughter and comic situations. Bergson notices that the "snowballing" of rigidity has comic effect. For more see Henri Bergson, *Laughter: An Essay on the Meaning of the Comic*, trans. Cloudesley Brereton and Fred Rothwell (1900), Project Gutenberg, July 26, 2009, http://www.gutenberg.org/files/4352/4352-h/4352-h.htm, accessed November 6, 2015.

^{5.} Arrhythmia is to be distinguished from intentional discordance in music, for example in jazz or in the creative play of a Grateful Dead song. In the epoch of any song, or set, there certainly can be discordance, but it is not arrhythmic in the sense I am discussing until the musicians fail at following through the complete "phrase" of the activity.

^{6.} I use this term for lack of a better formal term to succinctly describe the build-up of arrhythmia in experience.

^{7.} For more on the reflex arc concept, see John Dewey, "The Reflex Arc Concept in Psychology (1896)," in *The Essential Dewey, Volume 2: Ethics, Logic, Psychology*, eds. Larry Hickman and Thomas M. Alexander, vol. 2 (Bloomington: Indiana University Press, 1998), 8. For more on the "phrase form," see Martha Stockton Russell, A Music Lens on History (Baltimore: J.D. Lucas, 1952), iii–iv.

- 8. See William James, *The Principles of Psychology* (Cambridge, MA: Harvard University Press, 1983), 25, 96–97, and 120.
- 9. John Dewey, "Lecture I: The Psycho-physic Organism, or the Body as Instrument of the Psychical Life," in The Collected Works of John Dewey: The Early Works, 1895-1898, volume 5, edited by Jo Ann Boydston (Carbondale and Edwardsville: Southern Illinois University Press, 1972), 306.. For more on the "reflex-arc" and "organic circuit," see "The Reflex Arc Concept in Psychology (1896)," in The Essential Dewey, Volume 2: Ethics, Logic, Psychology, eds. Larry Hickman and Thomas M. Alexander, vol. 2 (Bloomington: Indiana University Press, 1998), 6.
- 10. See Henri Bergson, *Time and Free Will: An Essay on the Immediate Data of Consciousness*, trans. Frank Lubecki Pogson (1888; repr., New York: Dover Publications, 2001), 37.
- 11. For more, see John Dewey, "The Reflex Arc Concept in Psychology (1896)," 8.
- 12. Henri Bergson, Creative Evolution (1911; repr., Mineola, NY: Dover, 1998), 12.
- 13. For an example of Dewey on "equilibrium" see John Dewey, *Art as Experience* (New York: Minton, Balch & Company, 1934), 14.
- 14. For an example of how Dewey uses the concept of "warranted assertability," see John Dewey, *The Collected Works of John Dewey, 1882–1953*. The Later Works of John Dewey, 1925–1953. Volume 12: 1938, Logic: The Theory of Inquiry, eds. Jo Ann Boydston and Larry A. Hickman, Electronic ed. (Charlottesville, VA: InteLex Corporation, 1996), 15–16.
- 15. See Margarett Allen, Creative Motion: A Concept as Old as Energy Itself Applied to Music and Living (Anderson: Droke House, 1971), 16.
- 16. International Geneva Yearbook 2001–2002: Organization and Activities of International Institutions in Geneva (United Nations Publication, 2001), 295.
- 17. See Michael J. Cowan, *Cult of the Will: Nervousness and German Modernity* (University Park: Pennsylvania State University Press, 2008), 305.
- 18. Further research needs to be done to ascertain the connections between Creative Motion and Bergson.
- 19. Pete A.Y. Gunter, "Letter," in Journal of Creative Motion 4 (2003): 51.
- 20. George Sargent, "Foreword," in Martha Stockton Russell, *A Music Lens on History* (Baltimore: J.D. Lucas, 1952), iii–iv.
- 21. I realize that in modern popular culture there is an association between ballet and heteronormative femininity. In spite of this prejudiced association, I will continue to use "she" in this essay.
- 22. Henri Bergson, Time and Free Will, 12.
- 23. Ibid., 14.
- 24. Ibid., 16–17 (emphasis in original).
- 25. Henri Bergson, Matter and Memory, 60.
- 26. Ibid.
- 27. Russell, A Music Lens on History, xi.
- 28. Ibid., xii (emphasis in original).
- 29. Henri Bergson, Creative Evolution, 140 (emphasis in original).
- 30. Ibid., 127.
- 31. Ibid., 127-128.