

Aesthetic literacy: observable phenomena and pedagogical applications for (mobile) lifelong learning

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Abstract

This paper proposed a method for developing capacity for lifelong learning in open spaces, defined here as places without predefined learning structures or objectives, through the cultivation of aesthetic literacy. Aesthetic literacy, appropriated and broadened from its original focus as capacity for “reading” or making meaning from artistic material (discussed in Gale, 2005 as the “living of lyrical moments”), is positioned in this paper as a means of making meaning in open environments through alignment and attunement. Aesthetic literacy is presented through its observable phenomena and pragmatic methods for pedagogically cultivating learning in open spaces. The pedagogical advantages of such an approach and its applicability to lifelong learning, particularly lifelong learning activated through mobile technology (or mobile lifelong learning), follows along with recommendations for further research. The applicability of such research is for teachers, learners, or researchers who are looking for methods for making use of open spaces for learning, or to cultivate learners who actively seek learning in the “rhythms of the everyday” (Lankshear & Knobel, 2011).

Introduction

While formal, classroom-based education remains an important focus for learning and development, the emergence of online & distance learning, open learning, informal learning, lifelong learning, and mobile learning have both complemented and challenged the supremacy of formal learning in the overall learning process. These additional avenues of learning are reflections, even artifacts, of a world and its representative systems in flux. They offer learning opportunities outside the formal classroom, challenging its pedagogical supremacy; each technological development or shift in the educational landscape presents a new series of permutations that are routinely appropriated and discarded. It is a dynamic educational environment, influenced in no small part by economics, politics, issues surrounding employability, and large doses of exuberant educational technology marketing. However, despite these repeated movements towards and away from particular learning frameworks, there remains the potential of lifelong learning as a means of fostering resilience in the learner in the pursuit of their own learning. As defined by the European Commission in the Memorandum of Lifelong Learning (2000), lifelong learning is “all learning activity undertaken through-out life, with the aim of improving knowledge, skills, and competence, within a personal, civic, social and/or employment-related respective.” In the fourteen years since that memorandum was published, lifelong learning has been perceived as being a call to learning outside, but complementary to, the formal educational structure (critically in Alheit & Dausien,

2002), and an “emerging regime of learning” (Tuschling & Engemann, 2006). Lifelong learning has been defined in relation to employability and critiqued in that respect (Fejes, 2014); it has further been critiqued in terms of human agency and capital (Tsakiris, 2014). The defining focus and applicability of lifelong learning varies with the community being observed or served. This research attempts to provide a means for pedagogically developing lifelong learning in open spaces; this includes lifelong learning as activated through the use of tools (Saljo, 1999), including mobile technology.

Research has suggested the possible role of network technologies in lifelong learning (Kope & Tattersall, 2004), and a shift in recent years from the role of the educational institution in providing those technologies compared with recent trends towards individual ownership and use of existing technologies (Kalz, 2014). The focus of this paper is on the utilization of mobile technology, personally owned rather than organizationally given, towards a particular learning orientation. We look to narrow our focus to lifelong learning supported by mobile technology, or mobile lifelong learning (mLLL) as defined by Seta et al (2014) as a combination of both mobile learning, “essentially an ensemble of didactic practices based on the use of mobile technologies”, and lifelong learning, “a general vision of knowledge in the education society.” The definition adopted in this paper acknowledges these didactic practices and suggests an appropriation of Pachler and Kress’s (2007) notion of mobile learning as a “transformation of habitus”, where the mobile in mobile learning is the transformation of space, including cognitive space, into learning space. As it relates to lifelong learning, this version of mLLL suggests that the pedagogical focus of lifelong learning is in fostering the capacity of the individual learner to generate meaning in open contexts, to transform this open space into learning space.

Many of the current pedagogical approaches to learning in the open are hinged on openness as an extension of form: open learning, open educational resource, open course, open source, etc. This pedagogical emphasis on form is extended to outputs and assessments; the process by which the meaning was made in the particular context through a particular set of tools (Saljo, 1999) is implicitly de-emphasized (as discussed in Ihanainen & Gallagher, 2014). Open course, open source, open educational resources, place emphasis on output and assessment as a means of making learning visible; open as defined in this paper challenges that emphasis on output over process by emphasizing the learning that takes place in the “rhythms of the everyday” (Lankshear & Knobel, 2011).

Open in this paper (and as introduced in Gallagher & Ihanainen, 2014) is space without a predefined form, space outside a course, resource, or learning structure. Open in this paper can refer to urban, rural, suburban, or natural spaces; it can refer to physical, digital, or a hybrid space. A learner in this space must contend with the lack of a predefined learning objective, the lack of a predefined cache of learning materials, or even a full awareness of the learning potential in the space itself. Learners in this open context often create “everyday practices” (Lankshear & Knobel, 2011) to contend with this openness. These methods tend to be informal and can be individual or socialized methods for making meaning in uncertain environments. These environments tend to be mobile inasmuch as they are not geographically predefined; there is no predefined space for learning.

As such, we believe a pedagogy in response to this open space is one that extends this idea of making learning visible to its earliest stages of alignment and attunement, collected in this paper under aesthetic literacy. We believe that making the process by which the learner transforms open space into learning space (Pachler & Kress, 2007) visible to the learner allows them to consciously reflect on these “everyday practices” of alignment and attunement, refine their capacity for aesthetic literacy, and replicate the process in open environments.

Aesthetic Literacy

This involves a sophisticated process of alignment, attunement, data collection, composition, and reflection (outlined in Gallagher & Ihanainen, 2014, 2013), a process repeated both consciously and subconsciously in response to newly identified knowledge gaps, new goals or motivations, or from sheer curiosity. We have encapsulated parts of this process into what we call aesthetic literacy, an ability to identify learning potential in everyday and open environments and to methodically enact a process of learning through them. Aesthetic literacy, appropriated and broadened from its specific artistic focus as a capacity for “reading” or making meaning from artistic (everyday) material (discussed in Gale, 2005 as the “living of lyrical moments”), is positioned as a means of making meaning in open environments, to begin to enact lifelong learning in these open spaces.

What this paper suggests is that aesthetic literacy is much more than the capacity for communicating through or as a result of art, it is a capacity for transforming space into learning space as a result of a process of alignment and attunement. Learners align themselves to the possibility of learning in an open environment (a trust in their own capacities for finding learning material in their open, lived worlds), and then- or later, when appropriate- attune themselves to the specificities of their environment for learning (acknowledging that each location is a constructed, specific set of attributes- learning in a museum as opposed to the subway as opposed to an open field, etc.) before engaging in a process of data collection, composition, and reflection, a more traditional learning practice.

In practice you can imagine walking along the city street among crowds of people and perceiving flows of movement, color palettes, symphonies of odors and sounds etc., which form meanings to the learner; e.g. “a peace between people”- a question of the cultural, economic and political interaction of mankind. As described, this involves the utilization of aesthetic literacy. Aesthetic literacy develops in iterative loops of perceiving and acting. It includes identifying thinking, emotional intent and intentional orientation. Aesthetic literacy consists of continuous transitions, which are made visible via documentary collages that people create. In aesthetic literacy meaning making, action and encounters come true through beauty in empathy, respect and compassion. The beauty is a resonating state and readiness to perceive and act, which is simultaneously invigorating, sensitive and determinate. Aesthetic literacy can be developed and learned, and it is crystallized in the ability to align and attune.

Alignment and attunement

Alignment and attunement refer to how we as humans cope with environments and niches in which we are embedded. As a primary activity they are crucial survival skills and commonplace, but in more sophisticated instances, they will go beyond a routine of automatic perception and response. Alignment and attunement do not exactly mean the same although they can in practice be used in the same sense. Alignment is more focused on perceptual relationships with the surrounding world while attunement touches the world more via acting on it.

Alignment is connected with perceptual sensitivity, which means not only to perceive towards as is common, but backwards, onwards and by as well. Perceiving towards means that we align ourselves with perceptible matter like a sunrise and sunset. Perceiving backwards is in relation to earlier perceptual experiences, which is made visible in the present like seeing in the actual "vague" sunset all the strong and saturated colors that were present before. Perceiving onwards is related to being inside the actual perception like seeing in the sunrise a pace of the forthcoming day, a predictive perception of future possibility. Perceiving by refers to perception that is not fixed to some point or continuum, but to the periphery; it can be thought of as the possibility to see "invisible" lines, forms etc. building quite new meanings and realizations for the perceiver. For instance, looking by the trees, fog and framed windows of the landscape in front of us makes it possible to see the brightening dynamics of horizontal, vertical and sagittal activity. This, in turn, provides a fruitful mental state for creative buzzing- and allows the learner to realize the possibilities of line thinking in aesthetic literacy. Aesthetic alignment is a unique collection of perceiving towards, backwards, onwards and by in an authentic situation of urban, rural, suburban and natural physical, digital or hybrid places.

Attunement is connected with activities oriented to the environment, which we refer to as behavioural rhetorics. The idea of behavioural rhetorics is adapted from Aristotle's rhetoric of logos, pathos and ethos (as discussed in Braet, 1992). Logos refers to spoken language and argumentation created and used when speaking. Pathos includes the emotions of both the speaker and the audience. Ethos is activity by which the speaker tries to persuade the audience. Aristotelian rhetoric is a persuasion skill and ability, and it is an aggregation of bodily, intellectual and emotional activity. When we speak of behavioural rhetorics as an element of aesthetic literacy we refer to three kinds of active resonance. They are anticipatory emptiness, emotional openness and bodily vigilance, and they are related to aristotelian logos, pathos and ethos. Behavioural rhetorics refers in the aristotelian sense to persuasion of the met environment into an aesthetic attunement.

Anticipatory (Järvilehto et al, 2013) emptiness is an active cognitive state of preparedness to recognize significance in open environments. Anticipatory emptiness can be seen as an active silence or blank mind. An example of this can be understood when likened to flanerie, as learners meander through their open environments without a predetermined learning goal. "While the cityscape may be teeming with crowds and commerce, the flaneur opens his senses and paints his own picture of the city" (Dörk et al, 2011); flanerie, when positioned this way, is itself an act of anticipatory emptiness. By way of example, imagine walking in an old town and seeing statues and then suddenly, through an anticipatory emptiness, composing an

understanding of historical events and beauty through those statues. In this positioning, anticipatory emptiness is a cognitive state for cultivation.

Emotional openness is closely connected with anticipatory emptiness. When you are cognitively anticipating meaning in an open environment, feelings are allowed to arise as such, thereby freeing the mind to craft meaning from dynamic environments. In the statue example above, one first might experience a feeling of amusement, sadness, gratitude, etc. This is then further perceived a historical or other lens, which can then be transformed to political and ideological statements to be said aloud, composed, or reflected upon. In order for this process to occur, emotional openness as a state of readiness is needed. Without this state of readiness, the mind is filled by “previous” thoughts and emotions which prevent you from seeing “differently.” Without an anticipatory emptiness and emotional openness, the statues will only ever be seen as statues, not as a convergence of meaning across historical, aesthetic, and artistic planes.

Bodily vigilance is a part of anticipatory emptiness and emotional openness. It is an openness to physically move, change position and to seek new perspectives for aesthetically attuning and immersing oneself in one's actual niche. Bodily vigilance makes anticipatory emptiness and emotional openness possible, enlarges and deepens them while being simultaneously embedded in them. Bodily vigilance raises the importance of embodiment into sight, especially as embodied in a global and culturally spread out body in a mobile interactive reality (Farman, 2012, 2014). Bodily vigilance, anticipatory emptiness and emotional openness are interdependent, so they can only be fully separated in an analytical sense. As an aggregated whole, they function as behavioral rhetorics and are mechanisms for aligning and attuning oneself to the learning potential of open environments.

Aesthetic processes

Aesthetic literacy is a set of aligning and attuning skills and competencies. They take place in open environments and through authentic activities, in which they are elements of aesthetic processes of progress (pace), encounter, connection, interaction and an overall process of people's placement in their niches. The following presents categorizations of these aesthetic processes, by no means a comprehensive list of possible activity. These aesthetic processes should be seen in the context of open environments, or as a set of processes that learners perform in open environments to generate meaning.

Slow and fast pacing

It is possible to keep a person's perception-action cycle in a slow or fast tempo or to move from one to another. For instance, you can slowly follow people walking along a public square or marketplace and let them become perceived, or via quick glances to recognize certain types of people in the environment. The slow, deliberate pace creates an aesthetic impression akin to a slow motion movie, a methodical, deliberate perception. The fast pace in turn is similar to a fragmentary and perhaps pixelizing music video or movie trailer, a staccato perception.

Fluent and angular encounters

Meeting people, objects and events can be fluent in that everything is perceived as going smoothly without a disruptive friction. It can also be the opposite. Encounters are angular or sharp-edged when speaking with hesitating, aggressive, cynical or fearful people, or when encountering awkward, hostile, or just disorienting environments. Encounters have their aesthetic fluent-angular quality, and aesthetic literacy grows in these encounters through empathy and creativity.

Intact and unbalanced connections

Throughout these slow-fast progressions and fluent-angular encounters, humans have more or less permanent connections with their physical-virtual-social environment. These connections form the everyday experience of being both a part of and immersed in the reality around them. Intact connections are perceived as being balanced and harmonious. A person experiences control over her/his connections, enjoys them and develops satisfaction in these connections. Over time this harmony can evolve into boredom and irritation, and it can be seen as a state of opposition. Unbalanced connections produce uncontrolled, contradictory, insecure, frustrating and overloading experiences, but they as well can gradually lead to the learner to challenge them and become inspired to perform a balancing activity, or an attempt to make an unbalanced connection a balanced one.

Exciting and mawkish interaction

Interaction is a nourishing energy for encounters, connections and progress. Interaction can be exciting or mawkish, often oscillating between these states. Exciting interaction generates space for personal thinking, intuition and positive feelings. Mawkish interaction does the opposite and weakens connections, encounters and the progress of mutual and multilateral social intercourse. Aesthetic literacy takes these interactions into account.

Rhythmic and arrhythmic process

An ordinary life - instead of permanent outcomes - is a mixture of ongoing processes, which are fulfilled by physical, virtual and social interactions, encounters and connections. These form a progression of life at work, in learning, at rest, and at leisure. These life processes have their repetition in common intervals: annual, monthly, weekly, daily, and so on. They have a rhythm, which can be recognized personally and socially. These processes constitute a rhythmic continuum inside which people also experience arrhythmic occurrences. Life processes are simultaneously cyclical and separate, and this chaotic order is recognizable in the dynamics of rhythmic and arrhythmic activity. Aesthetic literacy lives in an active perception of and adaptation to of rhythmic and arrhythmic activity

Aesthetic literacy adopts these processes towards alignment and attunement in open environments. As such alignment and attunement are individual and personal resonance activities. Alignment and attunement are carried out in aesthetic processes of pacing, encounter, connection, interaction and overall activity rhythm. These processes are often social, forming a communal element of aesthetic literacy. These processes also emphasize the informal and tacit qualities of aesthetic literacy. It still includes more visible and explicit features as well. They are the creative activities in collecting alignment and attunement "data",

composing them into artistic artefacts, and finally reflecting on these compositions in personal or social texts and multimedia. Practical activities for developing aesthetic literacy are presented further in this paper.

Making aesthetic literacy visible through activity

Learning in this paper is positioned as a deliberate act balancing trust (in the learner to learn and in the environment to perceptually sensitive way stimulate that learning), behavioral rhetorics, activity (data collection, composition, socialized activity) and reflection (to identify what has been learned, what must be iterated upon, etc.). It is an intentional act of education, or “a process of living and not a preparation for future learning (Dewey, 1938), a description which dovetails into the positioning of lifelong learning as consistent and self-regulated learning activity towards self-betterment and a greater participation in society (Kurbanoglu & Serap, 2003). Learning in this context is generated, reflected, and iterated on through deliberate and consistent activity.

Making artifacts and compositions from this deliberate activity visible to the learner presents pedagogical advantages. First, the activity required to generate these artifacts or compositions (whether they be images, notes, videos, audio recordings, maps, etc.) is an act of aesthetic literacy, data collection, documentation, and, subsequently, an act of memory. Learners train themselves through deliberate activity to take a photograph, for example, in each new environment they encounter over the course of the day, or at regular intervals throughout the day. This consistent activity makes visible the process of aesthetic literacy through documentation; the learner develops aesthetic literacy by acknowledging the environment is new, and begins to transform space into learning space (Kress & Pachler, 2007) through the act of documentation.

Learners accumulate artifacts in this way and begin to assemble them into compositions at consistent intervals (time interval or after an accumulation of a certain amount of artifacts, etc.). These compositions are designed, in these early stages divorced from formal assessment, to be mere aggregations of meaning. This image assembled with this video and these audio recordings, etc. In this way, learners are composing their ephemeral learning environments and their own learning identities through consistent activity by slotting these artifacts into compositions and these compositions into narratives. Narratives in this instance are sequences of activities and compositions presenting intentional state entailment (Bruner, 1991), a deliberate presentation of their own sense of understanding in a particular environment. A learner might aggregate video, audio, imagery and text into one composition and reflect, consciously and deliberately, on what it is presenting and how that presentation reflects their evolving identity as a lifelong learner, their understanding of the environment and its capacity for generating meaning, and their knowledge gaps within this environment. Deliberate activity and reflection assists in constructing intentional state entailment; these learners are forging narratives of aggressive intentionality through consistent activity. These narratives are intentional in their present representation and in their future projection. Learners are deliberately attempting to represent what has been learned to date, while at the same time willing into existence all they hope to learn. As such, narratives are reflective markers of great significance

in charting a learning trajectory (Wenger, 1998). Unlike Wenger's focus on community membership, however, we expect learners to use these narratives not as tool for community engagement, but rather as tools of reflection and self-regulation.

Pedagogical Activity

How do we make use of all of these processes in open spaces? Aesthetic literacy is one method for doing so, one we believe holds much promise for open and lifelong learning. The lived worlds of these students are difficult to decipher in their ephemeral composition-overlap and intricacy; they are permeated by human presence and non-presence (experienced absences) (Gallagher & Ihanainen, 2014). Open space is composed of simultaneous spatial, temporal and social presence practices (Farman 2012). We believe this complexity is best activated for learning through an appropriate pedagogy, one that can make this "messy system" an approachable and useful learning space. Aesthetic literacy as learning method meets these contemporary demands mentioned above.

The activity that can be presented to transform space into learning space, to generate aesthetic literacy, and to provide learners with capacity for self-regulating their own learning, is most easily presented through representative categories. It should be noted that many of these activities are technological in nature, which broaches mobile lifelong learning (mLLL) as presented earlier in this paper. Mobile technology presents the most readily accessible (broadly) and arguably the least obtrusive tool (in terms of technical expertise) for engaging many of these activities; as such, it should be considered as a potential learning tool to be engaged with throughout this process. However, mobile technology, possibly due to its burgeoning maturity and sheer ubiquity, comes with it many socio-cultural practices of use and production, practices specific to the context in which this mobile technology has been employed. It adopts and often hybridizes existing social norms for interaction. It generates media practices that incorporate any number of community norms and memberships (Wenger, 1998). These need to be considered and reflected on by the teacher and the learner before embarking on the activities presented below.

Beauty adjusted: cultivating aesthetic literacy

Aesthetic literacy commands great importance in this presentation of learning as an act of constant activity and iteration. Aesthetic literacy is the act of transforming space into learning space. It is a mix of perception, intellect, and emotion, an understanding that all environments are pregnant with the possibility of learning if we adjust ourselves towards receiving it. Making the process of alignment and attunement visible is done primarily through documentation and data collection. Learners can perform any number of activities when presented with a new or evolving environment, including the following:

- Taking a photograph or video of "newness": at regular intervals or whenever presented with a new or evolving environment, the learner documents the space through a photograph. This simple act of documentation embeds the artifact in the memory, and the memory potentially to the narrative. It documents aesthetic literacy by acknowledging that the first stages of alignment and attunement have been performed and the space transformed into learning space.

- Taking a photograph or video in a particular location at a consistent time: in this exercise, the evolution of the space becomes the object of focus. The learner develops an understanding of the space as perpetually evolving, suggesting that the learner's understanding of the space is perpetually evolving as well. It is an act of elongated aesthetic literacy in that alignment and attunement are taking place over a course of time and indefinitely.
- Taking an audio recording: non-voice acts, i.e. ambient audio, are under-theorized artifacts of cognitive activity, but useful for aesthetic literacy in that they are received, or waded through, rather than presented. It is an aural presentation of space, challenging, urgent and volatile, over a course of time, one that is initially used to document, but which afterwards has pedagogical value as an artifact of potential incongruousness. An example would be a pristine image of an urban scene, presenting stillness and sanctuary, positioned against an audio recording of a screeching tire or a car horn.
- Soundtracking space: in this activity, learners are asked to orient themselves to open space by creating soundtracks or sound surveys of particular locations. This is a method appropriated from research on the role of music in academic and online study (elektronisches lernen muzik, 2014), as well as sound surveys documenting the aural landscape of a particular urban environment (London Sound Survey, 2014). Learners create soundtracks to generate an aesthetic literacy in unfamiliar spaces or spaces that are to be transformed into learning spaces through deliberate activity.
- Checking-in: the simple act of checking-in acknowledges that this place was new or an evolving environment. Check-ins aggregated over a course of time are compositions, even narratives documenting aesthetic literacy.

Data Collection and Composition

Many of the activities listed above were indeed data collection activities. Data collection is of critical importance to field activity (as described in detail in Gallagher & Ihanainen, 2014; Gallagher, 2013). Data collection is more than documentation, however. It is the identification of material of *possible* relevance for later composition. It is important to acknowledge this possibility; significance is not pre-ordained nor is always apparent before documentation. The documentation and data collection itself, a deliberate act of learning, will often generate the significance. It is important for the learner in managing their own lifelong learning as it is material through which learning activity will take place, the artifacts of their learning practices. As such, it is important to make it known to the learner that the production of such material at consistent intervals is an important practice in their overall learning process. It is the material that will be used and reused to generate meaning through composition and reflection.

Activities that collect data are numerous, many of which can extend into more formal disciplinary based learning. Historical documentation of a particular location, a neighborhood, a street, etc. can provide data that will be used to advance a disciplinary understanding. Consistent recording of audio to map the sound quality of a particular neighborhood or informal interviews to record the narratives of those who live there, video to document traffic down a particular street or patterns of activity, photographs to document impressions of sunsets or changing weather

patterns. Consistent data collection is the cultivating of the inquisitive learner. It is enacting the expectation of learning everywhere at anytime.

Composition is broadly defined here as any aggregation, or 'writing', of material to present meaning. Its practices are numerous as are its possible presentations or containers. If we are dealing with the materials of data collection, primarily if not exclusively digital, then this involves the composing of video, audio, imagery, text, and other modes of meaning into larger aggregates. Some examples of this activity might include:

- Field Notes, Blogging-primarily a textual medium, but one that can be enacted verbally (voice recordings or dictations) or through other multimedia (through images, audio, or video). This type of activity is both composition and reflection, a persistent presentation and iteration of both learning and self in relation to that learning. The teacher in this space can stimulate this type of composition through prompts or questions at intervals.
- Montages, collages, mashups: these are simple aggregations of media for a particular effect or representation, ones that can be composed in smart mobile technology through commercial applications. These multimodal compositions present opportunities for reflection around the applicability of the media to the particular medium, how these forms of media are assembled and arranged, etc. (Multimodality provides a useful basis to inform these reflections; see Jewitt (2009) for a broad treatment of multimodality).
- Mapping: whether digital or hand-drawn are compositions of the construction of geographical and cognitive space. Learners engage in aesthetic literacy to transform space and compose space into larger aggregations through mapping. It is the composition of space itself and, in turn, the learner's identity within that space that is being reflected on.
- Geocaching: allowing the learners to compose caches of geo-positioned material for gaming and learning purposes has been discussed extensively in research, particularly in respect towards embodiment (Farman, 2009). Embodiment has significant pedagogical value in that it forces a reflection on the role of space and the learner's position within it, essentially a reflection of aesthetic literacy itself. Learners compose caches of material, whether media, text, coordinates, material objects, etc., geolocate those caches, and spend time finding and adding to found caches from other learners. What these caches reveal, among other things, is the composition of aesthetic literacy, or the process by which space is transformed into learning space through alignment and attunement. A geocache is a composition reflecting on that learning space, and the narrative of the learner's relationship to it.

Reflection

Reflective practice is of great importance to several of the processes and fields described in this paper, including lifelong learning, self-regulation, and aesthetic literacy. It is generally enacted through composition, often as a formal writing prompt or assessable activity. Reflection as it relates to aesthetic literacy can be enacted through these methods, but others exist (as outlined convincingly in Byrne & Jones, 2009). Pedagogically, it is important to maintain instructional

focus on the process over the output in terms of choosing suitable reflective practices. This can be done by asking these general questions when pairing reflective practice with learning activity:

1. What does this reflection make visible to the learner?
2. How does this reflective practice allow the learner to iterate on their existing learning practices?
3. Is this reflective practice flexible enough to be adapted to other uses (formal, informal, individualized, socialized)?

These reflections should be composed at consistent intervals to maintain an expected state of learning amidst the everyday and to maintain a constant process of iteration on these practices. Self-reflection of this sort is grounded in the work of Sengers et al. (2005) on reflective design, Verpoorten et al. (2012) on reflective triggers, and Ifenthaler's (2012) work on reflective prompts. These reflective activities or simple reflective prompts provide an opportunity for the participant to make conscious the learning, media, aesthetic, and compositional practices they currently employ to make meaning. The following activities are but some of the possible reflections that can be pedagogically cultivated by the teacher or by the learner themselves.

Emotional and Intellectual Symmetry

This category refers primarily to prompts provided by the teacher or the learner to himself or herself that seeks to identify the symmetry that exists between their intellectual activity and emotional receptiveness to that activity. A simple example would be a reflective prompt in the form of a question asking what has been accomplished, what remains to be accomplished, and how that satisfies the learner. Additional activities would seek to employ media to compose symmetry. The learner composes a 'postcard' at intervals (a method adapted from Bayne et al, 2014) from their learning, a collection of imagery, audio, and representative text that documents their satisfaction with their own learning. Positioning these compositions around "satisfaction", "progress", or "contentedness" forces the learner to bridge intellectual activity and emotional effect. Aesthetic literacy depends to some degree on the capacity of the learner to receive learning in unlikely places, and this process depends to some degree on the emotional context of alignment and attunement.

Media Inventory and Review

On the surface deceptively simple, this approach involves a review of media inventory generated through these activities at intervals. For example, the learner would review their imagery, their video, audio, and textual content, identify gaps in these inventories, and iterate on their processes (discussed further). Media inventory review forces the learner to consider present learning efficacy (or self efficacy as defined, amongst other places, in Zimmermann, 2002), or the self-directive process by which learners transform their expectations into learning activity. A media review at consistent intervals forces the learner to reflect on their capacity to meet their learning expectations based on the media, or learning material, they are generating. Media collection processes are iterated on as needed. The reflective practice of media review also initiates a reflection on narrative, or the ability of the learner to construct their own narrative of progress amidst the limitless possibility of open space, or lifelong learning.

Process Mapping and Review

As the pedagogical focus of these activities are on process over output, it is important to position reflection at process iteration. The learning practices of the individual (from aesthetic literacy onwards) should be made visible as often as possible for the purposes of reflection. This can be visually (through a mindmap, digital or hand drawing; through a video documenting their learning practices), textually (as a numbered or composed listing of their learning practices), aurally (as an oral recording of the learner discussing their practices, their efficiency in performing activity, etc.), or some combination thereof (as a multimodal composition, for example). Prompts can be inserted to encourage the learner to consider the efficacy of these practices in achieving present learning objectives, and future ones as well.

Pedagogical Advantages

Pedagogically, it is important to consider the purpose of these activities in contributing to the reflective practices of learners interested in developing their own lifelong learning. Further, we need to identify the advantages in such activities and their underlying assumptions in relation to the lived world of the learner. What is to be gained with an emphasis on process over purpose, or a visualization of aesthetic literacy in our meaning-making environments? What is to be gained through an emphasis on what seems to be administrative or organizational activities (media inventory and review; process mapping and review) over formal outputs and assessments (essays, etc.)? The answers to these questions relate to the overall purpose of aesthetic literacy in orienting the learner towards reflective practice and process orientation. This, subsequently, is designed to stimulate learner self-efficacy and iterative practice, which actualizes lifelong learning (positioned in this paper, perhaps implicitly, as a benefit to the learner). The activities outlined in this paper attempt to address these questions pragmatically, through observable action, purposeful and consistent reflection, and iteration. The pedagogical advantages of such an approach charting aesthetic literacy through observable phenomena span the following groupings:

Self-regulation and Iteration

This pedagogical emphasis on aesthetic literacy is intended to create a self-regulatory system of learning, one where the individual learner is able to identify and iterate on existing learning practices based on the observable phenomena it produces. This definition of self-regulation can be likened to Bandura's notion of self-efficacy (1997), where one exercises control to achieve one's goals. However, in this context of developing and iterating on aesthetic literacy, self-control is linked to open iteration on existing practice. The learner develops aesthetic literacy pedagogically through consistent experimentation, and through consistent reflection and iteration on practice based on the feedback received through observable phenomena. An example of this might be a learner generating an informal learning activity in a public square in an urban setting (for example, a chalk drawing on the pavement). The learner aligns and attunes himself or herself to the potential of learning in this environment, collects and composes data as a result, and iterates on this process based on the feedback received from the composition. Adjustments are made to the learning practices in an iterative cycle of activity and reflection.

Cultivating the Capacity for Consistent Learning

Complementary to the self-regulation of learning based on consistent feedback is the notion of cultivating oneself to actively seek learning in the “rhythms of the everyday” (Lankshear & Knobel, 2011), or the open environments of everyday life. Cultivation in this instance is a state of consistent anticipation, or a persistent expectation of learning amidst our everyday lives. The pedagogical approaches outlined in this paper attempt to present aesthetic literacy as a means of cultivating ourselves to expect learning in the everyday by making visible the stages of alignment and attunement. It is important to note that this a conscious process, a reflective practice of engaging with the visible phenomena. Learners in this space are encouraged to reflect often and openly about the role of these practices in their learning, and how it inhibits or develops their capacity for self-regulation. The focus here is not on *understanding* intelligence, but in *generating* intelligent action through the reflective development of aesthetic literacy. This is done through cultivating oneself to expect, to generate, and to receive learning in open space.

Generating a Process Orientation

The process of making aesthetic literacy visible has a direct emphasis on a process over output orientation. By extending reflective practice to these earlier stages of learning (alignment and attunement), learners begin to reflect on the role they have in making use of open environments for learning, and the role they have in generating subsequent learning effort (composition, reflection, dissemination). Learners invest in these earlier stages as a means of generating the later ones.

Such a process emphasis also reveals a great connection between the stages of learning to the learner. The learner becomes aware of the necessity of alignment and attunement before questions can be put to this transformed open environment. This approach does not account for motivation or intent; it is possible to be aware of the value of alignment and attunement in the larger process of coming to know without having the discipline to cultivate oneself to make use of it. However, we believe that by making these earlier stages visible through consistent activity and reflection, a greater number of learners will orient themselves towards a more aggressive approach to their own learning.

Linking Pedagogy to Lifelong Learning

The pedagogical activities described in this paper attempt to position lifelong learning as a process orientation, one that begins with aesthetic literacy and carries through to composition, iteration, and reflection. The activities listed in this paper also attempt to cultivate capacity for lifelong learning through what can be best described as exercise, a process of consistent activity designed to make visible the perceptual phenomena that accompany aesthetic literacy. This approach to lifelong learning is specifically designed to be learner-centered, as the primary goal is to develop learners able to be self-regulating in their learning. This approach is also designed to make use of open environments, the daily milieu of everyday experience, for learning through aesthetic literacy. It is open learning broadly defined, an openness referring to the expanse of space in one’s lived environment rather than the form or structure (Ihanainen & Gallagher, 2014).

It is also an approach that is in keeping with past research on lifelong learning and mobile technology; mobile technology has long been positioned as an ICT that is capable of cultivating the capacity for lifelong learning (Sharples, 2000). It is contestable to what degree this matching of mobile technology and lifelong learning, most notably through mobile lifelong learning, has been successful as a national or regional effort (as defined by the European Commission, 2000). However, much research has been generated identifying learning approaches appropriate to the use of mobile technology for lifelong learning (outlined in Holzinger et al, 2005 & Nordin et al, 2010); this paper is designed to extend this conversation to include a process orientation to learning, one that positions aesthetic literacy as an integral literacy for activating lifelong learning; further, not unlike physical exercise and its relationship to our overall physical health, this paper provides pedagogical activity that is designed to consistently and predictably cultivate lifelong learning. It is our belief that this aesthetic literacy can be ‘taught’ in the sense that its related observable phenomena can be made visible and a process put in place to make use of these observable phenomena for learning effect.

Conclusion

Further research is needed to identify the socio-cultural practices (outlined in this paper as aesthetic processes) that might influence aesthetic literacy in particular environments, as well as the relationship between particular tools and the learning practices enacted there. There has been evidence to suggest that existing socio-cultural practices are incorporated, or re-traditionalized in hybrid form into tools, mobile technology in particular (as discussed in the Asian context in Yoon, 2006a, 2006b, 2003 & Hjorth in 2013, 2009); as such, it is important to understand the effects of these practices on the development of aesthetic literacy. Appropriate activities would need to be designed to reflect that socio-cultural orientation.

Aesthetic literacy is positioned in this paper as a desirable capacity for learning in the open spaces of the everyday, or in the “rhythms of the everyday” (Lankshear & Knobel, 2011). This is learning that spans formal and informal learning, as well as socialized and individualized learning (adapted from Park, 2011); it provides a means for validating formal, disciplinary learning in informal spaces through the learning process and suggested activities of aesthetic literacy, composition, iteration, and reflection described in this paper. It provides a means for creating self-regulating learners capable of defining, testing, and adjusting their learning practices based on feedback received. Most importantly, though, it provides a framework, or process, for learners to define knowledge gaps, design learning activities to address those knowledge gaps, iterate on process, and reflect on learning through consistent and predictable activity. As such, it remains relevant despite shifts in the broader environment of these learners; it can be adjusted based on feedback and reflection. It is a means of regulating learning itself rather than an output orientation, or a means by which learning is a consistent, active, and iterative.

The overriding focus of this paper is that aesthetic literacy is acquired through consistent activity, iteration, and reflection. It is therefore teachable in the sense that it can be pedagogically cultivated in the learner. It presents a means of activating lifelong learning, a

means of providing the means for learners to regulate their own learning, and a means to do so through available tools, mobile technology included. It has pragmatic application for lifelong learning and learning in open space, where we are often situated amidst the “rhythms of the everyday” (Lankshear & Knobel, 2011), anticipating learning that has yet to emerge.

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