

## A Very Large Distance: Creative Processes in Practice

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### Abstract

This article discusses creativity in general with the aim to demonstrate its application to the creation of two collaborative works by the author. The methodology included a survey of the concepts of creativity by examining discussions on the topic by contemporary writers and artists, especially its relation to imagination, originality and technology. The author then analyzed the creative processes of two collaborative works, focusing on the problems faced at the time of creation and the specific solutions. The result showed the creative processes applicable to the two collaborative works. In *I Cross a Very Large Distance* the story line of the iPad game was turned into a running man sequence, which in turn was being pushed beyond limits with the help of technology to achieve the unexpected result. In *Even Cathy Berberian*, the reaction towards the state of performing art sparked the utilization of audience as part of the creative work. In conclusion, creative processes work in tandem with imagination, technology, and skills. The two collaborative works show the correlation between imagination, technology, skills, and the creative process. Imagination provides original ideas that need to be applied to the real world for creativity to be viewed objectively by others. This process of application of media requires appropriate technology and skills in operating the instruments of choice.

**Keywords:** artistic ability, collaboration, creativity, imagination, multimedia, performing art

### บทคัดย่อ

บทความนี้มีจุดประสงค์เพื่อศึกษากระบวนการของความคิดสร้างสรรค์โดยมุมมองที่แสดงให้เห็นการทำงานที่เชื่อมโยงอยู่ในการสร้างงานศิลปะ 2 ชิ้นที่เป็นงานของผู้เขียนร่วมกับนักประพันธ์เพลง กระบวนการดำเนินงานรวมไปถึงการสำรวจความหมายของความคิดสร้างสรรค์ ในมุมมองของหมื่นนักเขียนและศิลปินร่วมสมัย โดยเฉพาะอย่างยิ่งในเรื่องของความสัมพันธ์ที่มีต่อจินตนาการ ความคิดค้นแบบ และเทคโนโลยี นอกจากนี้ผู้เขียนได้วิเคราะห์กระบวนการสร้างสรรค์ งานศิลปะในงาน 2 ชิ้นที่ต้องเผชิญกับการค้นหากระบวนการสร้างสรรค์และการหาวิธีการแก้ปัญหาในการสร้างสรรค์ ผลของงานวิเคราะห์แสดงให้เห็นถึงกระบวนการสร้างสรรค์ในงานสองชิ้นคือ "I Cross a Very Large Distance" ซึ่งได้แรงบันดาลใจมาจาก iPad เกม และกลายเป็นการวิ่งของชายคนหนึ่งที่ถูกเปลี่ยนแปลงจากการวิ่งธรรมดา ให้กลายเป็นการวิ่งที่ถูกผลักดันให้เกินขอบเขตของการคาดเดา ด้วยการใส่เทคโนโลยีอย่างเหมาะสม และงานศิลปะอีกชิ้นหนึ่งได้แก่ "Even Cathy Berberian" ทำให้เกิดผลลัพธ์ที่ทำให้ผู้ชมศิลปะการแสดง (Performing Art) ได้มีส่วนร่วมในการแสดงอย่างน่าสนใจ และคิดแปลกไปจากวิธีดั้งเดิมที่ซ้ำซากและคาดเดาได้ ข้อสรุปของบทความชิ้นนี้คือ กระบวนการความคิดสร้างสรรค์จะทำงานควบคู่ไปกับจินตนาการ เทคโนโลยี และทักษะ งานศิลปะทั้งสองชิ้นของผู้เขียน แสดงให้เห็นถึงการทำงานร่วมกันอย่างดีระหว่างจินตนาการ เทคโนโลยี ทักษะ และกระบวนการความคิดสร้างสรรค์ จินตนาการเป็นความคิดเบื้องต้นไม่สามารถเห็นได้ จำเป็นต้องมีกระบวนการสร้างสรรค์เพื่อให้มีผลงานให้เป็นที่ชื่นชม ซึ่งกระบวนการเหล่านี้ต้องการ เทคโนโลยีและทักษะเพื่อทำให้เกิดงานศิลปะ

**คำสำคัญ:** ความสามารถในด้านสุนทรียศาสตร์ ความร่วมมือ ความคิดสร้างสรรค์ จินตนาการ สื่อผสม ศิลปะการแสดง

### 1. Introduction

Creativity is the force behind all human creation. This article discusses the importance of creative processes in general and demonstrates its role in two of my multimedia works in collaboration with composer Jiradej Setabundhu—*I Cross a Very Large Distance* and *Even Cathy Berberian*—focusing on the creative challenges which I believed every artist has to confront when creating any new work. The article begins with a general observation of creativity before proceeding to examine the ideas, problems, and solutions behind the two works sequentially.

#### *Defining creativity*

Possibly in reference to his yacht, John Pierpont Morgan, an American financier, is rumored to say, "If you have to ask the price, you can't afford it." While the truth of this statement obviously depends on circumstances, its cautionary tone appropriately reminds us of similar attitude especially towards our

dealing with something esoteric, subjective and consequently dangerous to quantify—all in all, those which can be found in various fields of art. Such question as “what is music?” or “what is art?”, common among young enthusiasts as it may be, is often looked down upon by serious practitioners of the fields. To this group of questions we might as well add “what is creativity?”

So what is creativity? Seriously it should be noted that the seemingly uninterested responses from the professionals do not indicate their superior attitude towards the question. In fact many would probably, if being pushed enough for one, return with a quote not unlike “If it ain’t broke, don’t fix it.” This kind of responses, then, implicitly shows the mysterious quality of creativity and creative processes, along with the fear that whoever attempts to learn its secret might lose it altogether. Indeed it is rare to find in-depth writings on the subject by seminal painters, sculptors, composers or poets. This is understandable since artists by definition are more likely to prefer creating artworks. Most discussions on creativity therefore were written by scholars from related fields such as philosophy. While it is not the intention of this article to provide a definitive answer to the question, which may be proven impossible after all, examining discussions on the topic by contemporary writers as well as glimpses on the subject, some times through artists’ work and others through discussions or writing done by artists not specifically on creativity, might shed some light on the nature of artistic creativity.

Many associate imagination with creativity, and they are right in doing so as indeed it would be impossible to be creative without being imaginative. When people say that you are very imaginative, oftentimes they infer that you have an unusual idea or you look at things in a strange, different, yet positive way. In a word, confronting a similar situation, you see things that nobody else could; you get something out of the same premise that nobody else is able to. It is not simply a coincidence that Craig Tanimoto of TBWA\Chiat\Day agency’s 1997 masterful slogan for Apple computer “Think Different” (Siltanen, 2011) happened, in retrospect, just at the beginning of the rise of Apple as the powerhouse of new, outrageous ideas on what a personal computer should be like. Important also is the fact that Steve Jobs, then Apple’s interim CEO, did not consider the phrase grammatically incorrect. Instead of an adverb, Jobs took it in a similar vein to “Think Big,” i.e. “Different” as a noun.

It is not possible to say if everyone can be imaginative, but most would agree that children are likely to be more imaginative than adults. Ken Robinson provided an excellent example in his discussion of creativity:

I heard a great story recently . . . of a little girl who was in a drawing lesson. She was six, and she was at the back, drawing, and the teacher said this girl hardly ever paid attention, and in this drawing lesson, she did. The teacher was fascinated. She went over to her, and she said, “What are you drawing?” And the girl said, “I’m drawing a picture of God.” And the teacher said, “But nobody knows what God looks like.” And the girl said, “They will, in a minute (Robinson, 2006).”

Picasso obviously had in mind the connection between imagination, creativity, and artistic ability as well as recognized the problem of the coming-of-age when he said that “every child is an artist. The problem is how to remain an artist once we grow up (Peter, 1977).” It is this passage to adulthood that could tarnish the imaginative mind of children, which otherwise would have retained the ability to be imaginative. Robinson (2009) seemed to believe that since anyone can “conjecture, . . . hypothesize, . . . speculate, . . . and suppose,” everyone “can be imaginative.” Consequently imagination helps us perceive “things that we have never experienced” and frees us “from the immediate here and now.” It is probably these unique qualities that led Einstein to conclude that imagination “is more important than knowledge (Viereck, 1929),” since the latter “is limited” whereas the former “embraces the entire world, stimulating progress, giving birth to evolution (Einstein, 2009),” a viewpoint that Robinson (2009) would certainly agree as he put it eloquently that it is imagination that led humanity “from caves to cities . . . from superstition to science.”

Yet imagination is not creativity per se but rather a step, an important one, towards creativity. Imagination by itself “can be entirely internal,” that is, nobody needs to be aware of it, but in order to be creative a person has to put imagination to work “to make something new, to come up with new solutions to

problems, even to think of new problems or questions (Robinson, 2009).” Creativity therefore can be thought of as “applied imagination.”

Creative work is a process of making something original. Imagination is a pathway to creativity, but a creative idea requires a manifestation, a materialization, in order to be perceived by others. This requires media of some types and consequently certain technology is needed. In his novelette *The Winter Market*, part of his *Burning Chrome* collection of short stories, science fiction writer William Gibson (1986) prophesied the intertwined relationship between technology and art in the future age, which to me might as well represent any eras in the past:

“It was like she was born to the form, even though the technology that made that form possible hadn’t even existed when she was born. You see something like that and you wonder how many thousands, maybe millions, of phenomenal artists have died mute, down the centuries, people who could never have been poets or painters or saxophone players, but who had this stuff inside . . .”

Gibson’s story of the advanced technology capable of capturing dreams, which can be later edited and distributed via the Net implies how much art, and by association artistic creativity, depends on technology. It also implies that imagination alone may be useless without proper technology to bring the creative idea to life. And by technology I do not mean solely high technology. Imagine EDM or rock n’ roll without electricity, Beethoven without the invention of the piano, Van Gogh without oil paints, or Warhol without mass-produced consumables! It is true that an imaginative mind will often find a solution, an alternative route when confronting a seemingly insolvable problem, but sooner or later one will hit the wall. It is unavoidable that at least a minimum amount of low technology is required to manifest the ideas.

With technology follows the skills required to operate it. In 1909 the standardization of 35 mm film format ensured the popularity of still cameras to follow, by the end of the first two decades of the twentieth century; and certainly there were many enthusiastic amateur photographers then as there are now. But among those many, only a small handful had enough skills in judging the right exposure, measuring the composition, and capturing, as Henri Cartier-Bresson would say a few decades later, the decisive moment, to elevate photography to a status of worthwhile art form.

It is tempting to argue that, with today’s rapid advancement in digital technology and in computing power, professional skills are things of the past. It is true that, with the recognition of the importance of user interfaces and presets prepared by professionals, computer technology is more approachable than before. With just Apple’s Garageband software, a complete album ready for download can be produced literally in, pun intended, one’s own garage. Clarke (1962) was correct when he said that any sufficiently advanced technology is indistinguishable from magic. From a point of view of a person merely a few decades ago, we are indeed living in a magical world.

Yet while it is true that amateurs today can produce some good results, those same software, those same presets, under the hands of skillful and creative artists will likely result in even better outcomes. Indeed the interwoven threads of creativity and skills and their symbiotic relationship have appeared along with the study of art for a long time. The Bauhaus school’s philosophy, as stated in the 1919 Program of the State Bauhaus in Weimar by its first director Walter Gropius, was to “create a new guild of craftsmen without the class distinctions that raise an arrogant barrier between craftsman and artist” since “there is no essential difference between the artist and the craftsman (Wingler, 1978).”

Arnold Schoenberg, probably most known as the proponent of atonal music and 12-tone music, was also a painter whose works were exhibited alongside, among others, Wasily Kandinsky’s. Schoenberg’s view of skill as a lesser sibling of creativity is apparent from his belief that an artist could express himself regardless of media or skills:

But art belongs to the unconscious! One must express oneself! Express oneself directly! Not one’s taste, or one’s upbringing, or one’s intelligence, knowledge or skill. Not all these acquired characteristics, but that which is inborn, instinctive (Auner, 2003).

It should be noted, however, that when it comes to the teaching of music, particularly music composition, Schoenberg was very traditional in his pedagogical perspective. The early works of Alban Berg and Anton Webern, the two most prominent students of Schoenberg during his Vienna years, show the influences of many lessons and critiques from the master full of discussions of traditional “classical” forms such as theme and variations and sonata form. Dika Newlin (1980) also wrote about Schoenberg’s teaching method during his post at UCLA, showing the composer drawing many examples from Beethoven’s piano sonatas and quartets as well as emphasizing on the well-proportioned structure of the three main sections of sonata form. Schoenberg himself wrote many technical books on the inner mechanics of music composition and music theory. His 1922’s *Harmonielehre*, still one of the best music theory books today, discusses in detail the practical and logical reasons behind the various “rules” of functional harmony. The early chapters urge students to write out all possibilities of triad connections with and without common tones to practice their “craftsmanship” (Schoenberg, 1978).

An interesting consequence of this discussion is that there is now probably a criteria to distinguish artists and craftsmen. Both groups may utilize these similar, common concepts, but it is apparent that craftsmen by definition concentrate more on technology and skills to operate it while artists are prone to be more involved with imagination and the resulting creativity.

## 2. Objectives

To demonstrate the role of creative processes in two collaborative works by the author and composer Jiradej Setabundhu—*I Cross a Very Large Distance* and *Even Cathy Berberian*.

## 3. Materials and methods

The author approached the creative processes in her collaborative works by:

1. Examining the discussions on creativity by contemporary writers and artists, which led to the investigation of the relationship between creativity, imagination, and originality;
2. Examining the application of imagination, the manifestation of idea and its relation to technology and skills;
3. Analyzing the creative processes of two collaborative works, focusing on the fundamental problems/questions/limitation that the author faced at the time of creation, and the solutions applying original ideas within the limitation of technology and skills at hand.

## 4. Results and discussion

### *I Cross a Very Large Distance: the creative process*

In 2011 Jiradej Setabundhu and I collaborated on a video work to be premiered during the 2011 Thailand International Composition Festival at Payap University. Due to time constraints for both of us, by the time we started working on the project there were only a few weeks left to come up with the concept, create the work and edit it for final mixdown. The problems were apparent: 1) we had to come up with a good idea as soon as possible; 2) the idea had to be one that demanded only the skills that could be executed quickly; 3) since we did not apply for any grant for this project, the audio and video productions were done by ourselves and with equipment we already had at hand or could borrowed for free; 4) yet the result had to meet our standard.

The inspiration for the piece came from an iPad game called *Dead Runner* that I downloaded to use as a case study for my Game Development class. The video sequence of the game features a first person point of view as a runner, running through a misty forest. During this time Jiradej was working on completing his modular synthesizer, the last module of which was the binary clock division. Since human is biped, we thought it would be natural to incorporate music utilizing the module as the main feature with the video sequence of a running man.

I reversed the *Dead Runner* point of view by using the third person perspective instead, that is, with the runner facing a camera. The limited budget was in fact suited our situation, especially considering the deadline. Instead of wasting our time scouting for a suitable location for the sequence, we agreed up front that we would shoot with a blue screen, which in the final editing would simply become a black

background. Since the dolly system was out of the question and the actor would have to run over the same spot, we shot the actor from the waist up (Figure 1.)



**Figure 1** Screen capture composite of *I Cross a Very Large Distance*

Running is repetitive by nature and we planned both the video sequence and the music to reflect the repetition of each other. With the binary division as the heart of the synthesizer patch, the just-over-10-minute electronic music mostly comprised of a repetitive 3-note collection (set-class 027) over an equally repetitive rhythmic patterns based on a set of numbers multiplied by two, fading in from silence. The sequences of the three notes as well as the rhythmic sequences were nevertheless gradually and subtly changed over time by cross-feeding the voltage signals.

Repetitive as it was, the piece however demanded certain amount of drama. After a few minutes, a simple video shot of a man running was quite predictable. Since running is also a rhythmic activity, the obvious way to add drama to the sequence was to gradually increase the tempo so that the rhythms of both the running and the music were correspondingly faster, thus creating more movement. Musically this was achieved by accelerating the frequency of the clock input, resulting in a faster tempo.

Although this would produce a better result, to us it was still very much predictable. In the end we pushed things over the edge. The clock input of the binary division could accept the signal well into the audio range (more than 20 cycles per second) and we decided to see (and hear) where this would lead us to. The result was very satisfying to us. The beat was gradually faster and faster until it became blurred and started merging with each other, producing a low-frequency buzzing drone.

Visually our first plan was to capture the actor running in synchronous with the beats of the music. This proved to be impossible as the music accelerated much after midway through. During the shooting therefore I decided to abolish the idea, along with the tempo-synced metronome track prepared for the occasion. Instead the actor was directed to run faster, without hearing any beats. In the final sequence this created a more interesting counterpoint between the visual and sonic elements. When the music hovered over a borderline between beats and pitches, the actor ran as fast as he could, creating a long stretch of tension to be broken towards the end where he was exhausted and walked offscreen. Additionally the actor was also directed to look left, right, and behind, as if something was stalking him. This added much dramatic movement to the sequence.

To finish off the sequence, the editing process was done in Adobe's Premiere Pro. A simple strobe effect was added to the whole sequence. The periodicity of the strobe was very long at first that the effect produced what seemed like the result of film defects or digital artifacts. Then the strobe gradually increased in frequency so that towards the end the effect reached the frequency of 4 cycles per second. This created the additional contrapuntal line to the simple visual world. The freeze frames that occurred simultaneously with the breaks in rhythmic pattern near the end added synchronicity to the otherwise parallel paths between the visual and sonic worlds, as well as introduced an unexpected element to the sequence.

*Even Cathy Berberian: the creative process*

For the 2015 Thailand International Composition Festival, we wanted to try a different approach in our new work. Both of us felt increasingly the inertia in the presentation and reception of live performing art and would like to create something in reaction to it. This inertia was more apparent than, say, three decades earlier and was caused by the two following facts or problems.

First, there are more performing artists today than before. Statistically it follows that there are more fine performing artists than before. At the same time the twenty-first century has seen the rapid advancement in communication and broadcasting fields in terms of both the innovation and the implementation of technologies. Consequently, it has become easier for an audience to access great performances, either by attending many performing art venues or viewing live streams and recorded videos on the Net. Having advanced technology might feel like magic but, despite what Clarke said, living in a magical world for a long time, even magic becomes a mundane. With many great performances easily accessible, it is not unthinkable that fine artists and their works are viewed as the norm and are taken for granted.

The second problem is about the mannerism of the presentation of performing art whose appearance today approaches those of rituals. Every genres of art do require a certain amount of customs and routines—the audience's behavior in a classical music concert at the Lincoln Center would be different from those of the same group attending a Woodstock rock concert. Even the performer's reaction to the audience would be different. But this observation does nothing to undermine the fact that over time this set of standardized, predictable behaviors has become so stylized and ritualistic in nature that at times a performing art event was not much different from a ceremony. In a trendy jazz club, at the end of a trumpet improvisation passage, audiences are expected to applaud to show their appreciation to the musician's skill and it would be rude not to do so despite the fact that simultaneously the pianist begins his own improvisation passage. By contrary the same audience in an orchestra hall would not be expected to applaud after a solo passage in a violin concerto as it would be rude to interrupt the music. Basically, the audience, performers and even venue staff and technicians know what to be expected of the event and act accordingly, like a well-oiled machine, efficient and predictable.

In fact, the two problems can be summed up into one word—predictability: the predictability of good performances from professional performers and the predictability from the inception to the consumption of performing art. This led to the creation of *Even Cathy Berberian* whose creative decision is to undermine the predictability of the presentation of performing art. The performer was utilized in an unconventional manner, by not depending on his main performing skill but instead asking him to perform a task requiring skills that he apparently did not possess. This decision alone has already created an unsettling effect on the audience once they have realized that the expectation that they so far had taken for granted might not be fulfilled.

The next step in avoiding the predictability of the performance was to take the audience away from the routine of presentation. This can be achieved by creating a situation whereby the staged world is collided with the real world and the line between the two was blurred. By destroying this dividing line, the audiences were placed on an unstable ground. Once it became uncertain whether what they saw was staged, the legacy of customs and routines of performing art was irrelevant and the audience was ready to view the work with a fresh attitude.

Premiered in a concert hall setting, *Even Cathy Berberian* was conceived as an encounter between a selected member of the audience and an artificial intelligence appearing onstage in the form of a video projection (Figure 2.) Although the piece was programed as the next to last that night, the actual performance process began since the audience's arrival when they were asked to pick a number before entering the hall. At the beginning of the actual performance, the A.I called out a number and asked the member of the audience to join her on stage, helping her by performing a daunting task of patching a complicated modular synthesizer live onstage, following the A.I.'s instruction.



**Figure 2** Still image from the world premiere of *Even Cathy Berberian*

It is apparent from the audience's point of view that the ritualistic aspect of a concert performance was superseded by the invasion of the real world on the staged world and that there was an element of risk and unpredictability in introducing a nonprofessional, "one of them," onstage. The audience in effect could not help but identified themselves with the "performer." As the drama onstage progressed and the A.I.'s instruction kept coming faster and faster, there was a discernible tension in the hall. This was followed by a great relief at the end of the piece once the audience realized that against all odds the performer completed the task successfully.

Retrospectively, it is equally apparent that the situation set up during the performance could not be real. The existence of such an A.I. is not possible, yet, at least commercially. And if so, the detailed dialogues and the seemingly authentic interaction between the selected audience and the A.I. must also be scripted. And they were. But despite many cues that might have given away the fact that everything was staged, almost everyone that night was convinced that he or she witnessed the real A.I. conversing with a human. This is due to many elements—the pacing of the script, which left no time for the audience to reflect the impossibility, the performer's acting, the A.I.'s reference to previous event in the concert, her two-dimensional, "unpolished" appearance, which paradoxically made for a more convincing experience than it would have been if it were a realistic render, and a few unplanned, happy accidents that often happened despite the well-planned preparation.

## 5. Conclusion

The above discussion demonstrates that creativity works in tandem with imagination, technology, and skills. Imagination provides original ideas that need to be applied to the real world for creativity to be viewed objectively by others. This process of application of media requires appropriate technology and skills in operating the instruments of choice. "Appropriate" is an operative word here. As we have seen, different schools of thought, and even the same artists under different circumstances, prescribe different interpretation of what is enough for the task at hand. Suffice to say that as long as the amount of technology and skills reach the point where imagination transforms into artistic action, the creative process is happening.

The two works cited as examples likewise show the correlation between imagination, technology, skills, and the creative process. In *I Cross a Very Large Distance* the story line of the iPad game was turned into a running man sequence, which in turn was pushed beyond limits with the help of technology to achieve the unexpected result. This was made possible by audio technology and corresponding hardware which were also reflected in the video. The creative idea in *Even Cathy Berberian* originated from the author's reaction towards the state of performing art which sparked the utilization of audience as part of the creative work. The presence of futuristic technology in the form of the A.I. in contrast to the use of low-tech render method helped create a believable circumstance that ties the audience to the work and kept them suspended between the stage of the real and the make-belief.

## 6. References

- Auner, Joseph (2003). *A Schoenberg Reader*. New Haven: Yale University Press.
- Clarke, Arthur C. (1962). *Profiles of the Future: An Inquiry into the Limits of the Possible*. New York: Victor Gollancz.
- Einstein, Albert (2009). *Einstein on Cosmic Religion and Other Opinions and Aphorisms*. Mineola, N.Y.: Dover Publications.
- Gibson, William (1986). *Burning Chrome*. New York: Victor Gollancz.
- Newlin, Dika (1980). *Schoenberg Remembered: Diaries and Recollections, 1938-1976*. New York: Pendragon Press.
- Peter, Laurence J. (1977). *Peter's Quotations: Ideas for Our Time*. New York: Bantam Books.
- Robinson, Ken (2006). Do Schools Kill Creativity?. Retrieved June 28, 2015, from [http://www.ted.com/talks/ken\\_robinson\\_says\\_schools\\_kill\\_creativity/transcript?language=en](http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity/transcript?language=en)
- Robinson, Ken (2009). *The Element: How Finding Your Passion Changes Everything*. New York: Penguin Books.
- Schoenberg, Arnold (1978). *Theory of Harmony*. Translated by Roy E. Carter. Los Angeles: University of California Press.
- Siltanen, Rob (2011). *The Real Story Behind Apple's 'Think Different' Campaign*. Retrieved July 3, 2015, from <http://www.forbes.com/sites/onmarketing/2011/12/14/the-real-story-behind-apples-think-different-campaign/>
- Viereck, George Sylvester (1929, October 26). What Life Means to Einstein. *The Saturday Evening Post*, p. 17.
- Wingler, Hans Maria (1978). *Bauhaus: Weimar, Dessau, Berlin, Chicago*. Cambridge: MIT Press.