

Mobile Technology Use and Media for Humanities participation by graduate students in South Korean Universities

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Research Proposal

This research project explores mobile technology use by graduate students in the humanities in two of the universities of South Korea. For the purposes of this research, the humanities will be limited to the disciplines of language, literature, history, cultural heritage, archaeology, and an interdisciplinary offering that encapsulates several of these, Korean Studies. These disciplines are all prevalent offerings at the two top-tier universities of South Korea under investigation. For the purposes of this upgrading document, these disciplines will be subsequently referred to as the humanities.

This research study will explore how graduate students in Korean universities use mobile technology to support learning practices and how that use informs their disciplinary participation. Towards this end, the research questions this project is designed to answer are as follows:

1. How do graduate students in higher education in the humanities in South Korea use mobile technology to support their learning practices?
2. What mobile artifacts (compositions of text or multimedia designed to make meaning for graduate students in their disciplines) are being produced in mobile technology in Korean higher education in the humanities?
3. How do graduate students engage in the participatory process in the humanities in South Korean universities?

These research questions are designed to provide an understanding of the specific Korean context for learning with mobile technology, the role of mobile technology for learning in the humanities programs in South Korea, what type of artifacts are being produced there (multimodal, text, media compositions, etc.), and what participation in formal learning programs might look like.

Data will be collected from twenty graduate students in the humanities across two Korean universities with formal graduate programs in the humanities. These universities will be located in Seoul, South Korea. Students will be interviewed to determine their use of mobile technology, what they produce (media) in mobile technology, and how, if at all, that mobile technology is used in their disciplinary participation in their chosen discipline. These interviews will be supplemented with representative works of mobile compositions, referred to as mobile artifacts (multimedia, text, or otherwise), created to support humanities practice or participation. These representative works will be followed by a third round of data collection, a series of reflective prompts that will serve to stimulate an appraisal of the participant's use of mobile technology, the nature of their media practices, and their participation in their discipline. This collected data will then be subjected to an analysis using Community of Practice and Multimodality theories, respectively, to determine how this behavior is or isn't supported by existing community practice and what this media is attempting to manifest in terms of meaning to the larger humanities community.

Throughout this data collection and analysis, significant attention will be paid to understanding the movement of graduate students from informal to formal learning and from individualized to socialized states of activity (Park, 2011). This movement is referred to in greater detail in the Literature Review section, but it is critical to this research project to understand the flow of activity through these states (informal/formal, individualized/socialized) to identify the various communities of practice the graduate student is participating in to generate meaning in their discipline. It will also prove critical in determining the context of meaning being generated through mobile technology.

Critical Engagement with the Relevant Research Literature

Focus: Coming to Know

Throughout this Literature Review, there is an explicit attempt to link mobile activity amongst graduate students in the humanities in higher education in South Korea to a larger process of coming to know, a process whereby meaning is constructed

through the use and mastery of a number of different tools, technological, intellectual, and physical (Saljo, 1999). Mobile activity in this context is related to making meaning in the larger context of humanities activity, both formal and informal. It is less concerned with formalized outputs or assessment, but rather with the processes being mediated by mobile technology that generate meaning for the humanities learner. One such example, one that has significant focus in this thesis, is composition, how composing (in text, media, dialogue, etc.) in mobile technology generates meaning. However, mobile learning as such represents one space, process, or tool in a larger environment of context (which includes sociocultural communication, technology, formalized practice, and informal modes of communication, etc.).

Within this context and these fluid movements between states of knowing and coming to know, it is important to foreground that learning occurs in and subsequently produces context in a fluid cycle (Sharples et al, 2007). This produced context routinely evolves disciplinary practice in terms of the multimodal works being produced in mobile technology in higher education in Korea. The process of creating new understanding in the humanities irrevocably evolves the practices in the humanities that helped generate that understanding. This is a fluid, dynamic landscape of learning and one that presupposes change. There is perpetual change in practice, in context, and in the use of tools, mobile or otherwise.

This research presupposes that disciplinary activity in the humanities mediated through mobile technology is a constant series of oscillations between informal and formal learning, between learning with high and low transactional distance (Park, 2011) and with highly socialized and isolated pockets of activity. These oscillations are reflected in seamless learning (Looi et al, 2009 & Sharples, 2006), which can be defined as learning across a continuum of contexts mediated through a range of technologies. Seamless learning assumes that learning takes place “through individual learning in private learning spaces, collaborative learning in public learning spaces, and cognitive artifacts created across time and physical or virtual spaces mediated by technology within a context” (2009). We have evidence of these aspects of seamless learning in mobile technology supporting humanities activity in South Korea that will be discussed in the completed thesis, but it is important to remember that seamless learning emphasizes a continuum of meaning-making across contexts and traditional dichotomies of informal and formal, public and private, individual and social.

Mobile technology also foregrounds the understanding that context and practice are irrevocably linked. Practice, disciplinary or otherwise, assumes the manipulation of context for meaning. Context, in turn, assumes a level of engagement with practice. So, contextuality “is a relational property that holds between objects and activities” and is specific to a particular activity being performed by the individual or the learning community (Dourish, 2004). Context becomes an interactional rather than a representational issue (2004), one that assumes an active process of meaning-making occurring in a dynamic environment. Disciplinary activity mediated through mobile technology encapsulates these hallmarks of interactional context; it has dialogue, composition, mediation, dissemination, review, and reflection. More

importantly, context, according to Dourish, emerges (or 'arises') from activity; it is "actively produced, maintained and enacted in the course of the activity at hand" (2004). This thesis is drafted presupposing this to be true, that disciplinary activity by graduate students in the humanities in South Korea generates the context in which the activity takes place and that this activity is governed by community practice. In short, learning mediated mobile technology in the humanities is an interactional rather than a representational issue.

This position is reinforced by Tolmie (2001) in his examination of learning in relation to the use of ICT from a contextual basis. Tolmie affirms that technology inherently affects context and that affect in turn affects other disciplinary activities taking place, an interactional cycle or evolution of coming to know. This, as Tolmie points out, has considerable relevance to studies of technology use in higher education especially at the postgraduate level. Postgraduate students are assumed to be, for the purposes of this thesis, more independent than their undergraduate equivalents and, as such, have greater freedom in choosing which technologies to use to advance their learning and how to embed these technologies into their disciplinary processes of meaning-making (Tolmie, 2001). This freedom in turn creates a greater variability in the results of research projects on technology use in higher education. Other variations might emerge from non-technologically derived practices, whether independent or social, formal or informal, disciplinary or interdisciplinary. It is important, as Tolmie suggests, to avoid seeing these variations as 'noise' to be stabilized or removed, but rather as an opportunity to improve meaning-making or disciplinary practice in a mobile technology context.

It is also important, as this thesis attempts to do, to broaden the definition of context to include technology, process, engagement, and subsequent meaning-making in order to see mobile technology as an agent in a larger process of coming to know. This broader definition of context also allows this research to identify the changing practices of the humanities in South Korea emerging from this complex interplay between technology, context, and activity.

Defining Mobile Learning

Before plunging into a working definition of mobile learning, we must be clear that mobile learning is consistently evolving. It is an evolving process of coming to know for the research community as well as the community being researched. Earlier definitions of mobile learning were generally technologically-oriented or deterministic (Kukulka-Hulme et al. (2005), or even positioning mobile learning as an extension of e-learning (Quinn, 2000 & Traxler, 2005). These proved insufficient for the evolving context and practices of mobile learning as they emphasized the technology or the location and not the fluid social practices emerging from these contexts (Roschelle, 2003).

A more useful definition of mobile learning for this thesis is presented by Sharples (2007); in this definition, mobile learning is positioned as "the private and public processes of coming to know through exploration and conversation across multiple contexts, amongst people and interactive technologies." It is this movement through multiple contexts that the mobility of mobile learning emerges. As Sharples et al

(2007) suggest:

“We learn across time, by revisiting knowledge that was gained earlier in a different context, and more broadly, through ideas and strategies gained in early years...we move from topic to topic, managing a range of personal learning projects, rather than following a single curriculum”.

In this definition, the mobility in mobile learning can be both material and cognitive.

This cognitive mobility is encapsulated in Kress and Pachler’s (2007) notion of habitus. Habitus refers to the “the life world of the individual framed both as challenge and as an environment and a potential resource for learning” (2007). In viewing learning through habitus, every space has the potential to be a learning space when viewed appropriately. Within this transformation of space to learning space, we witness the mobility in mobile learning. In other words, “that which is mobile is not knowledge or information, but the learner’s habitus” (2007).

Kress & Pachler would argue that habitus is being transformed constantly and therefore has left the learner “constantly mobile, which does not refer, necessarily, to a physical mobility at all but to a constant expectancy, a state of contingency, of incompleteness, of moving toward completion, of waiting to be met and ‘made full’”. The answer to ‘who is mobile?’ is therefore ‘everyone who inhabits the new habitus’” (2007). Mobile learning, when defined as a learning state of expectation, contingency, and approaching (but never reaching) completion, is useful for exploring the material and cognitive movements through a mobile context for disciplinary participation and understanding.

This positions mobile technology as a tool in the larger process of coming to know across multiple contexts. It provides a foundation from which to observe engagement and interaction across mobile spaces and how that mobile activity is then siphoned back into other learning spaces. Without this broader definition of mobile learning, it would be difficult for this thesis to establish how meaning is made in the humanities in South Korea across the contexts of (mobile) technology, disciplinary activity, formal & informal spaces, and individualized & socialized states of interaction. This thesis works under the assumption that the mobility in mobile learning is both a cognitive and material state of being.

In summation, mobile learning as defined in this thesis will assume the following:

- Learning that occurs across multiple contexts, amongst people and interactive technologies (Sharples et al, 2007).
- Learning that encapsulates public and private processes (2007) and high and low states of transactional distance (Park, 2011); activity will flux between individualized and socialized states of activity with oscillations towards and away from the university as ‘center’ of learning.
- Learning that is mobile in both material (physical) and cognitive form; the transformation of habitus makes visible the mobility of cognitive activity (Kress & Pachler, 2007).

- Learners that “artfully engage with their surroundings to create impromptu sites of learning” (Sharples et al, 2007); these sites of learning relate to Kress & Pachler’s transformation of habitus.

With this working definition of mobile learning, this thesis attempts to broaden the range of technology employed by learners to make meaning in mobile scenarios. Technology that can be employed for mobile learning can be technology that assists in the completion of tasks (Task Model as proposed by Taylor et al, 2006), that provides evidence of communication & dialogue or that makes evident disciplinary engagement (through composition, for example). Technology that assists the learner in transforming their habitus into a learning space is willfully appropriated as mobile for the purposes of this thesis. As such, this would include laptops as well as the more traditionally mobile devices such as tablets, smartphones, SMS phones, MP3 players, and GPS devices. While this does not traditionally conform to the earlier, more technologically-focused definitions of mobile learning (Kukulka-Hulme et al., 2005; Quinn, 2000; Traxler, 2005), it does align itself with the use of technology as a tool in the process of coming to know (Saljo, 1999) and as a means of transforming habitus into mobility of material and cognitive processes (Kress & Pachler, 2007).

Park (2011) on Transactional Distance and following the participant through their learning spaces

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Current State of Mobile Technology use in Higher Education in South Korea

Mobile Technology Use in the Humanities in South Korea

The disciplines that comprise the humanities in higher education in South Korea and that will be reviewed in this thesis are Language, Literature, History, Cultural Heritage, Archaeology, and Korean Studies. Fine arts is considered outside the scope of this thesis, yet there is a blurring of boundaries between the humanities and the Fine Arts, a process long since mediated by ICT (Sedelow, S.Y., 1970). This thesis will draw from the mobile experimentation of the Fine Arts (Raptis et al, 2005), but not directly from their ontological and epistemological line of inquiry.

For the humanities, this thesis is looking at the use of mobile technology for graduate students for performing disciplinary activity, whether informally or formally. This disciplinary activity will be expanded upon in subsequent sections of the Literature Review, but first it is important to consider the distinctions between formal and informal use of mobile technology by graduate students in the humanities as this oscillates repeatedly between high and low interactional states, socialized and individualized states (Park, 2011) and informal and formal states of activity.

Formal use of mobile technology will be defined as use that directly relates to the engagement with or completion of formalized disciplinary activities, such as information retrieval and analysis (lectures, research), knowledge construction (essay writing, multimedia creation, publishing/posting), and peer interaction (faculty/student feedback and communication, formal discussion boards, peer

review, collaborative projects). This definition specifically excludes mobile use for university administrative functions. This formal activity sits within the high transactional distance categorization, yet graduate students oscillate between socialized (discussion, peer review) and individualized (essay writing, research) states of activity to enact it. All the universities in this study have developed mobile applications that account for some measure of both socialized and individualized activity, all with high degrees of transactional distance.

Informal use of mobile technology will be defined as use that indirectly supports, or runs parallel to, the engagement with or completion of formal disciplinary activity. Informal use can be categorized as low transactional distance activity, meaning there is limited formal contact between faculty or university and student. This informal use can oscillate between socialized (social media, peer discussion, informal study groups, sharing, posting, etc.) and individualized activity (data capture, media creation, reflective activities, informal writing/blogging). There are numerous mobile learning examples encompassing informal use, including social media and informal, student-designed mobile applications supporting university activity at the Korean universities involved in this study (informal study groups, language learning, mentoring and club activities, etc.). Mobile technology used for learning, it is important to note, will perpetually fluctuate between these informal and formal use cases in a larger system of meaning making in the humanities, a process of 'coming to know', a process whereby meaning is constructed through the use and mastery of a number of different tools, technological, intellectual, and physical (Saljo, 1999). It is the explicit goal of the research question involving graduate student participation in the humanities in Korean universities to follow the graduate student through this larger system of 'coming to know.'

The vast number of informal social media mobile applications, those not specifically designed to support formal learning in the humanities, but that can and are used to support learning, precludes an exhaustive exploration of these in this thesis. South Korea has a long and complex history of social media use by university students, but there are attributes of that use that reflect a particular cultural approach to engaging with social media (Kim, Sohn, Choi, 2011). Korean social networks tend to be much smaller (1/5 the size) than their American counterparts and their motivations for participation (social support, some information seeking, less casual relationships) speak to a close-knit social network that reinforces the offline one (2011). Learning takes place in these mobile social networks, but it is learning being filtered through an intimate group of confidantes engineered for social support. Mobile learning in social media by Korean university students, being designed primarily for social support from an intimate group of peers, does not overtly support the completion of formal disciplinary activities, but rather reinforces the resiliency needed to complete them. As such, this thesis will focus on social media applications only when it directly relates to discussion, composition, and dissemination whether media or text-based. This social media will most likely become visible in the artifact submission data collection point or in the self-reflection prompt designed to account for the learning practices of that artifact (discussed further in the methodology section).

Blogs represent a significant portion of the composition/writing activity taking place

in mobile environments among graduate students in South Korea, with over 40% of the entire Korean population operating a blog (with varying levels of activity) and over 20% contributing to blog-based discussion forums, numbers that expand when focusing on the age ranges that accompany most graduate students (20-29, 30-39) (Global Web Index, 2011). One such example of a blogging tool is CyWorld, a blogging platform and social environment. CyWorld illustrates the oscillation between individualized and socialized activity by providing both public and private spaces for communication and composition (Chun et al, 2008 & Haddon, Kim, 2007). A further example is Daum (다음), an internet portal with a blogging environment with considerable market penetration; Naver Blogs (네이버 블로그) presents a third popular option for graduate students. All of these blogging platforms have robust mobile applications to support their use. Blogs in particular are popular with graduate students as a means of disseminating research and developing trusted social and professional networks, particularly important in the Korean context; further, they are especially efficient conduits for information to the larger community (Young & Park, 2012). Blogs presented in both Daum, Cyworld and Naver, represent an important tool in a larger process of coming to know through mobile technology, a process that involves the ability not only “to use a particular set of tools in productive ways” (Saljo, 1999) but to use those tools to engage with and disseminate research to a larger informal academic community. As such, social media composition tools, blogs in particular, must be considered together in conjunction with official university mobile offerings when analyzing graduate student activity in the humanities.

Mobile Learning Examples in the Humanities: Categories and Characteristics

Language

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Literature, Composition & New Media

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History & Cultural Heritage

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Theoretical Framing

This thesis employs the theories of Community of Practice (CoP) and Multimodality to analyze the structure of graduate student participation and activity as well as the modes of meaning-making employed in the humanities, respectively. These two theories, taken together, form a framework for understanding the bounded elements of the particular communities of practice (domain, practice, community) engaged with by participating graduate students, the bounded elements of humanities practice in higher education (modes of knowledge construction, discussion, verification, and dissemination), and the learning activity by graduate students, particularly in mobile technology. A community of practice is, by Wenger’s own definition, “formed by people who engage in a process of collective learning in a shared domain of human endeavor.” More specifically, “A community of practice is a set of relations among persons, activity, and the world, over time and in relation

with other tangential and overlapping communities of practice” (Lave, Wenger, 1991). The disciplines of the humanities exhibit the characteristics of these two definitions.

Community of Practice theory will be used to directly answer the research question on how graduate students in the humanities participate in their chosen discipline by revealing what is expected of them by their community of practice; these expectations are formally codified in formal curricula and informally expressed through peer & faculty feedback (social practices), social communities, and technology use. Community of Practice theory also speaks to answering the research question on how graduate students use mobile technology to support their learning needs by revealing what the object of that learning is as defined by the discipline. This can include content or domain knowledge, procedural knowledge (processes specific to the discipline), skills acquisition (writing, disseminating) tool use (in this instance, mobile technology), and social support or networking.

Further to this, Community of Practice was chosen as the primary theory through which this mobile activity in the humanities would be analyzed based on the following:

Humanities as practiced in Higher Education as Bounded Space

Community of Practice establishes the criteria of domain, practice, and community as necessary ingredients for functional communities. It is important to note that all exist in the humanities as practiced in higher education in Korea. The domain in question is the disciplinary focus on knowledge as constructed in the humanities and, to a lesser degree, the formal institutional affiliation. All participants in this community of practice are bound to these domains (to greater or lesser degrees of intensity). The community aspect of Community of Practice is very evident in the humanities in the modes of interaction, the collaboration, and the communal effort towards both greater individual participation and community resilience. Much of this is made evident through an analysis of relationships and roles within the community. Much of it is made evident through knowledge construction and accepted modes of interaction around the content (Anderson & Day, 2005; Kim, H.J., 2011). Community of Practice addresses all of these factors, but most importantly it positions the individual within a system of activity (a Community of Practice), one that this individual governs and is governed by. It contextualizes activity in this formalized environment. However, it will be important to balance this the bounded space of the community with the participant’s movement through it and through the other communities that the participant might interact with to generate meaning in a disciplinary context.

Communities of Practice as Transparency: Production and Technology

Multimodality is employed in this thesis to identify the modes and construction of knowledge that is employed in the humanities for meaning-making. Although Community of Practice will form the vantage point from which this theoretical analysis is conducted, Multimodality will identify the communicative elements employed by graduate students to construct meaning in mobile spaces. These materials (or semiotic resources) and their composition (or assembly) will

demonstrate one context in which meaning is constructed in the humanities by peripheral participants (graduate students). The submitted mobile artifacts (see Methodology section) can employ multiple forms of media simultaneously to present meaning, meaning specific to this Community of Practice. Multimodality, it is hoped, will reveal the participant's movement through informal & formal, individualized and socialized states of activity by making visible the 'materials' of that meaning-making, namely the different forms of media being used and their assemblies into artifacts.

The use of Multimodality is in keeping with the general broadening in the humanities of what constitutes accepted practice and evidence, thereby loosening the traditional authority of text (Bowen & Kinnear) and shifting towards the visual (Kress, 2000). Multimodality, as defined by Kress (1997), refers to the nature of language and communication being represented through different modes. Meaning as presented through these modes is highly contextual and social, specific to the culture at work in the environment. Kress establishes that all communication is multimodal and that each mode used to present knowledge has specific affordances and limitations. Seeing communication and meaning-making (disciplinary or otherwise) as *inherently* multimodal lessens the exclusive authority of text and broadens knowledge construction across a significantly increased plane of activity. It is across such a broad plane of activity that this research is attempting to follow the participant: from formal to informal, from individualized to socialized states of activity.

Multimodality presents a useful vehicle for identifying, or even making visible, the 'materials' of participation for graduate students in the humanities in Korean universities. As it relates specifically to the research questions in this thesis, Multimodality provides a framework for identifying

- How graduate students in higher education use mobile technology to support their learning practices
- What work is being produced (or more specifically, assembled) in mobile technology in the humanities
- And what these artifacts, media or use practices illustrate about the participatory process of graduate students in Korean universities.

While Community of Practice theory will help bound this exploration in a particular community with a particular set of practices, Multimodality will be used as well to make visible the means in which graduate students oscillate towards and away from the Community through informal and formal, socialized and individualized states of activity. These two theories, taken together, should prove valuable in analyzing the data generated by this research study as outlined in the following section on methodology.

A Discussion of Methodology

Note about Methodological Issues specific to mobile learning

The overall aim of this research is to determine the particulars of graduate student

participation in the humanities in higher education in South Korea through mobile technology, how mobile technology is used as part of a larger process of 'coming to know' (Saljo, 1999). As such, methodologies chosen to observe, collect, and analyze data related to this process of 'coming to know' through disciplinary process must reflect the fluidity of student engagement in terms of transactional distance (Park, 2011) and movements between independent and socialized activity. Further, the chosen methodologies need to span formal and informal learning, acknowledging the seamless learning that occurs when students engage with mobile technology across informal and formal strands of learning and across different disciplinary contexts (Looi et al, 2009 & Sharples, 2006) and across fluid learning environments (Taylor, 2007). This is methodologically challenging. However, the theories employed in this thesis, Community of Practice theory and Multimodality, enable a vantage point for observation of this shifting environment. It is through community practice and social negotiation of meaning that activity becomes observable and analyzable.

Methodological Adherence

The methodological techniques used for this research embrace collecting qualitative data demonstrating the following:

- Engagement through mobile technology with the graduate students' discipline, informally or formally
- Graduate student participation across formal and informal, individualized and socialized activities of meaning making, paying particular attention to the oscillation between different states of being consistent with seamless learning. Mobility in this context, "is not an exclusive property of the technology, it also resides in the lifestyle of the learner, who in the course of everyday life moves from one context to another, switching locations, social groups, technologies and topics" (Vavoula & Sharples, 2009)
- The creation and use or potential use of multimodal artifacts for disciplinary participation. These artifacts are often referred to as multimodal ensembles, digital essays, digital compositions, etc. For the purposes of this research study, they are meant to encapsulate any combination of text and/or media generated primarily through mobile technology that presents meaning informally or formally for the discipline. These can range from a sound recording to a collage to a linear essay or post with embedded media.

As this research is less concerned with assessment, but rather process and outcomes, it will be drawing on Vavoula & Sharples (2009) considerations for evaluating mobile learning, namely how to capture and analyze learning in context, with consideration for learner privacy. This context will be established methodologically in this research by collecting narratives of participation in a disciplinary context, as well as collecting created artifacts for analysis. Further, this research is attempting to "look beyond measurable cognitive gains into changes in the learning process and practice" (2009). The chosen methodologies attempt to identify and theorize on these changing practices by following the graduate student across informal and formal channels as they create meaning in a disciplinary context.

Research Design and Methodology

The methods chosen for this research support a qualitative methodology for the purposes of answering the research questions on mobile technology use and graduate student participation in the humanities. The methods for data collection are presented immediately following this section, with justification as to the methods of their selection.

The methodological approaches employed for this research design borrow liberally from mobile media methodologies employed in Korean-specific studies of emerging mobile media practices. The design employed in this research design is consistent with many of the emerging media methodologies in Korea most evident through the work of Hjorth (2013, 2009, 2008) in her work on mobile media practices in South Korea; Haddon & Kim's (2007) work on the emerging practices of Korean mobile use and social media; and Goh et al's (2009) work on emerging mobile sharing practices in Korea. These studies all approximate a process of initial data collection (interviews) followed by an observation of media practices (or analysis of media compositions) with consistent activities eliciting participant self-reflection, most commonly though mobile diaries collected over the course of the study (Haddon & Kim, Goh et al). The research design employed for this study approximates these three practices of interview, observation & analysis, and participant self-reflection.

This research design directly references the research questions being addressed and is being appropriated for the purposes of this thesis to make visible the process of disciplinary participation and composition in the humanities through mobile technology in the universities of South Korea. This study will attempt to make visible graduate student participation across formal and informal, individualized and socialized activities of meaning making in a disciplinary context. To return to the work of Vavoula & Sharples (2009) mobility in this context, "is not an exclusive property of the technology, it also resides in the lifestyle of the learner, who in the course of everyday life moves from one context to another, switching locations, social groups, technologies and topics." It is my belief that this research design will reveal that this mobility is not applicable only to technological or social contexts, but rather to disciplinary participation, the type pursued by these graduate students. An effective research design would need to account for these mobilities across informal and formal boundaries, across solitary and social states of activity.

This study is being conducted with a relatively small number of graduate students in the humanities (20). Each participant will be interviewed and asked to provide records of their media practices supporting their disciplinary work in mobile settings (media artifacts or compositions that were, at least in part, composed in mobile technology). These artifacts could be used to triangulate, to some degree, the findings from extracted from the interviews. Participant self-reflection will be used to make visible (to both the researcher and the participant) their media practices and their use of mobile technology towards disciplinary participation an understanding. Further detail is provided in the following on each of the three chosen methods.

Narrative Interviews

Since the research questions focus on graduate student participation in the humanities, formally or informally, it will be important to construct the narrative of what that participation looks like and the oscillations that occur within this context between formal and informal practices, and individualized and socialized activities with high and low transactional distances (Park, 2011). To coherently gauge this participation and these oscillations, it is important to provide the students a voice for establishing their identity in these movements and activities. This research does not presuppose a particular a level of receptiveness to or use of mobile technology, but rather attempts to gauge that receptiveness based on the individual transcripts and subsequent narrative analysis (Robson, 2002). The narrative interviews are designed to identify and map the processes, activities, and reflections that graduate students encounter as they move through their graduate education. They also are designed to let data emerge from the transcripts that might demonstrate the mitigating circumstances that affect participation in the humanities, such as personal or family commitments.

The narrative research interview was constructed specifically to allow the participants to guide the discussion and to compose narratives of meaning based on experiences with mobile technology and their association with the humanities. Interviews in this context are viewed as speech activities where meaning emerges from within the interaction of interviewer and participant (Gumperz, 1982). A less rigid interview format was deemed necessary to elicit emotional context, a context that would help establish trust in the interview process as well as authenticity in the responses. The interview schedule was specifically constructed to avoid rigidity; Mishler points out that rigid question construction dictates “acceptable” responses (1986, 49). It is the assumption of this research, that the context of meaning making in the humanities can only be naturally broached through open-ended questions and a relinquishing of authoritative control on the part of the interviewer. This is done primarily to answer the research questions based on participation in the humanities.

The interview will last 30-60 minutes, depending on the data being generated and includes an introduction that specifically states that all answers are appropriate, the participant is explicitly encouraged to speak to whatever length suits them, and several probes have been identified for eliciting further narrative construction. These probes are designed with the understanding that the actual wording of the questions aren't as important as the level of receptiveness and emotional attentiveness shown by the interviewer (Riessman, 2008).

One concern I have over the use of the narrative approach is the Korean cultural context, namely how the authority imbued in the interviewer/research and interviewee/student relationship will affect responses or possibly stunt the construction of individual narratives. This interview data will be triangulated with other methods of data collection (artifact analysis and mobile media use), but it is important to establish an appropriate context for these interviews to take place, one where the graduate student feels empowered to establish their narrative. One such method for empowering graduate student participants would be to use peers as

interviewers; the peer interview approach has been useful in particular circumstances where complexity might otherwise stunt an authority/teacher-led discussion (Hamilton, 1996).

The pilot project will employ such a method where a graduate student enrolled in a formal program of translation (part of the humanities in the Korean higher education structure) will act as the interviewer, thereby allowing a peer dynamic to emerge during the course of the narrative interviews. This peer dynamic will, ideally, lead to a degree of authenticity that helps elicit the autobiographical-self, how the participant wants to position themselves in terms of their use of mobile technology and their participation in the humanities (Riessman, 2008). Since both the interviewer and the participant are “active participants who jointly construct narrative and meaning” (Riessman, 2008), I felt it prudent to establish a peer dynamic to allow for understandings to emerge in an appropriate Korean context. As the researcher, I will initiate and obtain informed consent from all the participants, answering any questions they might have regarding the research project and their roles in it. Then, I will schedule narrative interviews for the participants and the graduate student interviewer along with myself; the results will be analyzed after the pilot to determine the validity of the interview schedule in answering the research questions as well as the appropriateness of this peer interview format.

Artifact Analysis

Participants will be asked to make available an artifact (media or otherwise) created in mobile technology to support disciplinary participation or understanding. This artifact can be mobile media, a textual composition, a dialogue-based activity, a collaboration, or otherwise. These artifacts may be an image with a textual caption, a collage, a video or audio recording, even a screenshot of a mobile environment used to generate disciplinary understanding. It is the belief of this researcher that the particulars of these artifacts will be fleshed out during the narrative interviews through the discussion on the current mobile and media practices of the participant.

The use of mobile media artifacts is consistent with emerging methodologies employed for determining the nature of disciplinary participation in an online context (Bayne et al, 2013); in this particular instance, interviews were immediately followed by a submission of a multimodal (or digital) ‘postcards’. For Bayne et al, the postcards were visual, textual, and auditory compositions; participants were contextualized in their activities by being asked to reference their study space. For the purposes of this thesis, this postcard approach is defined through the use of mobile technology and through the contextualization of disciplinary understanding and participation. Participants are free to submit compositions that speak to their understanding in a disciplinary context through mobile technology, however broadly or narrowly defined.

For the purposes of this thesis, the submitted artifacts will be used to frame the subsequent reflective exercises outlined in the following section. Multimodality will be employed to make visible the salient points of these artifacts, their use as disciplinary communication, and their signaling of disciplinary participation. This will

be based partly on the work of Bezemer & Kress's exploration of writing in multimodal texts (2008). They will also be analyzed according to their salient characteristics (as made visible through Multimodality), their emerging media practices and use for participation in a disciplinary context (as made visible through Community of Practice theory).

Participant Self-Reflection

Further to these narrative interviews and submitted artifacts, there will be reflections conducted at intervals during the research process with the participating graduate students. These reflections will be requested from the participating graduate students in whatever medium is convenient to their current practices (social media, textual, or otherwise) and will attempt to gauge graduate engagement in the humanities and the use of mobile technology to mediate that engagement. The submitted artifact will be used to contextualize this reflection on mobile use and mobile media practices. This data will be analyzed in conjunction with the narrative interview transcripts and the submitted artifacts in an attempt to extract answers to the research questions of how mobile technology is being used by graduate students in the humanities, what is being produced there, and what participation in the humanities looks like across all states of activity (informal, formal, individualized, etc.).

For the purposes of the pilot, this will involve two reflections to triangulate the findings from the one narrative interview and one submitted artifact. One question will be delivered to the participants asking them to reflect on one granular aspect of disciplinary practice or mobile use through their mobile technology; this question is designed to provide a less rigorous means of participation and will be employed, if necessary, in the pilot study to determine its use in answering the research questions. If considered useful, it will be employed at intervals throughout the larger research study. The second reflective question will be a prompt discussing their submitted artifact. This prompt will attempt to elicit the design, mobile, and media practices used to construct the artifact. Subsequent prompts, if warranted, will attempt to elicit reflection on how their practices have changed in light of this exercise. It is believed that these self-reflection activities will sufficiently bookend the narrative interviews in their investigation of mobile use and media practices, as well as their participation in their discipline both formally and informally.

This participant self-reflection 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. The participant self-reflection employed for this research study are essentially a culminating reflective trigger inserted as a bookend to the research study. They provide an opportunity for the participant to make conscious (for both the researcher and themselves) the media practices they currently employ to make meaning and how they participate in their discipline. These reflective prompts or triggers have been used in research studies involving technologically-mediated learning, including the previously mentioned Verpoorten et al (2012) in their study of reflection in online courses, Holland & Purnell (2012) in their study of reflective prompts with students of Information Systems, and Pan &

Dominguese (2012, March) work on digital storytelling for reflection.

The chart below provides an overview of these three data collection methods and the number of submissions each participant is expected to make for the main research study. The pilot project is being undertaken with six participants. As mentioned in the timeline of activities, this research design will be evaluated and redesigned, if required, based on the generated data from the pilot project. Please note that the pilot project is currently underway as of the time of this writing (September 19, 2013), but not enough data has been generated to subject it to analysis ahead of the submission of this upgrading document.

Research Method	Narrative Interviews	Mobile Artifact	Self-Reflection Prompts
Number of Participants	20	20	20
Number of Submissions per participant	1	1	1

Please note that it is assumed, and indeed critical for the artifact and self-reflection prompt methods, that the same participant is performing all three activities. However, it is possible that participation in the narrative interview stage will not lead, based on the data being generated or the willingness of the participant, to participation in the remaining two stages of data collection. Such contingencies will be addressed as the need arises through an evaluation of the sample size (adding more participants), or the necessity of connecting the three data collection methods through one participant.

Research Design connecting to Research Questions

The research design for this thesis is engineered to specifically address the research questions posed as follows:

1. How do graduate students in higher education in the humanities in South Korea use mobile technology to support their learning practices?
2. What mobile artifacts (compositions of text or multimedia designed to make meaning for graduate students in their disciplines) are being produced in mobile technology in Korean higher education in the humanities?
3. How do graduate students engage in the participatory process in the humanities in South Korean universities?

Each of the methods employed in this research design, the narrative interviews, the participant self-reflection, and the submitted artifacts, are designed to make visible the process of meaning-making for graduate students in the humanities in Korean universities, both overall and when mediated through mobile technology. All of these methods speak directly to each of the research questions. They all, in conjunction, create a context for analyzing the participants' "life worlds, their agencies, and socio-cultural and media practices" (Pachler, 2010). They all further

produce evidence of the larger graduate student continuum of participation, that ceaseless movement between informal and formal states of learning, through individualized and socialized states of activity, with high or low degrees of university transactional distance (Park, 2011).

A chart is provided in the following that outlines how these methods answer the research questions, what data is being generated in each method, and how that data will be analyzed. This is followed by further discussion on the intersection of the research design and the research questions.

Method	Narrative Interviews	Mobile Artifact	Self-Reflection Prompt
Data produced	Processes of participation, expectations, formal and informal learning practices, technology use to support learning, motivations for participation	Media practices, technology use, engagement with the discipline, novel forms of composition and participation, scope of informal and social learning practices	Media practices, participant reflection on what submitted artifacts signal about their mobile technology use and about participation in their discipline.
Research question it answers	#1, #3	#1, #2, #3	#1, #3
Theory used to analyze data	Community of Practice: identify range of communities participant engages with to generate meaning; processes, activities, technology use signaling participation	Multimodality: to identify salient features of mobile artifacts (materials used, modes, compositions) Community of Practice: how these artifacts conform or expand community practice, what technology use and composition reveal about legitimate peripheral participation	Community of Practice: to reveal media practices and their use in community participation; to link media practices to a process of centering in the community of practice from the periphery Multimodality: to link media and modes generated

			from the artifacts to process and practice
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The narrative interviews speak directly to two of the research questions, namely how graduate students in Korean humanities programs use mobile technology to support their learning practices and how they participate in their discipline. These narrative interviews are designed as ‘narrative enquiries’ (Riessman, 1993) where the graduate students are allowed to follow their own narratives of participation in these humanities’ communities and how technology mediates that participation. The narrative interviews are designed to identify and map the processes, activities, and tools that graduate students encounter as they move through their graduate education.

The narrative interviews are further designed to generate an understanding of the range of communities the participant engages with to generate meaning in their discipline. Graduate students participate in their humanities’ community to generate meaning “in relation with other tangential and overlapping communities of practice” (Lave, Wenger, 1991). These can include resiliency-building Korean social networks (Kim, Sohn, Choi, 2011), informal study or peer groups, or other offline or online communities of activity. Identifying this range of activity will provide a bounded space in which to begin mapping the participant’s movement through formal, informal, social, and individual states of activity (Park, 2011). The narrative interviews also are designed to let data emerge from the transcripts that might demonstrate the mitigating circumstances that affect participation in the humanities, such as personal or family commitments. Although these mitigating circumstances are not specific to this research, they will help reveal the scope of activity taking place in informal learning spaces.

While the focus of this research is not the issues of technological acceptance, it is important to identify in the narrative interview the use of mobile technology for learning overall and for participation in the humanities to answer the first research question on how mobile technology supports learning practices. It will also establish the foundation for the second stage of data collection, the submission of the mobile artifact. Participants will be asked at the conclusion of the narrative interview to submit an artifact of their participation in the humanities generated through mobile technology.

The mobile artifact speaks to how participants use mobile technology to support their learning practices (the first research question), what is being produced by Korean graduate students in the humanities through mobile technology (the second research question), and what that production reveals about their participation in their discipline (the third research question). It also speaks to the definition of mobile learning advanced in this thesis, a precondition of which is that learners “artfully engage with their surroundings to create impromptu sites of learning” (Sharples et al, 2007). Evidence of creativity in these artifacts, if present, will reveal a

further movement from the peripheries to the center of the disciplinary community of practice (Lave & Wenger, 1991). Multimodality will make visible the 'materials' of that meaning-making, namely the different forms of media being used and their assemblies into artifacts. These 'materials' (or semiotic resources, as defined in Van Leeuwen, 2004) will be analyzed as a part of the graduate student's participation in the humanities as set of tools and processes used to generate meaning, a larger process of coming to know (Saljo, 1999).

The self-reflection prompts are designed explicitly to identify the media and technological practices the participant engaged with to create the artifact and what those practices reveal about their participation in the humanities. As such, they are critical to answering the research questions of how graduate students use mobile technology to support their learning practices (first research question) and how these graduate students engage with their discipline. Students will be administered a reflective prompt through mobile technology and asked to reflect on how they generated the mobile artifact. Participants will be able to submit their responses through a range of methods, either through an audio response, a textual response, or even through further multimodal composition.

Collectively, these three data collection methods answer the three research questions by providing a map of activity across communities, across formal and informal states of learning, across individualized and socialized states of activity, across a range of tools and through a range practices. The end result will be a visible representation of how graduate students in Korea use mobile technology to support their learning practices, what is being produced in mobile technology specifically in the humanities, and how students engaged in the participatory process of their discipline. This is, to my knowledge, the first study in Korea employing this research design towards answering these research questions focusing on the use of mobile technology and graduate student participation in the humanities.

Ethical Concerns

The research design involves data collection from graduate students in the humanities across two Korean universities. There will be 6-8 participants for the pilot study and 20 for the main research study, all graduate students in the humanities selected from two universities in Seoul, Korea. The generated data will be anonymized. Formal permission will be requested and received before beginning both the pilot and the main research study.

Reporting will be carried out in the body of the thesis and transcript data will be made available upon request. Data from the interviews will be transcribed and then translated (as it will be in Korean) and both (anonymized) versions will be made available upon request from the Institute of Education. Dissemination of the research findings will take place through this thesis, through relevant journals, as well as through a series of field notes, observations, and reflections on my own website.

Before analyzing the specific guidelines and their specificity to this research, it is important to consider the broader ethical issues involved in mobile and qualitative research. Evaluating mobile learning presents ethical problems “beyond those routinely associated with the study of people and technology, of ensuring their safety and informed cooperation” (Vavoula & Sharples, 2009). These unique ethical concerns are accelerated by the nature of data collection itself, which extends beyond the classroom and into the lived world itself. As such data collection can involve evidence of footprints through that ‘lived world’. This can include logs of user interaction, time and location and self-reports from users (2009). As Vavoula & Sharples rightly suggest, these qualitative and quantitative elements suggest a conflation of objectivist and postmodern approaches that might prove ethically challenging.

The data being collected (interviews, self-reflection, and mobile artifacts) are intended to make visible participation in mobile meaning-making and participation in disciplinary activity. Yet, there is an issue of the reliability of evidence in that the participant can craft responses, artifacts, and reflections that speak more to their identity (projection of self) than to their authentic engagement with either mobile media, their discipline, or both; in short, they can project a response bias (Sandström et al, 2001). This is an ethical challenge as these self-projections might reveal characteristics or activities damaging to the graduate students’ participation in their chosen field. An adherence to anonymity and privacy in all contributed data will hopefully serve to mitigate this possibility. This relates to the associated universities as well; a further ethical concern is the juxtaposition of this research analyzing informal and formal mobile learning use with more government-led top-down approaches to mobile learning to support disciplinary practice in Korean universities. As these universities are required to comply with government directives concerning the use of ICT, it will be important to anonymize the institutions so that this research will not be disadvantageous to the university when defending their ICT use.

A further ethical concern is the submission or linking to evidence in “the open.” There are two data points that have with them the possibility of a lack of privacy. These data points are the self-reflections conducted at multiple intervals over the course of the study and the submitted artifact. Participants in this study will be given clear instructions and background information on the nature of the study and their participation in it. In an attempt to lower the bar to participation, I have made these two data points open in terms of where the evidence is deposited. If the graduate students have the inclination, they are free to post their materials to their own sites or blogs, or they are free to post these materials anonymously (either directly to me through email or through an anonymous site). This openness in terms of data collection is a further attempt to extend the authenticity of the narrative interviews into this secondary environment of data collection. It allows participants, if they so desire, to associate this work with their academic identities and to deposit and disseminate that work from an authentic context (their own site). However, this is an optional characteristic of participation; all participants will be presented with the option (established in the information sheet as the default option) of submitting their work anonymously. This ‘openness’ in terms of data collection mitigates the

ethical issues involved in ownership of material collected across different contexts (Traxler & Bridges, 2005) and the rights of participants to know when and how they are being monitored. All of these points will be succinctly and clearly presented in the information sheet.

The types of data being collected, narrative interviews, self-reflections, and submitted artifacts, make the participants, to some degree, co-creators or co-researchers in this research process (Vavoula & Sharples, 2009). As such, I have an ethical responsibility to ensure that they themselves are able to follow the ethical guidelines as constructed by BERA for conducting ethical research. This requires clear explanation in the information sheet and consent form. Consent is also an ethical issue especially in the context of mobile learning. Definitions of what mobile learning is and how it is manifested still, after over a decade of research, vary considerably. As such, it is difficult to clearly define the mobile learning context being observed, the proposed outcomes, and the relevance of the data collection points to the overall research questions. This all directly affects informed consent. For the purposes of this research, informed consent will be established through the succinct articulation of the overall aims of the research project, the research questions, the data collection points, and how those points relate to the research questions. This will be followed by a clear presentation of what the participant will be expected to do in this context and their rights throughout the process. BERA's Guideline 14 (2011) for Openness and Disclosure articulates the need for transparency clearly through the avoidance of "deception or subterfuge", both of which have consciously been avoided in this design.

These ethical concerns will be mitigated through a strict adherence to BERA's Guidelines for Ethical Research (2011), specifically to the following conditions:

- Prior informed consent will be given by all participants before participation with clear indication on what data will be collected and how the data will be used. At this stage, all participants will be asked for permission to analyze media artifacts as part of the secondary data analysis.
- Further, all participants will be informed of their right to withdraw from the research at any stage they deem fit. Participants will be given progress reports as to the research during the data collection process, as well as at intervals in the data analysis and dissemination stages.

Above all, anonymizing the participants, the data, the institutions, and the artifacts under analysis will honor the participants' right to privacy.

Conclusion

This research design was created to directly answer the research questions, namely

1. How do graduate students in higher education in the humanities in South Korea use mobile technology to support their learning practices?
2. What mobile artifacts (compositions of text or multimedia designed to make meaning for graduate students in their disciplines) are being produced in

- mobile technology in Korean higher education in the humanities?
3. How do graduate students engage in the participatory process in the humanities in South Korean universities?

Through these research questions and throughout this research design, there is an explicit attempt to link mobile technology to a larger process of coming to know, a process whereby meaning is constructed through the use and mastery of a number of different tools, technological, intellectual, and physical (Saljo, 1999). Mobile technology exists as just such a tool and, for the purposes of this study, is used as both an environment for observation of the particular Korean dynamic, a conduit for creation and participation in the humanities, and an agent in this larger process of coming to know. As this process of coming to know and learning is perpetually producing context (Sharples et al, 2007), this research employs a design that avoids rigidity and emphasizes the individual participant (graduate student) in their ceaseless flow of participation and learning across informal and formal, individualized and socialized states of activity. This research is concerned with how these graduate students make meaning and how that meaning relates to or is derived from participation in a disciplinary community. It is my belief that this research will produce value in both identifying the nature of graduate student participation in the Korean university context, as well as revealing the nature of mobile technology use for learning and what is being produced through mobile technology in the humanities.

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