Semyotique Project| Reflections on improvisation in the creative process of teaching and learning

Robert Stanley Gardner

The University of Montana

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THE SEMYOTIQUE PROJECT

REFLECTIONS ON IMPROVISATION IN THE CREATIVE PROCESS OF TEACHING AND LEARNING

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The Semyotique Project: Reflections on Improvisation in the Creative Process of Teaching and Learning.

Chairperson: Dorothy Morrison

The orchestral piece, *Semyotique*, was commissioned by the Southeast Minnesota Youth Orchestras (SEMYO) with the stipulation that the composer provide significant opportunities for players to express themselves through improvisation. SEMYO is comprised of high school age players, most of who may be considered proficient on their instruments, having received private music lessons on at least one instrument; some with experience on two or more instruments.

To accommodate the particular challenge of improvisation especially among classically trained players, *Semyotique* was composed with consideration for what is fundamental to the experience of the players, including the overtone series, simple scales, familiar nursery tunes, and a rhythmic pattern borrowed from the beginner's level of Suzuki Method. A final section is composed of rhythms based on the West African drum rhythm, Djole, though in *Semyotique* the patterns are set also as melodic fragments among woodwind, brass, and stringed instruments. The piece was rehearsed once during each of six weeks, culminating in a concert performance.

In order to explore the creative process of teaching and learning in a broader context, *Semyotique* was offered to groups of learners beyond the orchestral rehearsal room. Each group was asked to listen to a computer-generated (MIDI) recording of the piece, then to create somewhat spontaneously out of the effects of their listening. The groups -- defined categorically by dancers, writers, and painters -- were offered opportunity to improvise: to *make meaning* within a context (symbol system) where they had some prior experience.

Theories of Intelligence (Howard Gardner) and Learning (Arthur Koestler) were considered as means for reflection during observations of the creative process. Conclusions are drawn with regard to the significance of *process* over *outcome*, including the learner's awareness of relationships between various elements comprising the experience of improvisation.
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Preliminary Thoughts

Howard Gardner's work on Multiple Intelligences calls us to serious reflection on matters of teaching and learning. Fundamental to the process is consideration for the various ways in which individual learners may approach both "raw material," and the context in which the material is set. In Frames of Mind, Gardner recommends that we scrutinize our assumptions about teaching and learning to accommodate Multiple Intelligences.

It is not sufficient to assign significance to an outcome unless one has been fully attentive to various elements contributing to the outcome. Gardner's argument is that a theory of Multiple Intelligences better attends to the broader range of those elements and to the ultimate description and the final assessment of intelligence:

"Only if we expand and reformulate our view of what counts as human intellect will we be able to devise more appropriate ways of assessing it and more effective ways of educating it" (Gardner, p.4).

Following Gardner, we surmise that a fair understanding of the learning process demands attention to creativity. It is the process that requires our attention at least as much as its outcome, precisely because learning seems to depend ultimately upon the learner's relationship to the "raw material" being presented. How that relationship is engaged and cultivated will determine in the end what may be expressed and created. A very simple premise then, for effective education, may be stated this way: Process is crucial to outcome.
Arthur Koestler has articulated carefully in *The Act of Creation*, an image to enlighten our understanding of the creative process. Opportunities to recognize and to understand our own discoveries depend upon our ability to engage multiple planes of thought (Koestler calls them “matrices”) simultaneously:

> When two independent matrices of perception or reasoning interact with each other the result (as I hope to show) is either a collision ending in laughter, or their fusion in a new intellectual synthesis, or their confrontation in an aesthetic experience (Koestler, p. 45).

Koestler’s observation indicates that learning – one’s ability to *comprehend* what one has been previously able to *apprehend* – depends upon some kind of fusion. Applied to Gardner’s notion, when a particular intelligence tends to focus the learner’s attention on a particular matrix, discovery requires “shifts of attention to previously neglected aspects of experience which make familiar phenomena appear in a new, revealing light, seen through spectacles of a different color” (Koestler, p. 233).

Gardner’s theory articulates specific kinds of ‘intelligence’ (e.g. linguistic, musical, logical-mathematical, bodily-kinesthetic, spatial, intra- and inter-personal) as being more or less natural among *particular* individuals in any given population of learners. In a discussion of the Suzuki method for training children in music, Gardner demonstrates how a particular intelligence might be cultivated in learners for whom it is perhaps not authentically natural (p. 373). We who teach must be called upon to enlighten various matrices in order that learners who are sympathetic to particular intelligences may have every opportunity for an experience of fusion.

One example of the significance of understanding process with regard to creativity (and learning) is found in Jean Elizabeth Howard’s analysis, *Shakespeare’s Art*
of Orchestration. Already in her title Professor Howard has intimated a fusion: orchestration is typically a musical term, while Shakespeare is renowned for drama and literature. Her premise is simple: that Shakespeare’s ultimate success in the theatre depends upon his ability as a writer to “lead the audience to experience the paradoxical interdependence of things utterly dissimilar” (Howard, p. 36). We appreciate and value Shakespeare, says Professor Howard, precisely because his work affords an opportunity to engage a whole piece in a variety of ways simultaneously:

The point is precisely that the abstractions we retrospectively use to synthesize and order a work often are adumbrated in performance as concrete elements of our sensory experience, felt or sensed, rather than abstracted into rational paradigms (Howard, p. 36).

Attention to Shakespeare here recalls the work of both Gardner and Koestler when we consider the singular creative genius of the playwright as well as the impact of his work upon audiences for centuries. For Gardner, we must recognize the intelligence of both the author and his audience; the latter likely representing various individual sensibilities more or less attuned to linguistic, or bodily-kinesthetic, or spatial comprehension, for example. Just as, Professor Howard notes, “it is the continuum of sights, sounds, and movements to which the dramatist must first give articulate form if effective theatre is to result,” (p.136), so too “What bears emphasis, moreover, is the role of aural, visual, and kinetic events in creating the cumulative power and meaning of the sequence for the audience” (p. 151).

Koestler’s model recommends that an audience will appreciate its experience to the extent that it is able to connect those various matrices of perception. What the
audience sees and hears and feels will be significant insofar as it is comprehended as a whole piece:

Without the hard little bits of marble which are called ‘facts’ or ‘data’ one cannot compose a mosaic; what matters, however, are not so much the individual bits, but the successive patterns into which you arrange them, then break them up and rearrange them (Koestler, p.235).

Diversion into Shakespeare provides opportunity for reflection on the premise for this paper. If process is crucial to outcome, then our attention as teachers must be comprehensive. We are required to ‘orchestrate’ carefully those matrices of perception we would hope for students to connect. We perhaps enlighten students to the extent that they discover value in a particular experience of synthesis.

Koestler reminds that during the process of discovery within a laboratory setting, the subject “must readapt its entire attitude and hierarchy of values – of what is important in life and what is not – to that universe . . .” (Koestler, p. 565). When the classroom – not unlike Shakespeare’s theatre -- becomes a universe, the learner/audience may be initially a stranger of experience. Koestler cautions about “laboratory attitude” – confusion between what is relevant and irrelevant within a particular context. The process of teaching and learning in such circumstances will be inhibited at best.

Teaching and learning are perhaps merely functional descriptions for an otherwise natural interaction: one’s experience of participation within a creative process. ‘Learning’ perhaps refers to some kind of successful adaptation, while ‘teaching’ describes some method of facilitating that adaptation for others. If so, we are challenged to inspire confidence – some sense of security that would allow students to engage “raw material” at the outset; to participate meaningfully in the process.
The Music and the Project

This project began when I was commissioned by the Southeastern Minnesota Youth Orchestras (SEMYO) to compose a piece in honor of their 25th anniversary celebration. One stipulation of the commission was that it would provide significant opportunity for student players to improvise upon their instruments. That requirement was the original focal point of this project: to observe the process of rehearsal and performance with particular attention to the execution of improvisation.

The piece is titled *Semyotique* for its phonological reference to the philosophical study of meaning – semiotics. In this context I mean to emphasize the relationship between the simple musical components and what they become as a whole piece, particularly in light of the contributions of improvisation.

SEMYO is comprised of high school age players, most of who may be considered proficient on their instruments. They are typically players who have received private music lessons on at least one instrument; some with experience on two or more instruments. SEMYO membership is by audition, and the group is intended to represent a fairly high standard of musicianship among student players. They meet on a weekly basis for 3 hours of rehearsal per session, and maintain a rigorous performance schedule during each semester.

The composer’s contract stipulated 12-15 minutes of music for orchestra, celebratory in nature, and to include various opportunities for improvisation. A particular challenge was to compose something appropriate to the relative experience of the players. At the same time, I was required to create opportunities for the players to express themselves freely within the context of the piece. Since this aspect of
improvisation represents a unique challenge among musicians trained in the classical style, the composed elements in Semyotique were developed out of consideration for what is fundamental to the experience of the players. I assumed that greater familiarity by the players with component parts of the composition would ultimately enhance the overall performance.

The so-called “overtone series” for example, is foundational to Western music. It both describes the physical relationships of sound production, and underpins our understanding of traditional music theory with regard to the function of harmony. All players on instruments capable of producing predictable musical tones (pitch) do so according to the “overtone series.” I therefore assumed familiarity on the part of the players, and constructed a recurring musical theme from the simple articulation of the tones that comprise the “overtone series.”

Other composed elements in the score include simple scales, the use of simple tunes learned at the beginner’s level (e.g., London Bridge, Yankee Doodle, etc.) by most students of music, and a rhythmic pattern borrowed from the beginner’s level of Suzuki Method (the same one that informed Gardner’s work on Multiple Intelligence Theory). Though not every player in SEMYO was trained in Suzuki Method, each would be familiar with at least two of those three elements as part of their musical training at the earliest level.

The final section of Semyotique was created as an intentional and novel challenge to the players. It is composed of rhythms based in West African tradition, the components of which are individually quite simple though they coordinate to surprisingly complex effect. Although the rhythms belong originally to a traditional pattern for drumming called Djole originating in Sierra Leone, in Semyotique they are
set also as melodic fragments among woodwind, brass, and stringed instruments of the orchestra.

Introducing the Players to the Music

Within the orchestra it is the role of the conductor to assist players in the interpretation of the music. Each piece comes to the player as a universe of its own, somehow encoded with the composer’s intention. As David Rothenberg observes in *Sudden Music*: “One listens for patterns, some sense of order to hold on to: the universe must have a plan, and if it’s there we ought to be able to hear it” (p. 195).

Through his own rigorous training, the conductor discovers what may be considered characteristic of particular composers in matters of musical style and form, as well as other idiosyncratic habits of musical expression. To the extent that the conductor is able to communicate to players how various matrices (rhythm, melody, counterpoint, and dynamics, for example) are related within a composition, and assuming the composer has done so skillfully, performance of the piece may be more or less effective. While professional musicians typically bring a lifetime of collective experience to the rehearsal room, student players bring much less experience and a greater discrepancy of technical proficiency. The process for learning a piece of music is therefore very much more demanding in preparation for performance among student players.

The conductor for SEMYO was initially very enthusiastic about his students being challenged by *Semyotique*. During our conversations about the piece, he expressed significant interest in my being present at rehearsals to guide the students through the piece, and especially to teach them how to approach the improvisatory
sections. Such an opportunity was never realized even though I attended rehearsals
during the month leading up to public performance. I was consulted on tempo and
some stylistic expressions, but did not have access to the students in ways that could
much affect their musical comprehension of the piece. Consequently, improvisations
during performance were generally insecure and unremarkable.

The rehearsal process for *Semyotique* was significantly inhibited by two
obvious factors: first, there was inconsistent attendance – both late arrivals and
absences; second, a full program of music needed to be learned, so clock-time
specifically for *Semyotique* was minimal. More significant though was the conductor's
method of simply playing through the music time after time with no discernable
attempts to enlighten players' understanding of the composition. Where some
comments and recommendations were made to the players with regard to technique,
in my estimation this is precisely where the process of teaching and learning would
appear to break down.

Where *process is crucial to outcome*, we consciously shift our attention away
from the *outcome* in order to attend fully to the *process*. Our goal must be to assist the
learner in discovery of two components. First, what is the essential "raw material" we
are to engage? Then, how do various perceptions of this material intersect one another
to enlighten us in a meaningful way? In the case of *Semyotique*, emphasis upon
technique implicitly focused the "raw material" on its *outcome*. Players were expected
to play particular passages better and better — that is, to execute more accurately the
notes on the page — each time, without ever having been given a sense of how those
passages relate to each other or to the piece as a whole. In performance, this kind of
emphasis easily becomes counter-productive especially among student players. When
a particular passage or section of music becomes the player's main concern, perspective is lost. That particular part becomes more important than the whole, and the student player is less likely to perceive a universe so much as a single component; to experience not so much fusion, as perhaps confusion. Nothing is learned necessarily, because there is no discernable method for assisting the learner's adaptation to this particular universe. The outcome suffers for lack of an effective process.

As demonstrated on the recording included in appendix materials, the overall performance of the piece was inadequate. Though not technically difficult (SEMYO typically performs major works by the great composers of Western music – Beethoven, Mozart, Tchaikovsky, Stravinsky, as examples) Semyotique was misrepresented perhaps, due to a lack of confidence that undermines execution. Confidence, I would argue, is in some way a consequence of understanding the relationships between components.

Here it is helpful to recall Koestler's image regarding matrices of perception and their potential fusion. When a clarinet player learns a scale, for example, she may execute it flawlessly among a category of other similar musical patterns. She may play her scales expertly when called upon to do so. However, even where scales are technically challenging they are not of themselves necessarily interesting as music. They are simply "raw material" to be placed within the larger context of a composition; they only really become 'music' as they relate to other aspects of composition. Scales may represent then, a particular matrix of musical expression. Other matrices might include the rhythm assigned to that scale, as well as other musical lines to be executed simultaneously as counterpoint to the original scale. Unless the player is able to
comprehend relationships between such matrices, the necessary fusion will not occur in a way that supports performance. The execution of one’s part may not be at all musical, even where it is technically proficient.

From my standpoint as composer, *Semyotique* seems a worthy piece even if only for its agenda. Student players who participate in orchestras are typically trained to read and play carefully what is written on the page, to execute the intentions of the composer as fully as possible. Much less common in their experience is the opportunity to create individually – to improvise – within the contextual framework of a composed piece of music. One can see the added challenge for players when *Semyotique* takes improvisation as its central intention at the outset. *Semyotique* has taught me some things about the conscious choices I make as a composer, especially with consideration for who will be performing the piece. In conversations with other composers during my work on *Semyotique*, we were unanimous in our anxiety about asking students to improvise. Yet that aspect was part of a contracted agreement, and I had to accept that the piece might succeed or fail on that aspect alone.

**Improvisation**

The opportunity to improvise is met typically with apparent anxiety. Student musicians in rehearsal for *Semyotique* were much more enthusiastic about recommending their stand-partners to “take a solo,” than volunteering themselves. The idea of improvising seems to fascinate. One imagines being able to play “anything.” However, players were quickly frustrated in discovering that there is a requirement for order and organization even within the experience of improvisation. Once again, the issue is about process: how does one approach the “raw material?” What are the
appropriate musical elements and how does one express them in a way that reflects their relationship to each other? Student players were surprised to hear the oft-quoted suggestion of the late Igor Stravinsky: "The more constraints I place upon myself, the greater creativity is possible."

*Semyotique* is composed with consideration for providing appropriate constraints. The improvisatory sections are supported both rhythmically and harmonically by material that is familiar to the players at some basic level, from traditional rock-and-roll and from the so-called “blues” patterns. Within those given patterns, certain “fail-safe” musical scales are provided as foundational structures (entirely optional) to guide the players’ improvisations. In both rehearsal and performance, players who chose to improvise on *Semyotique* tended toward relatively strict execution of the proscribed scales more than any other expression.

What captures our attention is again the observation that the players in SEMYO have been participating in musical experience for many years. They understand the function of music and are considered proficient on their instruments. However, generally speaking the players do not seem free to articulate. They are apparently unable to perceive beyond the single matrix of notes-on-the-page. As Gardner observes: “Part of the organization of music is horizontal – the relations among pitches as they unfold over time; and part is vertical, the effects produced when two or more sounds are emitted at the same time” (Gardner, p. 104).

The given universe must be understood in terms of dimension (horizontal/vertical) if a learner is to comprehend its wholeness. How one perceives that dimension may well determine which particular aspects of the universe one is able to recognize, and how one appreciates their relationship. “With music,” Rothenberg
observes, “we search for rhythm and relationship, a rare kind of order that is both explicable and forever beyond explanation . . . Music is the art of patterns, of design repetition, of rhythm in the recurrence of idea and change” (Rothenberg, pp. 191-192).

My intention with Semyotique was to guide players to confidence in the experience of improvisation. If they could perceive the original elements of the composition – scales, simple tunes, familiar Suzuki rhythm – as being essentially familiar to their cultivated talent of musical expression, then perhaps they might also perceive that they have been improvising on their respective instruments from the very beginning; simply redesigning patterns and reordering notes according to a composer’s particular perception. That student improvisations on Semyotique were not necessarily effective in performance may be due to insufficient rehearsal technique as described above. The players apparently weren’t given opportunity to appreciate the composer’s intention; they could not comprehend Semyotique in its wholeness. However, it is also significant to note Gardner’s consideration when he discusses an identifiable Musical Intelligence:

For future composers, like Stravinsky, pleasure came increasingly from what changes they could effect rather than simply from performing the piece literally as well as it could be performed . . . the need to create and dissect, to compose and decompose arises from different motivations than the desire to perform or simply to interpret (Gardner, p. 114).

Again the learner’s relationship to the “raw material” must be recognized, as the creative process of learning will be reflected in some kind of demonstrated performance.

As a model, the experience of music is fairly complex. Mere facility and technique may not of themselves be sufficient to a convincing outcome, precisely
because they are individual elements within a larger context. Until perception of the parts is experienced as some kind of fusion with the whole, the desired outcome will be inhibited. Gardner speaks to the complexity:

... music does relate in a variety of ways to the range of human symbol systems and intellectual competences. Moreover, precisely because it is not used for explicit communication, or for other evident survival purposes, its continuing centrality in human experience constitutes a challenging puzzle (Gardner, p. 123).

**The Project and the Arts**

In order to explore the creative process of teaching and learning in a broader context, *Semyotique* was offered to groups of learners beyond the orchestral rehearsal room. Each group was asked to listen to a computer-generated (MIDI) recording of the piece, then to create somewhat spontaneously out of the effects of their listening. The groups -- defined categorically by dancers, writers, and painters -- were offered opportunity to improvise: to make meaning within a context (symbol system) where they had some prior experience.

In the *Semyotique Project*, each of the other groups of learners had in common with the orchestra their involvement in an aspect of the Fine Arts. A distinction might be made with regard to those in the group of creative writers, that theirs is a form of more "explicit communication" than either dance or painting. However, the fundamental challenge of engaging raw material and perceiving it in context of relationships is common to all groups when they are seen as learners within a particular universe. When that universe is considered to be 'artistic' the learner perhaps tends to focus on a notion of personal expression, which, as described above, is more concerned with outcome than it first seems to be.
Rothenberg contends that authentic expression — what we would call “art” — is never so personal as we believe it to be. In order to discover the authentic relationships that bring fusion to the learning process, Rothenberg recommends, “I would also have to stick to instruments that would let me forget about the self. For that is key: the idea that art is not about expressing the self, but about expressing something larger than the self, a way toward fitting in with the natural world that belies the human sense of separateness, inadvertence, and doubt” (Rothenberg, p. 186). Thus a peculiar challenge arises perhaps, when the learner is described as “artist.” Too keen a focus on self — what we might typically describe as being self-conscious — seems to distort the learner’s perception of relative place in the universe, thereby inhibiting the process. A sense of alienation (“separateness, inadvertence, and doubt”) is sure to distort one’s experience of participation, whereby learning would be frustrated.

On The Dance Floor

The dancers who participated in the Semyotique Project were high school age students with experience ranging between 5 and 12 years of committed training. Each of them studies at an advanced level, and they have participated together on numerous projects during their high school years. They agreed to the project enthusiastically, and expressed few concerns with regard to the parameters they received: to choreograph specific dance according to the composed sections of Semyotique, then to improvise dance during the orchestral sections of improvisation.

Working with the MIDI version of the orchestra, the dancers listened and created within the dance studio. Their work was immediately physical, and seemed to reflect the truth of Martha Graham’s statement as quoted by Gardner in his discussion
of Bodily-Kinesthetic intelligence: "the logic – such as it is – occurs on the level of motor activity" (Gardner, p. 224).

Judith Hanna (1979) defines dance more specifically for Gardner:

> Culturally patterned sequences of nonverbal body movements that are purposeful, intentionally rhythmic, and have aesthetic value in the eyes of those for whom the dancer is performing (Gardner, p. 222).

Paul Taylor (1965) seems to clarify the process as well: "a dancer must learn to execute a dance movement in shape and time . . . one can discover a dance vocabulary" (Gardner, p. 224). Again one notes the requirements for a meaningful process of learning, whereby various matrices of perception (purposeful movement, intentional rhythm, aesthetic value, a vocabulary) might achieve comprehensive integrity (fusion).

A challenge peculiar to dance is further noted by Gardner, where Paul Taylor (1965) describes the relationship between music and dance:

> Music is the most important partner in dance, and the structure of a musical composition will strongly affect the technique in a dance; but inasmuch as dance can also proceed without music, the latter's presence cannot define the dance (Gardner, p. 224).

Taylor's observation reminds us that the point of intersection between matrices – music and dance, for example – may not be easily enlightened.

In the Semyotique Project, the dancers were kept from their final performance, due to a decision by SEMYO's Board of Directors within 48 hours of the performance event. Newly elected members objected to the previous agreement to have dancers perform at the Anniversary Gala. Something in their imagined perception took offence at the appearance of dancers during live performance; this in spite of the fact that no one of the board members had witnessed any of the dancers' creation during their rehearsal process. Here we may simply observe that the board members deprived
themselves of a learning opportunity; the result of their clear unwillingness to participate at some level in the creative process.

The dancers were able to demonstrate their work with the live orchestra during a dress rehearsal, when it was evident that they had accomplished something meaningful. The choreography was sensible and carefully executed in relation to the music. Again though, as in the case of the orchestra, improvisational sections were apparently more challenging and observed to be slightly less fluid in expression. Generally speaking, the dancers' movements became perhaps too intentional and more self-conscious. Thus the relationship between music and dance was significantly affected where the musical score is less specific in defining melodic expression, almost as if the vocabulary of dance is challenged to encounter a strange dialect within otherwise familiar language. Pertinent to this observation is Gardner's way of talking about Linguistic Intelligence, where he describes the elements of syntax -- "rules governing order and inflection" -- and phonology "the sounds of words and their musical interaction with each other" (Gardner, p. 76). One easily recalls the bodily-kinesthetic expression of sign-language by analogy, whereby the body becomes descriptive of literal communication in the absence of the visual/aural symbol system we call spoken language. For the dancers of Semyotique, improvisation is perhaps somewhat less literate than what is choreographed to specific musical composition; matrices of perception being less clearly defined, their ultimate fusion becomes less certain in expression.
On Canvas

Painters and writers who participated in the *Semyotique Project* have in common perhaps a more tangible form of expression than is typically considered of either music or dance. The painter is challenged to discover something meaningful in the use of color and light, by way of describing on canvas a perceived universe. By contrast, Gardner (1993) asserts that language is "a pre-eminent instance of human intelligence," (p. 79) and he underscores a special significance of creative writing as perceived by Northrup Frye: "it is through such fresh combinations of words . . . that we have our only way of creating new worlds" (Gardner, p. 77). In both cases there remains that process which challenges the artist/writer/learner to become meaningfully invested.

The paintings provided by student participants demonstrate secure technique in their use of color, line, and proportion (see appendix). They are abstract, as would seem consistent with the parameters of the assignment: *listen to Semyotique, then express your experience through painting*. One way to describe 'abstract' is by recognizing how it challenges perception from the outset, by some intentional distortion of usual expectations. Vocabulary and dimension, for example, are perceived in some new light, and the learner is called upon to adapt to that new light – in a sense, to improvise – on the way toward discovering meaningful relationships between the elements. Through that process of discovery, the learner is integrated within a universe.

A painting is emphatically the tangible outcome of an artist's crucial process, throughout which choices of perception were made. The viewer as learner is called upon not so much to evaluate the painting, as to appreciate it comprehensively; that is,
in terms of the fusion it represents as a way of perceiving experience. So, whether I perceive a particular painting as being remarkably ‘beautiful’ or especially ‘ugly’ teaches me nothing perhaps, unless I am able to comprehend the artist’s process that has made it so.

**On the Page**

Finally, consideration must be given to the process of creative writing (see appendix). Forty-four students participated within the context of their Senior English classes. Original instructions for the students were given to the English teacher as follows:

Listen to the piece. Feel free to make notes about what images the sounds bring to you. Feel free to doodle on scratch paper as a way of allowing your imagination to play. Make any notes to yourself that the piece suggests to you. After listening, you are free to write whatever comes to you.

Listen to the piece as many times as you need to, within the restrictions of your assignment. Just as the musical composition was held to a deadline, so must your own creative work be. That is part of the challenge of creating: at some point it is necessary simply to get started, and to be finished.

Their teacher provided the following to the students upon introducing the assignment:

1. Listen to the piece as many times as you need to within the allotted time frame for the assignment (one week). We will listen in class; however, the audiotape will be available in the library if you wish to listen to it additional times.

2. As you listen, feel free to make notes about what images the sounds bring to you. This may include doodles, mind maps/clusters, free-writing, lists, or any notes that allow your imagination to play. Please attach the handwritten “notes” to your final typed copy. (This part does not need to be typed. I want to see your original, spontaneous notes.)

3. After listening, you are free to write whatever comes to you. However, you are required to write a minimum of one paragraph. There is no maximum limit. Write a story, a poem, a description, or whatever you want as a response to the music. While you have freedom to express your ideas, they must, however, be coherent.
4. Need help getting started? Review your vocabulary sheet. What is the mood of the piece? What imagery comes to mind? Consider including alliteration, assonance, or personification in your response. While none of these items is required, one or more may help you to explore and identify your reaction to the music.

A significant difference is apparent between the two sets of instructions: the first is intentionally unspecific about what might be written; the second recommends particular categories – story, poem, description – with “whatever you want” almost as an afterthought.

Where process is crucial to outcome, direction and instruction are essential to students’ perception. The sense of improvisation was intended to be an essential element in the Semyotique Project. By changing the instructions as she did, the English teacher inadvertently affected student perception. Using matrices of perception that are typical to English class – mood, imagery, vocabulary sheet – the teacher seems to have set up parameters that might inhibit improvisation.

Where learners are specifically conscious of technique, there is apparently less freedom of expression and therefore less opportunity to comprehend relationships within a proscribed universe. Technique tends to be focused ultimately on outcome, as described above with regard to musical performance; again, to be narrowly focused on a single element of perception is to distort perspective, and perhaps to encourage self-consciousness. Between teachers and learners there is always the question of what each expects from the other, which also has the propensity to narrow perception for either party. The challenge here is perhaps to define parameters without confining perception, to define a field for perception without also delimiting one’s imagination of that field.
While I understand the requirement to be clear and concise in communicating assignments to students, my sense of the English teacher's instructions is that they offered students a path of least-resistance (description) where they didn't need to do so. Where improvisation is concerned, I would rather trust Senior students to know the fundamentals of writing, and leave them free to do with that language what they will in response to the experience of a new musical composition (Semyotique). Part of the wisdom of Stravinsky as quoted above, I believe, lies in the fact that each of us discovers in the process how to place constraints upon ourselves.

That thirty of the forty-four students chose to write descriptions of the music — rather than poetry or story, for example — indicates a similarity of tendency with the other groups of participants in the Semyotique Project. It is established that the majority of participants tended to express themselves according to perceptions familiar to their practiced experience; and, that attempts at improvisation were consistently less fluid and articulate than proscribed and practiced patterns of expression.

*Description* is a fundamental use of language, evident perhaps primitively in the simple act of naming those objects with which we enter into relationship. At a more advanced level, experience is described by analogy – music, for example, sounds like this or that occurrence in the world of experience. Those who chose to describe *Semyotique*, were evidently choosing to exercise familiar perception much more than they were extending their experience to include exploration of relationships within a comprehensive universe. Gardner describes the fundamental difference in process: "Fascination with language, technical facility with words, rather than the desire to express ideas, are hallmarks of the future poet" (Gardner, p. 77).
"My Conclusions"

_Semyotique_ was well received for its novelty, and appreciated somewhat for being composed by a "local." It represents a major work in my own practice, as well as being significant as a commission, rather than composed solely on my own initiative then presented to others for consideration of performance. It has taught me some things about the conscious choices I make as a composer, especially with consideration for who will be performing the piece. In the end I am of the opinion that the piece was not particularly successful in performance; this being the inherent risk of "going public" with one's creative endeavors.

The Project engendered by _Semyotique_, though, is significant at least for its perspective. Though it began as a commissioned orchestral piece, _Semyotique_ became the platform for both observing student responses to opportunities for improvising, and reflecting upon the creative process of teaching and learning. The most significant challenge in presenting this project to my colleagues and students was to convince them that there wasn't really anything to "get right." The Project has been about its process, and not about individual or collective _products_ coming out of it.

There is a significant moment when I ask both colleagues and students to participate in my project; a genuine psychic risk based in the knowledge that there may be plenty of critical assessment of the musical composition, whether or not that has been solicited. Perhaps we learn to navigate such criticisms in the roles with which we are most identified, simply in order to function effectively on a daily basis. However, engaging others on an unusual plane of experience certainly throws each of us off our balance. Colleagues and students know that I am a semi-professional musician in addition to my duties and responsibilities among them on the Religion Faculty, but they don't typically
interact with me in my role as musician. Given the improvisational focus on the *Semyotique* Project, we were all perhaps less clear than we prefer to be about what is expected, and also how to relate our typical roles with these new ones we were trying to imagine. There was, after all, a bit of improvisation demanded of our interactions.

In the end, students in an English class, as well as painters, dancers, and musicians in the orchestra, were called upon to participate in a process of creation, the outcome of which seems consistently to reflect the experience of the participants. When focused particularly in terms of an end-product (performance or object), opportunity for learning and discovery is apparently inhibited according to one's technical proficiency. However, where a particular fascination – Gardner's 'intelligence'; Koestler's 'matrix of perception' – exists with regard to the process itself, learning and discovery are comprehensive of a universal experience. The opportunity to improvise perhaps challenges us to notice significant relationships where we did not or might not, would not or could not, previously.

As teachers we ought to be aware of the significance of process in order to provide opportunities for authentic learning. Improvisation seems to challenge our awareness of process in ways that require careful attention. Which recommends that all who participate in the experience of education might cultivate a conscious awareness and appreciation for the subtleties of intelligence, as well as the possibilities for relationship between and among various matrices of perception. Teaching and learning may then be encountered in terms of Koestler's title, as *The Act of Creation.*
Appendix Materials

1. Samples of Student Writing

2. CD: Student Paintings [located in pocket-folder]

3. Conductor Score: *Semyotique* by Robert Stanley Peter Gardner
   [located in pocket-folder]

4. CD: Audio Recording of Live Performance of *Semyotique* (March 19, 2005)
   [located in pocket-folder]
References


"Childhood"

As a kid there were merry-go-rounds with circus music.
As a kid there were Mr. Rogers shows and movies that could be watched over and over again.
As a kid there were games that would teach stuff like counting, but other games that were additive. Mario World, Final Fantasy that older brothers would play ALL DAY LONG.
As a kid parents would turn on music to get the youngsters to fall asleep.
As a kid there were weird memories that will never be forgotten.

Sounds or pictures trigger these weird memories in the wonderful world of childhood.

Untitled
The music seems to follow a classic story line of fairytales. It starts out light and airy but problems keep rising up. The conflict between good (higher music) and bad (lower music) continues throughout the story. Parts of the music were very repetitious, like the cowbell or triangle parts. It was very unnerving. Pieces sounded familiar like songs off of Nintendo games or Nick Jr. cartoons. I think I heard London Bridge toward the beginning, which gave me an image of fog, chimneys, and maybe some bells in the background, basically the beginning of Mary Poppins. In the very beginning the first thing that I pictured was a bee going from flower to flower, moving jerkily and briskly. At some points I pictured rain falling. It was not until the end that I realized the patterns of high and low were similar to the tone of fairy tales. It starts off very light, then a problem arises, then it has a temporary solution and the music goes back to light, then the villain catches up and the power struggle commences. In the end it is ultimately the happy music that has won. The past's panic moments and climbing scales have ceased to exist in the mind of the listener.

Untitled
The smell is in the air as the sun is masked by swollen clouds. Just as rapidly as the sun is taken away, the clouds begin to pour their salty, wet sadness on the earth. It starts out slowly as if teasing the playing children, but it continues to intensify. Children run home disenchanted as well-dressed adults reach for umbrellas. Cars splash the broken drops that lay in puddles on the ground like mirrors for the sky. Sparkling eyes look out on the street where they were playing, as the drops seducingly slap the window, beckoning the children to come out and play with them. Then, as suddenly as the rain appeared, it went away. The sun took over once again and began to melt away the evidenced of its enemy. Possibly the rain went away because no child came out to play, or possibly the clouds had no tears left. The mirrors on the ground began to shrink and become shattered by children's running feet and hurried high-heeled shoes. The thought of the rain vanishes as quickly as the puddles and isn't to return until the smell once again masks the air.
The temp rises like the sun high in the sky
Light causes people to begin to wake
As the time gets later traffic starts passing by

Stress and exhaustion float in the air
All because the time keeps on moving
Like a horrible unending nightmare

Finally the sun begins to descend
People start to fall asleep
Unaware of what time will send

The music that we listened to reminded me of the Fantasia movie. The cartoon was playing through my head to the music. It wasn’t actually the Fantasia characters that I saw. While I was listening I decided to close my eyes. I was flying through the clouds and the sky, but when the music would progress to deeper sounds the environment would darken. Sometimes I could see lightning or just black sky. When the music went higher the environment went back to the clear blue sky of tranquility.

This piece of music was very interesting. I was quite confused when it began to play, because I was expecting a normal piece of music. It sounded like something from a television show or a movie. To me, it seemed like it had all the parts of a plot. You could almost hear the introduction with a rising action as the music began to play louder and more repetitively. It kind of seemed like the climax came next, where most of the action would take place in some sort of television show. Then, the falling action and conclusion seemed to take place in my mind. Overall, I thought it was quite strange.

When listening to the music, I felt like I was at a weird carnival. The music made it sound like I was at a fun land where there were scary creatures bothering me. I also felt like I was in a video game. The sounds were similar to those in Mario and Zelda. It was a very interesting choice of music. I felt like I was in the television trying to escape this mysterious land so that the one-eyed Cyclopes and the little girl with two heads wouldn’t come after me. There were a lot of bell noises too. They kind of gave me a headache, but when the bells sounded it was like I got another point for each bell. Like I was collecting coins like Sonic the Hedgehog does in that game. Basically I felt loopy and I was thankful when the music ended.
Music and Reaction
This piece of music sounded very carnival-ish. It prompted many feelings and ideas related to that of a circus or carnival. I started to draw many figures from my make-believe circus. I had a strong man, a yak woman, an elephant, and even a human cannonball. But as the music progressed, I started to envision a child playing make believe. I began to think of the TV show “South Park.” In it, a boy named Butters often plays make believe. He becomes Professor Chaos, the outcast, shunned by society. He then creates ideas about how to wreak havoc upon the town. Some of these include switching people’s orders in restaurants. They are very innocent things and this music reminded me of that. Above anything, this music sounded childish and made me think of many things involving children’s imagination. I could see them playing make-believe or going to the circus. This music inspired me to think of anything involving fun or imagination for children.

Creative Writing
To me, the classical music showed a progression over time. It almost seemed like a story was being told. During the beginning of the song, I felt like I was stuck in some sort of twisted reality with everything out of proportion. The first image that popped into my head was a scary carnival scene with clowns terrorizing little children in a room full of mirrors. The song’s quick beat hinted at a rushing or urgency to complete a task, almost like a dramatic game of hide and seek. When the beat picked up and got faster it only added to the hectic chaos. I thought that the end of the song was rather abrupt and unexpected. It seemed as though the song should have continued, but instead it just ended leaving the listener wondering as to the outcome of the hidden story.

Creative Writing Assignment
The music sounds as if it were coming from a weird carnival with many attractions trying to persuade someone to join in with their fun. At first, the music sounds like an organ playing gallantly among a congregation at church, as it brings people together to this eccentric site. It is a bright, sunny day where the atmosphere is lively and the birds are singing. However, in an ironic way, there seems to be a loss of emotion at the same time, with the constant droning of the crashing waves along the nearby coastline. The overplayed ringing of the bells and honking of the trains along these coastal waters is reminiscent of a run-down Coney Island. It seems as if there is a crime being unfolded as the music rises up on the scale to appoint where the criminal has been caught until the point when he is taken away and the music falls down the scale. Lastly, the people are trying to figure out their purpose at this carnival, but in the end cannot decipher the true meaning of the extraordinary surroundings that bring a mysterious effect upon them.
Listening to this music gave me many memories of when I was young, reminded me of children in general, and of things in the past. The repetitive sounds reminded me of cartoons I used to watch and old video games I used to play. It also sounded like many of the short songs and scales I used to play when I practiced my piano. The music made me think of my neighbors that I used to babysit because it sounded very similar to many of the videos I would watch with them, such as Baby Einstein, Mickey Mouse, and sing-along videos. I also thought of kid’s toys, like a train, while listening to this music. It also reminded me of things from the past. It sounded like the background songs in old horror films and like the intro music to James Bond and Mission Impossible. Many of the noises made sounded like the music in the workout videos from the eighties that we used to watch in gym class.

Creative Writing Assignment
When I heard the song I was mostly drawing a blank. At some point in the song I heard “London Bridge is Falling Down,” so I wrote that down. I also heard bits that reminded me of the really old Zelda games from the NES. Since I wasn’t thinking of anything else, my mind wandered and I tried to see how much of the game map I could see in my mind. I was able to remember pretty much everything, though some of the connections of what piece of the map connected to where I forgot. It’s been a while. Also I was tired. Then after the song was over we were feeling random, so I wrote a lot more. I had snowboarding on my mind so I drew a little guy getting owned when he fell and broke in half an stuff because that is probably what is going to happen to me when I go out to Colorado. And I had snowboarding bones because I cared more about snowboarding than breaking bones (as long as it’s near the end of the season). Then there was “farce” which I thought was an awesome work that I had heard the night before so I wrote that down too. And “smooth and smarmy” is from a website and smarmy is another awesome word.

Creative Writing Assignment
Listening to the piece of music that we were assigned to listen to I found myself drifting off into a video game dream world. Throughout the piece I could see the great heroes of such games as Super Mario Bros. and The Legend of Zelda battling evil and venturing out on a mythical quest to save the princess. The music would start out with a quicker, livelier piece, and then that piece would turn into a darker tone. This was when, in my mind, the legendary heroes began to fight the great evils in the games like Bowser or Canon. The only reason that I thought of these video game characters was because I have been playing way too many video games over the past few weeks, so my thoughts are being controlled by the video games. Nonetheless, I felt that the music really demonstrated as effect of changing emotions, like carefree and jovial to dark and sinister. The song, in its entirety, was like an epic story of good versus evil where the side of good has to travel great distances and overcome many barriers before the final showdown and triumph over evil.
Semyotique
by
Robert Stanley Peter Gardner

The commissioning of Robert S. P. Gardner for this twenty-fifth anniversary celebration was made possible by The Rochester Area Foundation.

SEMYOTIQUE recognizes the fundamentals of musical development among student players. Obvious reference is made to the over-tone series, simple scales, and common beats learned by young students as they explore the possibilities of their chosen instruments. Recovering rhythmic themes reveal us of the inevitable influence of The Suzuki Method in the experience of many players.

Improvisation - our first, and perhaps most natural musical instinct - leads us to the opening of the piece, after which a number of structured sections offer players opportunities to extend their improvisations.

The sections of the second measure are based on West African tradition called Jjum befela. The composer gratefully acknowledges the work of Professor Dorothy Morrison at the University of Montana for her expertise in that particular art form.

To the Conductor - please note that the opening measure of the piece is intended to be spontaneous in performance. Players should be instructed to improvise on their instruments in any way that is natural to them. It is how we have learned our instruments from the beginning, and each of us has retained various improvisational techniques that are part of our respective warm-up rituals.

The second measure should be taken in tempo without any obvious and in the improvisational manner - most types of cues may be worked out in rehearsal.

Please note also that scales have been suggested throughout the piece to assist those players who might be looking for something to structure their improvisations. The sections for improvisation are easily repeated by your determination, and there are marked sections to allow for as many solo (or group) improvisations as desired.