INDIGENOUS/DIGITAL HETEROGENEITIES: AN ACTOR-NETWORK-THEORY APPROACH

Gino Caesar R Orticio
BA Social Sciences (Sociology and Psychology), University of the Philippines
MA Social and Development Studies, University of the Philippines

Submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

Research Students Centre
Division of Research and Commercialisation
Queensland University of Technology

April 2013
Keywords

Abatan, absence, actant, actor-network, actor-network-theory, ambivalences, affordances, Annemarie Mol, ANT, anti-programs, assemblages, association, Baguio, Bauko, betrayals, blackbox, Bruno Latour, Cagubatan, coherences, cell phone, cell sites, collectif, communication, competencies, complexities, computer, Cordillera, counter-enrolment, Dalit, digital, dislocation, dissidence, eel, enactment, enrol, enrolment, ethnic, ethnography, Facebook, Filipino, formalism, formal design, fractionalities, free association, generalised agnosticism, generalised symmetry, heterogeneities, heterogeneous, hinterland, historiography, human actors, hybrid collectif, hyper-punctualisation, ICT, identity, Igorot, indigeneity, indigenous, indigenous/digital collectif, indigenous people, information and communications technology, intéressement, interests, intermediary, Internet, Internet café, Internet access, Internet access centres, Internet connectivity, irreduction, iTadian, John Law, Kayan, kin, kinship, matters of concern, matters of fact, metrologies, metrological power, Michel Callon, mobile phone, multiple realities, Mountain Province, non-human actors, non-coherences, obligatory points of passage, oligoptic, ontological politics, ontology, network, panoramic, partial connections, Paw-it system, performance, Philippine, Philippines, practice, praxiography, presence, problematisation, punctualisation, sociology of association, sociology of the social, standards, Tadian, technology, telecommunication, telegraph, telephone, translation, uncertainties.
Abstract

Previous scholarships on information and communications technology (ICT) and indigenous people point to different themes ranging from celebrating differences (Longboan, 2009, 2011), increasing knowledge and literacy (Auld, Snyder, & Henderson, 2012; Leclair & Warren, 2007; Sengara, 2005), effecting material gains (Leclair & Warren, 2007; Longboan, 2011), building coalitions across boundaries (Alexander, 2001; Soriano, 2012), promoting community solidarity (Delgado, 2002), enhancing communicative competence (Longboan, 2009; Salazar, 2003; Sengara, 2005) and critical thinking (Sengara, 2005), effecting technical skills (Gorre, 2007; Mizrach, 1999) and organisational competence (Budka, 2009; Vaughan, 2011) as a prerequisite for ICT use and access, and indigenous exceptionalism (Alia, 2009; Glowczewski, 2005). It is argued that the current scholarship is based on the same depictions of what Latour (2005, pp. 181-183, 187-188) describes as “oligoptic” and “panoramic” ontologies, typified as “sociology of the social” (Latour, 2005). As an alternative, the author availed himself of the framework and methods of actor-network-theory (ANT) and applied the data-gathering techniques of historiography and field research techniques, such as semi-structured interviews, participant observation, ethnography, praxiography and personal accounts among the iTadian people of Tadian, Mountain Province, Philippines. The results reveal a heterogeneous indigenous/digital collectif of competing realities striving for relevance and avoiding obsolescence through the process of translation (Callon & Latour, 1981; Latour, 2005, pp. 106-108). By avoiding the ontological pitfalls of the sociology of the social, the ANT approach proved to be more rigorous in data-gathering, which resulted in richer and more substantial descriptions.
Heterogeneities, such as fully-competent mediators, ambivalences, oscillations, noise and non-coherences, are also given equal footing, which are otherwise dismissed as externalities in data. Most importantly, the ANT framework avoided the ‘why’ questions, thereby making data able to be analysed without being overtaken by ontology and ideology.
Table of Contents

Keywords .................................................................................................................................. i
Abstract .................................................................................................................................... ii
Table of Contents .................................................................................................................... iv
List of Figures ....................................................................................................................... viii
List of Abbreviations .............................................................................................................. ix
Statement of Original Authorship .............................................................................................x
Acknowledgements ................................................................................................................. xi

Chapter 1: Introduction ........................................................................................................... 1

Chapter 2: Review of Literature ............................................................................................. 25
Internet and Indigenous People ...............................................................................................26
Mobile Phones and Indigenous People ...................................................................................31
Mobile Phones and Internet Technologies in Philippine Society ...........................................31
Four Main Theses ...................................................................................................................33
  Instrumentality. ...................................................................................................................... 33
  Conditionality. ...................................................................................................................... 35
  Annexation. 36
  Human agency. ...................................................................................................................... 37
Metatheoretical Presuppositions .............................................................................................38
  Oligoptica. 39
  Panorama. 40

The Need to Flatten Contours and Recognise Heterogeneities .............................................42

Chapter 3: Framework and Methodology .............................................................................. 45
Framework ..............................................................................................................................45
  Metatheoretical grounds. ..................................................................................................... 46
  Irreductions. ......................................................................................................................... 49
  Dislocation, performance and enactments. ......................................................................... 50
  Fractionalities and partial connections. .............................................................................. 50
  Ontological politics. ............................................................................................................ 51
  A sociology of translation. ................................................................................................. 53
  Technology and heterogeneities......................................................................................... 56
  The collective and the collectif ......................................................................................... 57
Research Methodology .......................................................................................................... 58
  Three methodological steps. ............................................................................................... 58
  Research design. .................................................................................................................. 59

Chapter 4: Deploying Uncertainties in the Hinterland: A Brief Social History of Tadian, Mountain Province .................................................................... 67

Background ............................................................................................................................ 68
A Cursory Reassembly of Tadian ........................................................................................... 70
  ‘Tadian’ through different texts. ....................................................................................... 70
  Enactments of place-making. ......................................................................................... 71
Pre-colonial Polities ................................................................................................................. 72
  The kadangyan. .................................................................................................................. 72
List of Figures

Figure 1 Mobile phone shown by an elder. Note that the last few numbers were intentionally blurred for privacy ........................................ 119
Figure 2 The Internet Room of MPSPC Tadian ........................................... 134
Figure 3 The entrance to the former Community e-Center ............................. 160
Figure 4 A snapshot inside the Abatan internet shop. ................................... 164
## List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT</td>
<td>Actor-Network-Theory</td>
</tr>
<tr>
<td>CAR</td>
<td>Cordillera Administrative Region</td>
</tr>
<tr>
<td>CEC</td>
<td>Community E-Center</td>
</tr>
<tr>
<td>CICT</td>
<td>Commission on Information and Communications Technology</td>
</tr>
<tr>
<td>DILG</td>
<td>Department of Interior and Local Government</td>
</tr>
<tr>
<td>HTTP</td>
<td>Hypertext transfer protocol</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and communications technology</td>
</tr>
<tr>
<td>ICT4D</td>
<td>ICT for development</td>
</tr>
<tr>
<td>ICTs</td>
<td>Information and communications technologies</td>
</tr>
<tr>
<td>IP</td>
<td>Indigenous peoples</td>
</tr>
<tr>
<td>LCD</td>
<td>Liquid crystal display</td>
</tr>
<tr>
<td>MPSPC</td>
<td>Mountain Province State Polytechnic College</td>
</tr>
<tr>
<td>NSCB</td>
<td>National Statistical Coordination Board</td>
</tr>
<tr>
<td>PC</td>
<td>Personal computer</td>
</tr>
<tr>
<td>SIM card</td>
<td>Subscriber identity module card</td>
</tr>
<tr>
<td>‘Smart’</td>
<td>Smart Telecommunications Corporation</td>
</tr>
<tr>
<td>SMS</td>
<td>Short message service</td>
</tr>
<tr>
<td>UNDRIP</td>
<td>United Nations Declaration on the Rights of Indigenous Peoples</td>
</tr>
<tr>
<td>US/USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>USB</td>
<td>Universal serial bus</td>
</tr>
<tr>
<td>VOIP</td>
<td>Voice over Internet protocol</td>
</tr>
<tr>
<td>WSIS</td>
<td>World Summit on Information Society</td>
</tr>
</tbody>
</table>
Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signature: [Signature]
Gino Caesar R Orticio

Date: 18 August 2013
Acknowledgements

This work is a meaningful life journey for me. It is a result of four years of scholarly work in both theoretical and field research. It is with profound gratitude and pleasure that I acknowledge the following people who were with me in this journey.

To Dr John Synott, for his initial supervision during the first months of my studies.

To Professor Gavin Kendall, who took the helm of supervision after John. Gavin helped me meander the hinterlands and navigate away from ontological and theoretical doldrums.

To Melody McIntosh, for her tremendous administrative support in guiding me throughout my scholarship.

To the Queensland University of Technology and the Department of Industry, Innovation, Science and Research for granting me the QUT Postgraduate Research Award scholarship which was shortly upgraded to an Australian Postgraduate Award. Both scholarships were very significant in providing logistic and material support for my fieldwork, research and writing, not to mention the prestige it brought.

To Karyll Mae Ngina, for her translation skills and administrative support she provided during my fieldwork.

To Chris Page, for proofreading my manuscript.

To my PhD colleagues and collocutors at Sociological Conversations. It’s a privilege to be part of our discourses on Social Theory.
To my research participants: Thank you for taking the time to share your insights and, at times, your homes during my fieldwork.

Finally, I wish to express my gratitude, apologies and love to my family for their understanding and support, for their many sacrifices, assistance and accommodations they made so that this journey be completed. To my loving wife, Noreen, and to my two daughters, Bianca and Arabella: Thank you very much.
Chapter 1: Introduction

With your indulgence, allow me to begin by inviting controversy.

Let me start by stating that the sociological interest on the interaction between information and communications technology (ICT) and indigenous peoples (IP), although relatively new and rigorous, comfortably sits on theoretical and analytical approaches that are bound to produce one and the same general outcomes.

If this trend in scholarship remains unchecked and a rethinking of its approaches are ignored, what this scholarship is bound to produce are one and the same depictions: a ritornello of nonetheless predictable results made through perfunctory conceptions of the indigenous and digital.

What this scholarship tends to produce are outputs of the same depiction of ICT and indigenous peoples, particularly that of images of stable systems and fully-coherent imageries. These depictions are not only superfluous, unrealistic and unfair, they do not do justice to the whole enterprise, which has only been around for little more than a decade. Nor it does do justice to the conditions of indigenous peoples themselves.

What is important is to steer away from these conceptions and not be overtaken by them in the analytical process, so as not to force explanations into simplistic, reductionist statements that may otherwise perpetuate undue notions of indigeneity.

Please allow me further to shed light on this burgeoning impasse by presenting a new approach in the sociological inquiry of ICTs and indigenous peoples by introducing the approach of actor-network-theory as an alternative method of studying this interaction, thereby avoiding the pitfalls of previous studies.
The second chapter of this thesis elucidates existing scholarship in the field of indigenous people and information and communications technologies (ICTs), particularly that of mobile phones and the Internet.

From the late 1990s until the present, there have been a number of scholarly interests in the field with diverse foci and theoretical persuasions. However, it is argued that these sets of literature adhere to metatheoretical presuppositions that strictly subscribe to two systems that depict the relationship between IP and ICTs, based on ontological purity. The first system of study revolves around the ontology of strong causal flows operating within stable, homogenous systems, whether that be of the centre-periphery dynamics or based on nested, hierarchical scales of structure. This oligoptic analogue depicts few, yet strongly-connected, elements bound together to depict a stable, coherent, system. The second system assembles the topic of ICT and IP as a fully coherent vision and its boundaries are carefully concealed by the writer. This panoramic depiction shows a fully-coherent reality that is based on tropes of indigenous exceptionalism, culture and agency amidst passive technological artefacts. It is then argued that these two ontologies tend to portray a homogenous, social reality devoid of mess, together with its apprehensions, ambivalences, betrayals and failures. Chapter Two ends with an argument for an alternative sociological method, where heterogeneities are recognised in this field.

The first section of Chapter Three addresses the controversies presented in the previous chapter by presenting themselves as opportunities for theoretical development by espousing the framework of Actor-Network-Theory (ANT) on the theme of indigenous peoples and ICT. The chapter argues that the main approaches of ANT provide better alternatives to the existing theme, because ANT recognises the importance of heterogeneities, together with networks vying for survival by
stabilising the messiness in the hinterlands\textsuperscript{1}, and by acquiring human and non-human actors within its midst. Chapter Three starts by discussing the metatheoretical grounds of ANT, namely free association, generalised symmetry and agnosticism.

*Free association* guides this research to connect relationships without any apprehensions that it may transgress any *a priori* or arbitrary categorisations. It allows social research to include non-human actors in analyses. This approach is especially important if indigenous societies are taken into consideration when the influence of objects and things have still have much potency.

The principle of *generalised symmetry* shows that everything deserves equal consideration and taking on identical footing, as with the rest of the elements, for explanation. A flat ontology is then possible by symmetrising the explanandum, which is devoid of the homogenising tendencies of nested hierarchical and totalising structures that had otherwise dominated previous scholarships.

The third metatheoretical principle of *generalised agnosticism* informs this research not to haphazardly generate conclusions that point to specific sociological themes, may they be concerns of ‘inequality’, ‘globalisation’ or ‘indigenous self-determination’, to name a few. Agnosticism advises the researcher to follow the actors themselves, no matter what metaphysical mess it leads them into (Latour, 2005).

Through these three principles, the research is able to generate a number of *irreductions* as generating novel forms of associations across the network. An irreduction has to be done through substantive descriptions, but not fall carelessly

\textsuperscript{1} *Hinterlands* is referred to “a bundle of indefinitely extending and more or less routinised and costly literary and material relations that include statements about reality and the realities themselves...and enacts a topography of reality possibilities, impossibilities and probabilities” (Law, 2004, p. 160)
and attribute social explanation to arbitrary, as well as long-held, models or concepts.2

Another main argument of ANT is the idea of fractionalities as a response to the bifurcation of ontological singularity, on one hand, and multiplicity, on the other. Ontological singularity is the notion that there is only a singular reality ‘out there’. Asserting singularity entails professing a unitary and definite process in what is considered to be the universe. On the other hand, multiplicity asserts that there are a multitude of coherent, yet fragmented, realities. This bifurcation of both ontologies is bridged by the idea of fractionalities by letting multiple, yet heterogeneous and fractional, realities intersect with each other in the process of partial connections (Haraway, 1991, and Strathern, 1991 in Law, 2004, pp.64-69). As human and non-human actors navigate through the hinterland of multiple, yet fractional, realities, they temporarily connect themselves to specific realities in their course. Fractionality asserts that the connections, being partial, are never permanent and merely stabilised by their enrolment to the enacted reality.

Stabilisation of partial connections involves the translation of actors into actor-networks. Translation starts with the premise that actor-networks of enacted realities strive for permanence by enrolling actors into its network. This involves establishing its presence across the hinterland of competing realities (punctualisation phase), then distinguishing itself from competing actor-networks, while employing strategies for actors to dissociate ties with these other actor-networks (intéressement phase).

The next phase of enrolment is the acceptance of the actors into the network. This first involves the enticement of the actors (seduction), then the articulation of

---

2 A specific analysis using irreduction is used in this research specifically in reconstituting the concepts of presence and ethnicity in light of internet technologies.
available choices (transaction) and, lastly, the moment when associations are established with a clear obligatory passage point, when actants are now enjoined to perform and engage with the new connection (consent).

The last phase is when enrolment is stabilised and further deployment of actors is set, in order to enrol more actors into the network.

It must be said further that, apart from being multiple and fractional, realities also compete against each other as they strive for permanence. This dynamic is called ontological politics (Mol, 2002). One instance of ontological politics is how competing realities are either made invisible, hidden or inaccessible as a particular reality aspires to enrol more actors in the hinterland.

Hence, what can be gathered and analysed through ANT research is a departure of what is conventionally (and conveniently) called a ‘society’, but a heterogeneous ‘collective’ of partially-connected human and non-human actors among competing actor-networks, momentarily stabilised through transportation or translation (Latour, 2005, p. 108).

Moreover, the term ‘hybrid collectif’ can be used for analytical purposes as an “emergent effect created by the interaction of heterogeneous parts that make it up” (Callon & Law, 1995, p. 485). It is the concatenation of association among human and non-human actors—a result of enactment of production and reproduction (Law, 2004, p. 159)—which is used in this research to trace the resultant associations between the designated sites (that is, information and communications technology, and indigenous people) in a particular setting (in this instance, Tadian, Mountain Province, Philippines).
The second section of Chapter Three is a narrative of the methodology of the research. It walks through the data gathering and analytical techniques employed. These techniques involved research of secondary data, and group and key informant interviews of Tadian natives belonging to different backgrounds and interests. Ethnographic and praxiographic techniques were also applied in order to generate a sufficient amount of data and information from the field. Personal insights and observations were also recorded on several occasions and were included in a few parts of this research.

Chapter Four provides background information about Tadian, Mountain Province, Philippines, based on synoptic information and available historiography reassembled using the framework of actor-network-theory. It starts with the various narratives of Tadian as through official government and academic documents, as well as personal accounts. Then this chapter identifies the various enactments that are exhibited by the texts and how these texts stabilise a heterogeneous terrain by the different ways of reconstructing Tadian as a locality. Heterogeneities, in the form of ambivalences, are found creeping into the texts. These multiple depictions of place-making ambivalences offer the translation of competing enactments to enrol these texts into their own ontology.

The chapter further goes through a social, historiographic account of Tadian and the larger domain of Igorot, the larger constitutive population to which the indigenous people of Tadian belong. Chapter Four identifies and discusses the heterogeneities through different periods of the social history of Tadian. The different periods of pre-colonial, colonial and post-colonial enactments exhibited translations and ontological politics at work, as these enactments fluently navigated along the hinterland. This chapter shows how these enactments struggled to stabilise
their grip amidst the complexities faced by encounters with indigenous people. Enactments like colonial rule struggle to fabricate hegemony based on the standards, metrologies and ontologies. Colonial enactments maintain to locate themselves as having the pre-destined moral ascendancy over the colony. Yet despite this great effort for stabilisation of the heterogeneous terrain through language, law, built environment as well as the expansion of road networks, full control and colonial hegemony did not occur. Instead, the ontological messiness always crept into their systems, as evinced by ambivalent performances by the natives.

Indigenous people have displayed ambivalence, as well as a number of cases of direct assertion of indigenous enactments, as they interact with events within colonial settings in specific historical instances. These cases of ambivalence and direct assertions advance the idea of ontological politics, as evinced by the strategies employed by native iTadian as they navigate along these hinterlands.

The chapter ends with a depiction of the Tadian hinterland as heterogeneous and replete with competing enactments as the natives navigate along them in their day-to-day lives. From small, self-governing communities during pre-colonial times to delineated, geo-political boundaries stabilised by administrative and allocative resources by the state bureaucracy, the setting of Tadian shows how the different enactments have enrolled and counter-enrolled themselves throughout time. The historical flux showed the survival of these enactments, such as the multilinguality of the native and its specific uses of languages in different situations, together with the practice of stylised, pre-colonial enactments of governance. Hence, the chapter argues its case by depicting the Tadian setting as a heterogeneous hinterland of competing enactments and not portraying it as an inert, unitary, passive and oftentimes anachronistic small community.
Ontological politics cannot only be traced through historiographic accounts, but also through specific technologies and how they struggle for relevance by enrolling actors in the hinterland. After setting the heterogeneous nature of the Tadian hinterland in the previous chapter, Chapter Five then looks specifically at the translation of mobile phone technology among the inhabitants. First it reviews, through the ANT framework, the different modes of telecommunication that were applied before the introduction of mobile phones. It then shows how some of these modes have struggled to become relevant and how others have become obsolete. It points out that the survival and failure of the technological devices is dependent on and these devices deploy their allies, enrol both human and non-human actors, open up their points of passages and sustain subscribers to their service.

Then the chapter presents how mobile phones have emerged in Tadian through expatriate kinfolk and advertisements deployed as allies to this technology. The arrival of mobile phones has been seen to be a significant shift on how mobile phones successfully created new geographies and courses of actions. Contingent with the signals deriving from mobile phone stations, otherwise known as intermediary cell sites, as well as the formal, black-boxed structure of the mobile phone, its usage created and fostered new geographies. For instance, temporary hangouts were formed where people gather to get good signals. It also showed how these hangouts have diminished as mere matters of fact, as signals got stronger by the addition of a local cell site. New courses of action also occurred as mobile phone users took their phones to their places of livelihood and integrated the mobile phone into their daily routines. More importantly, the emergence of mobile phones has showed its means of creating interest in them by presenting itself to limit the number of passages important in transmitting messages across geophysical boundaries. It
had effectively cut the interest of human actors to the previous modes of communication. Another significant event is the mobile phone’s effective enrolment of filial and kin-based enactments into its network. This consequently made it the most preferred means of telecommunication in Tadian.

Ten years since its introduction, the mobile phone has already established itself as a fixture within Tadian. The mobile phone is not only regarded as an efficient means of communication, but has been translated as an indicator of social presence, wellbeing and life. These translations indicate how mobile phones have effectively enrolled other enactments within the hinterland, by rendering themselves as multivalent mediators that are able to translate themselves as being relevant across competing ontologies. Newly established metrologies also emerged, such as the application of abbreviated languages in text messaging. Text messaging juxtaposes itself with the linguistic system shared by two communicators, while negotiating itself across the limits of the digital structure and economic efficiency. Mobile phone users must be able to oscillate between conversational linguistic systems and the digital texting environment in order to effectively communicate to each other.

New anxieties also emerge from enrolment to mobile phones. Mostly exhibited by the youths and those close to mobile base stations, these anxieties emerge when users are not be able to send text messages. This form of lethophobia is further evidence that mobile phones translate presence and physical life according to a person’s ability to send a text to key members of their network.

Hence, the efficacy of conducting ANT research by tracing the associations of mobile phones and indigenous societies can further be seen. Taking an ANT perspective argues that oligoptic and panoramic ontologies through structuralist epistemologies on sociotechnical studies is like walking to a dead end or being
caught up in an endless ritornello of the same tune. By initially rendering the
hinterland as complex and heterogeneous, technologies can be countenanced in equal
favour with the rest of the other enactments. That is by accounting for both the
transient features of enactments as well as its continuous means of making relevance
and practicability across space and time. In other words, the focus should be on
competing transient enactments, rather than stable structures and institutions as
conventional means of methodological and theoretical dispensation.

Chapter Six is about the sociology of translation on the emergence of Internet
technology in Tadian. It shows how the academic sector had deployed itself as the
initial spokesperson for this technology. This is particularly in the application of
Internet connectivity in a local college, when the college initially struggled to sustain
an expensive Internet connection via satellite.

The Internet initially peddled itself with a promise to address economic and
physical difficulties in communicating information across vast distances, maintaining
academic networks and accessing relevant pedagogical information. This is apart
from the mandate of the Philippine national government to have Internet access
installed in major state colleges. Heterogeneities emerged, from the onset, in the
form of dissidence by students and fellow academicians who would rather avail
themselves of tried and tested means of communication and research than Internet-
based methods. Ambivalences were was also exhibited by the slow bandwidth
speeds that made Internet browsing a boring activity.

Heterogeneities also emerged through anti-programs, such Tadian’s rugged
topography and students’ monetary considerations. Consequently, despite an earnest
promotion, Internet connectivity became too financially unviable to the
administration of the local college, which decided to cancel its services to the
students and general public. It was only restored five years later, when the administration made available the services of another Internet service provider that charged lower connection fees. The local college strategised to incorporate Internet access into its curriculum by integrating “Internet fees” on top of general matriculation fees, as well as encouraging the students to use the Internet to supplement their existing research. This, in effect, translated Internet technology as being, not only as a subtle definition of academic success, but, more importantly, an academic requirement. Internet technology in the Tadian college is presently stabilised by the ‘Internet Room’, where a number of computer terminals are available for access, together with posters prominently showing policies of acceptable Internet use. Subscription to the college’s Internet room is regular, but it fails to be a conducive place for a growing number of students who want to access the Internet against the college’s acceptable use policy. The results are a few dissident instances of violating the college’s policy, apart from the students preferring to go to nearby Abatan to play online games and social media sites in small-scale, commercial Internet shops. This shows that Internet technology has also translated itself more as a thing of leisure and recreation, than as an academic requirement. This, in turn, creates an oscillation of Internet technology between being an object and a thing (Latour, 2004; 2005, pp. 87-120).

The small Internet shops in Abatan exploited translations of Internet technology as a thing of amusement and creation among the youths and students. However, its continuous subscription is also contingent on the competencies of using information and communications technology (ICT) by the youths that was brought about by the public educational system, particularly the operation of personal computers. Personal computers are a rarity in Tadian households and the youths
acquire ICT competences as part of a hands-on computer literacy program in secondary high schools. Competencies range from a combination of rudimentary but practical knowledge (for example, switching the computer on and knowing its parts), motor skills (for instance, mastering keystrokes and manipulating the mouse) and technical knowledge (for example, word processing, spreadsheet use and the presentation of graphics). These competencies have been significant in the interest in accessing Internet technology as an extension the available uses of ICTs.

These small Internet shops are sites where the juvenile character of the Internet is accentuated. Although it must be said that there is still a significant portion of Internet access based on academic requisites, most of the subscription to the Internet at these sites is not based on the demands of the school system, but Internet access is transformed into a thing of leisure, recreation and self-discovery. This transformation is evidenced by the youths’ use of online games and social networking sites.

The translation of Internet technology in Tadian has been a fascinating concatenation of academic and private commercial enactments. Peddled by the academic sector as an efficient tool for research and pedagogy, the Internet created opportunities through its translation as being a thing of leisure and recreation. This moment of betrayal was exploited as an income-generating opportunity for private commercial interests based in nearby Abatan.

Apart from use by the youths, Internet technology is seen to be used mostly by people whose spouses are working abroad. The considerable improvement to a family’s wellbeing brought about by remittances from overseas also entailed the compromise of the physical absence of the major household member, be it parent, spouse or sibling. Internet access is used as a major means of addressing loneliness
and participating in matters concerning the family’s day-to-day activities. It translates itself as a major line of communication with the absent family member. Internet access is synchronised according to the free times of the family member overseas. This involved new arrangements for common access times during the day, which entails a change in common domestic routines, as well as interruptions to regular sleeping schedules. The Internet has also been a venue for sharing content through social media sites by spouses, who find the time to share digital photographs with personal networks through Facebook. These digital photographs find multivalent meanings, as some of them evoke nostalgia and reaffirmation of ethnic identity, especially to fellow townsfolk living abroad. These mundane photographs are sites where the indigenous ontologies referring to ethnic identity are dynamically reaffirmed and rearticulated. As spouses become aware of the influence of these digital photographs posted on social networking sites, they recursively become encouraged to post more of these to please their fellow townsfolk.

Through the epistemic exercise of irreduction, it can be seen that concepts that typically constitute presence and ethnicity are being translated in light of the enrolment of Internet technologies. The presence of a relative working abroad is not merely defined in terms of their physicality but rather is constituted as a synchronised invocation of the relative through a plethora of human and non-human intermediaries of Internet technology. Conversely, distance is not merely constituted by geophysical bounders, per se, but is reconstituted as the breakdown of the Internet network is brought about by the dissidence of its intermediaries and the success of anti-programs in breaking the network. On the other hand, ethnicity and indigenous self-identification is also reconstituted as a consequence of its enrolment with Internet technologies. Digital photographs posted on social media sites become
multivalent actors where different enactments and ontologies are expressed. Social media sites are where elements within the photographs oscillate between being an *object* or a *thing*. The oscillation and multivalences of digital photographs on social media sites creates opportunities for the concept for *ethnicity* and *indigeneity* to be dynamically reconstituted by the practitioners themselves. There are two revelations here. The first is that indigeneity is *not local or situated* within a specific geophysical boundary, but is actively constituted and reconstituted by specific *localisers*, such as online digital photographs. The second is that the concept of indigeneity must not be regarded as an inert and static entity that had somehow maintained its archaic features throughout time and space but has rather navigated itself across competing enactments in the hinterland and allowed itself to enrol and counter-enrol against other competing enactments in order for it to be recursively brought into presence in a nonetheless stabilised form.

Hence, Internet technology can be constituted within an heterogeneous assemblage by the subscription of Internet access of human actors through the confluence of academic, kinship, ethnic and commercial enactments. The espousal of ICT competencies brought forth opportunities for *performing* Internet technologies framed within the boundaries of academic prerequisites, as well as the juvenescence of leisure, recreation and self-discovery. These performances reinforce themselves as Internet users (mostly youths and young adult students) fluently navigate through the various sites where these enactments take place. Ontological politics is also seen, through how Internet technologies manage this flux as it negotiates with the enactments based on academic success and kinship, as well as ethnic identification. This is provisionally hiding or effacing other realities, thereby accentuating its expedient character. As an effect, the Internet among the inhabitants
in Tadian is a dynamic translation of the tropes of academic success, family diasporas, ethnic solidarity, leisure and self-discovery.

Chapter Seven presents four cases of how the technologies of Internet and mobile phones have created heterogeneous assemblages within the Tadian hinterland. It shows how these digital technologies strive for existence through enrolling and counter-enrolling actors, as well as competing enactments.

The first section presents a comparison of two cases of translating Internet technology-based different enactments: One is espoused by the state bureaucracy and the other by local, private interests. Internet enactments based on state bureaucratic ontology is based on the notion that it has the sole ascendancy in dispensing ICT services to the general public. It is based on the imaginary concept that it is a patron for communities and that these communities are passive and poor in terms of ICT competencies. It regards the Internet as an idealised and hierarchical system based on academic success and technical expertise. It draws upon the knowledge of the central, yet distant, technical expert as a source of resources and ideas to dispense ICT competencies and services across communities. Clear, coherent and structured definitions are a prerequisite in the formal practice of state bureaucracy, and it expects its participants to work on these elements as well. When Internet enactments based on state bureaucracy were put into practice in the Tadian-Abatan hinterland, the doctrinaire singularity, characterised by this enactment, failed to evoke consequences, which are imperative for its own raison d’être. Even the best of intentions of the state failed to subscribe a significant number of subscribers in order to sustain itself, because it insisted on listening to itself, instead of taking heed of the complexities of the hinterland. These attempts in overstabilisation on the interests of actors have proved to be fatal in implementing ICT projects in the Tadian hinterland.
Overstabilisation has failed to make ICT an interesting thing to engage in, because it reduced the actors to tropes of passivity and their motives are either ossified or are purely malleable, according to state bureaucratic ontology.

In the case of the local, private business enterprise, the proliferation of heterogeneities through the flux of its operations has been always part of its performance. The local Internet access shop had started with incoherence as it ‘played it by ear’ by operating within the heterogeneous hinterland. The small shop succeeded by recognising the multiple realities and different enactments and competences of Internet use. It exploited enactments based on juvenile leisure, as it regarded online gaming as an acceptable form of Internet usage. Contrary to state bureaucracy, the private business owner sees customers, not as passive imageries in existence, but, rather, as ambivalent actors that have disparate sets of competencies, interests and persuasions. It dealt with the unpredictabilities, non-coherences and noise of customers, but did not approach them with dogmatic singularity. It, instead, embraced these heterogeneities through a phronetic mapping of the various interests and competencies of the customers. It stabilised the interests of the business with reference to the interests of its patrons and, thus, was able to generate a stable flow of subscriptions in the course of its regular business operations.

An emergent case also saw how technical knowledge fluently navigates along pathways that are regularly attenuated or rendered absent by singularised ontologies. The performance and eventual application of technical knowledge of Internet shopkeepers shows the flux of such knowledge to navigate around formalised institutions and achieve sufficient information and skills important to their business operations. The flux potentiates technical knowledge as it travels through networks
based on friendship, while reinforcing the strength of these networks based on friendship and similar persuasions.

In summary, the first section shows that digital enactment that subscribed to singularity may have limited success in achieving its goal, especially if the aim of its operation is to stabilise the enrolment of actors within the hinterland according to its raison d’être (such as ICT projects by the national government). Moreover, such enactments are inimical to the interests of indigenous enactments if it maintains a sense of ascendancy, aloofness and solipsism. On the other hand, enactments that fluently navigate across the interests of actors and enactments within the hinterland will have greater chances of sustainability and survival, as long as they phonetically generate interests and externalise courses of action within the heterogeneous landscape of unpredictability, non-coherence and noise.

The second section of Chapter Seven is about how an endemic species of eel living on the streams and creeks of the community of Cagubatan, Tadian, has thrived through the affordances of indigenous enactments provided in both physical and online settings. It shows that both enactments supplement each other in that they afford the eel a conducive habitat for fabricating a practice of sacrality to the eel, then providing it with an environment that protects it against harm and, more importantly, obscurity.

Indigenous enchantment in the physical realm generates a sense of apotheosis to the eel and associates it with the various elements of village life, such as its historicity, with regard to fauna and water resources. The practice of summoning the sacred eel by the local guides is also another form of affordance, where its presence is gradually punctuated through ritualised performances. The fabricated environment around the eel’s natural habitat also presents as both civic and symbolic space to
practice its sacrality. The built environment is the eel’s final stand in the physical space where indigenous enactments assert the eel’s sacred nature, together with discouraging betrayals in the form of activities that may harm its wellbeing.

These performances are translated into online digital form by a video clip accessible on YouTube. The elements depicting its enchanted status is intentionally integrated, particularly the ritualised performances of the local guides and the excited shouts of the onlookers. This is apart from the title, commentary and accompanying introductory narrative placed by the author.

Here, the concept of affordances (Gibson, 1979) is extended to include digital performances on the Internet. By fabricating an extension of indigenous enactment on digital content-sharing sites such as YouTube, the author had afforded yet another environment where the eel’s enchanted features are stabilised, therefore ensuring its survival. Apart from stabilising enchantment through YouTube, a dynamic recursion also occurs through cultural affordances to the Cagubatan community. This is by also affording it yet another opportunity for stabilising indigenous enactments through ethnic identification and cultural autonomy. The eel also presents itself as a mediator to both indigenous and digital enactments; it only needs to show itself during ritualised performances, when its sacred nature is accentuated. In addition, the online environment of YouTube has become a site where both indigenous enactments are translated into digital format and by automatically presenting the eel’s mystical characteristics.

---

The third section of Chapter Seven is a yet another presentation of how mobile phones have been successfully counter-enrolled against the traditional system of sending mail and packages from and to Tadian by the buses that regularly ply the main route. Both modes are well-stabilised means of communication and have strong associations with kin-based enactments. Moreover, these two modes complement each other, as one provides something that the other does not. The use of mobile phones is only limited to the transport of small messages, which are sent quickly and directly by the sender. On the other hand, the traditional paw-it system had previously established itself as the main means of transporting mail and packages, but these were sent through a number of intermediaries that occasionally betrayed its dependability and reliability in the form of mechanical breakdowns and road closures, among others. This system’s existence has always been threatened every time these breakdowns happen, derived from the betrayals of intermediaries. The counter-enrolment of mobile phones into this traditional system of sending letters and packages stabilises the heterogeneities by creating an open line of communication with the three human actors involved, namely, sender, receiver and the bus conductor as the mediator. By both the sender and receiver giving the power to inquire about the in-transit status and whereabouts of the package to the bus conductor, mobile phones do not actually help to make the paw-it system more efficient in delivery times. Instead the counter-enrolment of mobile phones presents itself as an opportunity to reforge the trustworthiness of the bus conductor and the whole system. In this case, mobile phones are translated into the paw-it system as a means of stabilising the heterogeneities that come with its operation.

The fourth section of Chapter Seven traces the actions and associations human and non-human actors that respond during a devastating landslide that occurred in
the community of Kayan in Tadian on 8 October 2009. A narration of the different customary methods of disseminating information is presented to give the reader some background information of its inner workings. These customary methods include community criers, drums and bells. These methods are mediators to the hybrid features of the present local governance system, partially based on indigenous socio-political enactments. These mediators stabilise complexities and betrayals through the deployment of information, and instruction through parsed messages and codes. These instructions inform the community of the influence and power of these institutions and results in specific courses of action being undertaken by community members.

The section further assembles a narrative of the events that occurred during that fateful day. It describes how the landslide struck during the preparations for the community’s annual festival, and how the festive atmosphere of anticipation suddenly turned into that of panic and urgent concern. The customary mediators of disseminating information were deployed. Community criers took to the streets and alleyways in Kayan to spread information about the landslide, while exhorting the households to participate in the rescue effort. The church bells of Kayan were continuously pealed to notify its inhabitants and nearby communities of an emergency situation. People also started relaying news about the disaster through text messaging. Less than an hour after the landslide occurred, the diverse modes of disseminating information about the disaster were responded to by not only the local villagers, but also a large number of individuals and organisations outside of the community. This included health professionals from the municipal health offices and people from nearby villages. There were even people and organisations that
responded to the disaster coming from places such as Baguio City, which is five hours’ drive away.

Days after the tragic landslide, Internet technologies played a large role in the relief and reconstruction efforts in Kayan. Some individuals and non-government organisations took the reins in purveying the information by posting photos and reports about the disaster across social network sites, Internet forums and individual websites. Soon after, donations came pouring in, in the form of cash from online philanthropic efforts, but this was soon met with controversy as local government officers complained of using images of the dead and the devastation as being a breach of taboo and the solemn observance of the dead. The local government officials also complained that their authority was being usurped, because foreign donations are not coursed through them for monitoring and distribution. Instead, these donations went straight to the non-government organisations which made the effort to distribute them on their own, as a way of filling the shortcomings of government efforts.

The agentic power of the Internet and mobile phones was fully revealed during the response and management of the landslide in Kayan. The hidden agency of mobile phones as purveyors of information was accentuated as people disseminated the details of the disaster across their own networks. The response reached outside the geophysical boundaries of the municipality, extending further to expatriate kin and ethnic networks. The mobile phone enrolled enactments of kinship, ethnic identification and state bureaucracy then gathered a concatenation of human and non-human actors to address the rescue and recovery effort during the first twenty-four hours of the landslide.
Internet technology showed its capability to dissociate ties with enactments that instil strict protocols, such as those of a state bureaucracy. Instead, it deployed its mediators in the forms of individuals and non-government organisations that had the competency to translate the situation by broadcasting news of the landslide across the Internet. The Internet localised the disaster and galvanised donations derived from enactments based on indigeneity, ethnic identification and international development assistance. The resultant effect of the Kayan disaster was a reticulated, yet heterogeneous, concatenation of enactments of digital, kin-based, indigenous and state bureaucracy, to name a few. The disaster has shown that these enactments deployed its mediators with such exigency and transported its urgency into text messages, bell peals and shouts of the crier, as well as drum beats. This transportation of various messages was met with clear courses of action that aimed to respond to the disaster situation.

The last section of Chapter Seven sums up the digital translations of how the Internet and mobile phones have enrolled and stabilised themselves within the hinterland by forming these heterogeneous assemblages.

Chapter Eight further examines previous scholarships on ICT and indigenous people (from Chapter Two), with particular focus on the data derived from the research and using irreduction as an argumentative method. It begins by pointing out that the different theses and ontological perspectives in Chapter Two are implicitly referenced from enactments of organisational efficiency, exceptionalism, equilibrium and transformative development. These enactments are characteristic of the sociology of the social that stabilise their enrolment within the collectif by further enrolling academic enactments in its fold.
Actor-network-theory takes on a different perspective of looking at the subject of ICT and the indigenous, by reminding the investigator not to haphazardly fall into oligoptic and panoramic ontologies, thereby treating academic scholarship as among the many enactments of normal sociology, as one enactment seeking to be stabilised, and even black-boxed, among the multitude of other competing enactments and ontologies.

Chapter Nine concludes the thesis by identifying the different realities on this research, namely, colonial, bureaucratic, academic, leisure, the paw-it, indigenous, digital and the natural environment. These fractional realities translate and stabilise their ontologies through the process of disclosing the uncertainties of their competitors to make their own realities a more interesting one to engage with; rendering the presence of realities other than their own in order for actors to remain enrolled in them; and the hyper-punctualisation of interests. Apart from these, the stabilisations of indigenous and digital enactments are also found in new cartographies where actors navigate. Conversely, heterogeneities can also be found through complacencies and new anxieties, which happen during times of dissidence and anti-programs. Moreover, the sites of partial connections of these realities are located at fully-competent mediators, ambivalences, oscillations, noise and non-coherences.

This chapter concludes by propounding the concept of the indigenous/digital collectif, an emergent assemblage of heterogeneous and fractional reticulation of human and non-human actants, translated by indigenous and digital realities and enactments. The indigenous/digital collectif is stabilised by the enrolment and counter-enrolment of digital, indigenous and other competing realities.
By avoiding the ontological pitfalls of the *sociology of the social*, the approach of actor-network-theory demands richer data and thicker descriptions. Heterogeneities that are more or less hidden or effaced in previous scholarships are taken on equal footing through ANT.

Most importantly, the ANT framework and methodology focuses more on the ‘how’ than the ‘why’ questions. By avoiding *why* questions, the data speaks for itself and action was not overtaken by ontologies and ideologies of particular bodies politic.
Chapter 2: Review of Literature

There has been some degree of academic interest on the social studies of information and communications technologies (ICTs) and indigenous peoples\(^4\) (IP) for the past decade. A large number of peer-reviewed articles on this topic particularly focus on Internet technology and indigenous peoples, with only one journal article that talks about the educational use of mobile phones in an indigenous Australian community (Auld, *et al.*, 2012). This chapter looks over the existing literature and further investigates and groups its metatheoretical and ontological presuppositions. An examination of the literature points to several challenges in assembling the scholarship based on theses of closed, homogenous and, at times, hierarchical systems.

This chapter is divided into two sections. The first section of this chapter will review the literature on ICT and indigenous peoples in general. However, since this study also takes Philippine society into consideration, it was deemed necessary to include literature in the field of ICT and Philippine society in order to set countenance on previous works within the field.

The second section fleshes out the main arguments of these works and groups according to themes or theses. The review of these works reveals four dominant theses based on the metatheoretical arguments of *instrumentality*, *conditionality*, *annexation* and *human agency*. These four arguments further merge into two ontological approaches of *oligoptica* and *panorama* (Latour, 2005, pp. 181-183, 187-188)—approaches that dominate sociology. Utilising Latour’s critique on the

\(^4\) The pluralized *peoples* instead of *people* is a standard used to denote the sociocultural and historical diversity of indigenous societies (United Nations 1966)
As a theoretical lens, it can be discerned that these dominant ontological approaches fall short in presenting a judicious account of ICT and IP social research. It is because depictions based on oligoptic and panoramic ontologies leave no room for complexities that, nonetheless, proliferate in the hinterland. Alternatively, this ontological paucity presents opportunities for further theoretical and methodological developments in the field.

**Internet and Indigenous People**

Among the first scholarly articles that revolved around the theme of Internet technologies and indigenous people is the study of the Cheyenne River Sioux Tribe in the United States (Mizrach, 1999, p. 215). It discusses the central role of “emerging media technologies”, the Internet among them, in becoming “tools of resistance to acculturation” against dominant mainstream cultures (pp. 378-379). It was further qualified that, for the efficacy of these emergent technologies to effect cultural revival, greater autonomy and social development is contingent on the degree of local control over it, particularly how community-based organisations operate on the imperative of “training tribal members how to operate, understand and use technology” (p. 379).

An assessment of a pilot implementation of Internet access among the Pirlangimpi people of Northern Australia saw the potentialities of Internet and e-mail skills toward the effectiveness of the delivery of warranted services to indigenous communities (Morrison, 2000). The results revealed that Internet skills “can have significant, widespread benefits for many areas of community development beyond the local government context” at the selected pilot sites (p. 1789). It also emphasised that the participants must remain committed to the application of Internet technology,
if it is to effect the delivery of local government and development services to their respective communities (p. 1790).

A study among Canada’s ‘First Nations’ communities saw the potential of the Internet as a medium for indigenous people to “speak in their own voices” and form alliances with other like-minded organisations (Alexander, 2001, p. 295). It further argues that Internet technologies can “amplify and clarify” the indigenous experience, as it “reconstitute(s) their past and reassure(s) them of future possibilities” (p. 281). The study highlights the role of federal government in laying down the “groundwork for a fundamental shift in First Nations peoples' ability to communicate, form coalitions, mobilize and to bring about political and policy change in their own communities and organizations and in the nation” (p. 295).

In one cross-country comparison in Latin America, Internet cafés were seen as a significant factor in promoting solidarity among indigenous communities (Delgado, 2002). The main challenge seen is the sustainability of Internet usage, because of costly Internet access in relation to their household expenses; and in spite of the proliferation of Internet cafes even in remote areas that also charge expensive fees (ibid).

In a similar vein, Salazar (2003) pointed out how Internet technologies were constructed as a “counter public sphere” (Salazar, 2003) within the indigenous Mapuche movement against Chilean state authorities. The Internet provided a counter-discursive space in which Mapuche community organisations and advocates presented their struggle in order to define their position within the national imaginary of Chile, as well as breaking down the illusion of a free public sphere as portrayed by the Chilean state authorities (ibid).
Glowczewski (2005) notes the importance of “reticular” or networked thinking. Argued as an “ancient Indigenous practice”, Glowczewski finds congruence in reticular thinking to Internet hyperlinks, allowing indigenous peoples to explore new meanings, encounters and creations (2005, p. 34). Reticular thinking has been associated with ancient and indigenous cultures, in contrast to conventional mainstream thinking.

Niezen (2005) highlights the role of international indigenous peoples’ organisations in accessing Internet technology with specific aims of reconstructing memory and self-hood, claiming historical continuity and asserting collective attachment to its own indigenous linguistics and socio-political systems, while attenuating imperfect and ignoble acts from public scrutiny.

A study among indigenous youths in the Sydney suburb of Redfern accentuates the educational approach of problem-posing propounded by Freire (1970) in the adoption of web-based Internet technology (Sengara, 2005). This approach used education as a tool to promote critical thinking and expression, with the aim of enhancing social capital and improving the literacy of indigenous youths (ibid).

One study, by Gorre (2007), on the utilisation of the Internet by the Maori reflects the Cheyenne River Sioux findings of Mizrach (1999) in pointing out the need for indigenous peoples to control the technology, in order to convey their own identity and heritage across a wider audience. In Gorre’s study, this was particularly by utilising the Internet as an instrument to correctly represent contemporary Maori culture and empowering them as the experts and guardians of their own culture.

---

In a similar vein, Leclair and Warren (2007) argued that indigenous communities can increase their general capabilities by using the Internet for electronic commerce, e-learning and community web portals. This is at the same time as being aware that ICTs, argued by Leclair and Warren (2007), “operating within a narrow framework”, may reinforce false notions about indigenous knowledge systems, thereby rendering them as being subaltern (pp. 2-11).

A study on web-based media for the Nishwabe Aski Nation of Northern Ontario noted the important role of local leaders and their personal passion in “shaping” digital technologies (Budka, 2009). In that study, Internet technology is seen as a means of facilitating communication with indigenous and non-indigenous counterparts, and personal development among individual members (ibid). It also revealed that the Internet was used to build and sustain relationships based on family, friends and community, in accordance with the realities of their own geography of their terrain, as well as their ethno-demographic distinctiveness (ibid).

Alia (2009) advances the concept of a ‘New Media Nation’ emerging from the creative use of old technologies and ICTs by the international movement of indigenous peoples in advocating their agenda. The New Media Nation resulted from an “explosion of Indigenous news media, information, technology, film, music, and other artistic and cultural developments”, when the movement can bypass national and international boundaries as a means to amplify their voices and expand their power to a global audience (Alia, 2009).

Longboan (2009) presents the importance of Internet weblogs as a space where the Igorot indigenous group of the Philippines can celebrate their ethnic identity and present counter-discourses against discriminatory and ethnocentric narratives on the Internet and mainstream media, particularly coming from Manila-centric cultural
productions (Longboan, 2009). Longboan (2011) also extended the efficacy of web-based communication protocols to diasporic Igorots. Internet-based communication among expatriate Igorots fostered an environment where they can reinforce old ethnic and kinship relations, as well as create new ones (ibid). This creates a recursive loop that potentiates the flow of material gains derived from diaspora back to their families and local communities (ibid).

Vaughan (2011) likewise advocated the significance of community participation, together with ICT resource capabilities, as contributing factors to the success of government-initiated ICT for development (ICT4D) programs in specific, remote, indigenous communities in Australia. This is particularly the case in the use of the ‘capability approach’ as an evaluative tool in assessing ICT programs at the grass-roots level (Ibid).

Belton (2010) examined how indigenous peoples’ organisations use the Internet and the United Nations Permanent Forum on Indigenous Issues as strategies by establishing their claims, creating alliances and asserting their right to self-determination. The utilisation of the Internet and this Forum are undertaken to build online and offline communities, challenge misrepresentations by other sectors, share their own world views and, more importantly, to present their own alternative visions as a proactive strategy against dominant discourses (2010).

Soriano (2012) also frames her study congruently with Belton’s premises. Taking the case of two indigenous organisations based in the Philippines, the study shows how these organisations negotiate and appropriate online spaces in order to reclaim, create alliances and advocate their rights to self-determination, apart from building up their credibility and controlling their respective administrative operations offline (Ibid).
Mobile Phones and Indigenous People

In contrast to the breadth of scholarship in the field of Internet technologies and indigenous people, there has only been one article identified in a scientific journal regarding mobile phone usage among indigenous people. In a recent article by Auld, Snyder and Henderson (2012), mobile phones were identified to be significant “placed resources” (Blommaert, 2010 in Auld, Snyder and Henderson, 2012) where individual and collective digital media are stored to enhance literacy learning among the children and youths of the Maningrida community in Arnhem Land (Auld, et al., 2012). It posits that the use and application of digital technologies, such as mobile phones, as resources are best understood within local cultural practices in which the Maningrida find a strong association, wherein they develop new ideas of digital practices in accordance with local perspectives (p. 12).

Mobile Phones and Internet Technologies in Philippine Society

The following section reviews a number of literatures that focus on the application of Internet technologies and mobile phone usage in the Philippines.

Orticio (2003) argues for the accentuation of the Internet’s communicative potential in effecting developmental change in the Philippines. By using a development framework based on the Habermasian constitutive interests of work, power and intercultural understanding, the work developed a template on how Internet technology can be instrumental in effecting technical and communicative gains, in opposition to the conventional approach of economic growth and commercial, urban-centric access in the country.

Apart from the efficacy of information and communications technology in strengthening traditional ties among Filipinos across geospatial distances (Pertierra, 2003, p. 63; 2007a, p. 3), another observation is how well ICTs evoke emancipation
in light of long-held Filipino traditions of fate by “opening up new possibilities of being and becoming” (Pertierra, 2006, p. 116). One specific instance is through the practice of online games at local Internet access centres.

In one study, De Leon (2007) identified online spaces as opportunities to exercise individual freedom away from the conventions of gender and other social categories. Online games were seen as spaces where anonymity and trust in strangers are encouraged and practiced (p. 47).

Another interesting observation is how Filipinos rarely express emotional closeness during face-to-face communication (Pertierra, 2007b, p. 24). However, through texting, it is much easier for them to express affection to close family and friends (Pertierra, 2007b, p. 24). These performances are located outside the influence of traditional Philippine society, where physicality, familiarity and reputation is valued (ibid.).

Internet technologies have also created “local cosmopolitanisms” in Philippine society, where experiences of global events have almost become locally mundane, which, in turn, led to “glocalisation” where the significance of national events have either been bypassed or diminished in favour of global and local ones (2007b, p. 19).

Cyberspace is also seen as a post-modern alternative to the state, where Filipino Internet users enable new forms of citizenship, giving them the potential to transform from “surfer” to “citizen” (Contreras, 2012). Citizenship is treated as a condition for politics beyond state and scientific discourse, leading to what Lash (1994, in Contreras, 2012, p. 98) describes as the “hermeneutics of retrieval”, an understanding of politics beyond the mechanisms of nation-states, yet widely held and expressed by individual human actants.
Four Main Theses

Contemporary literature tends to gravitate towards four major metatheoretical perspectives, namely, instrumentality, conditionality annexation and human agency. This section will examine each one, together with its proponents and their premises.

Instrumentality.

This first thesis shows the efficacy of ICTs in promoting indigenous peoples’ welfare and development.

The study of Canada’s First Nations’ aborigines saw the potential of the Internet as a medium to “speak in their own voices” and form alliances with other like-minded organisations (Alexander, 2001, p. 295).

In the cross-country comparison across of Latin American indigenous communities, Internet cafés were significant in promoting solidarity (Delgado, 2002).

By using the public sphere (Habermas, 1989) as an analytical framework for the Mapuche movement, Internet technology facilitated the constitution of a “counter-discursive” movement, as opposed to the depiction of an informed and free public sphere by the Chilean state authorities (Salazar, 2003).

Another study among indigenous youths in the Sydney suburb of Redfern highlights the educational approach of problem-posing propounded by Freire (1970) in the adoption of web-based Internet technology, by using it as a tool to promote critical thinking and expression (Sengara, 2005).

Further, Leclair and Warren (2007) argue that indigenous communities can increase their general capabilities by using the Internet for electronic commerce, e-learning and community web portals, while being aware that ICTs, operating within
a narrow framework, may create notions about indigenous knowledge systems as being subaltern (pp. 2-11).

In another case, mobile phones are seen as potent “placed resources” (Blommaert, 2010 in Auld, Snyder and Henderson, 2012) where stored individual and collective media can enhance literacy learning among the children and youths of the Maningrida community in Arnhem Land (Auld, et al., 2012).

This theme also resonates in studies among the Igorots of the Philippines. Weblogs, or blogs, were seen as a space where indigenous groups can celebrate their ethnic identity and present counter-discourses against discriminatory and ethnocentric narratives on the Internet (Longboan, 2009). This is also the case among expatriate Igorots in their use of web-based communication (Longboan, 2011).

Whether it is by celebrating difference (Longboan, 2009, 2011), increasing knowledge and literacy (Auld, et al., 2012; Leclair & Warren, 2007; Sengara, 2005), effecting material gains (Leclair & Warren, 2007; Longboan, 2011), building coalitions across boundaries (Alexander, 2001; Soriano, 2012), promoting community solidarity (Delgado, 2002), and/or enhancing communicative competence (Longboan, 2009; Salazar, 2003; Sengara, 2005) and critical thinking (Sengara, 2005), intrinsic is the presupposition that ICTs are instrumental in effecting these changes. This thesis of instrumentality is predicated by an inherent capacity of information and communication technologies to achieve development gains among indigenous people, but intrinsic to this argument is the voluntarism of indigenous peoples to access and avail themselves of these key developmental features of information and communication technologies.
Conditionality.
The second thesis focuses on requisites that induce ICT developmental gains.

Mizrach (1999) identified the importance of technical knowledge of ICT among the Cheyenne River Sioux. Knowledge, in terms of skills in operating a personal computer, navigating the web and creating web pages, was regarded as a necessary condition for indigenous peoples to utilise ICT as a tool for cultural resistance (p. 379).

Another study of the utilisation of the Internet by the Maori runs parallel to the above findings, again with the emphasis on capacitating indigenous people to have Internet access and technical skills that will, consequently, enable them to express their identity and heritage (Gorre, 2007).

The study of web-based media on the Nishwabe Aski Nation noted the important role of local leaders in “shaping” digital technologies, as a means of facilitating inter-community communication and personal skills development (Budka, 2009).

Further, another study on the pilot implementation of Internet access among the Pirlangimpi people of Northern Australia saw the importance of the technical operating skills of Internet use, together with the decisive role of community-based councils, in utilising technological access (Morrison, 2000).

In a similar vein, Vaughan (2011) points to community participation as a contributing factor in the success of government-initiated ICT programs in a number of remote indigenous communities in Australia.

The foregoing literature tend to foster the idea that technical skills in ICT use and access (Gorre, 2007; Mizrach, 1999), qualities of community organisation and
leadership (Budka, 2009; Vaughan, 2011) or a combination of both (Morrison, 2000) relate to homogenised and stabilised social interactions being necessary preconditions for ICT access and use, in order to invoke cultural resistance, self-identification and community welfare—outcomes considered to be developmental to indigenous peoples.

This thesis of conditionality can be parsed into the following statement: information and communication technologies will help indigenous peoples, provided that they possess (or strive to possess) the distinct personal or organisational qualities necessary for its operation. This thesis shows a causation pointing to the capacity of ICTs to evoke gains if (and only if) indigenous peoples configure themselves accordingly. It also suggests an imaginary of indigenous communities as local, configurable and yet dynamic units of analyses amidst a macrological information infrastructure.

Annexation.

Another emergent theme tends to point towards appropriating indigenous features in a number of aspects surrounding the use of information and communications technologies.

In one case, an epistemic strategy was ascribed to an indigenous character. Glowczewski (2005) notes the importance of “reticular” or networked thinking. By arguing that reticular thinking is an “ancient Indigenous practice”, Glowczewski finds its congruence to Internet hyperlinks, allowing indigenous peoples to explore new meanings, encounters and creations (2005, p. 34). Reticular thinking has been associated to ancient and indigenous cultures, in contrast to the epistemologies of conventional mainstream thinking. This argument suggests the indigenous as being exceptional among other cultures.
Another instance is the ‘New Media Nation’ emerging from creative use of ICTs and old technologies by the international movement of indigenous peoples (Alia, 2009).

Based on these two cases, the thesis of annexation appropriates emergent elements in the social analysis, highlights them, and then ascribes them to an indigenous character based on inherent performances of exceptionalism. It depicts indigenous peoples and their world views as an exceptional, coherent and homogenous portrait.

**Human agency.**

The last thesis focuses on indigenous peoples as reflexive, sophisticated participants in the use of ICT in accordance with their own goals. For example, Aikenhead (1997) emphasises “autonomous appropriation”—an act of indigenous peoples reflexively appropriating aspects of western knowledge systems according to their own interest without totally assimilating to it (1997, p. 551).

Comparable is the idea of international indigenous peoples’ organisations in using the Internet in (re)constructing memory and self-hood, claiming historical continuity and asserting collective attachment to indigenous linguistic and socio-political systems, while hiding imperfect acts from public scrutiny (Niezen, 2005).

Another dramaturgical variant is seen in the findings presented by Belton (2010) and Soriano (2012), wherein indigenous peoples’ organisations negotiate and appropriate online spaces in order to reclaim, create alliances and advocate their rights, while building up credibility and administrative controls in offline work.

Whether it is autonomous appropriation or the practice of dramaturgical strategies, the foregoing literature portrays indigenous groups as reflexive entities.
This thesis of human agency highlights indigenous people's organisations as reflexive, sophisticated participants in their ICT practice. Compared to the previous thesis, human agency accentuates idealised notions of the indigenous as proactive, while recognising, yet attenuating, the mundane, ignoble acts as indiscursive parts of social action.

**Metatheoretical Presuppositions**

The four theses presented are further predicated on underlying premises about indigenous peoples and information, and communications technologies.

Firstly, the thesis of instrumentality portrays indigenous peoples as being reactive to ICTs. Although not regarded as passive objects, indigenous peoples are, nonetheless, depicted as reactive to external technologies. There is a subtle, yet persistent, insinuation that indigenous peoples needed this trope of development in the first place, and that such development can be delivered by ICTs in general. Information and communications technologies, on the other hand, are depicted as having an intrinsic capability of emancipating indigenous peoples and their communities. Such technological power is not made apparent, but is technology in potentia. This suggests a nuance of technological determinism.

Secondly, the thesis of conditionality presupposes indigenous people as being active, knowledgeable subjects. Its main difference from the first premise is that these qualities are still kept in reserve, in this case agency in potentia. Information and communications technologies are seen to be producing developmental change provided that indigenous peoples first unlock their own hidden potential, in order for such to function according to notions of social development.
The thesis of annexation suggests that indigenous culture and societies are inherently and exceptionally good and creative. It suggests that their cultural integrity remains inert across space and time. On the other hand, ICTs are seen to exhibit a fixation in reclaiming indigenous characteristics, in which social scientists need to discover, narrate and include the roster of human cultures. This also subtly suggests that technologies can be culturally interpreted, according to their select features.

Lastly, the thesis of human agency portrays indigenous peoples as sophisticated, reflexive participants in the information society. In contrast to the thesis of conditionality, human agency portrays the indigenous as being active, with no dormant, untapped qualities that need to be exposed. There is tendency to invoke an anthropocentric argument which takes as fact that humans, being intelligible subjects, have the utmost systematic capability in structuring modes of action.

These four metatheoretical presuppositions are based on ontological depictions of social realities, that of stable totalising systems and fully-coherent imageries.

Oligoptica.

It is argued that the metatheoretical presuppositions of instrumentality and conditionality are related, as they adhere to an ontology in which a few, but specific, factors are made to stick and hold together to create a vision of a stable state-of-affairs, otherwise their main arguments will collapse. By suggesting that information and communication technologies flow from macro levels of structure, indicates a centre-periphery framework. This perspective depicts tangible and intangible elements of high technology flowing from centres of technology normally located at global centres of capital accumulation. These elements of hardware and software
trickle down to local and micro levels of structuration where indigenous communities are located.

Conversely, indigenous peoples and communities are depicted as configurable, dynamic, yet fragmented, local units amidst the technological flows. The scaling is obvious: the indigenous is made local, in contrast to macro (that is, global), technological, social structures and forces. Through this structuring, the analytical power is contingent on these elements that hierarchically flow and trickle down arbitrarily-nested levels of scale. So, unless this representation of causal flows remains true or a recursive causation and reflexivity does not occur, the theses of instrumentality and conditionality will hold valid.

Latour (2005) describes this kind of ontology, of a totalising analogue of well-connected homogenous whole, as an oligoptica (pp. 181-183). The oligoptic perspective depicts few, narrowly-defined, albeit strongly-connected, elements of social reality with the intent of portraying a stable, coherent system (ibid). The ontology only remains coherent as long as its elements hold, and the betrayals and messy, extraneous elements are avoided (ibid). Latour further argues that oligoptica are illusory, as a considerable amount of elements are rendered absent, ignored or effaced in the process of taking into account social reality. (p. 49).

The theoretical presumptions of technological determinism and causal functionalism ossify a number of discursive elements into a well-structured social whole, leaving no room for critique and theoretical development.

Panorama.

The metatheoretical presuppositions of annexation (romanticism) and human agency (anthropocentrism) depict the indigenous as one reflexive, homogenous formation, with banal and ignoble forces effectively obfuscated or even made absent
within the narrative. The indigenous is further employed as a coherent category, with clear distinctions in the tropes of exceptionalism, struggle, historicity, culture and reflexivity. On the other hand, information and communications technologies are reduced to inert artefacts, which rational and reflexive indigenous peoples utilise in their day-to-day lives. As such, the interaction between indigenous peoples and information communications technologies is an idealised portrait.

In contrast to oligoptica, Latour (2005) describes this ontological perspective as a *panorama* (pp. 187-188). A panoramic ontology fundamentally depicts social reality as a “well-ordered zoom”, which attempts to assemble a fully coherent vision (ibid). However, like any panoramic vision, such portrayal is simply located within the confines of the zoom itself and nothing more, because its frontiers are skillfully closed (ibid). It is illusory because the depiction that it renders is excessively coherent, which simply gives it away (p. 188). In the case of ICTs and indigenous people, a panoramic depiction romanticises indigenous peoples and shows the passivity of technological artefacts. It is just too good to be true.

Both *oligoptic* and *panoramic* ontologies posit that social realities are *homogeneous*6 (that is, having the same quality throughout), *isotopic* (having the same reactions at the same moment in any site), *isobaric* (exerting the same pressure), *synchronic* (happening at the same moment) and *synoptic* (having only a number of actors that are visible on any given dispensation), whereas no social interaction holds these qualities (Latour, 2005, pp. 200-201). These epistemologies are simply illusory, yet have dominated ICT and IP scholarship for the past decade.

6 Roy and Raitt (2003, p. 413) warned about homogenising indigenous communities, vis-a-vis information and communications technology, in social research.
The ontologies of panorama and oligoptica do not show technological obsolescence and malicious software as betraying the homogenous formalism of ICTs, nor as posing a threat to their relevance and applicability. Here are some other scenarios: ICT, such as Internet access, may also present itself as inimical to development gains, therefore being instrumental in maintaining an oppressive status quo; the use of mobile phones may enhance literacy learning among indigenous youth, but it may also present additional expenses to their families; and the success of developmental gains may not be brought by Internet technology, as not all members in a community may learn technical operating skills. In addition, cases of synchronic and synoptic scenarios are simply far-fetched, hypothetical or simply misleading. Adopting oligoptic and panoramic ontologies only partially depicts social realities as having messes, apprehensions, betrayals and failures, among many others. The occurrences of “wild publics and grotesque symposia”7 (Gardiner, 2004) are rendered silent, effaced or made absent.

Further, it is argued that these identified pro forma, metatheoretical templates and ontological lenses discover nothing but the same issues. For quite some time, the study of ICT and indigenous peoples has been a ritornello of results yielding the same oligoptic and panoramic outcomes characteristic of what Latour (2005) depicts as this rigidified approach striving for epistemic coherence and ontological purity, but, at the same time, leaving behind a plethora of heterogeneity out of the narrative.

**The Need to Flatten Contours and Recognise Heterogeneities**

The metatheoretical presuppositions of the theses of instrumentality, conditionality, annexation and human agency currently dominate the social, scientific

---

7 The concepts of a *wild publics* and *grotesque symposia* were put forward by semiotician Mikhail Bhaktin but is proposed as an extension of the Habermasian *public sphere* (Gardiner, 2004).
discourse of ICT and indigenous peoples constructed around ontologies of oligoptic systems and panoramic imageries. These strategies point to a “sociology of the social” (Latour, 2005), wherein ontological purity is accentuated, while carefully hiding the proliferation of impurities, hybrids and heterogeneities. There is a need to flatten the contours and nested structures that were arbitrarily formulated through oligoptic reasoning. Alternatively, there is an equal need to recognise and address the messiness, ambivalences and non-coherences that were either skilfully or unwittingly hidden in panoramic representations.

A call has been made already, exhorting scholars to rethink and re-examine the use of orthodox, theoretical disciplines in relation to the study of ICT and the Philippine society (Pertierra, 2007a, p. 5; Thompson, 2007). This exhortation can also be extended to rethink not only the application of orthodox theories, but ontological constructions as well. It can be extended further in relation to studies and research of information and communications technologies, and indigenous societies, not only in the Philippines, but in other places as well.
Chapter 3: Framework and Methodology

The previous chapter located metatheoretical and ontological issues that concern the recent scholarships of information and communications technologies (ICTs) and indigenous peoples. It is argued, here, that research of ICT and indigenous peoples needs to veer away from this systemic obfuscation, by recognising the proliferation of hybrids, as well as the existence of impurities and heterogeneities (Law, 2004, 2009). It ended with call to re-examine the theoretical and ontological strategies employed in the field.

On the other hand, the issues presented also show themselves as opportunities towards adding to the body of knowledge by means of epistemic and theoretical development.

The framework and methods of actor-network-theory (ANT) provide social research of the cognisance of heterogeneities together with the various enactments attempting ontological purity, difference and coherence (Law, 2002b, pp. 116-130; 2004, p. 82).

Framework

otherwise pre-empted social inquiry into fore-structured and ossified results, particularly in the field of ICT and indigenous peoples.

**Metatheoretical grounds.**

Sociologist Michel Callon (1986) identifies three major principles of the ANT framework. These are *free association, generalised symmetry and agnosticism*. These three principles form the metatheoretical grounds of ANT research.

First, the principle of *free association* posits that all associations or relationships are formed with no *a priori* classification, may they be epistemic dualisms, dichotomisations or multi-tiered hierarchies. Latour (in Callon & Latour, 1981; in Harman, 2009; 1993) saw this principle as a reaction to homogenous mononaturalism and pluralistic multiculturalism of modernist thought (Harman, 2009).

Homogenous mononaturalism maintains that there is a natural reality in existence that is unitary, universal, logically-structured and operating within established physical laws in the universe. Such universe exists and will continue to do so, even without human voluntarism and intervention (Harman, 2009; Latour, 1993). Pluralistic multiculturalism, on the other hand, depicts multiple social realities as being products of human civilisation. It propounds an abundance of different cultures resulting in different ways of looking at the world. These two principles have remained separated in theory, as exemplified by the present bifurcation of academic disciplines between the natural sciences, humanities and social sciences. However, while the bifurcation has existed in theory, these two epistemic dualisms have actually blended in practice (Harman, 2009; Latour, 1993).
This is evinced by a proliferation of hybrids (Latour, 1993) and the discovery of messy heterogeneities (Law, 2004).

The principle of free association bridges this bifurcation by letting the social researcher associate elements from both natural and social realms, and by including both human and non-human actors in the analysis (Latour, 1992). Free association posits that agency is not merely characteristic of humans, but of non-humans as well (ibid, pp. 63-86). The agency of non-human actors does not mean granting full causality to things (Latour, 2004; 2005, pp. 87-120). Apart from creating an environment for humans and making them undertake certain types of actions, things also “authorize, allow, afford, encourage, permit, suggest, influence, block, render possible, forbid”, to name a few (Latour, 2005, p. 72). The agency of things is normally relegated to the background of sociological inquiry. However, there are instances when things reveal their agency through events, human limitations and activities, such as (but not limited to) times of innovation, accident, temporal and spatial distantiations, archival investigation or products of fiction (Latour, 2005, pp. 80-82). What is important for the investigator is not to limit analysis with human-to-human associations and causalities that had previously, and yet arbitrarily, dominated research in the field.

The second principle deals with generalised symmetry. This principle does not discriminate any actor by giving them equal treatment in the process of social investigation. Symmetry shows that everything deserves equal explanation by taking matters into account on equal footing (Latour, 2005, p. 79; Law, 2004, p. 164). By symmetrising the explanandum, social research then creates the possibility of a flat

---

8 Bruno Latour (2004; 2005, pp. 87-120) made a comparison between ‘things’ as matters of concern, as opposed to ‘objects’ as matters of fact.
ontology (Latour, 2005) without any presupposed hierarchies and levels, as imagined in previous scholarship and somewhat succumbed to. As such, notions of nested or hierarchical levels imagined through macro, meso, micro and local structural configurations are dismantled through the principle of generalised symmetry. In addition, emergent variables in any given social investigation are treated equally and do not impose some *a priori* conceptions of human intentionality and causal-material relations, such that scallops exert the same agency as fishermen and scientists (Callon, 1986) or aboriginal landowners, fires and environmental scientists (Verran, 2002).

The third principle is that of *generalised agnosticism* (Callon, 1986). Generalised agnosticism steers clear of taking positions and reducing a particular network to specific, sociological interpretations. Agnosticism acknowledges the complexities of a particular interpretation, aware of its messiness and heterogeneities. One particular instance is the careless and oft-repeated propensity to relate social inequalities to globalisation, as a convenient explanation of everything from pathos to markets. Hence, sociological analyses of categorisations haphazardly directing the reader on tropes of ‘globalisation’, or of any micro or macro configurations, must be suspended prior to making generalisations. Agnosticism forces the investigator not to quickly pass judgement on the observed types of actions by immediately framing them within such backdrops (Callon, 1986; Latour, 2005). It emphasises the imperative to, as Latour advises, “myopically” follow the actors themselves, no matter what metaphysical mess it leads them into (2005). Latour (ibid, pp. 200-201) further argues that agnosticism makes the investigator aware that no social interaction is *isotopic* (that is, having the same reactions at the same moment at any site), *isobaric* (that is, exerting the same pressure at all times),
synchronic (that is, happening at same points in time) or synoptic (that is, having only a number of actors visible for any given dispensation). Analyses must then steer clear of homogenising tendencies.

These three principles let the researcher freely associate everything within the hinterland by freely associating its actors, giving them equal explanatory power and staying clear of homogenising sociological interpretations and frameworks by suspending interpretation.

**Irreductions.**

Another principle of ANT research is *irreduction* (Latour, 2005; Latour 1988; Mol and Law 2002; Andrew Barry in Mol and Law, 2002). Irreduction propounds that social research does not necessarily require the same connections (as with isotopism), nor does it require the same set of arguments and variables to explain social phenomena (Latour, 2005, p.107). Hence, if connections are established between actors and sites, it should be explained with a thick description (Geertz, 1973, 1983 in Denzin & Lincoln, 1994, pp. 505-506) and not by haphazardly reducing them into long-held and long-accepted concepts (Latour, 2005, p. 137), such as, for instance, “New Media Nation” (Alia, 2009), “ancient indigenous practice” (Glowczewski, 2005), “cultural resistance” (Mizrach, 1999), among others.

It is argued that perfunctory conceptions of the indigenous are not only unrealistic, but also unfair. What is important is to steer away from these conceptions and not be overtaken by them in the analytical process, so as not to force explanations into simplistic, reductionist statements that may otherwise perpetuate undue notions of indigeneity.
Dislocation, performance and enactments.

Actor-network-theory defines action as dislocated, that is being ‘framed’ within other surrounding actors (Latour, 1996 in Cooren, 2000, pp. 173, 176). Researchers must be reminded that the action is not performed in a vacuum, nor does it exclusively occur by means of psychologistic interpretation. Latour (2005, pp. 43-62) describes action as not original, but “borrowed”, “distributed”, “suggested”, “influenced”, “dominated” and “betrayed”, among other possibilities.

If action is not local, then its performance is also not an original one (Latour, 2005, p. 34-35), but it is brought into being by a concatenation of actors. This performance is recursively produced, reproduced and stabilised through enactment (Law, 2004, p. 159,). Human and non-human actors and their connections are made real through performance that is constitutive of a recursive process of enactment. Realities are, therefore, made real through the performance of an action. Alternatively, this concatenation of actors vanishes when it is no longer performed; it is only made real because it is enacted (Mol, 2002, p. 44; Mol, in Law, 2004, p.56).

Fractionalities and partial connections.

According to Law, the concept of fractionalities is another way of imagining an alternative to the themes of singularity in modernism and multiplicity in postmodernism (Law, 2002a). It is a means of bridging the dilemma of ontological singularity (the notion that there is only one consistent reality in existence) and multiplicity, the idea of multiple realities proliferate without restraint (Law, 2004). Singularities are transfixed ideologies professing a singular, definite and limited set of processes in this world (Law, 2004, pp. 50-51). Multiplicity, on the other hand, is the recognition of multiple, coherent, yet fragmented, realities. The idea of

---

9 Dislocal is also another synonymous term used by Latour in describing social action (Latour, 2005)
fractionalities provides a way of avoiding the issues of these two ontologies by imagining hinterlands partially intersecting each other in complex ways (Law, 2004, p. 160). As such, human, as social beings continually associate themselves through partial connections (Haraway, 1991; and Strathern, 1991, in Law, 2004, pp. 64-69) of multiple, fractional realities. Humans engage in partial connections within these realities in their day-to-day lives. Likewise, they enact these realities by recursively bringing these realities into being through the production and re-production of social action (Law, 2004, p. 159). This recursive feature of enactment provides the setting of hinterlands of competing realities.

**Ontological politics.**

Multiple realities continually strive for relevance and stability through the dynamics of ontological politics (Mol, 2002). Each enacted reality has its own ontology (that is, its own set of principles for making sense of its own composition), as humans and non-human actants perform and connect to their fractional character (Law, 2004, p. 162). Having multiple and fractional sets of realities, with a multitude of actants weaving through them, depicts scenarios of competing ontologies striving for existence. *Ontological politics* is the technique of examining the various reasons why, at one given unit of sociological investigation, actors and actor-networks enact one reality instead of another (Law, 2004, p.162; Mol, 1999; Mol, 2002).

Ontological politics can be seen from two different angles, namely, the perspective of the actor and the actions undertaken by the actor-network. In the perspective of the actor, the decision of which ontology to follow is a political one. An actor in any given setting identifies an available number of ontologies, determines other ontologies that interfere, includes other ontologies and chooses
from a set, which then stabilises the actor’s decision and course of action (Mol in Law, 2004; Mol, 2002, p. 67).

On the other hand, ontological politics is seen differently, if we take competing realities and their enactments into consideration. Realities compete for enrolment by:

- avoiding the appearance of other realities by rendering them ambiguous or invisible;
- provisionally hiding other realities and their appearances;
- instilling a singular process in the world, based on its ontology;
- deleting the uncertain nature of other realities in favour of apparently stable ones;
- keeping competing realities separate and distributing them across time and space;
- deferring multiplicity for affecting its disappearance;
- grouping othered realities in order to make their out-thereness look much more straightforward; and
- insisting that a singular reality is productive and navigating along others is not (Law, 2004, pp. 65-67).

Indigenous peoples engage in the hinterland of competing fractional realities. It has been argued that indigenous communities should not treated as inert objects fixed through time and space, as they live within a “arena of multicultural strife” (Pieterse, 2001, p. 68). Such setting is situated by ontological politics of competing realities. These include, but are not limited to, indigenous worldviews, colonial and
post-colonial administrators, commercial traders and religious organisations, among many others. These realities actively compete for relevance through *enrolment*\(^{10}\) by seducing the actors into performing their subscribed ontologies and keeping betrayals at bay. The challenge of this study is to examine how ontological politics occur within a setting wherein indigenous peoples enact ICTs in the course of their daily lives.

**A sociology of translation.**

Crucial to analysing the social dimensions between ICT and indigenous people is taking account its emergence, existence and sustainability of the different operant enactments through ontological politics. Apart from this, ANT research also investigates how technologies (as actor-networks) associate themselves across sites. The sociology of translation gives a methodical approach to analysis, critique and theory-formation in the field.

*Translation* starts with the premise that there are no strong and stable social ties in existence, only associations traceable through things that have different meanings (Latour, 2005, pp. 106-108). These meanings allow at least two mediators to co-exist through association. The teleological basis of translation is not simply determined by association through direct causation\(^{11}\) or a simple counter-parting of meaning of stable elements. Translation is the process of taking into account how actors transiently stabilise heterogeneous other actors in the hinterland of competing ontologies (Latour, 2005, pp. 6-12)

\(^{10}\) See page 55.

\(^{11}\) Direct causation *transports* (not *translates*) elements of a social setting (Latour, 2005, pp. 106-108).
**The moments of translation.**


*Problematisation phase.*

Problematisation occurs when mediators and intermediaries of an actor-network establish the presence of a range of actors. The aim of this phase is to persuade human and non-human actors to be associated with it, instead of engaging in their current preoccupations. This requires the *punctualisation* of actors by reducing them into simplified and mutually acceptable definitions. An actor’s *obligatory passage point* is also defined as that which actors must go through. This phase is also characterised by actors constructing *interest maps* by attributing reductionist simplifications of stability of other actors, while attenuating or ignoring the heterogeneity of their motives, aims and actions (Callon & Law, 1982, pp. 617-618)

*Intéressement phase.*

Intéressement is the phase when the actor-network attempts to distinguish itself from other competing actors by employing strategies to dissociate from the activities connected to them. Interests are articulated and explored in terms of choices among possible courses of action (Callon & Law, 1982, p. 617). This is done by weakening or attempting to sever the links of other competing actors to establish itself as a better means of engagement. The aim is create a menu of interests into which the actors could enter by enrolment.
**Enrolment.**

This is the acceptance phase of the actors within the network. Callon (1986) describes three sub-phases of enrolment, namely, seduction, transaction and consent. *Seduction* occurs when the network entices the actors with a set of rewards, along with a map of its transaction costs and benefits. *Transaction* is the phase when actors reflect on the available choices, and the moment of *consent* is when associations are stabilised, with a clear *obligatory passage point* established. An obligatory passage point is where all actors are forced to pass through and trade. The alliance to an actor-network is then effectively made stable and sustained (Callon, 1986, p. 261; Latour, in Bijker and Law, 1992, p. 234).

**Mobilisation phase.**

Mobilisation occurs when enrolment is stabilised. Human and non-human actors are now mobilised as mediators and intermediaries set to enrol other actors into the network.

**Counter-enrolment and dissidence.**

Apart from the options of being enrolled or not to an actor-network, actors respond to translation, either through counter-enrolment or dissidence. Actors may recursively perform courses of action as a counter-enrolment strategy against the strategies of other actor-networks (Callon & Law, 1982). The interests of an actor could be transmuted into the map of interests of another. So, instead of the intended outcome of enrolling actors into its network, an actor may become an ally of another, through counter-enrolment.

Another reaction to enrolment is to sever ties while being associated with the actor-network. *De-inscription* is the set of courses of action to a program when they no longer subscribe to the seductions employed by another actor (Akrich and Latour
in Bijker & Law, 1992, p. 259). These actors may avail themselves of \textit{anti-programs} in order to extract themselves from the actor-network. This happens by performing a set of actions that are in conflict with the interests of the actor-network that they are currently enrolled into. A state of \textit{dissidence} then occurs when a multiplicity of de-inscriptions by actors against a network (Callon in Law, 1986, p. 219). Every actor striving for permanence stands the chance of dissent. Total submission maybe apparent at first, but it can never be complete. Every translation is not a stable one and treachery and betrayal abound, which is operant across the hinterlands.

Latour (in Law, 1986, p. 271) emphasised enrolment as an important element of social power, such that the more actors enrolled in an actor-network, the more it is capable in exerting its influence. However, this does not necessarily equate to power \textit{in perpetua}, nor does it imply that the quantity of actors is necessary. An actor-network needs to make itself stable, sustain itself, as well as protect itself against counter-enrolment by other actors. It must be reminded that enrolment is not a permanent one, as actors continually navigate across competing networks.

\textbf{Technology and heterogeneities.}

Law (in Law & Mol, 2002, pp. 116-141) states that, in any given setting, heterogeneities abound and operate in any given technology. This includes information and communications technologies. In order for it to enrol other actors, a technology has to oscillate between its formal design and the complexities of the hinterland of competing ontologies (in Law & Mol, 2002, pp. 116-141). Law (ibid) provides several instances when heterogeneities, although \textit{apparently hidden}, manage the enrolment of other actors. This is done through the following strategies:
• Asserting that stabilising translations is a matter of parsimony and exigency. Not all factors can be taken within a given time because of its impracticability (*heterogeneity and simplicity*).

• Making itself present, by rendering competing actors absent in the process of stabilising translations (*heterogeneity and absence or presence*).

• Constructing materialities in which presences are made absent through the design and formal design of an object (*heterogeneity and materiality*).

• Constituting ‘others’ as present or absent within the design of technologies (*heterogeneity and otherness*).

• Constructing ambivalent explanations in an attempt to enrol the absent (*heterogeneity and non-coherence*).

• Creating an oscillation of absences and present absences into presence until their relationship with the technology is invoked and stabilised (*heterogeneity and deferral*).

Navigating heterogeneity and material formalism are part of the complexities of technological design. Technological design enacts translations in the form of rendering absence and presence through (but not limited to) *simplicity, materiality, otherness, ambivalence, noncoherence and deferral*.

**The collective and the collectif.**

What can be gathered now from the ANT framework is that there is no such thing as a ‘society’, but a heterogeneous *collective* of partially-connected human and non-human actors among competing actor-networks, momentarily stabilised through transportation or translation (Latour, 2005, p. 108). This includes technological devices acting as mediators and intermediaries for a network. It is argued that the
term ‘collective’ is a more appropriate term, as it exhibits a less stable portrayal than the traditional and somehow pretentious conceptions of what is seen as an inert social world.

The term collectif, on the other hand, was coined in a paper by Michel Callon and John Law, describing it as an “emergent effect created by the interaction of heterogeneous parts that make it up” (Callon & Law, 1995, p. 485). Emphasis must be made on the collectif’s ‘emergent’ character, unlike the ‘collective’ used as a contradistinction to society (Latour, 2005, pp. 247-262). The collectif is a heterogeneous web of relations among human and non-human actors—a result of enactment of production and reproduction (Law, 2004, p. 159).

**Research Methodology**

**Three methodological steps.**

This research adopts the general methodology espoused by Latour (2005) in conducting research using the framework of Actor-Network-Theory. This is because social research on ICTs and indigenous peoples must veer way from past epistemic and metatheoretical preoccupations, which fall into oligoptic and panoramic ontologies. This involved three major methodological steps, namely, deploying uncertainties, tracing associations and reassembling a collectif.

The first of these steps, deploying uncertainties, sets the background of the research site by acknowledging its heterogeneity and its features. This involves identifying group formations and its boundaries through their spokespersons, identifying performances and enactments, and identifying intermediaries, which transport meaning and relations, and mediators, which transform, translate and distort complex sets of resources across different directions (Latour, 2005).
The second step is to investigate the course of action that the participants have taken and trace its associations. It is important to flag potential pitfalls of panoramic and oligoptic themes, in order to avoid them and not to commit past mistakes. The rule is to keep a flat ontology by avoiding a ‘jump’ into notions of nested levels of social structure, together with fully-coherent depictions of social realities. Tracing the associations will determine the mediators and intermediaries of particular sites.

The last step is the reassembling of the concatenation of sites, mediators and intermediaries into a collectif. Taking a clear account of a collectif will enable the discovery of both its ontological messiness and its metrological power. Heterogeneities can be seen in how the collectif manages, reacts and works through ambivalences, apprehensions, uncertainties, betrayals and non-coherences, among others. Conversely, the metrological power of a collectif can be identified through how it imposes standards of action, deploys collecting statements\textsuperscript{12} that stabilise the enrolment of its actors across sites (Latour, 2005, pp. 227-232) and how it counter-enrols itself against other competing collectifs.

**Research design.**

The methodological design of this research involves three major phases, based on the methodological principles of Actor-Network-Theory.

**First phase.**

The first phase of this design involved the generation of a preliminary literature review, the preparation of the necessary research instruments and materials, and the arrangement of the research protocols necessary for field research.

---

\textsuperscript{12} Collecting statements are expressions that create justifications of their own actions, fluently passing across the sites (Boltanski and Thevenot (forthcoming) in Latour, 2005).
This phase initially involved the acquisition of background information, based on research of the relevant literature. A number of historiographic resources were collected and used to establish the background information of Tadian, while pertinent journal articles, relating to the themes of indigenous people, the Internet, mobile phones and Philippine society, were also collected. The aim of literature research is to generate a preliminary set of the various enactments from various texts. Apart from this, the aim of literature research is to identify the representational ontologies of these enactments and how they assert and stabilise themselves among competing realities. A preliminary review of literature is drafted to guide the investigator in the vagaries of the research. The review also locates particular group formations necessary for personal and group interviews conducted on the next phase.

Upon identification of background information, through the preliminary review of literature, the next stage of this phase involves the formulation of the necessary instrumentation and fieldwork protocols. The fieldwork instruments that were used in this research involved semi-structured questionnaires for interviews. These questionnaires were drafted in English and translated into Kankanaey (the participants’ indigenous language) with the help of a local translator. These instruments were pre-tested to determine their applicability and feasibility during field interviews.

Recording materials were also prepared during this phase. These included two sets of logbooks, a voice recorder, a digital camera and a laptop computer. The first set of logbooks was for recording highlights during interviews and field observations. The second set of logbooks contains personal accounts and impressions, notes from the literature review and reminders. The voice recorder was

---

13 See Appendix E: Research Questions.
used for recording interviews, while the digital camera was for taking photographs of relevant events and subjects. The digital data from these two devices are stored in a laptop computer for easy retrieval.

The university’s requisite research ethics approval was secured and coordination of the research activities with community leaders, organisations and key individuals was undertaken during this phase. Research ethics protocols were followed in accordance with Australian research standards, which are, in turn, in accordance with the protocol of free, prior and informed consent among indigenous communities in the Philippines. Coordination meetings were also effected with community leaders to discuss the feasibility of conducting research on the site. This also involved meeting with community leaders and key people to present the agenda of this research.

**Second phase.**

The second phase of the research was the collection of data and information in the field. This involved staying in Tadian to conduct group and individual interviews, and systematic observations. There were two aims of this phase: First, to generate sufficient scientific data and information to identify heterogeneities; and secondly, to consolidate this information with the literature derived from the first phase. This was to trace the associations within the field, as the actors themselves perform ICTs in their daily lives.

*Group and key informant interviews.*

The group and key informant interviews were always conducted in a congenial manner and were information-rich. Group interview sessions lasted from 30 minutes.

---

14 Appendices A to C show the different ethics forms that were used to inform and invite people to participate in the research, while Appendix D contains the consent forms used prior to participation. Signed copies of the research ethics consent forms are kept by the author.
to slightly more than one hour, while individual interviews took an average of 20 minutes. Group discussions were conducted at a venue that was convenient, accessible, culturally-acceptable and consented to by the research participants. Key issues and questions were put up for discussion in an environment conducive to interaction, probing and dialogue. All sessions ended on good terms between the investigator and the participants.

The questionnaire was used only as a template for discussion and the questions therein were not asked verbatim or in a linear fashion. Generally, there were no translation difficulties encountered in using the research questionnaire because the participants were all multilingual and can easily shift from one language to another during regular conversations. However, there were a number of occasions when the investigator required the assistance of a translator, particularly during times when the investigator asked the participants to specify indigenous terms and/or clarify local phrases and idioms.

All responses were written in logbooks. There were some instances when responses were recorded by using a portable, digital voice recorder, upon the participants’ consent. There were two occasions when digital photographs were taken of certain participants. It was ensured that their consent and approval were sought beforehand and that their identities were not revealed.

There were a total of 45 participants, consisting of 18 males and 27 female individuals, all of whom willingly agreed to participate in this field research. Of the total participants, 20 participated in the group interviews. All participants were from groups of village officials, local government staff, students and young adults,
community elders, and spouses of overseas workers. Of the total participants, 27\(^{15}\) participated in the individual interview sessions.

Participants of individual interviews belonged to the following groups:

- Internet café business owners;
- Internet and/or mobile phone users;
- young adults or students;
- local and national government staff;
- officers of indigenous non-government organisations;
- members of indigenous councils of elders;
- academic staff;
- officers of village councils;
- overseas contract workers; and
- spouses of overseas workers.

*Ethnographic and/or praxiographic participant observation.*

A combination of ethnographic and praxiographic observation techniques were undertaken to provide a sufficient description of the cultural practices of the iTadian and their ICT usage. Ethnography is aimed at providing a description to a culture, by taking into account their symbolic and material descriptions. On the other hand, praxiography traces the complexities of a site through its multiple realities, in this case, as enacted by the participants (Mol in Law, 2004, p. 59). This involved observation and recording of participants’ behaviours and daily routines in specific contexts, and their use and treatment of ICTs.

\(^{15}\) Two participants from focus group discussions also took part of the 27 individual interviews.
Apart from detached observation, there were instances where the researcher participated in several practices to acquire a more detailed understanding. Observations were recorded in a logbook for this purpose. Some photographs of objects and places were also taken in the field, as a mnemonic device in preparation for narrative recording.

*Personal accounts.*

Recording of personal accounts were also done on few occasions. These included the author’s feelings and impressions of people, places, activities and events. Recordings were noted in logbooks, together with the data resulting from the other research techniques.

*Triangulation.*

The data collected underwent triangulation during the field phase. There were two aims for triangulation in this research. Firstly, it was used a means of gathering more detail in particular area of interest that requires more information. Secondly, triangulation was used as a means of validating and testing the reliability of the claims and issues of different persons.

There were two methods of triangulation that were adopted in the field, namely, data triangulation and methodological triangulation. Data triangulation involved the triangulation of information across different sources. For instance, when the data derived from a local focus group, about the use of mobile phones and internet during a major landslide in a particular community in Tadian, needed more details, it was triangulated with other focus groups. This resulted in a more detailed understanding and narrative of what happened, not only during that fateful landslide, but also what kind of responses it generated across time and space. Data triangulation was also used to validate important dates and events. There were
instances when simple details, such as the installation date of mobile phone base
stations or the price of internet access was triangulated from different individuals and
focus groups.

Methodological triangulation involved the cross-examination of one type of
data by using the data derived from other research methods. For instance, the data
collected from official, municipal documents about the combination of mobile
phones and the traditional paw-it system\(^{16}\) was triangulated with the data collected
from participants’ observations and individual interviews. Methodological
triangulation revealed the veracity of the claim derived from official, municipal
documents, while adding a lot more information about how the combination of
mobile phones and paw-it operates.

Both strategies of triangulation occurred spontaneously during the data-
gathering session (that is, interviews) or were made between trips into the field. In
spite of adding more time in the general research process, triangulation, nonetheless,
proved to be a significant activity that generated thicker descriptions of specific
themes and ensured the veracity of information.

*Third phase.*

The last phase involved the compilation and reassembly of data, using the
framework of the Actor-Network-Theory. Data recorded from the logbooks were
highlighted, encoded and stored in digital form, while photographs and voice
recordings were automatically saved in digital formats (JPG and MP3, respectively).
Selected secondary data were photocopied, compiled and stored, either in digital
format or were printed and bound for personal use.

\(^{16}\) See “The paw-it system and mobile phones”, p. 177.
Logbooks are stored in the researcher’s personal library, while all digitised sources are saved and compiled in a personal hard drive for easy retrieval. Back-up copies of digitised sources were also made on-site, while digitised copies of the interview proceedings are also saved off-site. Both actions were made in order to safeguard against possible loss.

The next stage was the reassembly of compiled data. This entailed the tracing of associations of heterogeneous human and non-human actors, sites, associations, mediators and intermediaries that are practiced within the Tadian hinterland. These emergent associations revealed various enactments having their own ontologies, which are stabilised through enrolment and application of standards and metrologies. In addition, the tracing of associations revealed betrayals, ambivalences, uncertainties and non-coherence of actors, revealing their heterogeneous character. Ontological politics between competing enactments are narrative, particularly how they struggle for relevance and survival.

The result is a heterogeneous assemblage arranged in the succeeding chapters.
Chapter 4: Deploying Uncertainties in the Hinterland: A Brief Social History of Tadian, Mountain Province

Using historiographic data, this chapter introduces the reader to the heterogeneity and competing enactments within Tadian, as the site of this research. It starts with a synopsis of Tadian as depicted by the Philippine state, as it stabilises the locality as a smooth and romanticised reconstruction. However, despite this official reconstruction, it can be evinced that heterogeneities are creeping into official texts. This is particularly so for the ambivalence rendered through the multiple depictions of stabilising Tadian as a locality.

The chapter then discusses heterogeneities through a different period of Tadian’s social history, namely, pre-colonial (that is, from Spanish colonisation to the Japanese interregnum of American control). Colonial enactments\(^{17}\) sought to control the hinterland through political administration and application of ideology, religious dogma and built environment. However, the efforts of these enactments to smooth the complexities across the landscape may have partially failed, but some persisted and were stabilised through space and time. Historical accounts bring forward heterogeneities within the setting of Tadian, based on accounts of ambivalences, as well as the natives’ direct assertion of traditional beliefs during the Spanish colonial regime. These ambivalences are seen through the practice of allegorical performances, overlapping enactments and colonial enrolment by indigenous people and institutions. Further, these ambivalences advance the idea of

\(^{17}\) This chapter does not suggest that enactments are indexed according to political regime. It merely presents clear points of reference as a heuristic device to elucidate how complexities and heterogeneities are reassembled using historiographical accounts.
the natives navigating through fractional enactments and ontologies. The direct assertion of the natives was also seen through their direct interrogation of colonial worldview, as well as partial failure of the colonial infrastructure that was built to assimilate them. Post-colonial, central authority was not as effective. Framed along historiographic accounts, the result is an interplay of the various pre-colonial, colonial and post-colonial enactments within the Tadian hinterland. Examples are the multilingualism of the natives, as well as enrolment to a number of hybridised, indigenous, socio-political institutions, apart from other enactments.

**Background**

The municipality of Tadian (2009 population: 19,023), Mountain Province, is located at the north-western part of Luzon island within the boundaries of the Philippine Cordillera, one of the largest mountain ranges in the Philippines. Situated on rugged terrain with peaks reaching 1,340 metres above sea level (Tadian Local Government 2005, p. 8), Tadian is accessible via three major highway routes, the most popular of which is the Halsema Highway. This highway was named after an American colonial engineer, who supervised the building of the road system that would connect and, at the same time, divide the province into eastern and western geopolitical regions. Buses coming from the major metropolitan area of Baguio usually leave for Tadian at about 7 am to 9 am, during the time when city traffic starts to build up. It has been a routine for bus operators to dispatch their buses during the morning to ensure that the whole journey will be undertaken in daylight, because travelling during the night-time is risky, especially during the rainy season.

---

18 Pronounced as Ta-jan. The present operations of the municipal government of Tadian is mostly dependent on the budget provided by the national government (Tadian, 2005). It is classified as a “fourth-class municipality” under the present income classification system of the government, that is having an average annual revenue income of under PhP 35 million (Tadian, 2005), which is roughly AUD800,000 under the present foreign exchange rates.
Travelling to Tadian would take an average of six to seven hours of traversing a long, meandering road, steep mountainsides and outcrops, and occasional landslips during rainy seasons take more time to negotiate. While on the road, the physical landscape features mountainsides swathed with commercial vegetable crops, such as carrots, lettuces and potatoes. The temperate and climate of the Cordillera region, as well as the growing demand for these vegetables, encourage local farmers to plant tracts of mountainsides with vegetable crops. The highway is dotted with signposts in a variety of sizes and places on the roadside, each one of them never failing to announce the latest brand of commercial agrochemicals on the market. This moving panoply of vegetable fields and promotional advertising occasionally tapers off once the bus traverses a town centre located on junctions.

Tadian consists of 19 barangays, namely, Balaoa, Banaao, Bantey, Bantayan, Bunga, Cadad-anan, Cagubatan, Dacudac, Duagan, Kayan East, Kayan West, Lenga, Lubon, Mabalité, Masla, Pandayan, Poblacion, Sumadel and Tue (Tadian, 2005, pp. 103-104). Each barangay consists of smaller sitio. Accessibility to each sitio varies. Some can be reached only through steep mountain foot-trails, while others are easily accessible via paved roads. It is interesting to note that a cartographic sketch of the municipality shows about six areas where territorial boundaries are contested with adjacent municipalities (Tadian ca.2004, p. 5).

An iTadian household engages to a number of livelihood strategies. A household’s source of income may include possible combinations of members

19 Pronounced ba-rang-gai. A barangay is the smallest local government unit in the Philippines. Field research was undertaken on the barangays of Poblacion, Kayan East, Kayan West, Masla, Mabalite and Cagubatan.
20 Hamlets.
21 iTadian is an ethnonym for people presently dwelling in Tadian or who have heritage within the greater Tadian area. Specific names are also attributed to those living in specific communities, such
engaged in full-time employment, conscripted labour, small-scale crop farming, small- to medium-scale enterprises or livestock raising, among other things (R. Rovillos, Orticio, & Orticio, 2009, pp. 9-10).

A Cursory Reassembly of Tadian

Assembling the idea of what constitutes as Tadian does not simply entail the process of providing names to places and delineating boundaries across geographical space. More importantly, it involves the stabilisation of actors, such as geography, personal experience, geopolitical boundaries and statistical information. These actors eventually arbitrarily reassemble into Tadian as a stabilised locale. This analysis immediately shows the heterogeneities at work here: Other enactments are rendered present, while yet others ones are absent, deferred, rendered silent or simply made absent in reassembling a locality. It deliberately starts as a messy one, harbouring no specific anchoring or partiality.

‘Tadian’ through different texts.

Migration and habitation are the most common themes in constituting Tadian. According to the Tadian Ancestral Domain Sustainable Development and Protection Plan (2005, p. 17), the people of Tadian are a product of immigration from nearby communities around the Ilocos and Cordillera regions. Another slightly romantic narrative, derived from focus groups and elders, claims that people from the older communities in the interior parts of the Cordillera, while searching for wandering domesticated animals, were enthralled by the beauty of the place and decided to inhabit the place (2005, p. 17). Another narrative is that Tadian was a preferred settlement for surviving members of indigenous and colonised communities stricken

that those living in Kayan ascribe themselves as iKayan, Masla as iMasla, and so forth. Igorot is the general term for indigenous people of the Cordillera region.

22 See also page 73
by smallpox (Tadian, 2005, pp. 17,21), a disease claimed to have been carried by infected Spanish *conquistadores* during their colonial expeditions (Scott 1982, p. 36). Anthropologist June Prill-Brett (1994a, p. 20) asserts that the establishment of permanent villages in the whole Cordillera region, Tadian included, is associated with the accessibility of natural resources suitable for hunting, fishing, shifting wet rice cultivation (Prill-Brett, 1994b, p. 20), pointing to narratives of migration based on environmental determinism.

**Enactments of place-making.**

As the previous section shows, reconstituting Tadian as a place derives from enactments that bring into presence the concept of place as a space of discovery, empty prior its habitation. This enactment is significant in claiming and asserting physical spaces, although it must be stressed that this is only one among the many possible reasons for *making a place*. Worthy to note is the conscription of non-human actors in place-making, particularly animals, elements of the physical environment and human conditions. These assemblages expose the interspersing enactments and mediators that form part of constituting ‘Tadian’ as a locale. Place-making focuses on reassembling the past in its present significance, according to valorisations made present in the process of translating actors into its ontology. This reassembling can be framed in terms of enactments that translate past and present actors, which are then expressed according to coherent justifications of place. This also means that other enactments for place-making are deferred, attenuated or made silent in order to accentuate its presence. In the case of Tadian, it is the trope of discovery that is highlighted.

While official, municipal documents point to the place as inert, the past and present conducted historiography about the Cordillera region notes that the area
where the current administrative centre of Tadian is located only took prominence late in the 20th century.

To summarise, the performance of place-making in Tadian is brought about by enrolling various enactments and mediators (for example, kinsfolk, animals, events, landscapes, documents and imaginaries) and then stabilising them to make a coherent space or a picture of place in accordance with selected ontologies.

**Pre-colonial Polities**

This section gives an account of the political institutions existing prior to the incursion of Spanish colonisation. It provides a number of enactments, together with strategies for addressing the complexities brought about by the physical environment and inter- and intra-community dynamics. These enactments must not be misconstrued as inert nor tropes pointing to romanticisms. To the contrary, it must be pointed out how these pre-colonial polities navigated within the complexities of a heterogeneous setting.

**The kadangyan.**

Before Spain took claim of the Philippines in 1521, the political landscape of the area now called Tadian can be characterised as decentralised communities called ‘îli’, consisting of 2,000 persons who were administered by a council of “petty plutocrats” called kadangyan (Scott 1982, p. 135). The kadangyan are pre-eminent men who gained prestige and influence through the maintenance of conditional lineality, ownership of land and domestic animals, as well as ostentatious (and competitive) ritual feasting (ibid). As a tradition, a kadangyan’s status is not directly passed down generations, but must be displayed by showing the capability to increase personal and community resources that are substantial enough to be passed on to the succeeding generation. Ownership of a kadangyan’s inherited properties in
the form of terraced rice fields must be periodically asserted and maintained through direct access. This is done by being physically present in the upkeep of the farm and through delegation among close kin groups. Domesticated beasts, such as water buffaloes, pigs and chickens, are accumulated by the kadangyan as a continuous means of establishing and displaying his status among community members. These beasts are regularly used for feasts and are sacrificed during times of crises like low harvests, epidemics and natural calamities. Aside from the butchering of beasts and the distribution of its meat among the villagers, customary feasting includes the performance of traditional music and dances within the vicinity of the kadangyan’s household. This display of ostentation can last for two or more days and its performance reinforces the stature of kadangyan as a figure of prominence (Scott 1982, pp. 135-136).

**The dalakay and pechen.**

Decisions concerning the ili are governed by a council of kadangyan called the *dalakay;*23 which is translated as ‘old or married men’. Decisions by the *dalakay* are either made in solidarity or in competition among competing kadangyan, particularly on matters concerning interpersonal disputes about resource use, management of resources, such as irrigation, inter-tribal conflicts and crimes, and days of planting, harvesting, recesses and feasts (Scott 1982, pp. 135-139). Meetings are held within ritual and judicial ward centres called *dap-ay.* Also called *delipey* in some parts, a typical dap-ay is a flattened, open-air area consisting of flat, medium-sized rocks that serve as seats and are arranged to surround a small fire pit. Each cluster of 10 to 15 households has its own area reserved for a dap-ay (Scott, 1982, pp. 136-138).

---

23 Also called *dalakay, lallakay* or *amam-a,* literally “assembly of fathers” (Tadian, 2005).
Peace pacts between communities are called *pechen*\(^\text{24}\). The *pechen* is a bilateral agreement between the *dalakay* of two communities in order to stabilise peaceful relations among its members, institute mutual and exclusive territorial rights to natural resources or as a means to end hostile relations (Prill-Brett, 1994, pp. 23-24).

**A glimpse of pre-colonial enactments.**

Domesticated beasts, rice fields, petty plutocrats, competing communities, calamities: here we can discover human and non-human actants of the pre-colonial hinterland wherein communities formalised performances of prestige and reciprocity through political and juridical enactments by councils of elders. These formalised performances are coupled with the competitive accumulation of domesticated beasts and performance of ostentation associated with the insecure tenure of petty plutocrats. These enactments of accumulation and ostentation do not only reinforce the sociopolitical stature of the petty plutocrats and, concomitantly, the council of elders, but also address the uncertainties posing as detrimental to the community, such as conquests, epidemics, food shortages and natural calamities. Other enactments by members of lower status, women and children were carefully effaced to accentuate the role of men in the community as a position of privilege. The accumulative capacity of the male plutocrat and the perceived wisdom of the council of elders are made present to ensure that inter- and intra-community hostilities are kept at bay.

It can be seen that historiographic accounts promise some degree of identifying the heterogeneous hinterland of the pre-colonial Igorots and, specifically, the iTadians. This is through the identification of political assemblages and how

\(^{24}\) Also called *peden.*
decisions are made through the enrolment and stabilisation of human and non-human actors, as well as competing enactments within their midst.

**Spanish Contact**

The kingdom of Spain took claim of the Philippines for almost four centuries (1521 to 1898). There are several records of Spanish colonial contact in the region, based on a 1623 royal decree to explore the area for mining (National Historical Commission., 1970, p. 165). One of the earliest recorded expeditions was made in about 1668 at the  ili of Kayan (Keesing, 1962, p. 102), a community of 150 dwellings located a few kilometres from the present-day Tadian town centre.\(^{25}\) According to Spanish historian, Diaz (in Keesing, 1962 #251, p. 102), the expeditionary forces of Admiral Pedro Duran de Monforté found the community of Kayan within areas of terraced rice fields draped along the mountain slopes (Keesing, 1962, p. 102). After the Monforté expedition of 1668, the Spanish regime gradually established a military garrison for subsequent colonial expeditions into the interior of the Cordillera (Scott 1994a, p. 33). Kayan was one of the largest of the 40 identified communities in the western Cordillera frontier (Keesing, 1962, p. 93). It was established as the capital of the *commandancia*\(^{26}\) of Lepanto\(^{27}\) by 1852, but was later shifted to the subject town of Cervantes in 1875 (Keesing, 1962, p. 110).

---

\(^{25}\) The area where Tadian stands was not recognised as the town centre until the middle of the 20th century (DILG-CAR, 1999, p. 384; Tadian, 2005, p. 24; ca.2004, p. 1). In fact, the only reference to "Tadian" then was through oral accounts and local folklore, when it is referred to as a place of blacksmiths specialising in *tadi*, which are spurs fitted on the legs of fighting cocks, hence the name *tadi-an*—a place where tadis are made. Other than that, it was the adjoining village of Kayan that was the point of Spanish attention, which carried on for half of the 20th century.  

\(^{26}\) A *commandancia* is a Spanish, colonial, geopolitical unit that required more military administration and allocation of resources, in contrast to an already subjugated and efficiently administered *alcadia*.  

\(^{27}\) Named after the 1571 Battle of Lepanto, a naval battle that took place in Lepanto (Nafpaktos of present-day Greece) between the Ottoman Empire and Holy League in which the Spanish Empire took a leading role.
Elements of the Spanish colonial regime have followed the old network of trails from the nearest established colonial town of Candon into the western Cordillera corridor. According to Keesing (1962, p. 102), the road to Kayan starts with a gradual ascent, by foot or on horse, along valleys and mountain passes from Candon to Cervantes, following the headwaters of the Abra river. This journey normally took a half a day. The town of Cervantes is usually a holdover for travellers before heading further inland. From Cervantes, Kayan can be reached eastward after another four hours. Gleaning from the foregoing example, the Spanish had a certain amount of progress in establishing colonial enactments within the fringes of the Igorot domain after almost 300 years of colonisation of the Philippine islands. This was true in their establishment of simple networks of horse trails as conduits for the flow of supplies, tributes and (not the least important) information deemed vital for the government.

Interestingly enough, the trail which the colonial regime established has also been a setting for subversion and revolutionary movements in the past. There are some historical records pointing to Kayan as being a transit point for both Igorot conscripts and fleeing Filipino revolutionaries during their struggle against colonial rule (Florendo, 1994a). There is one transcript from Fanged, an Igorot warrior from the interior community of Bontoc, who, in February 1899, stopped at a place that he called ‘Gay-ang’ (Fanged, 1994). Gay-ang served as a transit point for several Igorot conscripts to rest, eat and recuperate before leaving the Cordillera mountains for a long journey to battle against the American military forces at a place in the district of Manila called Kalookan (Florendo, 1994a, p. 55). The road system also

28 The pronunciation could be subject to interpretation. Aside from Kayan, there is also a place that is slightly homophonous to Kayan. It is called Gay-ang and is located in the northern part of present-day Tadian.
made it easier for Filipino revolutionary forces, including its first president Emilio Aguinaldo, to traverse Kayan in December 1899 during their eastward retreat. This was in order to avoid the attacking American forces during the Philippines-American war, which almost immediately preceded the Spanish regime (Florendo, 1994a, p. 84).

Past and contemporary historiography points to the networks of roads and trails traversing Kayan and the greater Tadian as being a mediator for colonials and insurgents alike. To the Spanish empire, Kayan (as with Cervantes) is a north-western gateway where gold ore lays beneath its mountains (Scott 1994b, pp. 9-10). On the other hand, the Kayan network also served as passageway for Filipino revolutionary forces to escape from colonial forces, and a way to recruit Igorots into their battles (Florendo, 1994a) 84-84. The road system has become a setting of the “surface dramas” (Harvey, 2011) of various, and sometimes competing, enactments notwithstanding the ones previously mentioned. It was a means of pre-Hispanic transportation until it was translated by colonial expansionism. As a consequence, the road became a mediator of both indigenous and colonial enactments. The road were once owned and controlled by the Igorots but were also translated (that is, betrayed) by colonial enactments. The natives were made aware of this betrayal and consequently ensured that the trails were hidden from colonial consciousness (Scott 1994b, p. 16).

Spanish colonial enactments were performed according to dogmatic hierarchy, expedition of colonial and pre-colonial networks, military technologies of submission, control and conscription.29 These enactments are dictated with

29 As a practical strategy, Spanish colonisers forced native inhabitants to live within the geopolitical structures of the pueblo (town) through a policy called reduccion (Peralta & Scott, 2001:43). Those who refused to live within
imaginary of moral ascendancy over the domain of Kayan, as well as the rest of the Philippine islands. These performances were made present and strove for singularised coherence and metrological power across the Tadian hinterland. Apart from road networks, various actants flowed into the Cordillera interior in an attempt to stabilise colonial enactments and avert dissidence. These included devices of administrative, religious and military control. However, these actants did not belong to the monopoly of Spanish colonial enactments alone; they were important actants of dissidence as well.

Ambivalences During Spanish Colonisation

If the geographic area of Kayan seemed to claim some strategic importance to Spanish colonial enactments, the indigenous dwellers of Kayan and nearby communities remained ambivalent towards both colonisers and Christianised Filipinos. When Kayan was ‘discovered’ during the 1668 Monforté expedition, it was found deserted, despite being surrounded by well-kept and verdant rice terraces (Keesing, 1962, p. 102). This was an indication that dwellers had fled due to prior knowledge of approaching strangers. This response of desertion is not unique among the iKayan (Scott 1994b, p. 5, 10), it is a strategy these communities took because of their advantage of distance and knowledge of its terrain.

Despite being a military commandancia of the Spanish colonial administration, the occupation of Kayan was a short-lived one (Scott 1982, p. 149; 1994b, p. 10). One proof of this colonial discontinuity is Kayan’s reputation as a major source of

the pueblo withdrew to the hinterlands where colonial influence was minimal and easy to repel. They were called remontados (“those who returned to the mountains”) by the Spanish colonisers. There were also indigenous communities that, because of their relative geographical and topographical isolation and history of resistance against Spanish annexation, remained autonomous. These communities were called tribus independientes (“separate” or “independent tribes”) and were labelled as ‘barbarians’ and ‘pagans’, among other derogatory names (Florendo 1994a, pp. 77-80). Soon enough, the assimilated or colonised indios (natives) internalised these prejudices against both remontados and tribus independientes (R. D. Rovillos & Morales, 2002:9).
contraband tobacco in 1811 (Scott 1982, p. 149). Scott (1982, p. 149) also asserted that the Spanish central government “had neither the will nor the means to prevent the untaxed highland-lowland commerce which involved most of the colony’s gold production”. Another discontinuity is the use of the indigenous *peace pact*\(^{30}\) (Scott 1982, p. 148-163) as an instrument by the Spanish government for mediating inter-community conflicts on frontier areas, such as the case of an 1820 peace-pact between conflicting Kayan, Bago and Cagubatan communities (Scott 1982, p. 148).

Even during the war against invading American forces, which happened soon after the Spanish left the Philippines, the retreating Philippine forces, under their revolutionary president, Emilio Aguinaldo, were uncertain of their safety upon reaching Kayan in 1899. Their sense of restlessness was realised when Igorots attacked on several occasions with spears and lances. As a result, these skirmishes reinforced the troops’ general derision against Igorots, whom they already perceived as savage, treacherous and having a deep hatred for Christianised Filipinos (Florendo, 1994a, p. 84). It also showed diverse and discordant knowledge and perspectives co-existing within textual historiographies, in this case resulting in violent actualisations.

**Allegory, overlaps and colonial subscription.**

At this point some fissures can be located in colonial translations when dealing with heterogeneities in the hinterland. First are the performances of the iKayan when the Spanish forces were present. Second is the exuberance of indigenous, economic networks operating beyond the reach of the colonial regime in areas that the Spanish

---

\(^{30}\) An inter-community peace pact is not an invention of the Spanish colonial regime. Pre-colonial Philippine communities, especially those from warrior societies within the Cordillera, practice a network-system of bilateral pacts of non aggression (for example, the *bodong* system among the Kalinga people) to ensure the safe passage of goods and people (Scott 1982, pp. 133,149).
regime considered part of its territory. Third, the systematic approach taken by the regime is enrolling indigenous performances such as the peace-pact agreement into their administrative framework. In this case, the peace-pact agreement was translated to stabilise the colonial enactments. Based on these accounts, the Kayan setting is where one can discern the dynamic translations between colonial, subject and indigenous enactments operate. These translations operated despite efforts by the Spanish regime to instil an ontology of governing that asserts its ascendancy over all other ontologies.

What can be evinced is that Igorots navigate through fractional worldviews of colonial, subject and indigenous ontologies, which they regularly manoeuvre through within the heterogeneous hinterland. During the Spanish regime, Scott (1994b, pp. 4,7-8, 16, 18-19, 23) describes the obstinacy of the Igorot people when confronted with a Spanish official, cleric or subject by:

- directly attacking Spanish subjects;
- seizing baptised children from nearby subject towns;
- head-hunting;
- taking advantage of the relative security of their terrain by raising and selling items considered contraband by the Spanish regime;
- collecting tributes from adjacent subject communities, as the Spanish forces did;
- deluding attackers by feigning weakness or surrender, only to later ambush them at the proper moment and place;
- acting dumb and inarticulate to members of missionary expeditions;
• playing meek and appearing compliant to friars, especially when asking for favours, then brusquely heading back to their mountain abodes once they obtained them; and

• deceiving expeditionary forces, especially regarding the whereabouts of places of considerable importance, such as mine sites and community foundries.

Even an Igorot conscript taken to Spain as an ‘item of exhibition’ during the 1887 *Exposicion de Filipinas* had something disparaging to say about the imperial mainland\textsuperscript{31} (Florendo, 1994a, p. 22). On another note, the settlements of Kayan and Cagubatan have been recorded to be tribute-paying settlements to the Spanish crown (Scott 1982, pp. 149-150).

**Navigation and oscillatory ambivalence.**

These strategies of fractional navigation translate potentialities that reinforce the valorisation of what constitutes *Igorot-ness* by the Igorot themselves, while deftly deferring subalternity. This interweaving of colonial, religious, subject and indigenous enactments potentiates the Igorots ability to look beyond the subjectivating performances of the competing enactments by others actors (that is, the Spanish intermediary, in this case) not as authority, but as a mere actor within the given setting. This is in contrast to the enactments of the Filipino subject whose ontologies have been in some way enrolled to standards and metrologies brought about by almost four centuries of colonial translations.

\textsuperscript{31} This is one historical account of an Igorot taken to Spain as a specimen for the *Exposicion de Filipinas* in 1889. On a train to Madrid, the Igorot watched the barren Spanish landscape and remarked, “There must be plenty of hunger here because there’s nothing but stones.” (Florendo, 1994a, p. 22). It should be noted that the Igorot was taken to the exposition with other Filipinos representing the life and culture of their colony.
Oscillatory ambivalences (Law, 2004, p. 92) take place in encounters between indigenous and colonial ontologies. The Igorots navigate these ambivalences by forming a map of interests, particularly considering the relationships of competing realities. Historiography points out that these ambivalences are met with allegorical performances. One is by provisionally hiding indigenous enactments by appearing to be subservient to colonial actors, then bringing these enactments into being at the opportune moment (for example, deluding attackers, acting dumb, playing meek) (Scott 1994b). Another performance is the direct disavowal of colonial enactments during encounters, which could be as subtle as a disparaging statement against colonial rule or as forcefully direct as headhunting, extortion of tributes or even direct attack (Scott 1994b). These performances oscillate from acquiescence to direct attack. Ontological politics play a role in the oscillation of these performances, where presences and absences of ontologies are carefully punctualised, selected and performed.

An instance of direct interrogation.

Roman Catholicism was, by and large, an introduced religion by the Spanish colonial regime in the Cordillera region. The regime had tried, but did not fully succeed, in converting the Igorots to be self-regulating Catholics subservient to both cross and crown. There is one instance when a certain friar tried to persuade an elderly Spanish-speaking iTadian that it was unsanitary to bury their dead under the house. The old man retorted, “But have you not heard or do you not understand that if we bury our dead out on that mountain-side, their souls will come back, take up

32 Allegory is knowing and enacting the existence of multiple realities (Law, 2004, pp. 108, 157), which are externalised as performances in a particular setting.
33 The exact place by provided by Cordillera historian, Nela Florendo (1994a, p. 19), was Sumadel, which is now part of present-day Tadian.
their bodies, and go out at night and eat up our camotes?" (Florendo, 1994a, p. 19).

There is also another recorded account of an obviously clever Igorot inmate who pointed out to his Spanish jailers that no coloured man had ever become a white man’s saint (Florendo, 1994a, p. 20). It is certain that this instance of direct interrogation on the validity of colonial beliefs is not a staple among colonial historiographers, wherein the main theme of conquest was the one accentuated. However, as Scott (1982) had pointed out, few crevices of dissent within historical narratives can be pinpointed and framed as the ontological standpoint of the native. Here, we can say that colonising ontologies and truth-claims were framed and interrogated in accordance with Spanish colonial world views. The two cases are but two of the instances identifying a clear interrogation of the canons of religious authority by invoking Igorot ontologies.

Outside the reach of bells.

During the Spanish regime, colonial settlements were laid out to make a plaza (public square)—with the catholic church and municipal building, among its architectural fixtures, as the focal area for religious and political control, with the church bells serving as an important fixture (Hart, 1955). The location of the church, its height and the architectural configuration of its belfry must be built and situated in such a manner that the sound of the church bells could reach far-flung territories, such as sitios (rural hamlets) or rancherias (rural areas). The aim of this was to bring the native population into colonial control by converting them to Christianity through the sound of the bells (Abinales, 2005, p. 52; Arcilla, 1998, pp. 42, 48). This Spanish principle of bajo de campana, literally ‘under the bells’, desires to ensure that the native population is under the dogmatic spell of catholic friars, so that

34 Translated to ‘sweet potato’.
Roman Catholicism and colonial culture can be assimilated. On the other hand, areas where the sound of the bell tolls were weak or absent denoted less colonial control and influence for the Spanish. Phelan (in Simbulan, 2005, p.22) notes that, despite some success by the colonisers in bringing some indigenous people into contact with Spanish culture, the results (even after almost four centuries) were not as extensive as they had intended. This can be evinced particularly in the Igorot domain of Tadian where the binding spell of the bells is weak. For instance, despite the success of initially establishing a military outpost and a chapel in Kayan, weak Spanish influence in the area can be exemplified by few and occasional tribute-paying settlers in Cagubatan (Scott 1982, p. 148). Spanish military forces, such as the ones in Kayan, have been far from successful in instituting the political changes necessary for assimilation of the Igorot people into acquiescence to their institutions (Florendo, 1994, p. 34).

By the end of Spanish occupation, a large proportion of the Igorot population still remained as, what the Spanish label as, *tribus independientes*; ‘independent tribes’ that they failed to colonise (Florendo, 1994b, pp. 32, 34).

**Translations.**

The Spanish colonial enactments in the Igorot region established the Spanish presence by deploying its military and religious intermediaries. These deployments sought to enrol a range of actors across the various hinterlands of the pre-colonial enactments already existing in the region. Problematisation of Spanish colonial enactments occurred by punctualising the natives as savage and their land as an annexation of their domain. Pre-colonial and constructed trails were enrolled to transport colonial intermediaries into the Igorot region, in order to further deploy more intermediaries as its allies in the form of colonial subjects, churches, military
commands and bells.\textsuperscript{35} The Spanish aspiration was to form standards and metrological power based on its ontology.

Although it cannot be argued that, after more than three centuries, Spanish enactments have been circumscribed into indigenous hinterlands, indigenous enactments have persisted and were successful in not enrolling themselves into the standards set by Spanish colonial enactments. Indigenous enactments existed prior to Spanish incursion and were stabilised, despite interspersing expeditionary, military, administrative and religious intermediaries by the colonial regime. These were partly stabilised by indigenous people in the form of allegorical performances, oscillatory ambivalences and even interrogation, by direct assertion of their traditional standards and worldviews. Encounters among subjects show that colonial enactments were provisionally made present, and then were rendered irrelevant when the opportunity arose.

The stabilisation of enrolments was not achieved partly due to the failure of colonial intermediaries to fully-transport Spanish ontologies, which, \textit{ipso facto}, made these intermediaries mediators instead. This could be seen in the ambivalent character of frontier roads, as well as in the resonance of church bells from the colonial plaza. Instead of transporting colonial enactments into the hinterland through their resonance, the bells translated their purpose into mediators of relative autonomy because of the failure of their sound to reach indigenous sitios.

Indigenous enactments were also successful in providing counter-enrolment strategies to Spanish enrolment by instituting community peace-pacts the interests of colonial rule.

\textsuperscript{35} Such deployments were not limited to the actors stated in historiographic accounts.
Hence, historiography shows that heterogeneities have been a staple within the Igorot setting. Certainly these heterogeneities have not been fully acknowledged by the Spanish, colonial subjects and indigenous people alike. However, historical records show a hinterland replete with translations of the Igorots, as well as the physical setting of what is now called the municipality of Tadian.

**American Colonial Regime**

The American colonial government saw the shift of the Spanish colonial capital of Kayan to the nearby community of Tadian, where its municipal hall and other administrative offices are presently located (Tadian, 2009, ca.2004). The shift to motorised transportation made Tadian closer to administrative control via the Baguio-Bontoc road (presently called the Halsema Highway, named after its American colonial engineer).

Colonial enactments within the Igorot hinterland took a different form, with the shift from Spanish to American regimes. American colonial enactments, jaded by battles in Cuba and Mexico, as well as against their own indigenous peoples, were more determined to employ a more systematic approach to the Igorots (Florendo, 1994b, p. 35). This approach had a certain degree of success. Initial American colonial rule in the region consisted of the:

- conscription of natives into the constabulary;
- introduction of formal education to the native population;
- creation of geopolitical divisions according to ethnicity;
- installation of telecommunication and civil works, including military and government installations; and
- extensive exploration of mineral resources (Florendo, 1994b, pp. 34-36).
American colonial rule was also complemented by a structured and graduated educational system. The regime established a few government-run schools and promoted schools run by religious orders. The main approach of these schools is the inculcation of literacy and numeracy skills; first among willing natives, then for the rest of the population. Formal education was introduced by the colonial regime to the local population with some initial resistance by some indigenous communities (Florendo, 1994b, p36), but was eventually enacted within a local context. For instance, ‘English language’ was introduced as a mandatory medium by American teachers within the school system, resulting in natives speaking and writing proficiently in English. Unlike their Spanish counterparts, American education and their religious missionaries were more successful in establishing inroads for cross-cultural interaction. Soon state- and church-run schools where established in central towns within the domain. The American colonial enactments can be characterised by managing complexities that were partially derived from lessons learned from its previous military excursions. These include the conscription of the native population into its institutions, with the aim of enrolling them into American enactments, such as a formal education system, the adoption of English language and creation of a bureaucratised civil service. Conscription also brought forth the deployment of colonial intermediaries and, consequently, its standards and metrologies in the Igorot hinterland.

The American colonial government introduced motor vehicles into the Philippine landscape, which facilitated the flow of administrative and allocative resources within the region. An increased network of roads that can accommodate the size and configurations of motorised cars meant the colonial regime’s increased capacity to limit insurrection, provide necessary administrative control and extract
natural resources vital for the operation of the regime and its concomitant companies, among others. A pan-Philippine highway system was important for both commerce and colonial control, and was immediately built and expanded within a couple of years of annexation. This built environment constructed and re-constructed colonial enactments that paved the way for the entry of mineral and timber concessions within the Igorot domain. It can be safe to surmise that the technological development of mass motorised transport, together with the reconfiguration of the road systems that accommodate them, have greatly contributed to the more intensive and extensive enrolment to American colonial enactments. The enrolment of motorised transport were instrumental in the speed and efficiency of deploying colonial intermediaries, while paved roads were important in stabilising transportation, marked by difficulties in traversing the rugged Cordillera terrain. This concatenation of military and state-run assemblages (for example, the civil service or education) and innovations in transportation and communication made the United States of America succeed in what Spain failed to do for three centuries; annexing the Igorot domain.

With the introduction of these intermediaries, Igorot communities had then practiced American colonial enactments, together with other enactments, within the hinterland. Native conscription by the colonial regime was not as effective to the local population, whom, to a certain extent, displayed general acquiescence to the Americans for the new colonial regime within the first several years of colonial rule. For instance, in spite of the efforts of integrating English as a lingua franca for instruction, the indigenous people were still speaking their native tongues within their own homes and communities, while their more peripatetic members were also adept in speaking in languages spoken in nearby regions, such as Tagalog and
Ilocano. A pan-Cordillera highway meant ease of physical mobility, which translated to temporary and permanent migration into other areas.

**Colonial enactments.**

How did the Americans enrol the Igorots into their own colonial enactments? The answer is not that simple. It must be said that enrolment of the Igorots to colonial enactments is not a complete one. It requires dealing with the complexities and the diversity of Igorot communities, an historical aversion to colonists and Filipino subjects, and a relatively inaccessible environment where only the Igorots fluidly navigate. What is certain is that American colonial rule provided a clear and tradeable obligatory point of passage to the natives; a framework of cultural or ethnic accommodation. Based on the lessons learned in engaging with North American indigenous peoples (Florendo, 1994b, p. 35), the US colonial government espoused a policy succinctly instructed by then American president McKinley:

> Such tribal governments should, however, be subjected to wise and firm regulation; and without undue or petty interference, constant and active effort should be exercised to prevent barbarous practices and introduce civilized customs (in Florendo, 1994b, p. 35).

In order to muster the complexities of the hinterland, indigenous and other enactments are punctualised as uncivilised, tribal, petty and barbaric. The American ontologies translated these punctualisations into a messianic mission that put themselves as superior. It can be seen that such reductionism is an ontological prerequisite for American colonisation, facilitating a sense of mission within its enactments. The McKinley doctrine is a clear manifestation of its colonial ontology. It asserts America as morally superior, bestowing on themselves authority over other enactments, which were reduced into simplifications of general weak entities.
Note that there is nothing fundamentally different between the Spanish and American colonial enactments. Both asserted their presences in the hinterland as authority figures which regarded other native enactments as generally passive. In the perspective of colonial enactments, native enactments stood against their manifest destiny and that they must let the native other know of this metaphysical burden. Note that the native (as ‘the other’) can never be absent for colonisation to take place. Hence, both Spanish and American colonial enactments punctualised the other enactment’s attempt to subjugate them by deploying actors necessary for its enrolment.

However, the native other could not be easily conscripted into colonial enactments. Historiographic accounts have exposed the counter-enrolment strategies employed by indigenous people. This can be seen in multivalences wherein allegorical performances happen. The case below is a participant’s personal account showing that, even during times of violent coercion in extremis, heterogeneities still exist, particularly within the hinterlands during the Japanese occupation of the Philippines in World War II.

The American regime was suddenly interrupted by World War II, during the Japanese occupation of the Philippine archipelago from 1941 until 1945. A number of Igorot guerrillas contributed to the resistance effort and, eventually, to the capture of surrendering Japanese forces toward the war’s end (Chaput, 1987). However, the Igorot’s role in the American war effort was not whole-heartedly about American patriotism. It cannot be contested that a number of Igorots fought side-by-side with the Americans as guerrillas during the Japanese invasion (Chaput, 1987), but neither patriotic fervour nor fealty to the Americans were sole reasons for the Igorot-American alliance. This was particularly so during the USA’s recruitment of
resistance fighters. Such was the case of an iTadian elder\textsuperscript{36} who was pressured by a kadangyan to join as a guerrilla fighter during his youth. Despite his indifference to the whole American resistance effort, he was coerced by fellow kaîlian\textsuperscript{37} to participate in the resistance effort, despite being in relative safety of his abode. It is argued here that pressure among traditional leaders and immediate kinship groups were also motivating factors in joining the guerrilla campaigns. American enactments were not a sole reason during the war, only convenient because of expedient ontological-political decisions. Decisions were made in the midst of the complex hinterland of American colonial, indigenous and Japanese enactments within a warfare setting. A warfare setting is an exemplar of competing ontologies; nothing better can expose ontological politics, and navigating these enactments can be clearly discerned when coercion and violence are anticipated responses to expressed betrayals.

However, allegorical performance by the iTadian elder shows how fluently he navigated along the enactments of resistance, patriotism and community interests. The strength of kin and ethnic network were made present, setting aside other interests. Multiple realities were very much existent during World War II, when the crevices and punctualisations of friend and foe were made coherent, but have remained ambiguous, resulting in a plethora of ontologies, allegorical performances and translations where indigenous actants navigated.

At this point, heterogeneities have been exposed as a juxtaposition of identified competing enactments. Ontological politics accentuates native (which is actually a concatenation of competing enactments, anyway) as against colonial enactments. It

\textsuperscript{36} Who is also a participant of this research.
\textsuperscript{37} "Community members"
can be argued that nativism is performed by colonial enactments to stabilise the translations of indigenous communities against anti-programs and dissenting ontologies. The trope of the indigenous peoples as passive and subaltern has to be stabilised and made present as an ontic strategy in order for colonial enactments to deploy its allies into an unknown terrain.

The Contemporary Hinterland

From disparate, self-governing communities forged by peace-pacts, to colonial outposts and post-colonial administrative centres, contemporary Tadian, as with the rest of the Cordillera, is a setting of various competing enactments that have persisted throughout time and space within the messy, heterogeneous hinterland. There are ‘changes’ brought about by colonial and post-colonial enactments, among them tiered formal education, Christian religion, a cash-based economy, immigration and emigration, as well as engagement in ‘non-traditional’ economic activities and bureaucratic structures of the Philippine government (Prill-Brett, 1994b, p. 24). However, this is only shows half of the story. Historical change also saw the survival and relevance of indigenous enactments, which persist up to the present time. Indigenous enactments persist with the rest of enacted realities, be they colonial, bureaucratic, western, military or commercial, among others. For instance, there are still communities forging indigenous peace-pacts, as a means of resolving in inter-village conflicts, along with national laws (Yogaswara, 2004, pp. 143, 148-149) and computerised, geographic, information systems (Rambaldi, Bugna, Tiangco, & Vera, 2002). Indigenous enactments actively enrol and counter-enrol other mediators within the hinterland.
The contemporary iTadian are practically multilingual as a consequence of ontological politics throughout Tadian’s social history. The Kankanaey\textsuperscript{38} language is the language of choice within most households and among community members and kin groups. Ilocano, on the other hand, is learned through interaction with nearby communities from the Ilocos region. It is also learned through the various Ilocano-speaking radio programs transmitted by radio stations in Baguio City and nearby regions. The Tagalog language is learned through schools as part of the official state curriculum and it is transmitted mostly through Manila-based television stations. English is also learned through the school system, as well as via radio, television and, now, the internet. During conversations, Kankanaey is the most commonly used language by the Tadian locals and is endemic to the population, while the other three languages are used interchangeably during conversations, especially with guests and outsiders.

The iTadian are also multivalent, routinely working around the various enactments of the indigenous, colonial and post-colonial. These enactments are partially connected; fluently navigating along the hinterlands of absences and presences, where what consists of local is, in fact, an articulation of a myriad of elements coming from different historicities and enactments. Some enactments may have been effectively effaced, while a lot more are standing in reserve, perhaps waiting to be invoked. Please note that this does not mean impuissance of colonial and post-colonial enactments, nor does it denote indigenous exceptionalism. It only shows that heterogeneities abound, even in this setting, and it is imperative for social

\textsuperscript{38} The \textit{Kankanaey} (‘kan-kana’-ei’) is a sub-group of a larger, ethnolinguistic group called the \textit{Igorot} (‘ii-go-ro-te’, which is translated as ‘mountain people’) inhabiting the Cordillera Administrative Region of northern Luzon, Philippines, with a population 1,520,743 (NSCB, 2007). They mostly live within the regions of North Central Benguet Province and the western Cordillera, which includes Tadian.
researchers to understand the complexities (and perplexities!) of the hinterland in social research.

Fissures reveal that heterogeneities can be indexed across past and present historiographies. Ontological politics and allegories are common themes, where multiple realities exert different pressures during different times. Throughout written histories, colonial enrolment strategies have been availed by different actor-networks and their ontologies. Colonial ontologies may push standards and metrics across the hinterland, some striving for hegemony. These attempts to homogenise the hinterland may have not succeeded, but traces of colonial enactments remain in specific performances and mediators that have somehow been imbricated in the day-to-day practices of contemporary iTadian.

This chapter prepares the reader for what is in store in the succeeding chapters.

Conceptions of an inert, homogenous and primitive imaginary of the indigenous must be cast away. Instead, the indigenous must be approached as a heterogeneous and dynamic assemblage of competing ontologies originating throughout their history. Parenthetically, this could also be good advice to field researchers when they approach indigenous communities. It is reviewed that research must be treated with the general principles of agnosticism, symmetry and free association.

It is advisable that, although prior researches and literature must be taken in to consideration, and bracketed in such a manner so as to first treat them as an enacted and practiced reality with their own ontological standpoints. In the process, nuances of its ontology along with its stabilising power can be identified.
The foregoing historiographic literature, which was mentioned in the previous sections, shows that these texts point to a logical and subtextual depiction of the various competing ontologies in a given setting. For instance, Spanish texts assert an ontology that points to control and dominance over other enactments in the colony, which was subsequently called *colonial enactments*. The historiography by William Henry Scott in the portrayal of indigenous enactments during the Spanish regime (1985; 2007; 1982, 1994a, 1994b) highlights a reality that is totally different from Spanish historiography *despite uplifting it from those texts*. There are other enactments, which, perhaps, could be considered as resistance or just simply living their daily lives, that exist within the fabricated rubric of the Spanish colonial regime. Another text, by Florendo (1994a, 1994b), points out an ontology based on American imperialism and its techniques of controlling the Igorot domain through the various technological assemblages that the USA had during its day, not to mention its notion of its predetermined and glorified mission as a global power. The review of the foregoing literature can show how these authors assembled their narratives. As a result, they had either wilfully or unwittingly opened up a framework of their ontology with an ideal to initially create form and coherence from an amorphous mass—from heterogeneity.

The reader will be pointed to more ontological disorder during discussion of the contemporary iTadian hinterlands on the next chapter.
Chapter 5: The Translation of Mobile Phones

This chapter will further explore the theory that what is conventionally seen as ‘social’ is, in fact, a heterogeneous hinterland of competing enactments. This time the focus is on information and communication technologies, particularly the mobile phone, as an actant; how they enrol and, at the same time, get enrolled in the context of iTadian.

Competing enactments in a heterogeneous hinterland are certainly not only fixtures across histories, they can be also discovered in how specific technologies translate to specific groups and form different outcomes and assemblages. This is through identifying performances and enactments derived from the introduction of competing communication technologies and then taking them into account through tracing associations and identifying ontological politics.

By using the results from ethnographic data, enactments, translations and ontological politics of mediators in the form of communication technologies have been discovered. This was particularly during the transition from customary means of communication to the adoption and use of mobile phones.

The first section of this chapter describes the different modes of communication the locals availed in order to communicate across geospatial boundaries before the advent of mobile phones. It will also show in detail how these modes were being practiced and how they enrol various human and non-human actors within the hinterland. This section also presents some cases of technological dissidence that has resulted to technological obsolescence.
The next section discusses how mobile phones emerged during the early 2000s, together with a review of the transformations that it has brought in terms of shifting loyalties, associations, new sets of arrangements and trade-offs.

The last section describes how mobile phones have translated the way iTadian communicate across geophysical constraints, rendering the mobile phone not only as an indispensable tool, but also as a multivalent thing.

**The pre-cell phone period**

Mobile phones, also called cellular phones or its more popular abbreviation, ‘cell phones’, were introduced in Tadian circa 2000, four years later than mainstream Philippine society. Immediately prior to the use of cell phones, the locals mainly used the following modes of communicating across boundaries:

- a customary system of sending letters and packages called the *paw-it*;
- official post;
- telegraph stations; and
- local calling stations located at town and community centres.

Except for the local calling stations, these systems are still in operation in Tadian.

**Paw-it.**

The *paw-it* is a system of exchange of letters, parcels, food and money among kin outside the community. This is done through a conductor of buses regularly plying the route. Most of the exchanges are made between relatives who are based in Baguio City.

---

39 Pronounced ‘pau’it’, it means ‘to send’ in Ilocano and Kankanaey. Also referred to as an ‘item-to-send’. 
The background of how the paw-it system operates is provided in order to show the different human and non-human actors involved in the process. A paw-it starts with the preparation of the package to be sent. Clearly written on each mail item or package is the recipient’s name, address and/or the address of the nearest drop-off point. These are normally the nearest variety stores, locally called a sari-sari\textsuperscript{40} store. Selecting which sari-sari store to send to is pre-arranged by both the sender and the recipient. The selection is normally based on three factors:

- the store must be along the bus route;
- it must be familiar to the bus conductor; and
- the store must be within walking distance of the recipient’s home.

The sender then takes the mail item or package by walking to the nearest bus transit point. The sender waits for the bus to arrive and park, and then asks the bus conductor to take the package to the designated store. After both parties have reached a common understanding of the whereabouts of the store, the conductor then charges the sender a fee based on the distance covered by the bus through the mountain highway. The package is received by the conductor, who then places it in a secure area, together with other packages for dispatch.

Cooked food or food ingredients are part of the normal paw-it packages and are usually sent in bundles. These packages, such as sacks of rice and vegetables, are loaded on to special racks on the buses’ rooftops. These are skilfully loaded on elevated platforms called andamyu. These andamyu (derived from the Spanish word ‘andamio’, meaning platform) are regular fixtures along Cordillera roadsides. Made from either wood or concrete, an andamyu is a platform made as high as a buses’

\textsuperscript{40} Pronounced ‘sär-ē’ sär-ē’. Sari-sari means ‘variety’ in Tagalog.
roof, so as to easily load cargo that is too large or inconvenient for stowing in the inner compartments of the bus. While andamyu are mostly located along the national highway, there are also a number of smaller andamyu placed on farms leading to market roads to accommodate the loading of vegetables on to small delivery trucks.

There are a few reports about times when the conductor would forget about the dispatch, which results in delays. Another major source of delay is the perennial landslides that occur during the monsoon season. A landslide can effectively stall a bus journey for a few hours or even hold travel up for a few days, depending on the weather conditions. Unanticipated delays are part of the paw-it system, which partly relies on human memory, weather and road dependability.

As the bus arrives at the store along its journey, the conductor temporarily disembarks and promptly hands over the package to the storekeeper. At any time after receipt of the package, the storekeeper writes down the name of the recipient on a list of other recipients. This list is then pasted on a wall outside of the store for display. Sometimes the letter itself is displayed in the store’s window, securely tucked between other items for sale. This is so that anyone who happens to pass by the store will take notice, including the recipient. The notice serves as a method of directly informing the recipient or there is the chance of having it relayed to him or her by word of mouth. Ultimately, the letter or package is received within a few days. While the conductor is bound by the arrangement to take the package to the designated store, there are no paid arrangements made to the delegated store or the storekeeper as an intermediary to the paw-it system.

For some parents whose children study in Baguio City or nearby regions, the paw-it system means a lot in sustaining their children’s regular cost of living. For
parents living in far-flung communities, this means travelling for two to four hours, crossing rivers and mountain passes in order to reach the nearest bus transit point. They have to schedule the time of departure from their homes in order to catch one of the few buses plying the route. There was one case of a parent in the community of Mabalité who had to leave home at four o’clock in the morning in order to reach the bus terminal at the small township of Sumadel before the bus leaves at about seven o’clock the same morning. They then had to return home after the transaction was effected.

The paw-it system is circumscribed by a network of roads, stores, trails and existing bus routes. A paw-it package relies on a concatenation of actors for it to reach its recipient. These intermediaries include the bus, the road system, the memory of the bus conductor, the existence of nearby stores as drop-off points, climactic conditions, and notices, among many other things. Letters and packages travel in different figurations from sender to recipient: A walk to the bus terminal, arrangements with the conductor, the long and meandering journey to the drop-off point, the notice in the sari-sari store, until it materialises in the hands of the intended recipient. The paw-it system is contingent on its intermediaries, such that if one of them betrays it (either through mechanical breakdown, landslides, road closures, monsoons, frailty of memory and so on), the reliability of the paw-it system is questioned. So far, the paw-it system still holds up as one of the most durable means of long-distance communication in Tadian. This is because it has counter-enrolled mobile phones into its assemblage. This will be discussed in detail further.41

41 See pages 177-180
Official post.

Official postage is undertaken by the national government through the local post office. Compared to the popular paw-it system, official post is mostly patronised by government offices to transmit their official correspondence, although members of the public send letters via official post that are addressed to outside of the traditional paw-it route. This could be anywhere outside the route of vans and buses. Postal deliveries are only for those inhabiting areas adjacent to the town centre where the post office is situated. On occasions when letters are addressed to far-flung communities, the official post is eventually sent through the traditional paw-it system.

Post office staff also rely on community-based networks—municipal staff who may be a kaîlian⁴² or affiliated through kinship—to send letters on their behalf. Proxies can also be people who happen to be a kaîlian and are found to be within the post office premises. Proxies are requested to undertake the task of sending the letter directly or via the sari-sari store adjacent to the address indicated on the post item.

The formal state bureaucracy, together with informal networks of kin and kaîlian, sustain the survival of the official post. The post office still holds relevance through the sustained budgetary and administrative allocation from the national government, as well as the existing need for paper-based correspondence as a standard system of communication among government agencies. In addition, customary networks based on kinship and community assume the difficulty of sending letters to remote villages. The official postal system could not operate effectively to most members of the municipality if it does not enrol mediators such as the sari-sari store, the rugged terrain, the meandering road system and the kin-based

⁴² Kaîlian is a term for a fellow member of a community.
means of requesting favours, among many others. It can, therefore, be said that, in
the case of official postage, bureaucracy requires the enrolment of enduring
enactments of kinship and domicile-identification in order to sustain itself as a
service distributor of written correspondence. The official postal system also
effected the counter-enrolment of the paw-it system into its operations in order to
effectively deliver its services.

**Municipal telegram.**

The municipal telegraphic office is operated by the national government in
accordance with state law. Community members avail themselves of telegraphic
services for two reasons; to send ordinary and social telegrams, and to remit money.
The process requires customers to fill out a form asking their names and addresses as
well as that of their recipients. The form also contains rows of blocks where the
sender writes their message. A standard of 20 words is a required minimum for a
telegraphic message and extra words will be charged an excess fee. Once the
appropriate amount is paid by the sender, the form containing the message and the
contact details are transcribed into Morse code by the radio operator using a
telegraph. The operator selects the assigned frequency by turning a dial on the radio
transceiver. She then presses a series of long and short audio pulses on the telegraph
paddle. The first series of tones denote the sender’s and receiver’s call signs. The
operator pauses for a few seconds, monitoring for a response from the other end.
Once a response is heard and acknowledged, another series of transmissions in
Morse code are made until the sender’s message is transmitted and acknowledged by
the other end.

Receiving ordinary telegrams also requires the same transmission via Morse
code. Using a manual typewriter, received messages are typed directly on to a pro
*forma* sheet loaded on specially built rollers. The rolled sheet contains markings that indicate an official government document, serial numbers and perforated lines separating each form. Once the message has been typed, the form is then cut from the roll, folded and enclosed in a special envelope. It is then sent to the receiver through official post or, if that method fails, the last resort will be by using the *paw-it* system.

Sending social telegrams entails the same process, but messages are typed on a decorative card marking a special occasion (for example, St. Valentine’s Day, Christmas, birthdays and graduations). These are then enclosed in a coloured envelope and sent to the recipient. A higher fee is charged for social telegrams.

People also remit money by means of telegraphic transfer. The sender hands the money to the radio operator who accordingly issues an official receipt. Then, just like a telegram, the radio operator sends information of the transfer to the receiving office and receives the proper acknowledgement. The recipient is notified about the money via telegram, which then proceeds to the telegraph office to redeem the money with the notifying telegram as proof. The telegraph officer then checks the serial number of the notification telegram with their records. If both numbers match, the recipient is required to sign a receipt and is then handed the exact amount remitted by the sender.

Patronage of the telegraph service was regular until the advent of mobile phones in 2000, according to the municipal telegraph officer. She recalled that event as a sharp drop in clients to only a few transactions per week, mostly coming from inter-agency correspondence from government offices. She related that it would be a very good day if they transmitted and received a total of five messages. She also expressed her delight that someone had still bothered to send a social telegram on the
day before I paid her a visit. This made her nostalgic about the flurry of activities in
the past two decades of working at the telegraphic office. In early 2012, the
telegraphic equipment of her office just gave off a hissing sound characteristic of
radio silence.

Like many other technologies, the telegraphic transfer involves the morphing
of messages through intermediaries. From the sender, messages and money are
transfigured by walking to the telegraphic office (corporeal), completing official
forms on which the sender has to write a message (lexigraphic) and paying a fee
(monetary). The message is then encoded into Morse code by licensed radio
operators (expert systems) and transmitted by invisible electromagnetic waves
(physical energy). The message is received by radio operators who decode these
messages (expert systems) on to forms (lexigraphic) that will be transported
(corporeal) to the recipient. These oscillations from corporeal back to corporeal
involve a number of costly obligatory points of passage in the form of travel time and
money.

The sustainability of the municipal telegraphic office is heavily reliant on the
conventions of state bureaucracy, particularly in formal inter-agency communication.
If not for its continued subsidy by the national government, the telegraph would
likely be decommissioned. The de-inscription to the telegraphy service by iTadian
took place when they decided to subscribe for the more convenient, quicker and
easier use of short message service (SMS) available on mobile phones, which
essentially provides the same service. Betrayal was quick and the telegraph teeters
towards obsolescence.
**Terrestrial telephone and local calling station.**

In 1965, a terrestrial telephone service was installed to interconnect the offices of constituent communities in Tadian. Its full installation was abruptly put to an end when damages were caused by a typhoon that struck the region several months afterwards. There were no available funds to subsidise its rehabilitation and the project was quickly abandoned.43 What eventually succeeded were a few government and privately operated landline telephone units serving as calling stations. Not many people patronised these stations then: Using telephones was not a necessity and they were only used in communicating matters of urgency. Most calls were charged per minute, so calling sessions were planned carefully and usually abridged. Customers had to wait in queue to use a single telephone during business hours at calling stations. There were just a few landline phones serving the whole municipality, mostly owned by local and national government agencies. In fact, most households in the province and many more within the entire region do not have landline telephones.

Towards the end of the 1990s, landline calling stations were succeeded by calling stations operated by private enterprises using first generation, analogue mobile phones. These stations were fitted with this type of mobile phone, which was connected to an antenna in order to enhance its reception. The antennas were oriented to distant base stations where they could catch a steady wave of signals. As compared to their landline counterparts, these mobile phones were easier to access, but still very costly to operate. Nevertheless, a few of these enterprises had sprouted in several communities where electricity was available together with steady stream of radio waves from base stations.

43 Account provided by a key informant working in a government agency.
By 2000, there were no more calling stations in Tadian.

The demise of calling stations was similar to the case of the municipal telegraph office. Senders needed to undergo a number of costs and involved travelling to the town during the station’s business hours, queuing for a call, making the call and eventually paying the clerk. Sending a telephone message also incurred the use of a number of intermediaries and required a number of morphisms. These posed difficulties for some, especially when traversing a relatively mountainous terrain with minimal financial resources.

**Costly passages, black boxes and anti-programs.**

As can be seen from the foregoing cases, the durability of a technology can be partly determined by how it enrols other actors and enactments, as well as stabilising costly passage throughout the hinterland. For instance, the municipal telegraph and postal offices were stabilised by funds from the national government, coupled with the continued enrolment of government agencies through their official correspondence. It can be argued that these modes of communication will continue to be used as preferred methods by the government bureaucracy, as long as they are buoyed by government funds and expert systems, in spite of the de-inscription of its intermediaries. Actors that were formerly enrolled in these modes of communication find it *costly* to transact with them. *Cost* is not merely a monetary value that can be gleaned as a number of morphisms that human actors have to go pass through in order to consummate a transaction. The passage itself has been too costly for a message which has to undergo a number of intermediary morphisms. Black-boxed networks, such as indigenous kinship, trust, mechanical and communications engineering and government bureaucracy are also continually being enrolled by these modes of communication to stabilise their processes in the face of persistent anti-
programs within the hinterland. Anti-programs could be such things as frequent monsoon rains, the rugged topography, unreliable road networks, breakdown of equipment, as well as the frailty of human memory, among others.

**Emergence**

The emergence of the GSM mobile phone\(^{44}\) in Tadian occurred in about the year 2000, and can be traced to a few individuals with close relatives working in Baguio City and abroad. Before this period, stories of mobile phone usage and its practicality have been vicariously spread among iTadians through visits to metropolitan areas. It was introduced through television, radio and print media. It can be safely surmised that a few of the iTadian, through kin or friends, had tested a mobile phone during trips to Baguio, Bontoc and Sagada—locations where base stations, also known as ‘cell sites’, have been in place since on or before the year 2000.

The first mobile phone users were the ones who had kin working abroad. One case was a couple in the remote community of Mabalité. This couple bought their first mobile phone from the husband’s sister, who returned from contractual work in Taiwan in 2000. She introduced the cell phone to the couple by telling them of its ability to send messages to other people using the same device. However, effectively operating a mobile phone could only occur if it could receive a steady signal coming from one of few newly-installed cell sites in the region. This meant that they had to go to a nearby elevated space or an open field and then orientate its antenna towards the municipality of Sagada, where a base station is situated—about five kilometres from Mabalité. The sister was able to demonstrate to the couple how a cell phone

\(^{44}\) Mobile phones and cell phones will hereinafter refer to the second generation, GSM, digital mobile phones.
works and the relative ease in communicating with far-off relatives. This enticed them to purchase that same phone for the amount of 3,500 Philippine pesos. They subsequently purchased a prepaid SIM card for themselves, with the help of another sibling who was based in Baguio. To recharge their phone’s credit, the husband would send a text message to his Baguio-based sibling and request to have his phone reloaded with credit, and then pay him when they met at an opportune time. From then on, the couple ceased sending letters through the paw-it system and henceforth sent most of their messages to relatives and siblings through SMS.

Later, iTadian students based in Baguio and neighbouring La Trinidad were caught up in the wave of mobile phone use and were the most enthusiastic in using these new devices. The students had initial difficulties in accessing cell phones in their communities because there was no available cell site in Tadian. Hence, in order to access and maintain good mobile reception, they had to seek higher ground or even climb to mountaintops, locally called ‘tapaw’ or ‘paway’. One popular spot among the youths was a rocky protrusion in the neighbouring community of Lubon. For one to get a fairly good signal for a call or text, one must literally ‘sit on the rock’. The rock became an erstwhile habitué, and rock-sitting-and-texting has become a common activity.

Others eventually began purchasing mobile phones and taking them with them during their daily activities. It was not only students, professionals or wage earners also began carrying their phones. Even crop farmers began taking mobile phones to work in fields, with their farm implements and water buffaloes. Labourers and tradespersons also began bringing phones with them as they went from one construction site to another.

45 Approximately 80 Australian dollars at that time.
There are a number of ways the mobile phone can be carried, according to preference. A number of people take them to work with special holster-style cases fastened to their belts. These cases are usually made of leather or faux-leather, with clear plastic coverings in the centre to show the phone’s keypad. Others prefer to hang them around their necks with a special strap, while others simply place them in their pockets or bags. The main reason for this is not to miss text messages and calls while engaging in other activities.

Another way of getting a steady signal stream and to avoid missing calls and texts is by placing phones in elevated areas. Mobile phones were placed on the second floor of their homes, normally propped up in a vertical position and resting on a windowsill. Others strap their phones to tree branches while working on their farms or when cooking or doing laundry. Upon the installation of a base station in Lubon in 2006, most of these activities tapered off when mobile signal strengths got stronger and more stable. However, there are still numerous places where ‘dead spots’ (places where no signal reaches) exist, partly due to Tadian’s rugged topography. For instance, mobile signals are still difficult to access in the hillside community of Cagubatan where a large hill stands between the village and the base station. There, mobiles are still seen hung on trees like fruits and perched on windowsills like sentries, or are only used while working at vegetable farms where signals are better.

**Shifting loyalties.**

The emergence of mobile phones partly contributed to the evanescence of the local telephone and telegraphic service in Tadian. The main ally for the survival and relevance of these services is government funds and bureaucracy, maintained by the need for inter-agency communication. Yet the provision of local telegraphic services
has mostly lost its lustre among the general public due to mobile phone use. Most actors turned their backs on the telegraph when it had slowly transformed into an impersonal means of official state correspondence, with social telegrams being a rare and pale glimmer of their former glory. Consequently, mobile phones became the more personal and intimate means of communicating. Hence, betrayal was easy for the iTadians who preferred the mobile phone to the telegraph, because the effervescence of catching up, greeting someone during special occasions or private communications were eventually offered by mobile phones as a better alternative.

**Communicating with distant kin.**

Mobile phones quickly became associated with communicating with distant friends and kin, as the technology emerged within Tadian. This was particularly among inhabitants whose relatives temporarily emigrated to work or study, or to settle permanently away from the community. The distant kin reappeared to the mobile phone user through text messages, which became a means of reconnecting and sustaining kinship ties across geospatial constraints. Punctualised from its technical workings, the mobile phone is transformed as an intermediary of kinship by momentarily making present the physically absent kin. Soon the villagers expanded their previous communication limits, thereby creating and reaffirming their kin-based networks by using mobile phones. The indigenous kinship network had found another intermediary through the cell phone.

**New arrangements and courses of action.**

The advent of cell phones also brought forth new arrangements and courses of action dictated by the availability of household funds as well as radio signals from base stations. The mobile phone had created new habits and routines of action that were incorporated into the day-to-day lives of its users. Places were redefined
according to the standards of mobile phone use. Mountaintops and rocks were redefined as *things* in the local geographies of early cell phone users, while trees and windowsills became significant actors to contact kith and kin. The mobile phone enrolled a motley mix of unexpected mediators and forced people to create new mediated routines.

With the installation of a new base station near the town centre on 2006, the iTadians started enjoying stronger signals for their mobile phones. As the new cell site became operational, it had easily betrayed the former mountaintop hang-outs, trees and windowsills, rendering their return to inconsequential *objects* and perhaps relegating them to transient memories, together with the telegraph and calling stations. Thus, stabilisation by technological enactments may turn *objects into things*, as is the case of these places. However, the introduction of a committed intermediary consequently effaced these erstwhile *things* by relegating them back to *objects* again.

**Easier trade-offs.**

The mobile phone showed the iTadians an easier, obligatory point of passage by reducing the number of intermediaries needed to communicate with distant networks of friends and kin. As compared to previous modes of communications, particularly those of the telegraph and public calling stations, the formal design of mobile phones made it easier for human actors to negotiate its various morphisms such as texting (human kinetic and lexical) and electromagnetic waves (physical energy). Mobile phones betrayed the relevance of roads and other intermediaries, but created new ones, such as hilltops and windowsills, as well as the behaviour of electromagnetic waves from base stations. It is possible to draw a different forms of
cartography based on this unique set of enactments, dictated by the invisible beams of electromagnetic waves coming from mountaintop cell sites.

**Ten Years Hence**

Ten years after its first introduction, the mobile phone is already a fixture among the iTadians. Mobile phone usage rose dramatically in 2006, when two cell sites were installed; one in the town centre and another in the neighbouring community of Lubon. The installation of these two cell sites did not come unopposed by some community members though. Concern about the risks of the radio waves emanating from cell sites on people’s health and their crops were raised by a number of townsfolk. Opposition eventually ebbed, which made way for its installation and operation. Located on mountaintops, these two cell sites stand taller than an adjacent grove of pine trees, towering across the rugged mountainous landscape of Tadian.

It can be said that most households in Tadian have at least one prepaid mobile phone unit. Most phones are second-hand units, either handed down by relatives living outside the community or bought commercially. Most units used are earlier models, having a small, low-resolution, LCD display and keypad. There is also a preference for cell phones that had built-in LED torches (flashlights), as these are particularly important for travelling unlit trails during night-time. These phones are the cheap and rugged, compact ones that are not easily destroyed. The users do not mind so much having them scratched or worn out, as long as they send and receive calls and messages.

---

46 Focus and key informant interviews.
47 A focus group estimates that about 90 percent of adults own a mobile phone.
Among the youth.

Younger members of the family, particularly teenage children, are the ones teaching their parents to operate a cell phone. They are the ones who are generally curious, yet bold enough, to explore the inner workings of a mobile phone. Teaching entails telling their parents about the various parts of the cell phone in an informal way. This includes demonstrating the phone’s keys and basic features, as well as recharging its battery and topping up prepaid credit. Initial difficulties by some parents involved pressing the keys and knowing the keystrokes for texting. Parents were also taught how to understand the various abbreviations used in texting. Abbreviations are commonly used in order to conserve the number of keystrokes and transmission costs. Adult respondents reported that they usually did not send many text messages a day. Students are the more frequent texters, sending almost 80 to 200 text messages daily, especially on days when they can avail themselves of unlimited texting for a small price. Calling someone through a mobile phone is only considered as a last resort, because it costs more and uses more battery charge.

Most of the youths’ daytime activities are spent in schools. These schools and colleges are mostly located in areas of higher elevation that are, in effect, conducive to mobile phone use among students. Few respondents report of students getting reprimanded for texting in class.

Nevertheless, it can be said that youths are more adept with the intricacies of mobile use. Apart from what has been mentioned, youths are more dexterous with the use of the phone’s keypad, can text more messages in a given time and are more informed about the latest models and available text price promotions. They are the
ones who ‘cannot live without a cell phone’. They claim that they would react with belligerence (for example, cry, curse, get anxious, try to wrestle the phone back) when their phones were taken away, lost or stolen. They would also think of ways to either get their phones back or have it replaced at the soonest time.

The significance of the cell phone among youths is exemplified in the following cases. One participant experienced losing a phone for a week. She admits to being uncomfortable with not being able to catch up with the goings-on within her network, associating mobile phones with the close relationships of family and friends. She also relates it to her own life and wellbeing (“I experienced living without a phone for a week. I felt a yearning for my family and friends who I’ve felt distant already. Some of my friends were asking me if I were okay. Some of them jokingly asked if I was still alive”).

Another participant also associated mobile phones with her own physical presence and life when she had a recent vehicular accident. (“Just last week I was involved in a slight vehicular accident along the highway. It was a simple mishap and delays were expected, but I had to send text messages to my âté (older sister) so that she will not worry.”). Another participant explains that “it’s like one couldn’t (do anything) without a cell phone.” Some of the respondents report that family members would ask about their wellbeing if they fail to respond to their text or calls within a reasonable time.

**Among the adults.**

While adults would rather use mobile phones more sparingly than their younger counterparts, they also share the thought of making sure that their phones

---

48 Focus group interview.
are within reach most of the time. Farmers take their cell phones with them to their mountainside farms, as they tend to their crops. In areas where cell site signals are intermittent, the farmers make sure that they place their phones in an area where they can access reliable streams of signal during the day. This could be anything such as a rock protrusion, a tree or a sturdy branch that could be used as a pole to which they can secure their phones with string or rubber bands.

Responses vary among communities when asked how dependent they are on mobile phones for their daily activities. Participants in areas where mobile signals are intermittent, such as in Cagubatan and Mabalité, relate that they might find initial discomfort when they lose their phones. However, they would not hesitate to use paw-it or official post in order to communicate across boundaries. On the other hand, participants living in communities where mobile signals are stable and reliable, such as in Masla, Kayan and the town centre of Tadian, admit that they would be more concerned about how can they be contacted without their mobile phones. A few people express concerns that some contacts might forget them; “Awan samet makalaglagip kanyak” (“Nobody might remember me.”) They further claim that they would resort to borrowing other people’s phones straight away in the case of needing to contact someone.

**Among the elders.**

Although most of the community elders claim to find that mobile phones are not an essential part of their lives, they seek a number of intermediaries in sustaining mobile phone use. This is for them to address several issues concerning the overall design of the phone, intergenerational nuances in text messages, as well

49 The elders’ common attitude to mobile phone use can be summarised by one elder’s remarks: “Uray awan cell phone, mabiyag latta” (“We could live even without cell phones”).
as their own frailty of physique and cognition. Some older users rely on children or grandchildren to read aloud the text messages they receive. The juniors ask the elder’s response to the text and then send the text on the elder’s behalf. Their difficulties arise not only in reading small characters on the display unit, but also in the task of sending messages by entering words and navigating through menus with the keypad. Another difficulty is decoding text messages. Text messages commonly involve the use of abbreviated words and a phrasing structure that the elders find initial difficulty in understanding. Abbreviated words are usually constructed in order to conserve keystrokes and the cost of text messaging. This is done by maximising the allowable number of characters in a text message. For instance, ‘one’ becomes ‘wan’ to conserve three keystrokes, ‘toto-o’ (‘true’ in Tagalog) becomes ‘22o’ to conserve both character space and keystrokes and the letter ‘k’ is short for ‘okay’, as an acknowledgement of the sender’s latest message. Aside from difficulty decoding, the elderly recipient may get the impression that the sender is rude or angry because of abbreviated text messages. One elderly participant saw it as a “deterioration of the English language”. This concern is particularly poignant for the elderly because they are especially known to be good English speakers. Another concern by several elderly respondents is privacy. One centenarian iTadian pointed out that “there are no more secrets to hide” with the advent of mobile phones, as community members will learn everything through texting.

Younger kin are important among elders for keeping their cell phones loaded with credit. Prepaid credits are available and purchased at sari-sari stores within the coverage of the cell site’s signal. The purchasing of credits starts with a customer looking for stores selling them, which commonly have posters promoting them, although accustomed users just go directly to stores and request reload credits in
Philippine pesos.\textsuperscript{50} The storekeeper then brings out his or her own mobile phone and asks the customer how much credit is desired. The customer nominates the amount and hands over the money. The storekeeper then asks for the mobile phone number that needs reloading. The storekeeper enters the necessary reloading procedure in his or her mobile phone and, after a short while, tells the customer that reloaded credit has been sent to the nominated mobile phone number. The transaction is consummated when the customer receives a text message notifying him or her of the reloaded credit.

Almost all users avail themselves of prepaid mobile phones, including the elderly. Where reloading is usually an accustomed practice among all other ages, a number of elderly iTadians encounter difficulties in reloading their mobile phones. In as much as they can do this procedure themselves, issues on their mobility and memory arise, hence most of them resort to traditional kin-based seniority relationships by instructing younger kin to reload phone credits on their behalf. Children or grandchildren who act as temporary wards walk a distance to the nearest store selling credit and have their elder’s mobile phone account reloaded with credit. Some elders avail themselves of more creative strategies that they deem suitable for their own needs and limitations. They will place their own numbers on the back part of their phones as a reminder (see Figure 1), and take their phones to the store themselves and tell the storekeeper how much credit they need. Then they notify the storekeeper of their number, which is written on the back of the phone. Accordingly, the storekeeper enters his or her number until the reloading process is completed.

Acknowledgement of geophysical (for example, rugged terrain and topography) and the physiological difficulties brought about by ageing, elders

\textsuperscript{50} The current rate for mobile credits is one peso for one text message.
dispense indigenous enactments of kinship and their intermediaries to remain subscribed to mobile phones. Respect for old people and strong kin-based relations of generational seniority are invoked, and then used as a proxy for operating mobile phones. Elder generations are customarily cared for by younger members of the kin group as a reciprocal practice in deference to the elder’s respected status as a living heritage and an embodiment of old wisdoms and a source of oral traditions. This deep regard for elders is exemplified through the council of elders that, until now, is still a source of influence in community affairs.

Where strong, kin-based relations and community deference cannot be invoked, elders fluently navigate by conscripting the written word (or, in this case, a series of numbers) as a proxy for their memory. It also ensures that the same process (that is, reloading) remains stable.

Several elderly women associate mobile phones with being their supplementary ‘life partner’. The mobile phone is regarded as a repository of their partner’s words, a venue for endearing words, such as “Are you sleepy?”, “Hello,
“Darling how was your ri-ing?”51 “How was your sleep?” and “I love you.” This is especially among the males, for whom culture dictates to show toughness and not show affection, as the latter is a sign of weakness. Their female spouses observe that their spouse’s text messages are more intimate and loving, compared to face-to-face conversation. They store these messages as a testament to their affection and intimacy in case their partner passes on. Senior males tend to be more endearing in their text messages to their wives, compared to public displays of affection. These text messages show that elderly males can easily navigate out of these traditional conventions and they provide possibilities for the men to be more endearing and intimate to their spouses through mobile phones. This enactment evokes some degree of fascination because such an affective shift between text and face-to-face communication was noted to be practiced generally by Filipinos (Pertierra, 2007b, p. 24). There is also a female elder who engages in ‘textmating’; exchanging SMS messages and eventually engaging in intimate conversations (and sometimes, even leading to romantic encounters) with strangers. She relates to the excitement of sending text messages, although she would never call, nor receive calls from, her textmate. It was only through texting that she would engage in this behaviour. She further admits that it was enjoyable at first, but, eventually, she got bored and was pestered by her textmate due to the daily greetings that she receives. She eventually stopped communicating with her textmate, although, in retrospect, she finds that that episode was heartening because she believed that at least there was someone other than her family that shows care and concern by asking how she felt.

51 Ilocano or kankanaey for awake, or the state of waking up.
Discussion

**Stable black-boxes.**

State bureaucracy and customary networks based on kin and community are among the black-boxed realities operating within Tadian. The state bureaucracy asserts itself as the singular, effective ontology that provides the warranted services to its constituents. It recognises other realities within the hinterland, but asserts its ascendancy over them and distributes them across space and time. On the other hand, customary kinship and *kaïlian* networks operate by manifesting as the only one visible amongst the uncertainty of the hinterlands, apart from asserting the unreliability of other enactments. These two realities deploy their own sets of intermediaries and transmute their interests into others to counter-enrol other enactments. For instance, the municipal postal and telegraphic offices will continue to exist, albeit being an apparent anachronism in modern telecommunications. This is because of its enrolment with *state bureaucratic enactments*. As long as there is a continuous flow of government-controlled resources, expert systems and ‘official’ forms of correspondence that rely on their operation, the postal and telegraphic offices will thrive.

In addition, customary networks invoke kinship and locale-based ties, transforming human monads into specific intermediaries, based on ethnicity and family affiliation. Traditional and contemporary means of communication are counter-enrolled by customary networks in regular operations.

**Highly competent mediators.**

There are a number of highly competent mediators across the iTadian hinterland. These fully-connected actors easily oscillate from enrolment and betrayal across various competing enactments. They can easily transform themselves within
the exigencies of the hinterland. These highly competent mediators could be the sari-sari stores that can transform themselves into post offices through the paw-it system, or they could be kinsfolk shifting their role as dispatchers of letters or spokespersons to the enrolment of mobile phones as a preferred means of communication. They could also be the road system that is being used by a plethora of enactments. These mediators exercise their indispensability within the hinterland, either by asserting its materiality (in the form of road systems) simplicity (for example, kinship) or deferral (for example, sari-sari stores).

**Translations.**

All past and present modes of communication in Tadian involve the process of stabilising enrolment in order to sustain the interest of the actors, as well as competing enactments, within the hinterlands. Human communication is transported across intermediaries that, in turn, change their form upon reaching its receiver. It relies on a concatenation of intermediaries to fully function and avoid betrayals along the way. However, dissidence always poses a threat to the intermediaries’ survival, sometimes resulting in its full termination (as in the case of the community-based telephone system). In order to sustain their relevance and practicability, successful modes of communication provide counter-enrolment measures by deploying allies as spokespersons, such as in the case of mobile phones and close family ties. They also create a means of presenting congruent interests as a countervailing measure against competing enactments. Another measure is the deployment of black-boxed formalisms, such as mobile phones, in order to address costly passages and morphisms. The black-boxed formal design of mobile phones is also important in staving off various dissidences and anti-programs, creating a punctualised format that is beyond the scrutiny of most users.
Mobile phone technologies.

Ten years after the emergence of the mobile phone, there was an indubitable shift in the way the iTadian communicated across distances. More so, mobile phones have eventually emerged as stabilised enactments among the Tadian hinterland. Its stability relied on the operation of an important intermediary, the base station. The base station, or by its common term ‘cell site’, is a black-boxed actor composed of different intermediaries whose main function is to send and receive messages to its mobile subscribers through digitised electromagnetic waves that transport information and communication to human mobile phone users. Mobile phones also enrolled mediators such as the mountainous terrain of Tadian and deployed close kin and the youths as allies.

Mobile phones introduced new standards among the iTadian. New communication codes were introduced in the form of texting. Texting uses a combination of common and abbreviated words that could accommodate the character limit provided by mobile phones and telecommunications companies. Texting relies on the mutual understanding of local languages, as well as the sense of brevity by the mobile phone users.

Mobile phones made the iTadian do things that they have never done before. It is not only this technology that has opened up nascent possibilities of “being and becoming” (Pertierra, 2006, p. 116), but also creating new cartographies and courses of action. New cartographies happen when places within the landscape are redefined as a result of enrolment to mobile phone communications. New places within the home (for example, windowsill) and community (for example, trees, mountain tops) quickly become matters of concern as a requisite for communication through mobile phones. With these new cartographies emerged new courses of action, which
include, but are not limited to, taking mobile phones to work, placing them on windowsills, as well as fastening mobile phones to poles and branches. However, it must be noted that these new cartographies and courses of action are contingent on signals coming from the cell sites.

Addressing the complexities of the physical structure and use of the mobile phone requires responses apart from its manifest formal design. These responses are derived from enactments made absent by mainstream mobile phone usage. The first case is the use of text abbreviations that suit local pronunciations. By subverting official lexical structures, users are able to conserve keystrokes, thereby saving transmission costs. Apart from text abbreviations is the inclusion of phone numbers on mobile phones by elders. By so placing their own phone numbers, the elders dealt with one less, but difficult, process; that of remembering their phone numbers or navigating the phone’s menu to locate it for reloading credit.

New forms of kin-based social arrangements emerged through mobile phone use. One is the subscription of younger members in teaching their parents the fundamentals of mobile phone usage. Another is the participation of junior members in assisting elderly kin in mobile phone usage. Two points are evident here. The first is that young members are the most effectively enrolled in this actor-network. The second is that respect for elderly members is reinforced through enactments derived from mobile phone usage. Both observations point out that, by effectively enrolling the youths and kin-based enactments, the mobile phone had formed a strong alliance in sustaining its relevance among the iTadian.

With these new standards emerge new forms of metrologies and anxieties. As mobile phones have enrolled human actors, life and presence are now constituted in terms their competence in replying to texts as an indicator of life. The technology of
the short message service, or SMS text, and not the mobile phone *per se*, has become associated with one’s life and wellbeing. The cold formalism of mobile phones immediately dissipates when translated as things of affection. This is the case among a number of elderly iTadian women who equate their mobile phone with being an appendage of their life partners. The phone becomes multivalent, an allegorical device for which various enactments are rendered present or absent. Its hidden heterogeneities are exposed to uncover multiple realities struggling for survival. In this case, the mobile phone has not only become strictly an object of communication, but also a ‘life partner’, a repository of endearing messages, a purveyor of presence and a mediator of kinship. Deferred absences are brought into presence and availed of despite the black-boxed formalism of mobile phones. Hence, by deploying mediators from other enactments, the iTadian fluently oscillate from heterogeneous enactments through mobile use. Black-boxed, homogenised formalisms are informally solved by navigation.

A sense of liberation (De Leon, 2007) is also evoked; one that face-to-face conversation could not mediate. The formal design of mobile phones allow human actants to translate enactments of affection (as with elderly males) and even anonymous conversations (as in the case of textmating) without the gaze and judgement of traditions.

On the other hand, new anxieties have also emerged through these metrologies. Mostly shown by the youths and those close to cell sites, new anxieties emerged when one of the mobile phone users could not send text messages, or their mobile phone was lost or taken away. These anxieties emerged one user could not send text messages to inform of her presence. Conversely, this is also manifested through positive feelings when someone was able to send a text message, or even a sense of
affirmation or presence—of being remembered—as in the case of the elderly female
textmate. This lethophobia\textsuperscript{52} derived from mobile phone usage translates life or existence into a digital version of presence, manifested through digitised text. A momentary therapy for lethophobia is to get hold of a phone and assure oneself of being remembered. A new encumbrance is formed, that of anxiety of being effaced from memory by kith and kin.

This chapter ends by showing that new ideas and insights are brought forth by analysing technologies (for example, mobile phones) and indigenous societies within the framework of ANT research. ‘Centric’ epistemologies are eliminated in favour of more reliable, symmetric methods. This is done by focusing more on competing enactments than structures and institutions, as conventional means of methodological and theoretical dispensation. It also shows the contingent and transient nature of the different modes of communication. It can be discerned that those modes that have been rendered obsolete or remained stagnant are, in fact, the ones that have minimal means in \textit{navigating} amidst the hinterlands.

In the next chapter a different type of information and communication technology is discussed.

\textsuperscript{52} \textit{Lethophobia} is defined as an innate fear of oblivion.
Chapter 6: The Translation of the Internet

This chapter will show how actor-network-theory can uncover the dynamic interplay of competing and negotiating enactments brought into practice by a fascinating assemblage of internet technology within the iTadian hinterlands. This is by presenting its emergence within Tadian and how it is maintained and sustained by enrolling other enactments and realities in the process. By identifying the number of actors that are serving as transient mediators during the emergence and maintenance of internet connections, the associations and enactments that are temporarily maintained through translations can be traced. Cases of ambivalence and dissidence also pose a threat to the survival of internet connections in Tadian. Ontological politics can be seen in how internet technology navigates along the hinterland of competing enactments, especially the well-connected and black-boxed enactments.

The academic sector was a forerunner of internet technology in Tadian, but it struggled to create a permanent internet connection despite the odds of low subscription during the initial years of operation. Faced with this issue, the creation of standards and metrics of internet use were made coherent to its users, in spite of existing disinterest and opposition among other members of the academic and youth groups. It showed how educational institutions integrated internet access as a necessity for academic requirements.

The group formations that emerged are the youths and students as well as the spouses of overseas contract workers.

Similar to any technology, the internet created multivalences among youths and students in terms of usage. What is notable is its translation from an academic
requirement into enactments of fun, self-discovery, additional knowledge and
telecommunication. However, unlike the ubiquity and indispensability of mobile
phones, the internet still stands the betrayal of youths and students because of its
costly passages, as well as the availability of other competing modes of
communication (for example, mobile phones and paw-it).

The internet also made an impact among spouses of overseas contract workers.
The necessity to communicate with the distant spouses had changed their daily
routines. The prestigious status of having internet access in the community also
made them purveyors of community matters among expatriate iTadian. Through the
internet these spouses have become mediators of the dynamic oscillation between the
mundane and the exotic through sharing of web-based content with expatriates, such
as images of community affairs and landscapes. These images were translated from
digitised photographs of the mundane to things of ethnic articulation and pride
among the iTadian.

Emergence from the Academe

Internet use among the iTadian started from networks of students and college
instructors. There was absolutely no internet access in Tadian during the turn of the
21st century. Before internet connectivity was made available, a number of iTadian
students based in metropolitan centres, such as Baguio and Manila, had limited
internet access through few burgeoning internet cafés\(^{53}\) in the area during the late

---

\(^{53}\) The concept of an Internet café (literally a café designed to cater for Internet service \textit{and} gourmet coffee) was initially adopted by Filipino small business enterprises then, perhaps as a response to
current international mainstream modes of communication. However, as Internet access became more
popular and on-demand coffee consumption failed to take-off, businesses eventually dealt away with
the coffee shop imaginary. However, the term ‘Internet café’ still remained in cultural consciousness
and nomenclature in spite of the absence of coffee as part of the service.
1990s. Internet usage was only a growing engagement in urban areas, then through internet cafés and private, dial-up connections by a few others.

Among the significant group that promoted internet usage were the local academicians who discovered the internet through exchanges from fellow academicians and town mates, as well as kin who were based outside Tadian. There were two main things that fascinated iTadian academicians about the internet: electronic mail and the worldwide web. Electronic mail promised to enable them to communicate with fellow peers and get in contact with close relatives and friends who had access to this technology. On the other hand, access to the worldwide web was seen as a replacement for old books and reference materials.

There were three possibilities that internet technology promised to the academic network, particularly the administration of the Mountain Province State Polytechnic College (MPSPC):

- a fast, effective and economical means of communication across vast distances;
- an enhanced network based on friendship, profession and kinship; and
- a cheaper, updated and quicker access point to relevant pedagogical information.

On the administrative level, having internet access can enhance network-building through more and sustained contacts over a wider geographic distance. It also promised the users potential savings by the lowering of communication costs, apart from the potential gains derived from acquiring the skill-set for using internet technology.
Interest in internet connectivity had reached the administration of the MPSPC, a government-run college with a campus located in the Tadian town centre. Apart from being pressured by state policy to keep up with the rest of the government-sponsored colleges and universities, the MPSPC administration made sure that internet connectivity must be realised because of the above-mentioned possibilities. During the first few years after 2000, the college administration saw to it that it became the forefront of information and communication technology in Tadian, by being the first to provide internet connectivity to its faculty and students.

One main obstacle for this realisation was the lack of basic infrastructure within Tadian that was necessary for affordable, land-based internet access. The rugged, mountainous topography made it difficult to install a terrestrial telephone system, which is the cheapest means of internet connectivity during that time. The next and best available means of connectivity was through satellite. Satellite internet connectivity is established through the transmission of packet data, using electromagnetic waves, to a geosynchronous satellite. Having eventually decided to connect through satellite internet connectivity, the college entered into a contract with an Israeli-based satellite internet service provider (ISP) in 2003 to install internet connections to three campuses, including Tadian. The college was bound by contract to pay a monthly fee of PhP 35,000 (approximately AUD$1,000) for the connection in Tadian. The internet was received by the college with so much

---

54 There were two main state policies that put forward the adoption of internet technology in the Philippine educational system. These were the (Electronic Commerce Act of 2000, 2000) and the (Executive Order No. 265 - Approving and adopting the Government Information Systems Plan (GISP) as framework and guide for all computerization efforts in government, 2000).
55 There were two main bidders for satellite Internet connectivity in the MPSPC. The first bidder was Shiron, an Israel-based corporation that subcontracted a Textron Corporation, a Manila-based private telecommunications provider. The second, Mabuhay Satellite Corporation, was a subsidiary of national conglomerate Philippine Long Distance Company. Shiron and Textron eventually won the contract to install and provide satellite Internet services to three major campuses in Mountain Province. One of those was Tadian.
enthusiasm, although this was tempered by an obligation to self-liquidate the relatively high monthly connection costs. A computer was bought to function as an internet server, while existing computer terminals were interconnected and installed in an existing classroom that consequently functioned as an internet access centre. It was decided by the MPSPC administration that an hourly rate of PhP 25 would be charged to those interested in accessing the internet.

Despite an extensive promotion by the MPSPC through direct advertisements and short promotional courses or seminars about the internet technology, interest towards internet access turned out to be contrary to what was intended. Most locals and students were either unaware about what the internet was or indifferent on what it could provide. This sense of indifference felt by the locals was separate from the growing complacency towards the use of mobile phones as a preferred means of telecommunication and building networks. There was also one matter of concern; the difficulty of accessing the technology. For most iTadian, the mountaintop location of the MPSPC internet access centre either entailed an uphill walk of about twenty minutes or access to the available transportation shuttles vehicles that regularly ply the route to the campus. In short, on-demand internet access to the MPSPC internet access centre entailed additional costs in both time and money. This is aside from the fact that internet connections were slow, hence browsing became a boring, uninteresting activity.

Consequently, the monthly payment of 35,000 pesos proved to be too expensive for the finances of the campus. While it was observed that there was a small, but steady, stream of patronage among the student population, it was still too low to defray the operational costs, much less make a profit. For three years the college’s annual budget allocated money to pay for the connection costs with the
Israel-based ISP. However, towards the end of 2005, the college decided that it could no longer cope with this situation and further decided not to renew the contract with the ISP. In effect, the campus internet access centre cancelled its services to the public.

The hiatus continued for five years. During that time a number of internet access centres had emerged in nearby Abatan. Still seeing the importance of internet connectivity for its operations, the MPSPC administration decided to restore internet access by January 2010. During this time the MPSPC connected with a new internet service provider that charged a significantly lower rate than its predecessor. Learning from past mistakes, the college decided to integrate an ‘internet fee’ into the existing matriculation fees for each student as they enrolled at the start of the semester. This fee corresponded to five hours of on-campus internet access for the whole semester. Another strategy employed by several instructors was to encourage internet-based research to supplement existing resources. Students were encouraged to browse the internet to look for related reference materials and to incorporate other web-based elements, such as photos, graphics and clipart, in their academic requirements.

The present Internet Room (see Figure 2) is still located in the western wing of the college. This is also where the old internet system operated. The room is about 50 square meters, well-lit and cool, partly brought about by the temperate climate of the area. It has 12 computer units and is kept safe under the supervision of the designated information technology instructor. Each unit is fairly up-to-date with

---

56 See also page 155.
57 Apart from the MPSPC, there were only a few computer rental shops in Tadian that only provided internet connections, through USB wireless broadband, when requested. Patronage of these shops was low because of the higher hourly charges and slow, intermittent internet connections.
the necessary hardware and software for internet access. Prominently posted around
the internet room are signs indicating prohibited and unacceptable use of the internet.
Among them are:

- playing online games;
- access to pornographic websites;
- violations of privacy and online intimidation;
- access to social media sites, such as Facebook or Twitter.

The information technology instructor, who also acts as the internet administrator,
posted these policies and he admits that they were taken from other ‘acceptable use’
policies available on the worldwide web. These posters serve as a means of
enforcing the standards of acceptable internet use by the college. Despite an effort in
enforcing rules for acceptable use, reports of non-compliance are a regular
occurrence, especially about the playing of online games and the use of social media
sites such as Facebook.

Maintaining a comfortable flow of patrons is still a big issue. This is because
there were already a growing number of students who travelled to nearby Abatan to
utilise its internet access centres. This is because it is claimed that the shops in
Abatan provide a more conducive environment to access the internet as they allow
access to online games and social media sites.
Another concern is the lack of interest by some faculty members, particularly regarding the idea of internet technology itself. This is especially among the senior and tenured academicians, who had grown comfortable with their teaching methods and were accustomed to textbooks as a medium of instruction. They claimed that the internet was being peddled as panacea for all of the information needs of the college and that they would rather use their tried and tested methods.

These were the concerns faced by the MPSPC administration. Apart from feeling the pressure to keep up with the present academic standards imposed by state law, as well as growing interests by the academic community, the administration felt the need to instil interest in accessing their own internet access centre, while creating new standards which were acceptable to most of the faculty.

**Translations and academic enactments.**

An oscillation of internet technology between being *matters of fact* to *matters of concern* (Latour, 2005, pp. 114-115, 119) can never be more apparent than it is at the MPSPC. Internet technology initially typified a distant presence, convenient within the confines of out-thereness. However, with time, the external online...
networks of MPSPC academics have deployed themselves as allies and spokespeople on behalf of internet technology. This is apart from the interests of the Philippine state mandate to diffuse ICT as a standard in education. It can be said that bureaucratic and academic enactments are successfully translated by internet technology, eventually distributing its black-boxed formalisms in the form of wires, computers and satellite networks.

Gradually, the academic networks in Tadian took an interest in integrating the technology within the college, by aligning the academics’ interests and the college’s organisational processes with the functions of the internet.

The creation of the first internet connection at MPSPC Tadian was a process of negotiating the complexities of expediency and geographic spatiality. Geographic spatiality and topography was a big challenge for the college, particularly in establishing a continuous data throughput. Manifest absences in the form of possible connections were brought into simplified, laid-out plans that were easily navigable for the actants within the academic networks. Next was the introduction of the internet as an expediency; an urgent necessity without taking into account the uncertainties. The result was an initial regime of costly internet access, which was followed by a sudden failure of service. Hence, the cartography of interests emerged in the form of associating the internet with the interests of academic or scholastic enactments (through network-building and expansion of reference materials), as well as kin-based networks (telecommunication across relatives outside the community).

However, these interests did not last long, as there were a number of anti-programs operating against the emerging enactments of internet usage during its first installation. The physical location topography of the school was one of them, which hindered both access and internet connectivity. Another factor was the
preoccupation of both students and teachers with libraries as the main source of references, which did not require any additional costs. Consequently, the interest to engage with internet technologies proved to be too costly on the part of its main ally, the academe.

The academe needed to rethink strategies of how to generate interest to engage actors to use the Internet, as well as to stabilise the enrolment of actors. The college created interest by placing information technology subjects in the curriculum, then placed a fixed payment in the students’ general matriculation fees. This enjoined the students to access the internet as an academic prerequisite and a prepaid service. This made internet access more of a necessity for the completion of subjects, which was the main interest of the students. The second connection made sure that internet-based metrologies and standards were in place, in order to ensure its subscription and survival. Coherent rules and regulations of use were instituted as an approach to dealing with heterogeneities. These included, among others, the incorporation of online data on reference material, putting internet access as part of the periodic matriculation and the adoption of an acceptable use policy. This strict application of standards was not met without controversies. The students were still ambivalent in following the acceptable use policies, while a number of academic personnel still stuck to their own traditional methods of research and instruction. Inasmuch as they placed heterogeneous non-coherences into the fore, these renegade students and teachers already formed part of internet-based enactments, oscillating internet technology from being an object and a thing.

While internet technologies have translated the academic institution through this route, it took a different path of translation on commercial access among the youths in nearby Abatan.
The Internet, Students and Youths

Tadian youths have always been at the forefront of information and communications technologies, partly due to their formal introduction to personal computers during high school. Despite the low ratio of computers per student, high schools manage to schedule each student to learn the fundamentals of computer use. By the time they graduate, most youths are equipped with skills in word processing, spreadsheet use, presentation graphics and desktop publishing, mostly using the Microsoft Office suite of programs. Rudimentary skills include:

- switching the computer on;
- knowing the keyboard layout;
- mastering important keystrokes;
- manipulating the mouse; and
- navigating the digital interface.

Teaching Internet technology can only be done theoretically by teachers. This is due to several concerns, such as the school’s budgetary limits, topography and the availability of an internet provider. Teachers, particularly the ones tasked with teaching information technology, introduce the students to its fundamentals and teaching practically ended there. Most of the practical experience in internet use is made in internet cafés in Abatan or, for those who can afford and access it, through private, wireless broadband connections. The latter is limited to families which commonly have a member working abroad, or is rich and/or politically influential.

The practical and direct introduction of the internet among youths is through close relatives and friends based outside of Tadian who have access to internet cafés and/or private connections. Most participants of this study reported that it was their
kin who is working or who has worked abroad as the first ones who introduced them to internet usage. Some are through friends who were already accessing the internet centre in Abatan. One male participant related that he learned about the internet by going with his friend on trips to the internet shop in Abatan. By sheer curiosity, he would watch and observed his friend ‘chat’ with someone online. The participant then asked his friend about the necessary steps for chatting, which involved opening a free email account, with a provider such as ‘Yahoo!’, then accessing this account to search for and make online friends.

However, those who are fortunate enough to enter college are luckier, because internet access is included in their overall matriculation fees. However, by whatever means they have been introduced, first-time users always have that background knowledge of computer skills that are subsequently oriented to web browsing, electronic mail, online or network games, internet relay chat and social networking sites.

Some recount a sense of amazement and revelation during their first internet session. One participant related that accessing the internet was merely out of curiosity, but she soon felt a sense of amazement about what she had discovered. (‘When I clicked onto a website, I was really amazed. There were many things to learn and discover. It was such an experience!’) Another saw it as a realisation of how much information is available—more than CD-based virtual encyclopaedias that they were used to accessing in high school. His first internet experience on the ‘Google’ homepage is worth quoting:

The first thing that appeared on the screen was ‘Search Google’ and a black space where you type what you want to search. And when I typed something, Google returned a large number of information about it. Hindi
ko naisip na ‘Internet; na pala ang tawag doon (I never thought that it was already the one called the ‘internet’). I thought [Microsoft] Encarta was already the best.

Reported internet use among the youth participants is about two to three hours a week, combining both academic research and leisurely web browsing, online gaming, social networking via Facebook and the now-defunct Friendster, and internet relay chat (or sometimes video conferencing) via Yahoo Messenger.

Internet-based academic research is an option for students to gather more information than required textbooks provided or as a means to obtain online information required by their instructors. Depending on its extent, online academic research can range from one hour to three hours per week. This increases in frequency in the middle and towards the end of semesters, when academic requirements increase as well. However, it must be stated that most participants would rather resort to library-based research and would only avail themselves of online research to supplement their assignment. They claim that internet-based research involves a lot more activities than library research, such as land travel, scheduling and, more importantly, money.

Online browsing is done in a leisurely manner and according to personal interests. Most websites are usually accessed through search engines or portals, such as Google or Yahoo, which act as gateways to sites of interest.

Online gaming is usually conducted by a number of high school students who, at times, spend most of their free time (sometimes during school hours as well) playing online games, particularly the first-person-shooter ones set in an urban warfare scenario. These are the most intense internet users in the internet centres in Abatan. Most, if not all, of the participants involved in this type of use are young
males who frequent internet cafés and play them for two hours or more. These boys play games for longer hours when there is an opportunity. A case in point is that of some boys who missed the last bus trip back to Tadian because they were so engrossed in online gaming. During these instances, the shop owner reluctantly provides them with accommodation in his shop, then sends them away on the first morning bus trip.

Email, internet relay chat, video conferencing and social networking sites are the most popular with the youths, and all are used to communicate with friends and kin. The most popular websites and protocols for these activities are Yahoo Messenger, Friendster and, more recently, Facebook. The average duration for online networking is two to three hours per week, although some participants reported that such activity is actually dependent on both convenience and cost; such that in instances where internet access is cheap and convenient, they can sit for half a day just talking with family and friends online. One participant typifies online networking by spending her online session chatting with her older sibling, who works as a contractual labourer in Saudi Arabia. She also uses Facebook and Friendster to get in touch with her relatives in Canada and the United States, together with her friends and former batchmates in high school now studying elsewhere. She says that she also asks for her friends’ mobile phone numbers as additional means of contact.

However, internet technology in Tadian and Abatan is not totally embraced by the youths, particularly during its present nascent stages. “Kaal-lang internet sina, nasanay ay maîd internet” (“The internet has just arrived and we are still used to

58 Friendster shifted its main services as a social networking site to a gaming portal in June 2011 (Wauters, 2011).
having no internet”), according to one participant. Most see the internet as a replacement for the library, which they still regard as a better mode of collecting information. There is also an issue concerning addiction to social networking sites, as is the case of one participant who previously became engrossed in using the now-defunct, social networking site, Friendster. However, when she transferred to the MPSPC in Tadian, where Internet connectivity is difficult, her interest waned. Another participant has become so indifferent to internet use that she totally forgot her online account details, as well as her email address. She did not bother to ascertain these details, nor is she interested in browsing the worldwide web, because she does not find the activity interesting anymore. For her, there are other things more worthwhile than accessing the internet.

The foregoing cases may show disinterest towards the internet, yet this attitude comes in varying degrees or valences. The case in point is that even those who are using the internet declare with conviction that they can easily continue with their day-to-day lives without connecting to it. Internet technology among the youths and students is predicated on leisure and self-discovery, which are translated into patronage of internet access centres. However, the internet does not provide the indispensability of mobile telephones.

**Translations and commercial enactments.**

Apart from mediators belonging to academic and state enactments, internet technology has deployed its allies among the youths and students in the form of business enterprises, coupled with existing digital competencies brought about by educational institutions. Internet technology took a different path through small-scale enterprises in Abatan, particularly as a means to provide amusement and clerical services to students and youths, with the aim of generating profit.
Subscription to internet technology among the youths is predicated not on scholastic learning, but on leisure, particularly self-discovery, online games and social networking. Apart from the propensity of youths to access the technology, because of their already equipped competences in computer skills from high school education, the transformation of the internet as a new thing of leisure and amusement is the main factor for subscription among the youths. Enrolment to internet technology among the youths is sustained as long as their interests of leisure, amusement and self-discovery are maintained.

There were two main allies that internet technologies employed through commercial interests: First is the emergence of an intermediary, such as the cell site in Abatan, by a commercial internet service provider and, second, the five emerging digital enactments of internet use germinated by the MPSPC Tadian campus, coupled with its five-year hiatus on internet connectivity. These factors opened up possibilities for diffusing the internet as thing of leisure, rather than as an oscillatory object-thing that is unilaterally adopted by the MPSPC.

Internet technology shows a degree of novelty and stability in accentuating the enactments of juvenescence and economic success in telecommunication. It is shown, in the foregoing cases, that sustaining these two enactments entails accentuating juvenescence while, at the same time, opening up possibilities for further investment to a growing number of users.

Betrayals.

As a relatively new introduction to the Tadian hinterland, internet technology is faced with competing and well-established enactments. First, the paw-it system is still the most durable form of telecommunication in Tadian, due to its ability to enrol other well-established enactments, such as kinship, road networks and topography.
Second, mobile telephony is a more established intermediary of information and communication technologies in Tadian. Third, the traditional method of reference-gathering in academic work is still sustained by school curricula and the availability of prescribed reference materials within school libraries. Fourth, anti-programs, in the form of topography and financial limitations, effectively limit the interest to sustain internet access among the indigenous youths and students. The above factors are strong enough to generate dissidence against internet usage in Tadian. Unless the technology is able to enrol and stabilise enrolments with well-established enactments\textsuperscript{59} and keep anti-programs in check, it stands to be betrayed.

**Internet and Spouses of Overseas Contract Workers**

The periodic and temporary emigration of skilled labour to other countries is not new among the iTadian. This occurrence mimics a national trend among a considerable number of Filipino families; economically insecure and/or living in the brink of poverty, families decide to send off a family member to work abroad (Gochoco-Bautista, 2009; Tan, 2006). The type of overseas work among iTadian varies according to the necessary skills and competencies needed by host countries. This may include menial labour in construction projects, administrative work, domestic help, aged care and child care, among others. Engagement in these jobs is tantamount to having a contract ranging from six months to several years and the iTadian’s stay is mainly contingent on these agreements unless they have their contracts renewed or enter into a new one.

Overseas contract workers from Tadian regularly remit money to their homeland to support their families. This serves as a significant source of livelihood

\textsuperscript{59} In a related note, the section about the ‘Two Internets of Abatan’ in Chapter 7 compares two enactments of Internet technology and how they navigated along the heterogeneities of the hinterland.
and constitutes a great outcome to upliftment of their families’ economic conditions. This sometimes occurs with dramatic consequences. Overseas remittances show sudden increases in family income and wellbeing. This translates to better living conditions, when families shift from being food insecure to having a regular source of food on the table. Their houses greatly improve in size, design and finish. It can be easily noticed that most of the iTadian overseas workers’ families’ houses are one floor higher than the rest and have a great deal of exterior improvements, such as paint and colour finishes, which, consequently, stands out amidst the village landscape. The families’ emerging savings and disposable income are spent on items not commonly enjoyed by the rest of the community, such as automobiles, personal computers and LCD televisions. Other families invest in small-scale businesses, such as small grocery stores, shops selling construction materials, computer shops and public transportation. This change in their wellbeing is traded for the absence of a key family member who is working abroad.

The absence of a parent, spouse or sibling over long periods of time is a key feature of this type of household. Family members left behind report a yearning for constant communication with their absent relative. They report that this is not only to address loneliness and filial concerns, but also due to matters concerning the daily economic activities of their household.

The installation of home-based, internet communication facilities among families of overseas contract workers is intended to provide a regular line of communication with the absent family member. This had become an emerging feature of the households’ daily routine. The spouses and mostly direct relations of overseas workers access the internet at home more frequently than the rest of the community. Most households access the internet using wireless, broadband
technology through USB sticks.\textsuperscript{60} Wireless broadband connects to the cell sites of mobile phone carriers acting as internet service providers. Connection via USB is relatively costly and is mostly sold on a prepaid basis in some parts of Tadian and Abatan. A steady stream of internet connection is especially conducted during pre-arranged sessions with the overseas relative, then is disconnected immediately after the communication session in order to avoid extra charges. If topography is a hindrance to a stable internet connection, household members, particularly spouses, access the internet in shops in the township of Abatan. Albeit only approximately 10 kilometres in distance to Tadian town proper, Abatan is relatively difficult to travel because of its rugged topography and the paucity of regular transportation services in the region. In order to maximise the travel, family members accessing the internet in Abatan is conducted together with other regular activities, such as purchasing grocery items, paying bills and/or visiting close relatives.

Communicating with a relative abroad usually involves the arrangement of common access times within the day. This is to assure that communication is synchronised. For instance, a scheduled break at 11 o’clock in the evening for a husband working in Angola corresponds to six o’clock in the morning in Tadian. Spouses report that this synchronisation of access time means that domestic routines normally undertaken during these times, such as laundry, cooking or child care, are rescheduled according to the spouse’s free time abroad. In some cases, regular sleeping schedules are affected. One case in point is a wife’s (a nurse) break time in Canada, which usually occurs during late evenings to early mornings in Tadian. Internet communication of this nature is set according to the overseas spouses’

\textsuperscript{60} ‘USB stick’ or ‘USB’ is the most common Filipino term for a USB dongle, a removable device that connect to universal serial bus (USB) ports of computers.
convenience. A synchronous communication session is commonly made during Internet relay chat via Yahoo Messenger, for instance, although there is an emerging use of the chat program’s video conferencing feature as well. At most times, a session involves a combination of a low-resolution video stream and text-based chatting.

While synchronous communication is the most preferred means of communication, a few of the families resort to asynchronous methods as well. Email was the initial preferred method for this, but, with the increasing popularity of social networking sites such as Friendster, then Facebook, families are now gradually easing away from the postal service towards this form of online asynchronous communication.

Through Facebook, spouses of overseas workers have become de-facto purveyors of news about community affairs, not only to their absent relative, but also to other expatriate kailian. This emerging role of purveyor is coupled with economic security and reliable internet connectivity. One participant, who also serves as a volunteer for a local church, regularly posts photos of local landscapes and community activities on her Facebook page. Most of her Facebook network members are childhood friends, schoolmates and kin living away from the community, a number of whom live abroad. One example of this research participant’s posts is a number of photographs of local community rituals, such as the begnas, a thanksgiving festival for good harvest, peace and protection against natural calamities. Most of her kailian express their delight when they see these photographs, which somehow keep them up-to-date and still part of the community and its affairs. Kin and old friends comment that some photos are makapa-iliw
(evoking nostalgia) and claim that these photographs bring back memories of the community that they have left behind.

The research participant claims that she posts some photographs that she considers to be mundane, such as farmland, rice fields, a piece of *etag* (dried salted pork) and *pinikpikan* (a delicacy across the Cordillera in which the chicken is gently beaten so as to coagulate the blood at its surface to add flavour). A round of comments from the *kakailian* would ensue. Here is one example of a commentary between an expatriate and the research participant:

*Expatriate kaîlian 1:* Wow! Naimah kan kinan! *(That’s delicious!)*

*Participant:* Umiyali kayo adi! *(Then come over here!)*

*Expatriate kaîlian 2:* Imbag ta inpaila yu. *(It’s good that you posted them.)*

The research participant relates that what she regards as commonplace, such as food and physical landscapes, is transformed into matters of yearning among expatriates through digital photographs posted on Facebook. These transformations evoke nostalgia and a reaffirmation of ethnic identity and sense of belonging as an iTadian. Parenthetically, it can be argued that ethnic solidarity (Delgado, 2002) and building coalitions (Alexander, 2001; Soriano, 2012) are not only equated with auspicious organisational messages of ‘self-determination’, ‘indigenous rights’, ‘ancestral domain’ and the like, as commonly espoused by indigenous advocacy organisations within the region. These invocations are almost absent in mundane dialogues, such as the one mentioned. To the contrary, ethnicity and indigeneity are also located on these mundane things, such as dried salted pork and *pinikpikan*, which take a different form as digitised images transported onto people’s computer

---

61 There are few notable indigenous organisations within the Cordillera region that are at the forefront of advocating the rights of indigenous peoples in both national and international settings, namely, the Tebtebba Foundation (2012) and the Cordillera People’s Alliance (2012).
screens. These things are the mediators of iTadian ethnic identity. It is the oscillation of objects into things and vice-versa, as well as the internet’s ability to transport them across geophysical boundaries. Pregnant with possibilities, these mundane things open up spaces where recursive flows of ethnic- and identity-based projects could take place. Web-based images by these spouses have become a reflexive activity as well. They have become aware of which photos and videos are regarded as relevant and evocative of community and ethnic solidarity, so they are purposely selected for posting.

However, despite the inherent and emergent possibilities of internet-based communication, spouses and families of overseas contract workers generally see the internet not as a necessity, but only as a quicker way of communicating with their absent family member. Despite what they can do on the internet, spouses reported that they can still live without internet connections. “Mai-kawa sin un-una” (“It takes an initial period of adjustment”), without the internet. The overseas workers’ families say that they might experience a period of uneasiness from its absence, but will eventually get used to being without it. Besides, they can still use their mobile phones to communicate with their spouses. In fact, mobile phones are more important to these families than internet connections because of the mobile phone’s relative ease of use.

There are notable transformations brought about by the internet for the spouses of overseas workers. First is the reconstitution of the spouse’s daily routine. Synchronisation requires coordination of time for both parties in order for them to communicate. Through internet relay chat and video conferencing, distance temporarily becomes redundant but presence and absence are reconstituted through morphisms and temporalities.
Another transformation is the emerging role of the spouses of overseas workers as purveyors of localised knowledge. The spouse walks amidst the localised heterogeneities of presences and absences, and of the mundane and exotic. This oscillation gives the spouse new sets of competencies, which, in turn, reinvigorates localised associations of migrant community members. With emigration, geospatial distance renders things into objects, but through the emergent role of the spouse, distant matters of fact oscillate back into matters of concern that reinforce ethnic identity.

Irreductions

Reconstituting presence.

The performance of constituting presence among households with a spouse working overseas is a fluid concatenation of transient intermediaries crystallising into synchronous communication. These intermediaries include enactments based on financial security, black-boxed digital appliances and the recalibration of temporalities. The increased economic wellbeing of some iTadian indigenous people translates into an increased propensity to install internet connections in their households, although this requires the negotiation of other intermediaries and the present competencies of the family members. Black-boxed digital appliances, such as laptop computers, the circumscribed formalism of a cell site, USB sticks and their emanating signals, are necessary intermediaries in rendering the presence of the members of a household. Recalibration of temporalities by synchronising communication times is a necessary activity. It must be said that anti-programs are always in the midst of these practices, and operate to limit the rendering of concatenated presence. Anti-programs take the forms of rugged topography and a harsh climate, to name a few. This arbitrary concatenation of intermediaries,
informed by temporalities, materiality and black-boxed technologies, are used to
invoke presence of a ‘distant’ relative. Hence, distance is no longer informed by
gеophysical boundaries per se, but it is redefined by the dissidence of the previously
mentioned intermediaries and the efficacy of anti-programs in breaking the network.

Reconstituting ethnicity.

Social-anthropological investigation of the dynamics of internet-based
communication and its consequences on building community and kin-based
solidarity is not new. Existing literature already points to how such communication
can sustain kinship and common ethnic bonds (Budka, 2009; Longboan, 2011). This
impact is further explored through the reconstitution of ethnicity and ethnic solidarity
via digital translations.

Reconstituting presence through enactments brought about by internet
technology is counter-enrolled by enactments based on marital and kin relations.
These enactments, which are found in the household, create a relationship with other
enactments, based on indigenous ethnicity. As internet technology creates new
competencies for the overseas workers’ spouses in Tadian, it also lets those spouses
subsume emergent roles that create possibilities for reconstituting ethnicity across
geographic boundaries. As the spouses become competent in communicating with
their spouse and kin, they also become purveyors of community interest and ethnic
identity. Here, ethnicity is invoked as an oscillatory thing—objects in the form of
digitised images, language and online commentary act as localisers or articulators
(Latour, 2005, pp. 203,216) to people who regard themselves as iTadians, despite
having emigrated from Tadian and settled elsewhere. These localisers prove that
ethnicity and, in fact, indigeneity cannot be charted within the geophysical
boundaries of the community, although it may be a significant part of it. Hence,
indigeneity is, in effect, reconstituted in the light of internet technology. It is invoked as a dynamic navigation of a transient (even arbitrary) concatenation of intermediaries that, in turn, invoke localisers (for example, food, sceneries, tropes of autonomy and self-determination, among others) that create recursive, but novel, forms of enrolment to kinship and ethnic enactments.

It is, therefore, argued and reiterated that indigeneity must not be seen as an inert and static entity that has somehow maintained its archaic features across time and space. To the contrary, the reason that indigenous societies have succeeded in sustaining themselves is because of their ability to successfully navigate across the vast hinterlands of competing enactments. This is by making themselves important and being translated into different forms and meanings. In fact, one of the reasons why we can even argue about “indigeneity” is because it has made itself subject to redefinition itself—by being what it can be at the moment.

**Translations and Ontological Politics**

In this chapter, emergent heterogeneous assemblages, using internet technology and the iTadian as foci, have been identified. Applying the framework of actor-network-theory to the analysis, not only sees the heterogeneity of the hinterland, but also sees glimpses of competing enactments, mediators, intermediaries, dissidences and anti-programs emerging. These assemblages only momentarily form and then dissipate as iTadians go about their daily lives. The transient connection of these networks is reliant on well-established enactments (for example, kinship or schooling) and mediators (for example, students or money), as well as black-boxed intermediaries (for example, cell sites, electricity or schools), as long as betrayals (for example, students’ ambivalence to internet technologies and their subscription to libraries as a way of gathering information or spouses’ reliance on mobile phones)
and anti-programs (for example, lack of financial resources) are precluded. It can also be seen that mediators are ambivalent by exhibiting both subscription and de-inscription. For instance, the limits of geographic physicality both constrain and enable subscription to internet technology as a preferred means of telecommunication. The rugged and fairly remote location of Tadian poses an opportunity to establish an incentive for internet access, while posing as a disincentive because of its difficulty in sustaining a steady stream of radio signal, which is important to internet access. In the case of the spouses of overseas workers, ambivalence is a way for them to negotiate the personal interests of shared content and the nostalgic interests of expatriate iTadian. They regard internet technology as merely one means of communicating with their respective spouses.

Ontological politics can be identified as internet technologies negotiating with indigenous realities of kinship and ethnic identification. The internet provisionally hides other realities by exhibiting itself as a thing of personal amusement and telecommunication. Although the internet had peddled itself as an academic requirement, betrayals from other well-established enactments have made sure that it remains ambivalent to libraries as a source of academic and pedagogical information, as well as mobile phones as a means of telecommunication.

The succeeding chapter further guides us to a number of cases of heterogeneous assemblages of indigenous and digital enactments within the Tadian hinterland.
Chapter 7: Heterogeneous Digital Assemblages—Four Cases

The previous chapters describe the emergence and present enrolment of information and communications technologies within the complexities of the Tadian hinterland. It showed that mobile phone and internet technologies have enrolled well-established and even black-boxed enactments into its fold. Enactments such as kinship and the academe are enrolled into digital technologies through the deployment of highly-competent mediators, in order to further enrol more actors and stabilise its relevance and practicability. However, this does not mean that the enrolment of ICTs within Tadian is a comfortable one. Anti-programs are always lurking in the translations and questioning the practicability of ICTs. It must also be mentioned that both mobile phones and internet technology are in competition against each other as the preferred means of telecommunication.

This chapter discusses a few cases of heterogeneous assemblages between ICTs and different enactments. This dynamism created variants of digital enactments as ICTs become mediators of transporting and translating the various performances and ontologies of pre-existing kin-based, indigenous and state bureaucratic enactments. The chapter starts with the comparison between two approaches of internet application in Abatan, a township adjacent to Tadian. The first approach subscribes to government mandates and authority, while the other is through a private enterprise that adopted heterogeneities within its midst. It also provides a brief account of how so-called technical knowledge is a consequence of

---

Among the anti-programs previously mentioned were costly connection subscription fees and geophysical terrain.
how human actors can successfully navigate through available enactments, other than the ones espoused by formal structures of government and educational institutions.

The second case shows how an endemic riverine species of eel that thrives in the headwaters of the small community of Cagubatan. It is a narrative of two cases of enchantments practiced by the locals in order to fabricate an assemblage of enchantment. This assemblage affords an environment that is conducive for the eels’ survival.

The third case takes into account the enrolment and counter-enrolment strategies of mobile phones in the customary paw-it system by asserting itself as a thing that stabilises the uncertainties of transporting letters and goods. By being counter-enrolled by mobile phones, the paw-it system found a close ally by creating an opportunity to manage the complexities within the hinterland, hence reinforcing trust in the system. The last case traces how people reacted to a recent landslide in the community of Kayan by using a concatenation of customary modes of communication and information and communication technologies. The general response provided a good illustration of how ICTs have enrolled themselves within iTadian.

The last section discusses the dynamics of digital translations; how they have enrolled and stabilised themselves within the hinterland. It examines how these new assemblages become mediators, as they both transform and transport ontologies of the various enactments. The last section also examines how digital technologies both stabilise and betray enactments in the translation of ontologies as they oscillate from one site to another as a result of these assemblages.

---

63 See page 98.
The Two Internets of Abatan

Located a few kilometres east of the Tadian municipality is the township of Abatan, Bauko, Mountain Province. Situated on top of a small plateau overlooking the far western part of the Cordillera region, Abatan is at a road junction frequented by people coming from nearby communities who avail themselves of its wide array of products and services that it offers, especially during market days. This time, Abatan is introduced regarding how it serves as a setting to two different enactments of Internet technology.

This section further depicts how the two enactments negotiate through the complexities of the Abatan hinterland. One approach leads to its success and practicability, while the other, to its failure.

The Community e-Center.

The sign reads: “Office of the President of the Philippines, Commission on Information and Communication Technology, Community e-Center, in partnership with Bauko, Mountain Province” (see Figure 3 on page 160). It appears to be placed conspicuously, so that it can easily be noticed by passers-by and commuters coming from the sloping highway. The sign points towards a door of a well-lit room of about 15 square metres in size. Based on the advertised sign, perhaps one would imagine an array of computer terminals with people busy using computers, their faces looking intently at video display monitors. After all, it is market day and almost everybody in Abatan and within nearby regions knows about this weekly activity. It is no wonder that Abatan means ‘meeting place’, or a place where people converge, in the local Kankanaey language, and the junction has been the customary convergence place within the north-western part of the Cordillera region. It is ten o’clock in the morning and a growing number of traders are busy selling the produce placed on
their stalls or spread out on tarpaulin mats. People are busy purchasing their weekly
groceries of fresh meat and vegetables, among other necessities. A number of them
are probably yet to go into Abatan itself and purchase their necessary household
commodities. A few may well take advantage of the location’s proximity to any
other errand—perhaps some may take the time to go to the Community e-Center
(CEC) and to have some documents encoded and printed. A few might even access
its internet service.

As one enters the CEC, the room is—surprisingly—not what is expected. It
looks like any other government office in the Philippines; amiable staff politely
greeting customers while they work their way through piles of paper. There are also
two typewriters and a solitary computer unit situated against a wall. The computer is
switched on and it displays some spreadsheet data; apparently it is being used by one
of the staff. Upon inquiry whether the room is the CEC (as the signboard says), one
of the staff members relates that the room was once the CEC, but was eventually
turned into another department annex of the municipal government. The sign no
longer signifies the CEC project. In fact, further inquiries reveal that the CEC ceased
operations a number of years ago. For some reason, the signboard still stands, only
as a testament to its short-lived existence.

Further investigation reveals that the CEC of Abatan, Bauko, is a consequence
of an agreement between the municipal government and the Presidential Commission
of Information and Communications Technology (CICT). The CICT is a recently
established government office operating under the direct supervision of the
Philippine president. According to the CICT website, Community e-Centers are mandated to

- provide the general public with access points for the delivery of e-government services and affordable access to a variety of information and communications services such as internet access, email, fax, voice over internet protocol (VOIP), distance learning and other online community-based services (Commission on Information and Communications Technology, 2006)

The aim of a CEC project is to provide a number of personal computer (PC) workstations and other ‘business centre equipment’ (for example, printers, scanners and digital cameras) to benefit local government units. For its part, the CICT is also tasked with training a few municipal government staff to operate and manage the centre during its implementation. It plans to sustain itself with income coming from the anticipated patronage of municipal constituents.

In 2007, the CICT signed an agreement with the municipal government of Bauko, Mountain Province, to provide the necessary equipment for the installation and operation of the local CEC. Bauko is one of the first two municipalities in Mountain Province to be involved in this project, the other one being Sagada. A year before, the CICT had trained two municipal government employees to manage the CEC. They were trained with the basic business skills to manage the CEC. Eventually these two staff members were bound to assume the responsibilities of maintaining the upkeep of the centre. Their duties included maintaining its internet

---

64 It must be stated that as of June 2011 the CICT was abolished and replaced by the Information Communications Technology Office under the Philippine Department of Science and Technology. As of January 2013, the CICT domain (http://www.cict.gov.ph) is no longer available, but still can be found via web.archive.org
connections and assisting customers with browsing and printing services, among other things. Apart from business skills, the CICT also trained these employees in network administration and maintenance, with the aim of maintaining the business machines. The main aim was to derive revenue from patrons from Abatan, as well as the communities of the Bauko and nearby Tadian municipalities. As this was not meant as a direct dole-out of computers, it was agreed by both the CICT and the Bauko municipality that the latter would pay the cost of equipment and installation. Payment was in monthly tranches to the CICT. The agreement was finally actualised when the four computer workstations, a printer and other business centre equipment were delivered and installed by the CICT to the Abatan CEC. This included the installation of the signboard.

The CEC was inaugurated in late 2007 with the usual bureaucratic formalities typical to Philippine governance; top local government officials and representatives from the CICT were invited as guests of honour during its inauguration. It also included other events, such as ribbon-cutting, speeches and photograph-taking.

The centre had four computer workstations with wireless internet connectivity through USB sticks. The workstations were all ready for use by customers, with each arranged in a row against the wall of a well-lit office space. It was intended that the centre would operate within government office hours (8am to 5pm). It was also to offer photocopying services.

After its installation, the appointed CEC staff earnestly went around town to advertise the services of the centre, as well as promoting it through word-of-mouth, print media and official letters or memoranda to government offices. The staff also offered tutorial sessions to teachers from elementary and high schools nearby.
However, a mere four months after its inauguration, the CEC of Bauko stopped providing its services. The expected flow of clients did not show up, despite the government-sponsored promotions. Only government employees occasionally availed themselves of its services, particularly those who know how to use the internet and were living nearby. Consequently, with no sustainable flow of patrons, the computers were redistributed to four separate municipal departments for office use. The provision of internet connectivity was also terminated. According to one staff member, the reason why patronage failed was because the people were too hesitant and diffident in going to the CEC\textsuperscript{65}. “Perhaps it’s the discomfort of going to the munisipyo (municipal offices) to access the internet”, one staff member. People have been accustomed to regarding the munisipyo as a place to pay fees, seek favours from local politicians and hold meetings called by the council, among other similar transactions. Being a Community e-Center is not among those functions. By 2010, three years after its closure, the municipal government was still paying for the cost of the CEC project.

What started as an auspicious project became an administrative concern to the municipal government of Bauko. Its pressing concern is how to deliver a broadly-conceived, nationally-mandated project of delivering “a variety of information and communications services” (Commission on Information and Communications Technology, 2006) to its constituents.

The CEC sign still stands there, firmly in place, and with a reason. A respondent to this study confided that the municipal administration still shows its determination to try again to fund a new Community e-Center.

\textsuperscript{65} The exact word used was ‘nahihiya’, a rather multivalent word, which in Tagalog means shyness, timidity, reluctance, embarrassment and, sometimes, shame.
Across the road from the failed CEC in Abatan is a small shop made of unfinished concrete. It has no sign outside. Through close observation, some activity happening inside this hole-in-the-wall could be noticed. The shop reveals silhouettes of both youths and young adults seated on plastic monobloc chairs. Some are looking amused while others seem to stare intently, as their faces are faintly illuminated by pale light from LCD monitors. A young male—a student judging by his looks, as he was wearing a school uniform—goes outside the shop and then

**The Internet Shop.**

Figure 3  The entrance to the former Community e-Center
proceeds to a store beside it. He orders a soft drink, gulps it down in no time, then hastily heads back into the dimly-lit shop.

This shop is an internet access centre. With its rugged, unassuming façade, it looks different from the shops that are typical in Baguio or any urbanised area. However, its looks do not deter people (like the young man mentioned above) from accessing the internet. A closer look inside reveals that the 30 square metre room has 23 computer workstations. The shop is illuminated by two fluorescent bulbs and its floor is made of an unfinished spread of mortar. Surprisingly, the room is cool, despite having no visible ventilation and being filled with a lot of customers. Perhaps its welcome temperature is due to the temperate climate that characterises Abatan.

Most of the computers are occupied late in the afternoon. There are even a few children watching over the shoulders of some customers wearing headsets. After several minutes, the shopkeeper, acting as network administrator, shouts a number, indicating that the current user of computer number 14 has only five minutes left to use it. The customer, a young man, shouts back, “Plus 15!” suggesting that the shopkeeper should add 15 minutes to his usage. The shopkeeper promptly makes a few scribbles in his notebook, then a few keystrokes and mouse-clicks on his computer, presumably to allow the user of computer number 14 another 15 minutes of access. This scene often repeats itself throughout the day, with customers requesting the addition of a little more time to their allotted access. The cacophony of hums from the computer fans, keystrokes, mouse clicks and excited shouts (which are politely lowered in volume so as not to disturb the other occupants) characterises the shop.
The internet shop was originally a computer rental shop in 2000. Aside from few computer units, it also held a number of gaming console units for short-time rental. High school students usually rented gaming units, while college students rented computers for typing and the printing of college requirements. It did not take long for the shop to generate a steady stream of customers availing themselves of these services. Computer literacy was already a growing skill among the student population and some learned how to operate these technologies with the help of friends who frequented the shop. By 2004, the shop owner purchased three second-hand personal computers, in addition to his existing ones, because of the increasing demand. The newly-acquired computers were sold to this shop owner by a close friend who had recently upgraded the computers for his own computer shop, based in the provincial capital of Bontoc, about an hour’s drive away from Abatan. The internet shop owner regularly gets in touch with his friend from Bontoc to seek advice on computer maintenance and upgrading, as well as to discuss recent trends in information technology.

In 2005, the Abatan shop owner learned from his friend that internet connectivity would be provided in Abatan by Smart Communications, Inc. (‘Smart’), a commercial mobile phone carrier. Smart planned to establish internet connectivity through wireless broadband distributed by their mobile base station in Abatan. Connections via wireless broadband are made by connecting a computer to a special router, which is then connected to an antenna oriented towards the mobile base station. Having heard of this news, the shop owner soon contacted Smart to have his computers installed with internet connectivity. However, the technicians of Smart were only allowed to install one computer unit, as it was their policy to only install one computer unit for each subscription. Installing a local area network for the rest
of the units must be done at the shop owner’s expense, through a different technician. The Abatan shop owner sought his friend’s advice for some technical help on installing his computer network with internet connections. Through his friend’s advice, the shop owner bought the necessary network adapters and accessories and then installed the shop network himself. He related that it saved him a considerable amount of money by doing the installation himself, rather than employing the services of a private computer network technician.

The shop owner conducted minimal promotion for his shop’s new service by placing a signboard with the words “Internet Available Here” in front of his shop. He was soon met with enthusiasm by patrons who already had prior knowledge about accessing the internet. News of the shop’s new internet availability spread to other customers who had yet to discover internet access. In less than a year, the growing patronage from the owner’s small shop encouraged him to set up two other shops located within walking distance of each other. As demand for online and network gaming grew faster, the gaming console units gave way to computer units with internet connectivity.

The shop now operates every day, except for Sundays and public holidays. The owner charges 20 pesos\(^{66}\) for an hour’s use, with a minimum charge of 5 pesos for each 15 minutes. Customers access the internet for an average of two to four hours per session. Based on previous experience, the owner discourages customers from taking food and drinks to consume in front of their rented computer units. He recalled that there were a number of cases when food and drinks were taken along and spilled on the keyboard, effectively damaging it and making a mess on other computer units.

\(^{66}\) Approximately AU$0.50.
During weekdays, a large part of the internet shop’s clientele is students from nearby high schools and colleges. Most of the high school students avail themselves of online gaming, while those in college access the internet for browsing, news, research and, until recently, social networking. During Mondays to Thursdays, customers would usually trickle in starting at 9 o’clock in the morning, then the flow of customers would reach its peak later in the afternoon. A number of students accessed the internet after school hours and this would gradually taper down to a few remaining clients by closing time, at 7 o’clock in the evening. Fridays and Saturdays are different, the owner tells with feigned delight. The shop’s atmosphere is typically crowded during Friday afternoons. This comes with frequent bursts of laughter, taunting and shouting from its juvenile patrons. This kind of activity is tolerated unless several of the patrons show disruptive behaviour, which the owner admits happens very rarely. In such cases, the owner just admonishes the patrons and requests them to tone down their voices, so as not to disturb the other customers,
particularly the ones using video conferencing. If the shop remains at full capacity by closing time, the owner usually extends the shop hours until 8 o’clock in the evening. There have been a number of occasions when the owner found high school boys still playing online games beyond this time. This causes the boys to miss the last bus trip home. The shop owner had no choice but to let them sleep in the shop overnight, then send them off on the first morning trip.

Saturdays are typical times when families and clans go to his shop to communicate with kin via the Internet, especially those who have relatives working overseas. The Internet shop owner remembers a family of seven from the nearby Otucan community. The family went to his shop in order to communicate with a female relative who was based in Hong Kong. He poignantly recalls that the family members had to rent a van and brought their old, ailing and paraplegic father to his shop. The family members had to carry the old man on a plastic mono-block chair into the shop. Then the shop owner helped the family to prop the old man up, so that he could be seen easily through the webcam. The owner set them up at one of his computers on which he had previously installed the Internet chat software, Skype. After coordinating with the family as to the daughter’s Skype information, the shop owner was able to help them talk to her through Skype. The owner also remembers a family of six in Tadian who went to his shop for the same reason. He amusingly narrated that all six members were shoving themselves towards the computer monitor in the hope that they could all be seen by the family member on the other end. This was a particularly difficult situation for the family whose members were jamming their heads and bodies close together so as to fit within the shot of the webcam. The owner also noticed that the relative at the other end of the conversation had difficulty recognising their faces because of this. It was also causing a certain degree of
distraction to the other customers. The shop owner then politely intervened, telling the family that it would be better for them to take turns in talking to their relative, rather than communicating with him all at the same time.

During times when customers need assistance in using the internet, both the owner and his wife act as *de facto* online tutors. The couple makes sure that they teach the patrons how to operate the computer, navigate its online environment and use the necessary protocols, such as email or Internet video chat. These tutoring sessions are short and done spontaneously, starting with customers politely signalling for assistance, usually through non-verbal cues and gestures or by directly approaching the main counter. The owner then gives them a short tutorial on how to address their issues, which are done hands-on and informally. They usually stand or sit beside the customer then tell them the necessary steps and actions for a particular computer issue. These issues seem to be very trivial for competent users and include things such as how to operate a mouse, dealing with screensavers suddenly popping-up on screen, clicking on a specific icon or menu or even simply adjusting a headset. These issues are approached by the shop owner couple in a matter-of-fact way. They are aware that such technologies are not easily available to everybody in the area, therefore, a lot of its residents are not competent users. The couple associates these sessions with being a way of helping the customers, while maintaining patronage. As a consequence of this, those customers who had initial difficulties usually return to the shop, confident that their needs will be attended to without any feeling of condescension.

The shop owner says that, aside from the regular patronage for online games among youths, there is a growing demand for internet access among people who need it for communicating with close kin based just outside of the region. He relates
that the internet primarily had a wonderful effect on customers because “they can see
the person they are talking to”, referring to the internet video conferencing protocols,
Skype and Yahoo Messenger.

**Two Cases of Translations**

The two cases: ‘the Community e-Centre’ and ‘the Internet shop’, show how
two different enactments, one that is practiced by the bureaucratic state network and
the other by private local enterprise, navigate the heterogeneities of the hinterland, as
well as enrol actors in their midst.

Enactments of the state seek to instil a reality that is based on the ontology that
the state bureaucracy has the paramount and necessary resources and expertise to
provide information and communication services to the ‘general public’. State or
government enactments create an imaginary of the community as passive and poor,
and looks at internet technology as an idealised, yet myopic, hierarchical system,
based on academic success and technical efficiency brought about by digitisation.
These enactments draw upon the temporal regularity of the business hours of the
municipal government. Likewise, they draw on the knowledge of the distant,
technical expert as a wellspring of ideas necessary for plugging-in ICT
competencies. When put into practice across the heterogeneous hinterland, the
doctrinaire singularity of its ontology was shown to falter, as it failed to adjust to the
multiple and competing realities within the hinterland. Instead state bureaucracy
only just listened to itself. Although the state is secure in succeeding to enrol a few
mediators, such as municipal budgetary allocations, the municipal government,
together with its staff, and built environment, it failed miserably in making internet
technology interesting to the locals. With regards to internet technology, the reality
of state bureaucratic enactments strove to enrol the necessary actants, such as schools
and other government agencies, in order to sustain itself, but, again, it failed to generate enough interest. In other words the enactments of the state bureaucracy created a logic that deflected other realities, actants and mediators from being enrolled, which was necessary for its relevance and survival. The actants in the hinterland were simply not interested in engaging with what the CEC had to offer. Eventually, even the best and most earnest intentions of the state failed by insisting that it held the monopoly for ICT competencies. This could have been a case of hyper-punctualisation of the interests of actants. This was to such extent that the actors in the hinterland were reduced to the utmost passivity and their motives, aims and actions were imagined by state bureaucracy to be malleable purely according to its ontology. As such, intéressement failed, or, perhaps it is safe to say, that it was partially successful. This is because while the state bureaucracy had been successful in trying to sever the links of competing enactments by listening to its own ontology, it had failed miserably in associating other actant’s interests with its own, which, ironically, is its main ‘developmental’ objective.

On the other hand, enactments that recognise heterogeneities, and have clear courses of action to take across competing interests, have thrived, as in the case of the local internet shop of Abatan. The small shop succeeded by enrolling other mediators and kin-based enactments into its operations. It recognised multiple realities and different degrees of competences of internet use, such as online gaming and video conferencing, among others. The shop owner sees his clientele not as passive imaginaries out-there, but as ambivalent actors having different interests, skills, experiences and persuasions. He dealt with unpredictabilities (such as sudden queries by customers and overstaying boy patrons), non-coherences (such as negotiating with unskilled users) and noise (such as disruptive behaviour and
taunting) as part of the heterogeneous landscape. *Locality-based enactments* such as these continuously negotiate with presence and absence, with noise and silence, with confusion and clarity, and with coherence and non-coherence. These local enactments do not approach heterogeneities with dogmatic singularity, but through navigating along a flux of enactments of internet usage. However, more than embracing heterogeneities is the phronetic mapping of interests by the actors in the course of enrolling possible mediators. By stabilising the interests of other actors with reference to their own, local enactments were able to generate continuous enrolment throughout their operation. This was evidenced by the provision of online games for the youths, while providing business needs, such as printing and internet browsing, to students. Another instance of phronetic mapping of interests is the shopkeeper’s ability to provide opportunities for overseas family members to communicate with their family members in the community.

It can also be seen that enactments, in the form of technical knowledge, navigate along pathways that are attenuated by doctrinaire ontologies, such as those of the state. In the case of the internet shopkeeper, technical knowledge was passed across filial networks by fluently navigating around formalised institutions of knowledge, such as training schools or institutes, making it possible for the shopkeeper to tactically accomplish outcomes that were important to his business operations. Apart from going around formalised institutions, the flow of technical knowledge through filial networks had a recursive character by continuing to reinforce the convivial networks of support among friends and people with similar persuasions.

---

67 In *phronesis*, I am referring to its deliberative capacity in the often translated Aristotelian concept of ‘practical wisdom’ (see Levine, 1995, pp. 100-101).
Therefore, the digital enactments that subscribed to the ossified and doctrinaire ontologies of ICT access stood no chance of survival within the hinterland, where stabilised, indigenous enactments were operant. Such digital enactments were inimical to the interests of indigenous enactments and did not succeed by maintaining aloofness, solipsism and a hierarchical character. Conversely, enactments that navigated the hinterland by accepting unpredictabilities, non-coherences and noise were partially successful. This is as as long as enactments managed to generate a phronetic map of interests of the various mediators encountered, with equally dynamic courses of action taken. This shows that digital enactments based on practical knowledge and lived experience may be more successful in enrolling allies as long as a dynamic and phronetic mapping of other actants’ interest is conducted.

**Enchantment and the Dalit of Cagubatan**

This section shows how an endemic species of eel that lives on the streams and creeks of the small community of Cagubatan had thrived through its enchanted depiction in both in situ and digital settings. Two versions of the Dalit eel (*Anguilla spp.*) are presented: The first is from the field experience of the author, while the second is a narrative of an uploaded video from YouTube. It shows that both enactments of natural and digital settings are complimentary approaches imperative to the survival to these eels. These enactments afford a safe habitat that is necessary for the survival of the eels by protecting against harm and obscurity.

**The trip to the field.**

It was already late in the afternoon when my translator and I first arrived in Cagubatan, a village in the northern part of Tadian. The village is situated right below the foothills of Mount Mugaw, a solitary hill surrounded by towering
mountains connecting the Cordillera range. Cagubatan can be reached from Baguio in about five hours of meandering along a combination of concrete mountain highways and rugged ‘tire-paths’ (unpaved feeder roads which are so narrow that they are only wide enough to accommodate the axle track of vehicles) particularly in the final stretches of the journey. It was said that, before a feeder road was constructed connecting Cagubatan to the main highway, villagers had to walk for about three to four hours along steep mountain trails in order to reach the local township.

The present feeder road is steep and cuts along very deep ravines, yet our bus driver casually navigated these narrow stretches without much effort and in spite of the heavy rain. It was still raining torrents when we arrived at the barangay (village) hall of Cagubatan later that afternoon. We were then met by several village elders who knew of our arrival, having previously coordinated our trip through cell phone calls. We travelled on the one and only bus that regularly goes to the community every other day. After a few greetings and pleasantries, the elders offered us warm coffee and bread made of cassava flour. We partook of this hospitality, knowing that it would be better to wait under the shelter of the hall during the heavy downpour, and with warm coffee too. Soon after we had exchanged pleasantries and the rain had ebbed to a drizzle, we politely left the hall to conduct interviews in several households, taking advantage of the sudden change of weather and remaining afternoon sunlight. We courteously advised the elders of our return to the hall by nightfall.

We went back to the hall at about six o’clock in the evening. It was already dark at that time of the year. Upon our return, an elder asked whether we were interested in seeing the village’s tourist attraction, the ‘enchanted’ eels or Dalit of
Cagubatan, and she offered to take us to the eels’ natural habitat. According to the anecdotes the elders shared, the length of a fully-grown Dalit extends to as much as two metres and it is best seen during the night time. This prompted me to ask a few questions about its enchanted nature. According to local folklore, the Dalit emits a faint mysterious glow as it swims along in its nocturnal feeding grounds. It is taboo for villagers to eat or harm these eels, in the belief that anyone who does so will certainly fall ill or die in a few days. The elders tell of old tales of invading foreign troops dying or getting killed on a night after feasting on the Dalit caught from a nearby pond. Local folklore also points to the Dalit as the protector of the water resources used by villagers to irrigate their rice fields.

Intrigued, I accepted their offer to get a glimpse of the Cagubatan’s enchanted eel. I was also aware of the local culture; that it is rude for guests to refuse a sincere and earnest offer, especially one coming from a respected elder.

The early evening darkness had crept in and the path leading to the Dalit’s special habitat was illuminated by the faint light of our guides’ torches. The elder opted to stay behind, saying that it would be too risky for her to walk in the dark on slippery pathways, which are motley patches of mossy concrete, rocks, mud and grass. Two local guides, my interpreter and I reached the Dalit’s special place, a small pool of fresh water surrounded by boulders and with plastered mortar on the ledges. The pool is surrounded by an interlinked wire fence with a ‘Welcome’ sign at the entrance. The water from the pool drains into a small pond a few feet downstream, serving as a catchment basin in case a few eels try to escape to the tributaries and into the main river.
At the side of the pool is a square concrete wall with a small brass plaque on its right side. The plaque gives a brief history of Cagubatan. Immediately below the plaque is a preamble written in English that says:

We the Cagubatan people are very thankful for God’s given gift, the eel ‘Dalit’.
So we have no (right) to abuse it.
So as a respect to this gift, we made the ‘Dalit’ sacred and the whole community offers a one-day feast to the eel called “Dilos”.
Thus we are appealing to the public to pay respect of the enchanted eel.

The left part of the brass plaque is a notice to the public to refrain from conducting activities that may harm the eel or destroy its habitat.

It took about ten minutes before the Dalit showed itself in the clear pool, drawn by our guide’s effort to entice it to emerge from the underwater crevices. Enticing the Dalit means whistling and gently dipping a twig, taken from a nearby tree, into the water. The guide made sure that dipping the stick did not create a stir turbulent enough to scare the Dalit.

“It’s there!” Shouts of excitement, coming from our guides, punctuated the emergence of a Dalit. One of the guides pointed at the eel. The Dalit emanated an iridescent glow of blue and purple as it slithered around the pool. Its eyes were glowing slightly dimmer than the rest of its body, and they were fixated on the tip of the twig that the guide had dipped. The guide, perhaps in an attempt to impress us, tried to grab the Dalit, but its viscous skin secretions prevented him from taking it out of the water. I secretly felt a sense of relief that he did not succeed in taking the Dalit out of the water, as seeing the Dalit itself—as well as the actions and reactions of our guides—was enough to know how the locals regard the enchanted eel. Our
trip to the Dalit’s home ended with another round of cold rain, amid the growing darkness.

**The uploaded ‘Dalit’.**

Shrieks of delight pierce the audio of an uploaded YouTube video ("vrenadineA", 2009). Apparently the shrieks were coming from female visitors reacting to what they have just seen. Then the video shows a mid-sized, freshwater eel passing through the crevices of a small pool. Whistling is then heard in the background, as if to attract the eel’s attention. Based on the ambient brightness, it can be surmised that the video was taken during the daytime. A close-up picture reveals a hand holding a short stick with an object (perhaps food?) on its end. The stick is dipped into the pool, as if to attract the eel further into the video shot. The eel then swims past the stick. It took several seconds for its whole body to pass, revealing how long the eel is. Then the shot is slightly zoomed out for several seconds, as if to capture the eel’s whole body length swimming towards a small, rocky crevice. Disembodied voices continue to shriek with delight, exclaiming how long and large the eel is. The eel continues to swim gracefully towards the dark, hidden areas of the rock gaps until it is totally hidden from view. A male voice (perhaps a guide?) yells in Kankanaey, “That’s all. Let’s go!”, then the video suddenly stops. This 37-second, short video is a snippet of the digital alter ego of the Dalit of Cagubatan.

The video was uploaded on YouTube two years ago has only been viewed less than 5,000 times, as at the time of writing. In the information section is an explanation as to why the eel is considered mystical and is revered. A few people have posted comments on the video, mostly saying how lucky the people in the video are, as large eels usually only appear at night time. Some commenters express
affirmation because the Dalit was said to be only an object of legend told to them by their elders, and the video is proof enough of its existence.

**Affording enchantment.**

The indigenous performance of enchantment in the field included several actions, these included:

- a background given by locals of the eel’s enchanted nature;
- the short travel to the eel’s secluded habitat with a local guide;
- the built environment containing civic and symbolic structures used to protect the eel;
- the ritualised enticement of an eel, using whistling and a stick as tools;
- the exclamation of the guides the moment an eel appeared, together with several moments to show the eel’s physical features.

By providing information to the guests, the local elder provided a sense of apotheosis to the Dalit and showed how it is important to village. Enchantment also gives the listener a background for the Dalit by associating it with matters of fact, such as the village’s historicity, regard for its fauna (especially the Dalit), and local water resources. The short journey with the local guides accords a degree of secrecy and privilege. Otherwise, this may have been a blasé trip and disenchantment for the traveller. The built environment of the small pool not only affords physical protection to the Dalit, but also the symbolic space of its sacrality. It dictates the traveller where and what to observe, as well as the clear rules of acceptable actions. The writings on the plaque and the wall are mediators of indigeneity, to stabilise enchantment against other competing enactments that may otherwise subvert the sacrosanct Dalit. The pool itself is a modification of the eel’s original habitat, with
an opening wide enough for viewing, but small enough for people to wade in the water. The pool seeks to control the behaviour of those within the space. The ritualised whistling and stick-dipping of the guide can be seen as a recursive action, with the Dalit appearing soon after this activity is done. The climactic moment is punctuated with the appearance of the Dalit, together with the participants’ shouting and displays of excitement.

Specific moments of enchantment are translated into digital form by the uploaded YouTube video. First its title and adjoining narrative sets the background of the Dalit’s mystical and sacred character. Then there are several elements in the video that are also present in the fieldwork version; the guide, the stick, the appearance of the Dalit and then the sounds of excitement and delight coming from the participants. The Dalit is focused upon and its length is emphasised in the shot as a climactic point in the video.

Here, the concept of affordances (Gibson, 1979) into the digital environment of the internet is extended to indigenous/digital enactments. By providing an enduring cultural practice of mystical sacrality to the Dalit, the Cagubatan village people have given the creature an environment in which it can thrive. The reader is also reminded that there is a process wherein the Dalit’s performance recursively affords the village another opportunity for self-identification, ethnic identification and cultural autonomy, thereby stabilising indigenous enactments. The digital setting of YouTube provided yet another form of indigenous enactment in which the Dalit can continue to thrive. This is by rendering itself as a mediator to both indigenous and digital enactments, which highlight its enchantment. The Dalit only has to make itself present during indigenous performances. Indigenous sacrality is then transformed by delegating digital and online mediators, gathering themselves on the
Dalit’s mystical competences that are derived from indigenous performances, then rendering them within the digital setting. Likewise, YouTube has also become a mediator of the enrolment and counter-enrolment of these digital and indigenous enactments. As a consequence, the Dalit has gained yet another ally by revealing its mystical self and by being present during these performances.

Through cultural affordances, indigenous enactments are translated into a digital format and yet its sense of emic identity remains unchanged. Ethnic and cultural identification is stabilised within the control of the video uploader, while opening up possibilities for poesis through comments written by viewers. A counter-enrolment happens as users navigate along the structures placed by digital protocols (in this case, YouTube) with the aim of performing these enactments in accordance with indigenous culture. Here, it is further argued that the survival and maintenance of indigenous enactments is possible by counter-enrolling itself with digital environments, creating possibilities of performing or externalising indigenous matters of concern by grouping and momentarily coalescing self-interests, as well as the interests of other enactments in the hinterland.

The Paw-it System and Mobile Phones

This section presents how a relatively new technology, the mobile phone, has counter-enrolled competing enactments as a necessary means of maintaining the survival of the older, paw-it system. This is in spite of the fact that it did nothing efficient, but, instead, only added more passages and morphisms along the way.

It starts with an excerpt from an official document about Tadian:

‘With the use of cellular phones, communication had become speedy and more efficient. However, it is observed that the main communication
(nowadays is a) combination of the paw-it and the use of cellphones.’

(Tadian, 2005, p. 106).

As discussed earlier, in Chapter 5, the paw-it system has been a widely acceptable method of transporting letters and packages since buses have been in operation in Tadian. It is a system of exchange, mostly among kin, although some use it for private deliveries and businesses. It has outlasted other methods of communication, such as the public telephone service and municipal telegrams. It still remains as the most preferred means of sending letters and goods, rather than the official post. The use of mobile phones in the paw-it system mainly involves the sender, bus conductor and the recipient. The mobile phone is used mostly as a counter measure, at times when packages are delayed or it is used to confirm receipt of letters and goods.

It is argued that the integration of mobile phones did not make the paw-it system a more efficient means of transporting goods. Respondents claim that there were no significant improvements in the delivery times brought about by mobile phones, as compared to deliveries made before its usage. Most of the speed and efficiency of the system is associated with the improvement of the road system. In fact, a lot more work is done by the conductor, who now has the added responsibility of answering and coordinating deliveries through text messages. These are the particular times when intermediaries stand to betray the system. Situations of betrayal may be a breakdown of the bus, landslides and road closures during monsoons or accidents, among other things. What significantly changed is the additional knowledge and capacity of both sender and recipient to coordinate activities at their end of the journey. First is the capacity to know the information that a package is in transit, whereas, before, it was a matter of regularly checking
local drop-off points, such as sari-sari stores for paw-it arrivals. Second is the knowledge that the package can be picked up, allowing both the sender and the recipient to coordinate their next move by means of text messaging. Third is the capacity to learn about the status of the package itself, as an assurance that it was not lost, nor did it lose its integrity (for example, melted, broken down or rotted) while in transit. These cases assure the sender and recipient of the success of the delivery, which recursively presents itself as an opportunity to renew the dependability of the bus conductor and the whole paw-it system. Both paw-it and mobile phones are well stabilised enactments that had successfully enrolled mediators within the Tadian hinterland. This is apart from strong, kin-based enactments that sustain the subscription to the paw-it and mobile phones. Potential betrayals and anti-programs present themselves as uncertainties and are placed in the open by mobile phones across the paw-it system. The information about these risks is shared with both sender and recipient.

If it is looked at through a map of interests, the enactments of the paw-it system and mobile phones each have something to offer that the other has not. Mobile phones could not transport bulky messages and large packages, as the paw-it system does. On the other hand, mobile phones eliminate a number of costly passages (for example, time and labour) and intermediaries (for example, the road system) by comparison to the paw-it system, where betrayals are replete and threaten the system’s reliability and dependability. The risk of betrayals (for example, inclement weather, road closures, mechanical breakdowns or negligence by the conductor) threatens the existence of the paw-it system. In order to address them, the paw-it system has to enrol itself within the digital enactments of mobile phones as an
intermediary of information and as a mediator of assurance. In short, mobile phones help to stabilise heterogeneities in the *paw-it* system.

The logic of heterogeneities/simplicity (Law, 2002b, p. 120) is operant in the performance of the *paw-it* system. It is imperative to stabilise translations by parsing the hinterland and making the *paw-it* system the most practicable means of sending letters and packages. However, materiality and trust are more significant features of the *paw-it* system, wherein the material presence of the package oscillates from certainty to uncertainty, until it is received by the intended recipient. From that point in time, the *paw-it* system is stabilised and made dependable once again.

Enrolment to this system by the iTadian has been conducted throughout decades. This enrolment is stabilised by bus routes, systems, buses, close kinship ties and emigration, among other things. However, there are several intermediaries that stand to betray the *paw-it* system. This creates uncertainties in its reliability and dependability.

The advent of mobile phones created an open means of communication between the sender, recipient and the bus conductor. It challenged the dependability of the system by exposing the inner workings of a rather black-boxed enactment, such as the *paw-it* system. This made the mobile phone a mediator of the *paw-it* system by identifying uncertainties, opening up opportunities for its stabilisation. Here it can be seen that a different approach to how technological enactments, such as mobile phones, deal with heterogeneities: This is by exposing heterogeneities of competing enactments, which were previously hidden or black-boxed. This *disclosure* creates a number of possibilities, one of which is the counter-enrolment of the *paw-it* system by mobile phones.
Disasters as Heterogeneities: Customary and Digital Assemblages During the Disaster in Kayan, Tadian

This section highlights the case of a village’s response to a local disaster through the enrolment of customary and digital modes of communication that eventually formed into a heterogeneous assemblage. This section traces the nexus of human and non-human actants that responded to the fatal landslide in the community of Kayan in October 2009. The narrative is in two parts, a run-through of the customary methods of information dissemination and a reassembly of the disaster response.

**Customary methods of disseminating information.**

**The one who calls.**

One of the traditional modes of disseminating information by the Tadian communities is by appointing a ‘community crier’ to undertake this task. A community crier, or *crier*, is someone tasked by the elders to broadcast news and announcements to the community. This is done by walking around the community and shouting out the news to the villagers. The crier is known by various names. Some communities call them *mando* (‘shout out’), while others call them *ibugaw* (‘to shout’) or *men-awag* (‘the one who calls’). Regardless of the nomenclature, the crier usually starts his\(^{68}\) business just before daybreak to reach every household before most of the adult villagers leave for work. Before the crier sets off, announcements are prepared by the village council or the council of elders. These include deaths in the village, lost livestock, emergency situations and community meetings, together with announcements of traditional community rituals and ceremonies, such as the *obaya* (rest days) in farm work. For instance, news of a death of a villager is

---

\(^{68}\) There were no reported cases of female criers.
purveyed through the crier. He also enjoins every household to contribute a *chupa*\(^{69}\) of uncooked rice for the bereaved family. As a response to the crier’s announcements, households usually go out and approach him to further inquire about the circumstances of the death and how the deceased is related to certain community members. The household member also takes out their rice contribution to the crier, who then places them into a sack or a large, tin container. He is tasked to take this collection to the family of the deceased, as a gesture of commiseration by the community.

A crier’s call is usually modulated and spoken in a monotonous tone to make sure that it resonates and reaches the recipients effectively. His message is usually phrased in an active and collective voice, such as, “Let’s go find the lost *carabao*”\(^{70}\) or “*Bumala tako ta entako tontonen*” (“Let’s go out and search”), exhorting everyone to do their part for the cause.

The crier’s message is regarded as the official announcement by the village council, which shows that they ‘mean business’. The crier is considered far better than sending letters to each individual household, because responses from the community via mail would take longer than doing so through the crier. It is also cheaper than sending individual text messages to each village household.

**Drums.**

Ceremonial drums are used to regularly to announce community meetings in some villages in Tadian. One such village is Cagubatan, located at the foot of Mount Mugaw. Mount Mugaw is a small hill surrounded by a mountain range within the domain of Tadian and nearby municipalities. A relatively small village of 170

---

\(^{69}\) A *chupa* is a unit of measure for raw grains, particularly rice. When cooked, a chupa of rice is enough to feed two people. A *ganta* is equivalent to eight chupas of rice.

\(^{70}\) Water buffalo.
homes (Tadian, 2009) clustered along the contours of the mountainside, Cagubatan is
governed by a village council and is led by its elders, who are also elected as local
government officials.

The ceremonial drum is called the ‘tambul’ and has been a used as a customary
means for announcing assemblies. The tambul’s body is made out of a thick, copper
cylinder less than a foot in diameter and about two feet high. The drumhead is made
of cow skin, tightly bound by rattan strands.

According to some elders, the tambul has been used since olden times. One
elder narrated that it was in existence during his childhood days, when it was used
for assemblies at the dalipey,\(^71\) where the elders gather. The tambul is never used to
produce music, as compared to the sulibaw—an other type of cylindrical drum used
for ceremonial and ritual dances. The tambul is normally located in a conspicuous
area inside the hall, where it is easily within reach in times of need. Only village
officials are allowed to use it for the main purpose of convening an assembly.

The number of beats of the tambul corresponds to specific village groups that
the council commands to assemble. For instance, two beats is a call for members of
the ‘community watch’, three beats corresponds to the elected village officials, four
beats is for the community youth organisation, five beats for the council of elders and
six beats corresponds to the local mediation board, a quasi-judicial assembly in
charge of settling petty disputes. The tambul drummer repeats the specific pattern
four to six times. As the village hall is in a flat area and is situated in front of the
cluster homes, the tambul’s beat easily resonates across most households.

\(^{71}\) A delipey is a traditional place where the council of elders gather to discuss community affairs. It
consists of smooth boulders around a fire pit. It is also called a dap-ay in some areas. At present, the
delipey of Cagubatan has been integrated into the design of the barangay hall, with its seats made of
concrete instead of using boulders. The fire pit still remains at the centre.
**Bells.**

Bells are also used to relay information to, and assemble, community members. These are installed in churches, schools and, in some cases, village halls. The bells of Tadian come in different shapes and sizes, but always have the same purpose of calling out to community members. Just like the tambul, no one must use the bells except for designated officers. Apart from heralding regular activities, such as classes at school, church masses and community meetings, the bells are regularly used as a general call for villagers to assemble, whether this may be for a regular Sunday mass, special occasions, such as feasts, or community meetings. In extraordinary circumstances, the bells are used to relay urgent information quickly across the community.

**Intermediaries of local governance and control.**

Enactments of local governance deploy the community crier, tambul and bells as intermediaries for the dissemination of information, as well as administrative control based on indigenous socio-political enactments. They stabilise the complexities of various competing enactments by accentuating the presence of local polity and enjoining them to subscribe to its fold. Local governance continues to assert its presence in the hinterlands as heterogeneity/simplicity, by dealing with parsimony and exigency as an imperative in the face of possible translations and competing enactments. Sources of betrayal may include anti-programs, such as geophysical terrain, competing daily routines of village households and non-participation of villagers, to name a few. These intermediaries transport their own physicalities into code and then are made coherent among community members and other non-human actants. In turn, they transport these codes into specific courses of action.
These intermediaries and indigenous enactments will play a crucial role during the rescue and recovery operations during the landslide in Kayan in 2009.

**The Kayan landslide in 2009.**

*Like a dream.*

It is the 8th day of October, 2009, in the community of Kayan, Tadian, Mountain Province. It has been raining in the village for two weeks. It is unsurprising for the villagers in this part of the world to be accustomed to, even complacent about, incessant rains continuing for weeks. In fact, torrential rains and the consequential landslides are staples during the rainy season in the Cordillera region. People are used to the fact that daytime travel is limited because the unsealed roads either get muddy, therefore difficult to drive on or, even worse, prone to erosion and possible road closures. Travelling during the night time is definitely out of the question, unless extreme circumstances warrant it. It is normal for students based in the metropolitan areas of Baguio and La Trinidad to forego their trips home because of the risk of getting stranded and missing classes. In addition, frequent power outages occur during this season, due to the occasional storms and landslips that sever power lines and affect the service of electricity in the area. On the other hand, the regular rainfall is a blessing for the farm folk, who depend on the periodic rainfall to cultivate their rice and other crops. The monsoon season is also the time when water reserves in the community are filled, which is important during dry seasons and periods of drought. As Kayan is a mountain village, it is not unusual for rain clouds to nestle along its boundaries. The clouds further darken the already grey surroundings.

The 8th of October is also the eve of Kayan’s annual *fiesta* or festival. A time of festive anticipation, this is a time to prepare food for the feast and rehearse the
dances and songs to be presented the following day at the village plaza, among the locals and guests. The village plaza is a semi-enclosed, paved courtyard used for a variety of purposes, from inter-school and inter-village sports, such as basketball and volleyball, to community meetings, ceremonies and cultural presentations. Despite the gloomy weather, on this day the plaza was a hive of activity.

At about six o’clock in the evening, during the school children’s rehearsals, the villagers heard a thunderous crash. It was “Kasla ungor ti napigsa nga lugan”, “Like a very loud sound of a motor engine”, according to one respondent. At the same moment the electricity went off. A momentary darkness and eerie silence had befallen them. It took them another moment to realise that massive amounts of water, mud and boulders were rushing down the mountainside into a residential area about 200 metres above the plaza. The landslide covered a number of houses and families.

The festive atmosphere immediately changed to urgent concern and panic. The church bell was rung immediately to signify an emergency. In spite of the growing darkness and heavy rains, a number of people went out of their way to go around the village to tell those neighbours who were indoors about what had happened and exhort them to come out and help their fellow villagers trapped in the rubble. The villagers also grabbed their mobile phones to text or call immediate kin about what had just happened.

Soon after, a kind of social organisation followed to address the calamity that had befallen their community. Aided by flashlights and digging tools, able-bodied individuals volunteered to rescue possible survivors from the rubble. A number of commuter vans drove to the disaster area and into the plaza, where rehearsals were conducted a few moments previously. The bells were rung continuously to alert
nearby communities that an emergency situation is ensuing. Local officials and villagers alike sent texts to municipal government officials about what happened, together with a plea for immediate assistance for the recovery effort. Some individuals, who had close kinship ties with influential people, also texted them for possible assistance. In fact, respondents recounted that they sent their text messages to almost anybody who they saw as capable of responding to the disaster.

*Kag-i’itaw*” (“It was just like a dream”), according to one villager in describing how those moments unfolded.

Soon enough, every available staff member from the municipal health office was informed about the calamity. They were immediately dispatched to assist with the rescue effort. They also immediately contacted key officers of the nearest government hospital in Abatan to request the equipment and vehicles necessary for search and rescue operations. Less than an hour after the landslide, health professionals were preparing the necessary medical supplies and were ready to render first aid to possible survivors. It was reported that four bodies were recovered at that time and more were feared trapped under the debris. A few hours later, a local school administrator brought a portable generator to the plaza to illuminate the staging area. At this point, a number of survivors had been rescued and provided with first aid, then taken to the hospital in Abatan.

People from other Tadian villages, such as Cagubatan, Masla and Lubon, soon learned about the calamity through texts. Upon receiving text messages about the disaster in Kayan, members of these villages deployed their criers to tell their respective community members about the disaster, together with an exhortation to
assist Kayan. The Kayan bells were also rung to signify an emergency. In Cagubatan, the tambul was sounded to convene the local council members.

The response to the disaster was overwhelming and transcended the boundaries of Tadian itself. By daybreak, a lot of people had shown up to help. It was at this time that the community discovered the tragic fate of their kaîlian in broad daylight. While most of the volunteers were from Kayan itself, a large number of them came from as far as the township of Abatan. Most of them brought digging tools to scour for bodies and possible survivors. A few brought their trucks and heavy equipment to further assist in the movement of debris. By midday, a large number of people and organisations came from as far as Baguio City, about five to six hours away from Kayan. Soldiers and trucks from the Philippine armed forces were also present for the recovery effort.

While community criers and mobile phones contributed greatly to the rescue and recovery effort, Internet access took the disaster to another form. The day after the fatal landslide, staff and volunteers from various organisations assisted in the rescue of the victims. More than 30 villagers perished in the landslide, with their bodies temporarily held for post-mortem examination and eventual burial. This entailed the process of having the bodies transported from the disaster site and taken downhill to a classroom in the nearby school. The muddied bodies were laid inside the classroom. In plain view, the bodies were injected with formaldehyde and placed into wooden coffins. Then the deceased were given the appropriate religious funeral rites and later they were interred in the community cemetery. These events were video-recorded and photographed by a few people. There was no immediate internet

72 Entako mentulong id Kayan (“Let’s go and help Kayan”) was one of the messages from the criers in nearby Tadian town centre and Cagubatan.
access during the emergency and most of the mobile phones were only used for text messages in order to conserve battery charge, as there was no available electric power during that time. The internet was only accessible in two areas, the local college in Tadian and internet shops in Abatan. Several of the images and video clippings were uploaded to websites and social media sites, such as Facebook and Flickr, sent through the computer terminals of the local college in Tadian and internet shops in Abatan. News reports were posted in national newspapers a day after the incident by journalists from Baguio and nearby regions. Only at this point was the Kayan disaster brought to national consciousness, not only through the traditional media, such as journalism through newspapers, television and radio, but also through the internet by disparate individuals whose main concern was to disseminate the information across their networks.

**Sympathy from afar.**

Minutes after the landslide, people based in Baguio and La Trinidad learned about the calamity from text messages sent by kin based in Kayan. Some had learned about it from internet-based chat messages, which were initially passed around through text messages. A number of expatriate iTadian and their friends and other informal groups soon organised themselves to collect canned goods and used clothing for the affected survivors. These items were either directly dispatched or were taken to a number of task forces set up by schools, churches, local newspaper companies, and radio and television stations.73 These task forces emerged barely two days after the incident, with the mission of collecting donations and transporting them to Kayan.

73 There were a number of task forces that emerged to gather relief items from the public that were then sent to Tadian for distribution.
Online groups of expatriate Igorots organised philanthropic efforts through Internet forums a few days after the disaster. News articles, photos and videos of the landslide and the deceased were posted, shared and copied through Facebook, Flickr and YouTube. By then, these online Igorot forums were already discussing ways to help the victims. The agreed forms of donations were cash and food purchases, as well as direct scholarships (Orticio, 2009) to those orphaned by the tragedy.

One participant related that a Yahoo! chatroom of Igorot youths based in La Trinidad, to which she belongs, also organised to collect food and clothing to donate for the victims of the disaster. She relates that, upon learning of the Kayan disaster via both online and mainstream media, a lot of discussions were generated about the plight of the victims. Being an iTadian herself, the participant was among the first to take the role of appealing to chatroom members to do their share and donate to the victims. Her efforts were realised as the members consequently pooled their donations of food and clothing, which were then transported to the nearest task force.

Some non-government organisations also took the initiative of disseminating information of the tragedy, while appealing for donations. Photographs of the deceased and the extent of the landslide were posted on websites and were shared across their networks. A considerable number of donations were sent through this channel and were subsequently sent to the victims through people’s organisations.

Controversies.

While a number individuals and non-government organisations took the initiative in posting photographs and appeals for the plight of the Kayan victims, it also sparked controversy, particularly among members of the municipal government. The first issue was the uploading of digital images over the internet. There were apprehensions over the treatment of the victim’s bodies soon after they were
extricated from the rubble. This was particularly in the case of the digital photographs posted on various web pages depicting the victims’ bodies. These photos showed the corpses, their bodies covered with blankets and their faces showing various grimaces of death. The photos were shown together with narratives of how the disaster unfolded, the fate of the victims, an update bulletin of the rescue and relief efforts and, on most occasions, the appeal for help, with directions on how to course their donations. The authors of these websites were mostly frowned upon by the municipal officers, stating that taking photos of the dead in such state was a breach of abig (taboo) and ngilin (solemn observance) of the dead. Some reacted with disgust over the treatment of their dead: “Pinagpipestahan ng mga tao at pinagkakaperahan, paano mo yan sasabihin sa mga elders?” (“The dead were exploited like a carnival freak show, how can you tell that to our elders?”)

The second issue was one that involved the assertion of bureaucratic authority over the management of the disaster, particularly the channelling of funds derived from individual appeals. These protestations were mostly voiced by people from the government. When news about the photos of the Kayan victims was published online, the initial concern of municipal government officials was that of ‘danger’ or that of concern over how to track the expected influx of donations coming from abroad. They believed that the government must have the sole legal and moral authority over the handling of funds and, further, feared that these donations might be diverted for selfish interests. These local officials asserted that these digital images were hastily posted without the proper coordination from authorities and that the flow of donations must be centralised by the government in order to be monitored. They asserted that appeals for donations must done with the authorisation of the government and that updates and reports should be given either
to the local government or to the local parish in Kayan. These allegations of misdirected donations were addressed to non-government organisations and other individuals that solicited help online without the government’s ‘official’ consent. In response to this, members of concerned non-governmental organisations maintained that they saw nothing wrong in helping the Kayan victims and were, in fact, filling up the shortcomings of the government’s efforts.

The news and images of the Kayan disaster spread to such a large extent over the internet that the immediate global, online, philanthropic response was overwhelming. Together with the information of the disaster, the news also sought an immediate online conduit to channel the funds. This was to the disadvantage of the municipal government during that time. While the municipal government were the ones operating at the disaster site, as they claimed, it was those who had the network capability that were successful in disseminating news of the disaster and appealed for help in their own way.

Several months after the tragedy, the after-effect of the controversy lingered among those involved. The non-government organisations that posted the images stood by their decision, that they had, in fact, successfully coordinated a large part of the relief efforts in Kayan with very minimal government support and coordination. This created some chagrin from the government, which believed that they had been superseded as the authorised organisation for the relief and rehabilitation effort. Others tried to downplay what happened by simply not mentioning it, being nonchalant or attempting to sidestep and move to another topic.

*A year after the landslide.*

A year after the fatal landslide, the community, municipal government and non-government organisations conducted an *akob* at the disaster site. An *akob* is a
Kankanaey ritual commemorating the tragedy, as well as an imploration for those bereaved to start the healing and rebuilding process. It signalled the closure of grieving, although the vestiges of the disaster still remain in the ruins of concrete and twisted metal bars at the disaster site. The memory of the tragedy remains among iKayans, but it is also an opportune time to move on.

**Revealing hidden agencies.**

It is not only during times of accidents and technological breakdowns (Latour, 2005, p. 80) when things reveal their importance as mediators. In the case of the Kayan disaster, the agentic power of mobile phones and internet technologies was revealed as a necessary means of communication and coordinating courses of action. This was clearly evinced when the locals of Kayan made sure that they communicated to their networks using mobile phones shortly after the disaster. It can be said with certainty that mobile phones have effectively enrolled enactments that refer kinship, state bureaucracy and community ascription.

The hidden agency of the internet can also be seen in the apprehension of municipal officials in competing with other organisations having internet access that was used for generating donations for the victims. In this case, the internet afforded privilege to those online individuals and organisations by acting as a mediator to networks far from the monitoring and control of the municipal bureaucracy. Internet technology not only betrayed the stabilised performances, but also questioned the *raison d’être* of the bureaucratic enactments, as the ontology of the municipal bureaucracy dictates that it as owning the monopoly for disaster management in the community.

Based on these instances, the Kayan landslide effectively revealed how these otherwise taken-for-granted technologies made themselves as indispensable *things*,
particularly in invoking enactments pertaining to kinship and state bureaucracy, among other things. In the case of internet technologies, the disaster also showed how intéressement operates, by cutting off the ties of the enactments of bureaucracy and associating itself to performances that transformed the disaster into digitised formats. This transformation localised the disaster further by indexing itself to ontologies pertaining to Igorot identity and international development assistance, hence transforming it into collecting statements of a disaster faced by fellow Igorots as well as a human tragedy. These created possibilities for fellow Igorots and international development organisations to channel their resources to the individuals and organisations that were online instead of coursing it through the municipal government whose presence was effectively obfuscated in the process.

Without these digital performances by mobile and internet technologies, the disaster itself may have not gained enough awareness and its memory may not have been more pronounced, which may possibly have been relegated to amnesia.

*Rete mirabile.*

The resultant effect of the Kayan disaster is a reticulated, yet heterogeneous, concatenation of mediators partly belonging to digital, indigenous and bureaucratic enactments. Notwithstanding the tragic nature of the Kayan disaster (for which I personally sympathise with the victims and their families), it can be imagined how this concatenation could be like a reticulated firmament of mediators from interspersing enactments. The diverse courses of action immediately after the landslide showed the how disaster almost immediately enrolled human actants into its ontology. The landslide transformed itself very quickly into various morphisms such as text messages, bell tolls, shouts by the criers and beats on the tambul. The translations of the various enactments soon followed, defining the landslide
according the various ontologies relating to enactments of kinship, state logic and ethnic identification, to name a few. Translation was also seen when the landslide event was transformed into digitised images of the ruins and its deceased victims posted on web pages that, in turn, stabilised interests by grouping other realities and making these digital elements more confronting and straightforward. The nexus of this reticular firmament brought about by the landslide extends across time and space, as long as it continues to generate interest and enrol various actants into its fold. Despite its tragic provenance, the Kayan disaster response displayed how a concatenation of heterogeneous actants formed into *reta mirabile*—a fascinating network that still generates interest in the present time.

**Digital Translations**

As information and communication technologies enrol the various actants and enactments across the Tadian hinterland, they create unique and fascinating forms of heterogeneous assemblages. These assemblages are transiently stabilised through the continuous translations to various mediators and enactments.

*Digital translations* are formed by the ontologies and strategies employed by the actor-network as it navigates the heterogeneous hinterland with digital technologies as their intermediaries. Digital translations navigate and avail themselves of strategies for enrolment and counter-enrolment with mediators. They also translate themselves with various enactments in order for them to be an interesting activity to engage with. As with other translations of actor-networks, digital translations must not be treated as stable through time and space, as they are only transiently stabilised through ontological politics.

It must be emphasised that digital translations are for analytical purposes and must be treated only as heuristic devices in looking at how such technological
networks navigate. Digital translations are not solidified processes, therefore creating a template of one translation then applying it to other contexts and periods of time is an exercise resulting in specious conclusions. There will be innumerable pathways and possibilities in any given translation, whether that is rendered by information and communications technologies or otherwise. Further, the moments of translation are not isotropic, nor isobaric; hence they could not form the same nexus or concatenations of actants in any given instance in time and space.

**Intermediaries.**

The reliable intermediaries of digital enactments in the hinterland of Tadian are electricity and cell sites. It must be said that there were no off-grid, electrical systems that were seen in the communities researched. The operation of mobile phones and technology within the municipality of Tadian and the nearby township of Abatan are heavily reliant on electricity distributed by the national network. Electricity is distributed through a national grid system and managed by provincial cooperatives, in this case, the Mountain Province Electric Cooperative. The consumption of grid-based electricity by ICT devices is taken for granted and its agentic power clearly black-boxed in the performance of digital enactments. However, its agentic power is fully illuminated during national calamities. One particular case was during the Kayan landslide, when grid-based electricity was shut down because of the calamity. Some people in Kayan had to avail themselves of other means to recharge their batteries. This was by connecting to available generators that were lent out by the local school. The few mobile base stations, or cell sites, are another black-boxed intermediary in the digital technologies in Tadian. Without these cell sites, signals could not be radiated and mobile phones, and even internet connections, are rendered useless.
Another intermediary is the antenna systems that are necessary for internet access. In Tadian, the preferred choice of connectivity is either through cell sites or satellite, as accessing internet technology is difficult due to the rugged topography. These transmitters have shown their agency, particularly during the initial phases of their implementation. The proponents of internet connectivity (for example, CICT, municipal government and the private internet shop owner) became enrolled in this intermediary as they struggled to provide internet access to the public. It is clear that these intermediaries are imperatives for such technologies to work.

As mentioned earlier, these intermediaries have carefully imbricated themselves into digital enactments, such that they have become taken for granted; hence they have effectively become black-boxed. Here, we can see another descriptor of technological heterogeneity, that of *heterogeneity-complacence*; one that renders its presence by gradually stabilising itself through the actor network, putting itself on the background as it continuously transports according to its formalised infrastructure. The stabilisation becomes effective as its presence becomes tacit to the network. For instance, electricity and cell sites have become effectively worked in the background to energise appliances and send digitised messages, respectively. Local people have become so complacent about their operation such that the electricity and cell sites have become taken for granted. However, their agency will show its presence during times of power outages and radio wave dead spots, as happened during the landslide in Kayan. As anti-programs (for example, natural calamities and topography) work their way to de-stabilise the enrolment provided and the consequences of heterogeneity-complacence become apparent. For example, mobile phones lose their capability to transmit voice and text messages to the anxiety of the users. This was apparent when a number of Kayan
residents availed themselves of strategies to maintain communication through their networks, either by avoiding voice calls\textsuperscript{74} or directly connecting their mobile phones to the portable generators that were operational during the first several hours of the landslide. These tacit intermediaries then become mediators by betraying the actor-network, but, at the same time, revealing their full agentic power in the process.

**Mediators.**

In the hinterland of Tadian, digital translations enrolled a concatenation of mediators and enactments that may or may not be totally unique within indigenous collectives. There have been a myriad of mediators of digital enactments presented in this chapter. Some of them include:

- **built infrastructures** (for example, the road to Tadian, the municipal building in Abatan, the fenced pond where the enchanted eel of Cagubatan is made sacred and the community halls);
- **non-tangibles**, such as the radio waves emanating from cell sites, text messages, the CICT organisation, noise from young patrons, websites and YouTube video clips;
- **organisms**, such as the enchanted eel;
- **artefacts**, such as the signboard of the Community e-Centre and the centre’s policies;
- **human affections**, such as the excitement of playing online games, seeing the enchanted eel, the endearment of the small Internet shop owner to a few of his customers, the sense of concern and need to purvey online

\textsuperscript{74} As mentioned in the previous section, voice calls were avoided by members of the community throughout the power outage that occurred during the first several hours of the Kayan landslide.
reports during the Kayan tragedy, and the panic and urgency among the people of Kayan and nearby communities; and

- occurrences, such as the Kayan landslide itself. Occurrences are conterminous events that travel through the flux of various enactments, fluently shifting themselves as they navigate through different ontologies.\(^{75}\)

Initially, it can be surmised that these mediators transported enactments through the enrolment of information and communications technologies into the Tadian hinterland. For instance, the ontologies of state bureaucracy are transported by civil infrastructures, such as the signpost at the Community e-Center. However, it can be argued further that the signpost had betrayed state bureaucratic enactments, as it created ambivalences by evoking both the national government’s earnestness to deliver services, \textit{at the same time} as showing their incapacity to show it. For another instance, the digitised radio waves on both mobile phones and Internet connections could be efficient transporters for ICT appliances and, as such, working intermediaries to digital enactments. However, as soon as radio waves fail to send messages from one point to another,\(^{76}\) this betrays the whole network by \textit{translating}—by questioning the reliability of ICT usage within Tadian.

\textbf{Enactments, ontologies and standards.}

The digital translations referred to have also involved the enrolment of other enactments. The enactments of state bureaucracy was very much utilised in forming the Abatan Community E-Center, which involved performances such as the hierarchical flow of administrative rules and allocative resources, the regimented

\(^{75}\) A discussion about \textit{occurrences} will be presented further below.

\(^{76}\) There could be more than a singular, simplistic process in the course of sending SMS texts or packets of data, so the process is for illustrative purposes only.
scheduling of government activities, the treatment of clients as patrons and the employment of detailed personnel to manage the CEC, among other things. Digital technologies were translated as “e-government services” (Information and Communications Technology Office, 2012). This means that ICT, specifically internet technology, is defined as a thing to deliver information quickly and on demand, to create transparency and accountability within the operations of state bureaucracy and to engage citizens through “digital channels” (Information and Communications Technology Office, 2012). In this case, Internet technology was translated according to the ontologies and enactments of state bureaucracy, specifically for the standards of speed, accountability, transparency and community engagement. These standards were then applied across the hinterlands by punctualising the actants across the hinterland. However, digital translations through state bureaucratic enactments failed to move further, into the enrolment of mediators across Abatan and Tadian, because it hyper-punctualised the interests of the actants that it tried to enrol.

Indigenous enactments were also enrolled into digital translations. A number of instances of this enrolment are presented in this chapter. The first is how indigenous fabrications of enchantment were translated into YouTube, extending sacrality in digital formats. The Dalit, the enchanted eel of Cagubatan, thrives amidst the performance of indigenous, community-based enactments. These enactments availed themselves of a concatenation of mediators acting together to create a sense of sacrality to the Dalit. This cultural ascription afforded a viable habitat for the enchanted eel. Not only did indigenous enactments afford an

---

37 The concept of *hyper-punctualisation* and the overall efficacy of digital translation of state bureaucratic enactments will be discussed further in this chapter.
environment specifically built for protection of the Dalit, they also gave people the symbolic and corporeal tools for how to approach the Dalit. The only action that the Dalit must make is to regularly reveal its physical presence to the human observers.

Hence, by transporting these mediators into digital video through YouTube, the enchanted eel of Cagubatan had made yet another ally. Mediators of indigenous enactments were translated into specific, encapsulated, digital signifiers that invoked the sacred character of the Dalit. The interests of the Cagubatan indigenous community were then digitally translated into YouTube through the performance of cultural affordances to the enchanted eel.

A second instance of digital translations is how mobile phones enrol kin-based enactments in the traditional paw-it system. The interest of the ethnic kinship system is the presence of familial and reciprocal care. As iTadians become more mobile and migratory, due to more opportunities elsewhere, kin-based enactments enrol the paw-it system to translate care into letters and parcels. Certainly the emerging use of mobile phones greatly instilled this presence, with or without the paw-it system. It is through the rendering of on-demand coordination between two relatives (acting as sender and recipient) and the paw-it bus conductor that another layer of activity that facilitates this presence of care is created. Hence, digital translations are used by kin-based enactments in order to stabilise the presence of familial care through the performance of the paw-it exchange system.

A third digital translation is shown in how local governance was translated through mobile phones, as indicated during the Kayan landslide of 2009. The

78 Another important digital translation is the counter-enrolment of mobile phones into the paw-it system.
79 A full elaboration of how mobile phones translate kin-based enactments is seen in Chapter 5.
imperative to communicate details of the disaster across geophysical boundaries was among the main interests of local governing units by utilising both customary (for example, criers, drums and bells) and digital (for example, mobile phones) enactments, with the main intent of generating community-based resources to assist with disaster management. Exigency was of utmost importance and, as with customary methods of dissemination, mobile technology translated the exigency to spread the information directly to the phones of community members, as well as to apply to pressure to the message recipients about the urgency of the situation.

Mobile phones and the Internet also translated ethnic solidarity and kinship during the 2009 Kayan landslide. Mobile phones transported messages among kin and *kailian*, beyond the borders of their own communities. These text messages translated the plight of the landslide victims into matters of concern by invoking common, ethnic Kankanaey bonds as a general call for emergency assistance. Internet technology also transported the news and visual content of the disaster to the online mailing list of expatriate Igorots (Orticio, 2009). The news then transformed the disaster into common, ethnic bonds among the pan-Igorot group, which included the Kankanaey, that resulted in the expatriates organising their own relief and rehabilitation efforts for the victims. The same instance happened in one *Yahoo!* chatroom among the Igorot youths based in La Trinidad, when news of the disaster translated itself from text-based discussions about the victims’ plight and the common bonds of the chatroom members into social organisation and the collection of relief goods for the landslide victims.

Ethnic solidarity was translated into material assistance for the victims through the internet. Firstly, this was through the transformation of the disaster itself as an urgent matter of concern across websites (for example, news of the disaster, images
of the victims and disaster site and appeals of help by both journalists and independent online posters). Then it took the form of Internet-based discussion among common, ethnic lines, which was then translated into cash, food and clothing for the victims.

**Betrayals.**

Digital translations are not necessarily equivalences of meanings, which, in the process of association, generate harmony and consensus among all actants. Translation also entails the betrayals of actants through associations. One particular case is the controversy generated by the digital images of the deceased victims during the Kayan landslide. The digital images that were posted online not only evoked sympathy among audiences, as the authors might have expected, it also stirred antipathy between the online authors and local state bureaucrats. The bureaucrats claimed that the online authors breached customary law when they posted photos of the deceased. The officers also disapproved of the online authors’ apparent lack of authority when they posted the photos and appealed for donations. The ontologies of the central bureaucratic authority and indigenous customary law were deployed as allies by local state bureaucrats in their remonstrations against the digital images. The liberal practices of internet use competed with the obedience to central authority and the respect to indigenous traditions. The enacted reality of state bureaucracy aligned itself with the indigenous sociopolitical traditions when it translated taboos and customs into its ontology. This was made as a countervailing measure against the use of digital images by online users. The actants of state bureaucracy associated themselves with indigenous enactments by invoking the elders as a means to gather more allies in the process. Hence, translations of indigenous culture were invoked to deter the perceived detrimental consequences of
the online posts. Both state bureaucratic and indigenous realities transiently coalesced to stabilise the management of the Kayan disaster.

On the other hand, digital translations avoided the appearance of state and indigenous ontologies by invoking the exigency of disaster response in the form of online images, narratives and appeals for assistance. Other realities, such as state bureaucracy and indigenous institutions, were deferred in the course of digital translations. Through digital translations, the appearances of these two realities were rendered as preoccupied in addressing the needs of the victims and incapable of reaching other potential allies in the form of online Igorot networks and international aid agencies.

**Localisers.**

By deferring indigenous and state bureaucratic ontologies, digital translations deployed the internet as a mediator to *localise* and *articulate* the Kayan disaster (Latour, 2005, pp. 203,206) by further deploying *collecting statements* (Latour, 2005, pp. 203,206) and making them interesting across the online community. The publication of the photographs sought to extend the interest of the disaster across geophysical space, through punctualising both the disaster as well as the audience it wished to engage. Firstly, the landslide was articulated into an event specific to the locality, and transformed into collecting statements that referred to ethnic bonds (for example, iTadian, iTadian or Igorots). Then, it was articulated into a *thing*; something that has catastrophic, ethnic and human dimensions. Otherwise the landslide would just have been a mere matter of fact; something that would not generate the interest of the audience. Articulated collecting statements consisting of these three dimensions were punctualised. This was to problematise the disaster in order to enrol the hinterland in engagement and to anticipate an auspicious response.
from it. Punctualisation not only applied to the articulation of the disaster, but also to the intended audience of online users. The individuals and non-government organisations that posted online content of the disaster also belong to various networks, which subsequently framed their posts according to the perceived interests of their respective networks. Therefore, the framing of their posts had to intersect with the interests of their networks.

Through localisers and problematisation, the enactments that were continuously translating and stabilising their ontologies within the digital environment can be seen. Indigeneity through ethnic identification is one example. Ethnic articulation of pan-Igorot indigeneity, as well as localising the Kayan disaster through ethnic translations within internet technology, ensured the relevance of Igorot indigeneity and the momentary stabilisation of its ontology.

Ambivalences.

The subsequent controversy on the digital images of the deceased during the Kayan landslide points to the heterogeneous feature of digital translations particularly its ambivalent character. The intention of posting these images online was not to flout indigenous customs and traditions, but, rather, to present the human, ethnic and catastrophic collecting statements about the landslide in the hope of creating sympathy from the punctualised audience. It can be said that this effort was successful to some point, because it stirred a number of donations from networked online users. On the other hand, it was also successful in stirring antipathy among the local leaders, by sidestepping customary observance of the dead by posting their photographs online. Online images of the deceased were translated as they crossed from the indigenous to the digital environment. Originally intended to act as an intermediary for immediate disaster response using the technical efficiency of
internet technology, these images of the dead turned against their provenance by also siding with the indigenous’ and their ancestor’s beliefs and traditions. So, just like sentient spectres, the dead and their images can still do things. The dead still exert agency! This actant’s digital translations had ambivalences of two or more ontologies struggling for momentary relevance. Sympathy and antipathy are one and the same: it is how one attenuates the other in the process of ontological politics that is of sociological interest.

Counter-enrolment.

Digital translations were also seen in the counter-enrolments of mobile phone technologies against the strategies employed by customs and traditions. In the case of mobile phone technologies and the traditional *paw-it* system, customary methods have been counter-enrolled by digital technologies, by accentuating their uncertainties. Digital technologies first exposed their own systemic uncertainties of customary methods, which were black-boxed until that time. Then, by opening these uncertainties, digital technologies presented themselves with an opportunity to be an important mediator of technical efficiency and strong kinship enactments. This can be evinced through the *paw-it* system and through customary methods of information dissemination and governance.

It can be argued that the advent of mobile phones exposed the uncertainties of the traditional *paw-it* system of transporting parcels. The heterogeneity of the anti-programs of the *paw-it* system (for example, monsoon, road closures, mechanical breakdowns and the dependability of the conductor) was certainly extant prior to mobile phone technology. These anti-programs were then taken as part of the risks of the *paw-it* system until the present. However, the presence of anti-programs was attenuated as mobile phones created an opportunity to counter-enrol themselves into
the *paw-it* system. The mobile phone presented itself as a necessary mediator to stabilise the heterogeneities of the system by the exchange of information through text messages with the sender, conductor and receiver.

As earlier stated, the inclusion of mobile phones did not matter much to the efficiency of the *paw-it* system, but only stabilised the system as an intermediary of text messages and a mediator of assurance among the key participants of the *paw-it* and kin-based enactments. Hence, mobile phones counter-enrolled customary methods of transport and information dissemination, as they presented themselves as an opportunity to stabilise heterogeneities throughout the Tadian hinterland.

The use of mobile phones also presented as an opportunity to supplement customary methods of information dissemination and governance, particularly during the events that occurred immediately after the catastrophic landslide in Kayan. During the first moments of the landslide, the disaster in Kayan started as a *geographically local* one. However, as soon as the assemblage of information dissemination strategies occurred, mobile phones and their human actants became *localisers* of indigenous, human and tragic dimensions, articulating the ontologies of ethnic bonds and human distress\(^80\) during times of catastrophe. This assemblage formed with the intent of relaying the disaster to kin, local and village officials, and emergency personnel. This assemblage consisted of a heterogeneous concatenation of SMS text messages and customary means of information dissemination (that is, criers, drums and bells). Anti-programs of geospatial distance, inclement weather, and human predisposition and frailties set in and transporting the emergency became difficult through customary means. Mobile phones made it possible to supplement

\(^{80}\) Perhaps it is one reason why the urgency of climate change or global warming has yet to be stabilised, because it has not been able to localise these things by articulating them (that is, by making them interesting) across heterogeneity.
customary methods by transporting the enactments of ethnicity, kinship and human tragedy, partly courtesy of the black-boxed electrical system, which was still available through mobile phones, as well as at adjacent cell sites.

Although the ontological basis remained the same, the counter-enrolment of mobile phones made itself present as a necessity by accentuating the anti-programs of physicalities and temporalities of customary methods of dissemination. Human criers can only do so much, especially during emergency situations; the resonance of the bells and drums can only reach certain households at a given time. These customary methods also require the households to be close and dispensable. These methods demand synchronous communication as well. The heterogeneity and chaos of disasters presented an opportunity for digital technologies to do away with these anti-programs, especially during emergency situations that would otherwise be difficult to disseminate through customary methods.

**Transportation: indigenous-digital.**

In the case of the cultural affordances provided to the enchanted eel of Cagubatan, indigenous enactments were *transported* into the internet. As discussed earlier, the emic features of indigenous identity and performances had changed their integrity as they passed from corporeal to digital. Firstly, the participation of the videographer in the ritualised performance became an important intermediary of the Dalit, or enchanted eel. Secondly, as the Dalit revealed itself (as it had previously been doing) through the invocation of ritualised and spontaneous performances, it was also digitally recorded on video. Thirdly, this video file was then uploaded to YouTube for general viewing and was framed as an ‘enchanted eel’ by the uploader. These three moments point to the transportation of indigenous enactments as they flow from corporeal to digital intermediaries or sites. This was possible through the
multivalent performance of the Dalit, which was punctualised into revealing its enchanted value. It can be evinced that both translation and transportation are happening at the same time. First is the transportation of the indigenous enactments of enchantment of the Dalit through digital intermediaries and the translation of the Dalit’s rather multivalent activity into that of enchantment. The transportation of a particular ontology across sites likewise involves a translation of multivalent actants in order to punctualise its features according to its set of metaphysics, which, in this case, is the indigenous ontology of the people of Cagubatan. Therefore, indigenous enactments do not remain indigenous or endemic or wedged into strict geophysical locations, but they fluently cross sites where they make themselves interesting enough to be enrolled or counter-enrolled. However, stabilising these indigenous enactments are made through the transportation of their ontologies and rendering them to be matters of concern across the hinterland of actants, dissidents and anti-programs.

**Occurrences.**

The agency of the Dalit counter-enrolled indigenous and digital enactments into its fold, making it thrive through the affordances that it had enjoyed from these enactments. However in this case, agentic power is partially connected to the enactment and is exerted with an occurrence. An occurrence is neither inert nor unitary. Can it be safely said that the Dalit will continue to thrive, simply reveal its presence by swimming across the pond, visible to both naked and digital eyes? Occurrences are events; a coalition of actants’ performances fluently crossing, betraying and transporting these events creates a matter of fact, in this particular case, making the eel thrive and according it its enchanted trait. The Dalit may swim across the visible area of the pool, but without the eyes that peer through the pond
and the cameras that capture its action, it will simply remain a *matter of fact*, a mere object. If the community did not fabricate some degree of indigenous mysticism to the Dalit through, among other things, the narration of tales in both corporeal and digital environments, the architecture of its shrine, the careful construction and design of the pond, the delegation of its guides, the customary nocturnal viewing, the use of the stick and the animated shrieks of the participants, it might have lived a different fate. These elements, translated into a heterogeneous occurrence, created further interest to (and the subsequent enrolment of) the videographer, who took the video and uploaded it to YouTube. The translated occurrence was stabilised and became another mediator of indigenous enactments, particularly when it was transported from the corporeal to the digital. The translation of the occurrence is further stabilised through YouTube, as the uploader mediated the digital environment by framing the video as being ‘enchanted’, together with an adjoining set of introductory texts. Subsequently, it became a mediator for indigenous enactments, as evidenced by the various responses from those who have viewed and written their comments.

A further elucidation of an occurrence can be seen in the enrolment of indigenous and digital enactments during the Kayan landslide. The landslide was seen to have *occurred* because it had immediately enrolled the interests of a significant number of actants within the community; the residences, the people, the preparatory activities for the fiesta, the mobile phones and the bells, among many other things. Through its sheer presence, the landslide enrolled indigenous enactments through the spontaneous performances of community-criers and the pealing of the church bells. Ethnic and kinship bonds also materialised through the performance of digital enactments, particularly when members of the community
sent a flurry of text messages to their immediate kin and kāilian. Indeed, the landslide evoked such a catastrophic presence in the hinterland that actants galvanised their ambivalence into clear punctualised distinctions, according to kin and indigenous enactments.  

**Two digital translations and their consequences.**

The case of the two approaches of internet access centres in Abatan show how two different digital translations navigate through different pathways. Digital translations that are stabilised through ontologies of strict passivity and hierarchical control are seen to be difficult in sustaining interest and the further enrolment of actants, as well as other competing enactments. This is evidenced in the case of the digital translations employed by state bureaucratic enactments during the installation and operation of the Community E-Center (CEC) of Abatan. From the start of the problematisation, the *hyper-punctualisation* of interests happens when performances relating to authority and ascendancy are applied to mediators. These mediators are strictly punctualised into imaginaries of control, then they unilaterally ascribe to actants a set of interests that are oversimplified, while ignoring the heterogeneity of the hinterland. Competing enactments are either rendered inert, passive subjects or made absent in this process. In addition, there is no recursive action from these hyper-punctualising, stabilising performances to adjust their interests according to the heterogeneities of the hinterland. Hyper-punctualisation freezes the process into one moment in the flux of enrolment, thereby failing to

---

81 The same landslide can also be an *event, a matter of fact*. The coverage of the disaster and the subsequent rescue and relief operations did not capture a large audience. Rehabilitation efforts were mainly conducted through the network of indigenous organisations, as well as national and some international agencies. The fact remains that the memory of the disaster could easily pass into oblivion if it ceases to be interesting to human and non-human actors throughout time.

82 It must be emphasised that state bureaucratic enactments must not be construed as entirely authoritarian, nor that it strictly performs hyper-punctualisations in the process of enrolment.
create interests that mediators are willing to engage in. Surely there are still a number of intermediaries that will perform according to the ontology of enactments. In the case of the CEC, for instance, the signboard still remains a loyal intermediary, despite the apparent non-existence of the service. However, this is exactly why hyper-punctualisation had failed; the sign remained as a signifier of a token ‘government project’. It did not translate into a place where families could talk to their loved ones through Skype, boys could taunt each other over an online game or students could conduct online research. Enactments such as state bureaucracy do not move on to the phase of intéressement, unless it changes its approach from hyper-punctualising and stabilising the interests of actants and shifts its engagement to other hinterlands of possibilities. As a result, the digital translations rendered by state bureaucratic ontologies failed to conscript mediators from the hinterlands. Betrayals came quickly through hyper-punctualisations. In the case of the CEC, it was in the form of extremely low patronage of customers, then failure of the project itself.

On the other hand, digital translations that stabilise enrolments by allowing themselves to be redefined according to the vagaries of the hinterland stand a chance against betrayals and de-inscriptions. This was seen in the case of the strategies adopted by the small internet shop in Abatan. Neither the unassuming frontage, nor the close quarters characterising the shop, were a deterrent for patrons to enter and avail themselves of its services. This is in contrast with the Abatan CEC that, despite its conspicuous signboard and well-appointed interior, the patronage that flowed in was far less than expected. For instance, the operator of the small internet shop acknowledges (but does not totally accept) the enactment of juvenile leisure as being an effective channel of engagement with information and communications
technology. This could be seen from the shop’s beginnings, when it initially engaged with youths by providing gaming consoles as an alternative engagement to studying and research. Performances related to juvenile leisure were translated into other forms, as the owner further decided to incorporate personal computers and internet technology in his shop. Juvenescence, noise and non-coherence are performances that are not accentuated in the enactments of state bureaucracy. These performances are effaced in the practice of bureaucratic enactments. Through ontological politics, there could be two reasons for this. The first is that the oscillation of these performances in the conduct of state bureaucracy is carefully made absent, given no room to exert its presence. Oscillation could be caused by effacing these performances that may open ambivalences to state bureaucratic ontologies within the hinterland, which may question its raison d’être. Another reason is that these performances simply do not pose an interest to state bureaucratic enactments, such that there is no opportunity for enrolment whatsoever. Whether it is either one or both reasons, these performances created unintended consequences to the translation of internet technology within state bureaucratic enactments, making it a less interesting form of engagement than the small-scale internet shop in Abatan.
Chapter 8: Discussion

In Chapter 2 of this thesis, it was argued that the metatheoretical presuppositions of instrumentality, conditionality, annexation and human agency, which currently dominate the social, scientific discourse on ICT and indigenous peoples, are predicated by the ontologies of oligoptic systems and panoramic imageries, pointing to a sociology of a social (2005). The sociology of the social accentuates ontological purity, as it obfuscated or rendered absent the proliferation of heterogeneities. The need to flatten contours and dismantle nested oligoptic structures was also called for, together with recognising the messiness of panoramic representations. A general exhortation is reiterated for scholars and researchers alike to rethink and re-examine the tools of the sociology of the social in relation to ICT and indigenous societies. In the following chapter, it is further proposed that the use of actor-network-theory, as a method of social inquiry, would address this controversy.

In this chapter, different themes of existing literature will be revisited, this time gleaning information from the empirical data of the research. Through the process of irreduction, the various claims and arguments pertaining to the theme of indigenous peoples and information and communications technology will be examined.

Resistance as Enactment

Mizrach (1999) identified the role of the internet (as part of emergent media technologies at that time) as a significant tool for indigenous people to resist

---

Irreduction is the argumentative and analytic process of avoiding simplistic, reductionist explanations that may otherwise overtake the explanation of an action (see page 49).
acculturation from dominant cultures. However, the results of this study did not reveal any occurrences when resistance was consciously directed against any culture. The contemporary iTadian is a consequence of the various enactments that had crossed and stabilised the hinterland: the iTadian are multi-lingual, they espouse the rules and resources of the nation-state and they subscribe to customary traditions, particularly in exercising ethnic solidarity and resolving conflicts. A considerable number of iTadian have learned about and used the internet but not strictly as a tool for cultural resistance. Ambivalent performances by the Igorots, starting from Spanish control until post-war colonial regimes, may have pointed to ‘resistance’, but a close examination reveals that these indigenous people’s ambivalent performances as they navigated through various encounters. There is one instance, about the direct interrogation of Igorots during colonial encounters, which may be seen as dissent and resistance, but there is no such thing happening in the present day practice of the ordinary folk of Tadian. What can be seen is an active navigation (for example, enrolling, counter-enrolling, rendering present and hiding) of ontologies through performances. Incidentally, the concept of cultural resistance overtakes actions within the hinterland by bestowing them a name before clearly describing them. Action is overtaken by ideology.

However, if this resistance argument is taken at face value, it can be seen that the indigenous enactments of the Igorot exert resistances through ambivalent performances, even during the colonial, bureaucratic, Western, military and commercial enactments—enactments which predate internet technology. Further, actor-network-theory may simply regard this argument as a transitive moment when internet technologies are momentarily stabilised as mediators of political and cultural resistance towards the ontologies of activist, cultural pluralism. Then again, this
thesis of annexation could be taken at face value simply because such thesis overtakes action by putting into the foreground the ideological interests of specific body politics over circumspect sociological inquiry (Latour, 2005, p. 171) in order for it to seek relevance and survival.

Beyond Local Control

Another argument being espoused is that of local control by indigenous communities and the internet, specifically pointing to community-based organisations in training its members in the rudiments of internet use (Mizrach, 1999, p. 379). Although efforts of community-based organisations must not be discounted, particularly in the field of development, ‘local control’ and the reflexive autonomy of internet technology may present some issues regarding the hyper-punctualisation of interests. Based on the results from this study, the hyper-punctualisation of the interests of digital translations and strict adherence to the specific ontologies of the nuances and messiness of the hinterland may present failures and counter-enrolment by other competing enactments. This was evidenced by the failure of state bureaucratic ontologies in the Community e-Center (CEC) in Abatan, when enrolment failed because the CICT strictly adhered to its mandate. This was also evidenced during the initial phase of internet connection by the Mountain Province State Polytechnic College (MPSPC) in Tadian, wherein the anti-programs of costly connections, rugged topography, complacent colleagues and non-participative students brought the project and the MPSPC administration to its knees. However, the opposite is true in the case of the small internet shop in Abatan. For the small business, there was no such thing as ‘local control’, as it merely worked through the messiness of internet usage, including such things as the noise of the youthful customers, and the non-coherence and apprehensions of first-time internet users.
Competencies rather Skills and Participation

The technical skills (Morrison, 2000) and participation (Vaughan, 2011) of an indigenous community in the use of internet technology promises to have significant benefits for the efficacy of delivering warranted development services. Similarly, these skills allow the international movement of indigenous peoples in creatively using the internet towards advocating their agenda (Alia, 2009). It is argued that skills and technical know-how may affect advantageous outcomes among indigenous people and communities, but these skills must also be transformed into competencies. Competency is not merely the equipping of knowledge and skills, but the ability to translate them by enrolling these skills in existing actants and competing enactments and ontologies within the hinterland. For instance, the spouses of overseas workers in Tadian have translated digital enactments by transforming themselves into purveyors of community and ethnic interests by posting photographs on social media sites. On the other hand, human actants may possess minimal ICT skills, but have well-connected competencies that make them capable of enrolling in the technology. Such is the case among iTadian elders in their use of mobile phones. Research results show the elders’ propensity to translate kin-based and ethnic enactments for ICT use. The elders have difficulty with mobile phone use, particularly in loading prepaid credits and SMS texting. On the other hand, the elders are treated with respect, care and deference in their communities. As such, they wield the necessary competencies by conscripting other actants to deploy ICT tasks. Hence, the elders’ competencies with indigenous and kin-based enactments translated their deficiencies in ICT skills to their benefit. Certainly, technical skills and knowledge are necessary steps for indigenous peoples (Morrison, 2000) but this
must be analysed together with their pre-existing *competencies* as well as other actants operating in the hinterland.

The results of this study show that the commitment and participation of indigenous peoples to particular ICT development projects (as translations) are stabilised when the interests of the highly-competent mediators, anti-programs and indigenous enactments are identified and enrolled. The cases of the Abatan CEC and the first phase of internet connectivity of MPSPC Tadian are two examples are examples of digital translations that have failed to enrol the interests of mediators. The CEC project failed in committing members of the community to patronise its internet services by not engaging with their various interests. The MPSPC of Tadian, on the other hand, had failed to identify the anti-programs that were replete during the time of installation of its first internet access centre. The rugged topography ensured that internet connectivity could only be accessed via satellite at that time. There had been low patronage by the community because of the indifference of students and the conservatism of academic personnel. The hyper-punctualisation of interests only proved to be detrimental to the project as it constructed a reductionist and rigidified set of interests among actants. To the contrary, the case of the small internet business in Abatan showed that participation occurred when digital translations were able to enrol and stabilise non-coherence, noise and ambivalences in its daily activities. The acceptance of heterogeneities is, likewise, an imperative, as these projects recursively identify interests, non-coherences, inactivity, manifested passivity, noise, and ambivalences. Organised community participation is only as good as the way in which it enrols and stabilises the various interests, enactments and complexities within the hinterland.
Therefore, the importance of the technical skills and the participation of indigenous people may be significant for the survival and relevance of digital enactments, whether these are grandly-designed, development, ICT projects or small-scale businesses. However, it is the competencies of mediators and the enrolment of pre-existing black-boxed enactments and ontologies that stabilise digital enactments against dissidents and anti-programs.

**Speaking in Their Own Voices as Enrolment**

Internet technology was also seen by indigenous peoples and communities to ‘speak in their own voices’ and articulate their experience, advocate their cause, form coalitions and advocate in order to effect policy changes in line with their interests (Alexander, 2001), as well as against ethnocentric narratives (Longboan, 2009). This identifies the potential of internet technology to provide a place for the communicative competence of communities as essential to evoke developmental change (Orticio, 2003). There are three issues to be raised about this argument.

First, notwithstanding its earnest and auspicious advocacy towards social change and development, the challenge for this argument is to determine how the internet and indigenous communities create a nexus that may lead to developmental change. There is always that causal gap where action is overtaken by a template of explanation (Latour, 2005, pp. 43-62). Action has been ascribed a name, a function and a goal already. However, the specific action made does not only refer to a singular function.84 Research results reveal that internet technology mediates and flows according to how enactments and ontologies are translated into performances. Performances could be ethnic articulation, juvenile leisure, nostalgia or familial

---

84 By which we may backslide towards presenting a structural-functionalist explanation.
yearning, to name a few. There could be a lot more translations with ICTs as mediators. This could be seen through the idea of the affections of romantic longing in the case of the use of mobile phones among elders, youthful play and leisure in the case of the internet users in Abatan, and apprehension and a sense of community in the case of mobile phones and internet posts during the Kayan tragedy. These instances point out that ICTs are not essentially in a balance, nor are they socially constructed to do so. These are among the multitude of ontologies that pass through internet technologies. Hence, an ontological equilibrium between the interests of work, power and mutual understanding (Habermas, 1978; 1987 in Orticio, 2003, pp. 24-28) are also based on ontologies and ideologies of particular bodies politic. A body politic is a way of composing a collective, but it cannot provide a general pattern based on actor-network-theory (Latour, 2005, p. 171).

Second, policy change through information and communications technology, or any planned consequence for that matter, is only a transient stabilisation of interests of the diverse enactments within the indigenous hinterland; a reassembly of the mediators, enactments and performances with the aim of effecting developmental social change through state bureaucratic enactments.

The third matter takes issue with the argument of communicative competence or the notion of indigenous peoples ‘speak(ing) in their own voices’. Research results show that communicative competence can be achieved by mustering a number of actants within the hinterland; coalescing them into localised messages of kinship and ethnic performances, as in the case of the spouses of overseas workers of Tadian.

Another is from online posters during the Kayan landslide, where ethnic and human narratives of tragedy are reassembled to form coherent messages. Such
communicative coherence is momentarily assembled and stabilised so as to create coherence amongst the hinterland of heterogeneous noise. The coherence is made present and transported into digital enactments in order to enrol actants in the hinterland.

**Internet Cafés as Multivalent Sites**

Based on research results, internet cafés in indigenous communities are not only seen as a significant factor in promoting inter-community solidarity (Delgado, 2002), but also as a site of other performances. These are sites where multiple enactments and valences intersect and transport themselves into practice. The performance of inter-community solidarity was evident during the response to the Kayan landslide, when online messages made at internet cafés in Abatan and in the MPSPC at Tadian were eventually translated into donations for the victims. Internet cafés were also sites of juvenescence, kinship relations and academic enactments. Juvenile enactments were based on the activities of the youths playing online games at the internet café in Abatan. Kin-based enactments were practiced by customers communicating with their kin abroad, during sessions using Skype and Yahoo Messenger. Lastly, academic enactments were practiced by the students as they worked on their online research. There are other enactments aside from inter-community solidarity. The main point is that the sociological analysis at sites of digital enactments (such as internet cafés) must not be limited to premeditated descriptions. This is the methodological lesson of the actor-network-theory; that is, not to restrict oneself to singular explanations within a given site, acknowledge complexities and explore the emergence of others.
Citizenship as Enactment

Internet-based communication was seen as a post-modern alternative to the political enactments of the Philippine national government, wherein users had the potential to take the role of citizens, rather than internet surfers85 (Contreras, 2012). The concept of citizenship was defined as a departure from the politics of the nation-state to embrace the political values widely held by individuals (Lash in Contreras, 2012, p. 98). It is safe to surmise that new forms of citizenship may be enacted and stabilised within the collective, however, results reveal that ICTs are also venues of betrayals of such concepts. This was seen through the enactments of traditional and customary polities being stabilised through the formal designs of ICTs, as well as the failure of state bureaucracy to enrol actants within Tadian through its Community e-Center. Hence, ‘citizenship’ is only one of the myriad of enactments, political or otherwise, that can emerge through the application of information and communications technologies. This instrumentality thesis of citizenship argues that the developmental capacity of ICTs (in this case, a new form of citizenship) is stabilised within the ontology and aspirations of particular bodies politic. It will only retain its abstract and illusory feature if it translates and stabilises itself amongst competing realities within the hinterland.

No Counter-public Spheres, Only Betrayals

Salazar (2003) pointed out how internet technology acted as a ‘counter public sphere’ for indigenous peoples’ movement against the portrayal of a free public sphere by state authorities. Gleaning data from the results, state bureaucratic enactments never had a domineering influence over other enactments when it came

85 Apparently a dichotomy of a passive surfer and an active citizen is emphasised, where citizenship connotes involvement with the transformative politics of a rather reactionary political state of affairs in the country.
to digital translations. However, it must be qualified that the ontology of state bureaucratic enactments maybe described by a logic of ascendancy. Nonetheless, such enactment does not remain inert in practice, despite exhibiting a mandate of ascendancy and an apparent refusal to listen to other discourses. There remains a fractional feature among state bureaucratic enactments wherein actants and networks are partially open for translations or, to put it in a more straightforward manner, open to betrayals and counter-enrolments from other enactments. These sites are also found in digital translations among the iTadian.

Historiographic information among the Igorots shows that agentic power is not exhibited through diametrically opposing counter arguments, but by exploiting the ambivalences within the colonial and post-colonial hinterland. These ambivalences are also presently found in state enactments as they stabilise their ontologies through digital translations. Such is the case regarding the ambivalence to the much-heralded Community E-Center of Abatan, when it failed to subscribe customers in the area. Despite all of the best efforts of state bureaucratic enactments to deliver its development mandate and provide the public with ‘online community-based services’, (Commission on Information and Communications Technology, 2004) it was met with ambivalence and eventually ignored altogether in favour of small, unassuming internet shops. Perhaps a slight concurrence with the trope of counter-discourse (Salazar, 2003) can be seen during the controversies from the online posts of private individuals who were asking for assistance and donations for the landslide victims of Kayan. The municipal government officials of Kayan took issue with these posts because the posts lacked the municipal government’s authorisation. On the other hand, the authors of these online posts saw nothing wrong in doing their share to bridge the shortcomings of government efforts in alleviating the plight of the
landslide victims. The parallelism with Salazar’s counter-discourse argument is the agentic power of internet technology to enrol other members in the hinterland and translate the disaster onto sites and collectives outside the control of state bureaucratic enactments, which eventuated by branding those actants with *digital competencies* as being without legal authorisation and, also, as being unscrupulous to indigenous customs. However, that is where the parallelism ends. The agentic power of internet technology is not restricted to providing countervailing benefits to otherwise politically-disadvantaged groups. There is no strict dialectic and counter-parting, only the ambivalences and multivalences fluently passing through as digital translations. The internet is not only a site where moments of counter-discourse happen, but also where betrayals are tacitly carried out in practice.

**Reticular Thinking as Romanticism**

The internet, and particularly internet hyperlinks that form part of the HTTP protocol, have been associated with indigenous peoples’ reticular thought processes (Glowczewski, 2005). This similarity, Glowczewski claims, allows indigenous peoples to explore new meanings, encounters and creations (2005, p. 34). It must be argued that the indigenous epistemologies and thought-processes are not objects of romantic reclamation, because doing so will only result in contrived imageries of inert anachronisms, exoticism and placations of exceptionalism. The results of this study show that indigenous communities are not ancient, nor inert; they have fluently navigated competing ontologies throughout time and space by partially enrolling and even counter-enrolling these ontologies. The consequence of this flux saw the present practice of indigenous ontologies, enactments and performances by translating them into digital technologies. Action has once again been overtaken by biases; in this case an ontological/epistemic one.
As it is no longer necessary to reclaim reticular thinking through indigenist and romanticist notions, are not the consequences of digital translations rendered into a reticulated fashion? Partially so. Results from digital translations can trace a reticulated or networked recurrence. This also applies through the consequences of enactments and performances. This was evinced by the translation of the Kayan landslide into indigenous, state bureaucratic and kin-based enactments, through the texting, customary information dissemination and online posts. However, the apprehensions, manoeuvres, betrayals, noise, ambivalences and misgivings of mediators are part of digital translations. This can be seen in the initial failure of the MPSPC to establish an internet centre in Tadian, the messiness of the small internet centre in Abatan, the way the natives navigated slopes and mountaintops, the way families of overseas workers arranged their daily routine and the way the eel successfully navigated its way through digital translations, among other things. These instances demand a different kind of topology beyond reticulation, perhaps even beyond what Latour proposed as *retia mirabilia* (2005, pp. 220-221).

**Reclamation as Enactment**

Results from this study shows that the practice of reclamation of indigenous identity through internet technology is not only an organisational activity conducted through systematic, organisational operations (Belton, 2010; Niezen, 2005; Soriano, 2012), but, likewise, it is done through the mundane and disparate performances of human (Alia, 2009; Budka, 2009; Gorre, 2007; Longboan, 2009; Mizrach, 1999) as well as non-human actants. This can gleaned from the case of the internet activities of the spouses of overseas workers in Tadian. Acting as *localisers* (Latour, 2005, pp. 203,216), the spouses translated elements of the community into digitised images. As these images were uploaded to social media sites, such as Facebook, they...
mediated within the digital environment allowing the images to oscillate from an object to thing. Indigenous ontologies were transported as these photographs evoked kinship bonds, community nostalgia and ethnic articulations. These images may have allowed themselves to be translated into mediators, partially connected to the advocacy aims of formal, indigenous peoples’ organisations. Another example is how an endemic eel species in Cagubatan had successfully translated itself through the cultural affordances provided by the community. Indigenous ontologies, in the form of the cultural affordances of enchantment toward the Dalit, were digitally translated to YouTube. However, it must be noted that the multivalent and multi-spatial performances of the Dalit allowed themselves to be translated into other enactments and ontologies as well.

This brings me to the concept of reclamation. The research results, delivered by using the sociology of translation, cast down the concept itself: *What do the indigenous need to reclaim, if they have survived and, in fact, thrived throughout space and time?* It is argued that the act of reclamation is one of the many enactments when indigenous peoples, communities and their organisations can exert their agency towards fulfilling goals of their own choosing, which include, among other things:

- critical thinking and problem-posing education (Sengara, 2005);
- claiming historical continuity (Niezen, 2005);
- asserting and protecting cultural identity and heritage (Belton, 2010; Gorre, 2007; Longboan, 2009; Mizrach, 1999; Niezen, 2005; Soriano, 2012); and
increasing economic and educational capabilities (Leclair and Warren, 2007; Gorre, 2007).

The enactment of reclamation is the process of rendering objects into things. However, it is not derived from the concept of ‘things’ per se, but on the active rendition of translating them into matters of concern. This is by constituting objects into manifest presences, allowing them to oscillate and enrol other heterogeneous mediators in the hinterland, and transiently stabilising them (as things) according to enrolled enactments and ontologies. The enactment of reclamation not only dwells within the advocacy agenda of formal, indigenous peoples’ organisations, but also within disparate human and non-human actants.

**Online and Offline Contra-distinctions as Arbitrary**

One subject of interest is the epistemic bifurcation of the online and offline spaces of indigenous peoples’ communities and organisations and how their members dramaturgically navigate through them to build up credibility (Belton, 2010; Niezen, 2005; Soriano, 2012). The performance of digital enactments among iTadian point to no clear-cut online and offline spaces. Results of the research showed that even the things that live in supposedly offline spaces are translated within the digital environment. For instance, the enchanted eel of Cagubatan might be considered to be living ‘offline’, referring to the affordances that the species enjoys from the biophysical ecosystem. However, the results of this research showed that the eel owes its survival not only to the affordances of the biophysical ecosystem, but also to the affordances (and partly through the fabricated

---

86 Online is used as an adjective to define entities connected by Internet infrastructure.
The concept of presence through indigenous-digital translations also shows that ‘offline’ and ‘online’ are constructed spaces that have been stabilised for the performance of synchronous communication among families with a member working overseas. The stabilisation of presence and absence of a family member is mediated through the enrolment of intermediaries and ontological politics between dissidents and anti-programs, and not through the contra-distinction of offline and online spaces.

There are no clear boundaries between offline and online spaces and to further extend a dramaturgical interpretation will not make it more plausible. Perhaps this binarisation can only be regarded as heuristic typologies to be used for the purposes of parsimony.

**More than Placed Resources**

Notwithstanding their utility for telecommunication, mobile phones are more than ‘placed resources’ (Blommaert, 2010 in Auld, Snyder and Henderson, 2012) through which indigenous people could collect and retrieve cultural and symbolic

---

87 See page 174.
88 See page 149-150.
assets for individual and collective purposes (Auld, et al., 2012). Blommaert’s (2010) sociolinguistic concept of placed resources, as a consequence of mobile phones, as mediators, transporting and translating indigenous ontologies and enactments across the collectif, must be rethought. In other words, mobile phones become a resource only after the moment that they are translated by various ontologies, indigenous or otherwise. It is only a consequence of translation, not as a fixed characteristic of the agency of mobile phones. Mobile phones are fully competent mediators, as they can easily oscillate between enrolment and betrayal.

‘Local cosmopolitanisms’ or Cosmopolitan Localisers?

Research results differ from the notion that information and communications technologies also created ‘local cosmopolitanisms’ in Philippine society, wherein experiences of global events almost become locally mundane; a ‘glocalisation’, when national events are bypassed or diminished in favour of global and local ones (Pertierra, 2007b, p. 19). It must be noted that there is an obsession in this academic enterprise with the ‘local’, without clearly knowing what local is. Notwithstanding its implied trope of nested levels of structuration, the logics of ‘local’, ‘national’ and ‘global’ are, in fact, practiced through the digital translations of both mobile phones and internet technologies. For instance, the ontology of state bureaucracy is fluently transported across digital technologies in the form of Community e-Centers and government websites, and these technologies are practiced and translated by mediators within the community. Another instance is the transportation of ethnic enactments through the spouses of overseas workers acting as purveyors of community activities. Localisation through digital translations is also seen through the recursive performances of the eel of Tadian, which transports not only its enchanted feature in accordance to indigenous worldviews, but also customary ways
of resource management through the Internet. The results of this research have shown that there is a bypassing of structures that were nonetheless arbitrarily nested. What is evident is the translation of enactments of ontologies through digital technologies in situ.89 Instead of local cosmopolitanisms, it could be said that localisations or articulations (Latour, 2005, pp. 203,216) are practiced through digital translations amidst cosmopolitan, yet fractional, ontologies. Digital enactments translate other enactments across geophysical boundaries, but, at the same time, localising them into the hinterland.

The foregoing irreductions not only point out that the theses on indigenous peoples and information technology are enactments and stabilisations of oligoptic and panoramic ontologies,90 but are implicitly referenced from enactments of organisational efficiency (Belton, 2010; Niezen, 2005; Soriano, 2012), exceptionalism (Auld, et al., 2012; Glowczewski, 2005; Perttierra, 2007a), equilibrium (Delgado, 2002), and transformative development (Alexander, 2001; Alia, 2009; Delgado, 2002; Longboan, 2009; Mizrach, 1999; Orticio, 2003; Vaughan, 2011). These enactments enrol academic scholarships where they are stabilised into texts and given a normative feature. These are enactments and ontologies striving to be black-boxed. However, the results of this research point out that these enactments, should ever they reveal themselves, are among the myriad that compete for exposure and recognition. The results further revealed that the indigenous hinterland of Tadian is replete with heterogeneities and that overtaking by haphazardly ascribing a few, or even a unitary set of, social explanations associating ICTs and indigenous people is a reversion to the sociology of the social. Actor-

89 Parenthetically, this issue points to how much fixation is being made through textual analysis without investigating how these texts are being enacted through practice in the first place.
80 As already stated in Chapter 2.
network-theory provides a different perspective: That which constitutes as a set of social explanations is actually a translated performance of stabilised ontologies amongst the multitude, yet fractional, partially-connected realities. These are evinced from the ambivalence, betrayal, non-coherence and dissidence of actants. Likewise, these are seen through the anti-programs that are always at hand to efface, debunk and render competing ontologies as absent, impractical or irrelevant. Furthermore, the agency of human and non-human actants cannot be reduced to simplified reductionisms. These multivalent mediators are also sites where various enactments enrol and navigate their way across the heterogeneous hinterland.
Chapter 9: Conclusions: Indigenous/Digital Heterogeneities

The application of framework and methods actor-network-theory does not only reveal competing, yet partially-connected, realities navigating within the field of ICT and indigenous peoples, particularly among the contemporary iTadian people. This application further reveals that the hinterland is not homogenously arranged, inert, structured or coherent. Rather, it has amorphous, homogenous, messy and multivalent features, with realities transiently translating across various human and non-human actants, including digital technologies, such as mobile phones and the Internet. These realities stabilise themselves through the enrolment, intéressement and counter-enrolment of other realities, as they strive for relevance and to avoid obsolescence.

This thesis started with an enumeration of the various realities that were identified in the research, namely: colonial, bureaucratic, academic, leisure, the paw-it, indigenous, digital and the natural environment. As they navigate the hinterland, these realities exert their ontologies, enactments and performances through their set of intermediaries. Next, these realities were examined to ascertain how they translate their ontologies and stabilise themselves through disclosure, rendering presences of other realities and hyper-punctualisation of interests.

The performance of standards and metrologies (Latour, 2005, pp. 227-229) are not the only sites where the stabilisation of enrolment is located. The sites of enrolment also included new cartographies, complacency and new anxieties.

91 It must be said that the enumeration of these realities is not an exhaustive one. Among those not on the list that were encountered are religion, telecommunication systems, marital love, commercial enactments and several pre-digital modes of communication, to name a few.
Sites of partial connections to fractional realities are also located through the identification of *fully-competent mediators, ambivalences, oscillations, noise* and *non-coherences*.

This chapter concludes with the proposition that the concept of the *indigenous/digital collectif* is a more appropriate term to denote the interaction of human and non-human actants that are translated by both indigenous and digital realities.

**Realities and Their Enactments**

The research undertaken revealed a number of realities practiced within Tadian as a hinterland. These realities have their own set of ontologies that are enacted through performances as they navigate Tadian throughout its past and recent histories through enrolment and counter-enrolment. Nonetheless, these realities are not stable. They exert different pressures and deploy their intermediaries and mediators at different moments. Their power is not to be found easily as it is both exposed and hidden, but can only be traced by following how their enactments transport and translate themselves in flux.

**Colonial enactments.**

Colonial reality was based on dogmatic hierarchy, moral ascendency and its insistence on purity and singularised coherence; that there is only one reality ‘out there’ for everyone to subscribe to. Enrolling the Tadian hinterland was part of its mission. Colonial enactments enrolled various actants in the hinterland as a means to deploy its allies in unfamiliar territory via the expedition of pre-colonial hinterlands through the deployment of technologies of religion and military techniques of submission, acquiescence, control and obedience. Colonial enactments were stabilised through the materialities of architecture, the built environment and partial
enrolment of civic infrastructure, such as road networks. Likewise, colonial realities is stabilised through the performance and enactment of colonial administration and jurisprudence, language and religious beliefs.

Colonial enactments punctualised the native subject as passive and subaltern in accordance with its moral and ontological ascendancy. Paradoxically, colonial enactments also negotiated with them through the counter-enrolment of their indigenous enactments and performances in order to avert dissidence and stabilise their enrolment.

More than a century after its formal regimes had come to an end in the Philippines, colonial realities still remain and are performed within contemporary Tadian, mediated through language, the local political system, religion, road networks and remnants of the built environment, to name a few things. These actants presently serve as nodes that either transport the colonial realities’ ontology or translate ontologies of other realities as well.

**State bureaucracy.**

The ontology of state bureaucracy is based on an oligopoly of skills and compartmentalised division of labour to effect the delivery of services to human actants who the state regards as constituents. Although bestowing itself as the authority, the state bureaucracy is reliant on the poetic and efficient flow of information and resources across hierarchical compartments within the nation-state. Its routinised performance is congruent with efficiency in the delivery of resources. Unlike colonial ontology, the ontology of state bureaucracy identifies itself in the midst of multiple realities, albeit grouping them and asserting the state as the authority. Poesis, routinisation and the enrolment of the constituency of people who the nation-state calls citizens are imperative flows for its survival. The citizen is
problematised as it oscillates between being an individual entity and a member of the general public. Hence, the notion of citizenry has both unitary and plural features.

Particularly with regard to digital translations, the state bureaucracy hyper-punctualises an imaginary of the constituency as passive, poor and incompetent in the self management of information resources, wherein it places its role as the purveyor of warranted resources. State bureaucratic ontologies unilaterally ascribe a set of these hyper-punctualised interests to its citizens and draws upon the knowledge of the technical expert. Intéressement with competing realities is done by avoiding the appearance of others or systematically deferring their appearances as a tactic for counter enrolment. The hyper-punctuated stabilisation of the citizen oscillates and put to the test during practical applications of state mandate. Like colonialism, doctrinaire singularities have been shown to translate into dissidence, ambivalences and allegorical performances among multiple and competing realities.

State bureaucratic enactments are also partially connected with indigenous enactments as they assert their administrative authority within Tadian. This is through the syncretism of indigenous, sociopolitical systems and the translation of mediators based on kinship relations.

Academic.

The reality of academic enactments in Tadian is based on the graduated scholastic performances of the youths. It is a social organisation of learning using a graduated, pedagogical system of prerequisites for students. It is based on a discipline of merit, as well as structured, focused learning. In close association to the enactments and performances of the state bureaucracy, the formal academic system regards itself as the purveyor of literacy and numeracy resources and transforms the youth into skilled citizens. It is mediated by a reticulated myriad of human and non-
human actants, among them schools buildings, pedagogical materials, suppliers of school supplies, libraries, students, and faculty and non-academic personnel, to name a few palpable examples. Although the academic system does not discount other competing realities, particularly other sources of learning and literacy, it is regarded as a black-boxed actor-network by the iTadian and the Philippines. Dissent to academic enactments is quickly checked and stabilised through its enrolment and counter-enrolment with other enactments.

Academic enactments are partially connected to digital enactments through the enrolment to state mandated ICT literacy programs. Academic enactments are partly oriented towards the interests of the state bureaucracy. In fact, one of the main reasons for academic enactments in Tadian is the negotiation of its own interests and those of the Philippine government. Nascent standards of technological efficiency and expediency, brought about by ICTs, are now subscribed to academic enactments as a strategy to stabilise the uncertainties of geographical topography and the performance of academic personnel. However, associations of academia with digital enactments are not only characterised by subscriptions and enrolment. Dissidence, such as technological failure and leisure, are partial connections with other forms of enactments, which creates recursive stratagems by academic enactments to further stabilise their enrolment.

Leisure.

The enactments of leisure are characterised by the indulgence of pleasurable activities for private or group satisfaction. Leisure manifests its presence against other enactments and performances. The performance of leisure is seen as navigation to an opportunity as it is made present. As such, it is both spontaneous and organised. Other enactments are deferred in the engagement of leisure; their
appearances are attenuated or placed into the background as engagement is made with things of leisure. Leisure is associated with the vagaries of juvenescence, but this is not strictly and necessarily the case.

The digital enactments of leisure are translated by information and communications technologies as things of leisure, self-discovery and amusement. Leisure is considered as a diversion against other performances. Digital translations that are stabilised through leisurely performances (for example, the small Internet shop in Abatan and mobile phones for ‘text-mating’) have been seen to deploy more allies as spokespersons and engaged more by iTadian.

Much of the social inquiry of leisure among indigenous communities and ICTs has been largely obfuscated in favour of ontologies and ideologies of bodies politic. Leisure has always been placed in the background and rendered as unproductive. Gleaning from the framework of actor-network-theory, it is argued that the enactments of leisure must be accorded the same introspection as other realities.

**Paw-it.**

The paw-it is a system of material exchange in the Cordillera that emerged from the subscription of a reticulated assemblage of human and non-human actants. It is mediated by stores, buses, buses conductors, the andamyu (‘platform’), the network of roads and trails, the paw-it (‘package’), kin, storekeepers, bus terminals, notices, weather, mobile phones, senders and receivers, to name a few. The paw-it navigates the hinterland by making it the simplest and most straightforward means of exchange, while rendering others as difficult, ambiguous, tedious, time-consuming and unreliable. More so, the stabilisation of trust and materiality form a large part of the paw-it ontology. Once subscribed to the paw-it, the participant meanders through oscillations of various states of amnesia and remembrance, abstraction and
materiality, breakdown and stability, dependability and suspicion, and trust and anxiety. These oscillations show heterogeneities at work, as manifested through the vicissitudes of the journey and the agency of the paw-it's mediators. The navigation of various states are stabilised once the package arrives in the hands of the intended recipient. Once the ontological materiality of the paw-it is shared among its human participants, trust is reaffirmed and stabilises enrolment to the system. It counter-enrolls the strategies of other enactments when moments of material exchange is warranted.

The counter-enrolment of mobile phones to the paw-it further stabilises the trust relationship between mediators and the uncertainties of dissidence and anti-programs. Mobile phones expose the oscillations of the paw-it by means of disclosure, thus rendering themselves as be an important activity to engage in the paw-it process.

**Indigenous.**

Among the iTadian, indigenous reality is an assemblage of enactments stabilised by the protection, celebration and nurturance of common historicity, shared language and beliefs, kinship bonds and marital affinity, diaspora and nostalgia, deference to elders, and enchantment and mysticism, to name a few things.

Indigenous ontologies are partially stabilised by pre-colonial enactments, which had thrived together with colonial realities. These pre-colonial enactments had navigated beside other competing enactments through deferral and opportunism, with their performances oscillating between acquiescence (for example, a tribute payment), allegorical performances (for example, acting meekly to colonial administrators or joining resistance movements based on ambivalences) and direct attack (for example head-hunting or tribute collection).
Indigenous realities among the iTadians are mediated by a plethora of human and non-human actants that are stabilised by intermediaries of indigeneity, such as the *ili*. Indigenous realities may orient themselves to the *ili* (the village) as a centre for ethnic identification. However, the *ili* does not remain fixed, for it transcends its geographic spatiality. For instance, ascription of the *kailian* (‘townmate, community member’, from the root word *ili*) is invoked across geophysical space, which is subsequently followed by a concatenation of localisers. Once unhinged from its geophysicality, the *ili* allows itself to be fluently mediated into localisations. Its cartography is both in-situ, yet dispersed; navigable, yet disorientating. The *ili* opens itself up for translations for enrolment and counter-enrolment of other realities. Together with the *ili*, the relations of kinship act as intermediaries of indigenous reality. Kinship is enacted through punctualised performances of care, exchange of material and non-material resources, and reaffirmation of presence among family members or members of a larger kin group that is based on marriage. Kinship is not static along marital and familial lines, as it may be momentarily translated into that of the *ili*, where genealogies are not fixed on the present, but on the past as well. The deference to elders is punctualised, based on their embodiment of customs and traditions, as well as wisdom. The *dalakay* or the council of elders is among the many performances where such deference is displayed. Such deference has been translated throughout time; presences of female elders are now attenuated but local historiographies obfuscated them. Therefore, the intermediaries of the *ili, kailian*, kinship relations and deference to elders are not temporally fixed and inert entities. These intermediaries oscillate across different epochs where past and present are the same. The indigenous resides in the past as it resides in the present.
Indigenous realities are also stabilised by localisers. Indigenous localisers stabilise the oscillations of matters of fact and momentarily turn them into matters that concern and deploy indigenous intermediaries. One example is how community members translate the otherwise mundane community landscape into something that evokes the nostalgia of indigenous performances. Even something as catastrophic as a landslide becomes a localiser for indigeneity when it is translated into collecting statements of pan-Igorot identity.

Localisers of the indigenous may be as conscious and competent as human actants who translate objects into things, such as the spouses of overseas iTadian workers. They may also be as unintended and forceful as the 2009 landslide in Kayan. Localisers may likewise be apparently subtle performances by the enchanted eel of Cagubatan. All of these localisers exert agencies and stabilise the oscillations of objects into things and transports indigenous intermediaries and their ontologies into the hinterland.

**Digital.**

The digital enactments are made real through punctualised, black-boxed intermediaries. These intermediaries include distributed electricity, an electric grid system, geophysical topography and distance, cell sites, satellites, electronic peripherals, electromagnetic waves, antenna, the formal and integrated design of computers and mobile phones, and human actants.\(^{92}\) Digital enactments are performed by rendering presences of objects and things through the reticulated stabilisation of intermediaries and the translation of mediators. Digital enactments thrive on the translation of human and non-human agencies as it navigates the

\(^{92}\) These intermediaries are some that were identified in the research and form a small part of the assemblage of digital enactments.
various realities in order to distribute its practicability. Among the competing enactments that stabilise digital enactments are the state bureaucracy, leisure, the *paw-it* and indigenous enactments. These enactments are enrolled and counter-enrolled by the intermediaries and mediators of digital technologies. There are standards in which human actants must be equipped and competent within the exercise of digital performances. Knowledge of the *interface* between the formal design of the ICT appliance forces the user to know its different codes, keystrokes and instructions. Competencies also include manual dexterity, lexical understanding and character recognition. Another important standard is the financial capability to invest in the subscription of digital enactments, because financial constraints limit the enrolment of and interest to access them.

Just like other technological enactments, a well-stabilised and even black-boxed enrolment is achieved when human actants become *complacent* with the technology. Complacency is performed when human actants become unaware of the inner workings of the intermediaries of the digital enactments; when the existence of ICTs is taken for granted. This is until such a point that technological dissidence occurs and anti-programs become successful in breaking down enrolments to digital enactments. Nonetheless, digital enactment makes itself interesting for enrolment by lessening the costly morphisms in the vagaries of telecommunication. Through heterogeneity/simplicity (Law, 2002b), digital enactments prevent the appearance of the complexities of its mediators by parsing the appearance of its design so that its inner workings are rendered invisible or transiently deferred. The black-boxed formal design of ICT appliances staves off and simplifies a punctualised format, so that it is beyond the scrutiny of users.
Digital technologies oscillate between states of complacency, irrelevance, practicability, obsolescence and oblivion, and their stabilisation is only contingent on how their intermediaries work in the background. Digital enactment partially thrives on unpredictabilities, non-coherences and noise, and will be partly successful as long as it manages to dynamically generate a map of the interests of the various mediators it encounters in the hinterland. As information and communication technologies enrol the various actants and enactments across the Tadian hinterland, digital enactments create unique and fascinating forms of heterogeneous assemblages that are transiently stabilised through the continuous translations of competing mediators and enactments.

**Natural environment.**

Perhaps one of the realities that is taken for granted in the Tadian hinterland is the natural environment. It works on the ontology of a singular physical universe governed by the laws of physics. In Tadian, the natural environment is seen to be performed by biophysical forces, geological movements and features, and meteorological cycles and its fluctuations. There is a myriad of intermediaries in the natural environment within Tadian, such as, but not limited to, water, rugged terrain, mountain ranges, ponds, hillsides, monsoons and typhoons.

Competing realities enrol the natural environment. For instance, roads and bridges have been constructed to work with the natural contours of the mountainsides by pre-colonial, colonial and state bureaucratic enactments. Indigenous enactments learned how to work with the regular monsoon cycles through customary horticultural techniques. Digital enactments have constructed cell sites on the highest mountain ranges in order to create a nexus of electromagnetic waves that can reach mobile phone users. These enactments have enrolled and stabilised their
performances within of the natural environment. To some extent enrolment of the natural environment had been so successful its presence has been black-boxed and its inner workings are taken for granted.

Counter-enrolment by the natural environment can be punctuated by the breakdown of the intermediaries of competing enactments. For instance, roads and bridges are washed away during heavy monsoon rains, hampering the transport of *paw-it* in the region. Pre-colonial enactments have been interrupted by epidemics and food shortages, partly brought about by natural calamities. Counter-enrolment can also be seen in human cartographies. Mobile phone users work with the rugged geological features of Tadian, such that mountaintops become temporary spaces for texting. Roads and trails meander their way throughout the rugged topography of the Cordillera region. However, perhaps the natural environment’s agentic power can be seen during natural calamities, such as the 2009 Kayan landslide, when its intermediaries momentarily coalesced and performed its reality with destructive force. The landslide evoked such a catastrophic presence on the hinterland that actants galvanised their ambivalence to confront its reality.

**Indigenous/digital Heterogeneities**

Indigenous/digital translations are formed by the enactments of indigenous and digital realities, as they translate their ontologies amidst the heterogeneous hinterland. Scholars of actor-network-theory focus on how these realities stabilise other than by simplicity, materiality, otherness and deferral (Law, 2002b). Translations reveal that realities disclosing the uncertainties of their competitors in order to be a more interesting reality to engage with. Translations also reveal that, other than creating oscillations between absences and presences, realities also render the presence of realities other than their own in order sustain its enrolment. Further,
intéressement at the moment of translation is interrupted when mediators are punctualised into oversimplified objects.

**Disclosure.**

*There are no more secrets (with mobile phones)—iTadian elder*

Disclosure is carried out by revealing the uncertainties of competing enactments by bringing into presence their inner workings. Hidden heterogeneities are exposed, opening up the possibilities of enrolment. For instance, the counter-enrolment of mobile phones by the *paw-it* system exposed the dissidence of road closures, delays and the negligence of its staff, revealing the undependability of the whole system. Mobile phones also disclosed materialities and temporalities through the various morphisms through which human actants have to go when availing themselves of the services of the municipal telegraphic and post offices. To the contrary, books and libraries stabilise themselves by exposing the financial and physical inaccessibility of internet cafés. Disclosure works as intéressement, as its own lumpy mess is hidden in the background and, instead, exposes others’ messes to the foreground, then renders the competing realities as uncertain and uninteresting realities to engage in.

The iTadian elder was correct when he lamented mobile phones and their secrets. First, he was correct that mobile phones are capable of disclosing other people’s privacy. His lamentation also resonates how ICTs are able to disclose the inner workings of competing enactments. However, the elder’s disclosure also showed the inner workings of digital technologies and, in that simple moment, opened the black-box of digital realities by revealing its uncertainties.
Rendering the presence of other realities.

Realities and their enactments also stabilise their enrolment through the rendering of presences and absences into technologies (Law, 2002b). However, in practice, realities also stabilise their enrolment by rendering the presences of other realities through translation. For instance, indigenous realities are rendered present through the reticulated process of enrolment of internet-based, synchronous communication. An apparent co-presence of realities is identified when two or more realities meld and perform their enactments. To explain this further, go back to the image of an elderly hand holding a mobile phone with numerical inscriptions pasted on its back. The co-presence of indigenous (that is, the inscription noting the elder’s mobile phone number to be used to easily purchase credit) and digital (that is, the formal and circumscribed design of the mobile phone) enactments show the oscillation between enactments in the process of reloading credit. The formal design of digital enactments may have created presence and absence (Law, 2002b) by effacing the elder population, but its formalisms of digital artefacts has also shown to be a site for the rendition of presences of indigenous enactments, creating co-presences and thereby stabilising both realities.

The hyper-punctualisation of interests.

Hyper-punctualisation of interests happens when enactments perform imaginaries of control, then unilaterally ascribe a set of oversimplified interests of mediators and potential allies. Mediators are either rendered inert, passive subjects or even made absent in the process. In the case of the CEC, for example, state bureaucratic ontologies oversimplified the interests of the enactments of leisure and indigenous realities as the ‘general public’, thereby punctualising mediators into

---

93 See Figure 1 on page 124.
passive recipients of state resources. Hyper-punctualisation, likewise, occurred when academic interests oversimplified digital realities into tropes of technical efficiency and academic network-building. In both examples, the act of hyper-punctualisation effectively interrupted the enrolment of mediators in the Tadian hinterland that led into failures.

**Sites of Enrolment**

The stabilisation of enrolment of indigenous and digital enactments is not only located in the application of standards and metrologies (Latour, 2005, pp. 227-229), but also in new cartographies where human and non-human actants navigate. It can also be seen through the performance of dissidence and anti-programs, thereby exposing how actants have become complacent as realities are stabilised into the background as tacit knowledge. In the case of digital technologies, enrolment is also seen to have been stabilised when new anxieties, such as lethophobia, occur in human actants.

The translation of indigenous and digital realities has opened up new *cartographies* where actants navigate through flux. These new cartographies have been translated according to the nexus of actants that mediate indigenous and digital realities. These digital realities created new nomenclatures of places, as well as new schedules on top of existing ones, as human actants coordinated their actions to access ICT appliances, such as mobile phones and Internet technology. Parts of built environments are delegated new roles in order to access a continuous stream of phone signals. Places are ascribed according to the non-existence, existence and strengths of mobile phone signals. Moreover, places that are otherwise relegated to matters of fact become matters of concern through the enrolment of digital realities.
A stabilised enrolment to a reality is manifested when its actants become complacent to its enactments and performances; its inner workings permeate the background and become tacit knowledge. Complacency can be strikingly apparent during times of dissidence and anti-programs, as both successfully work their way into de-stabilising enrolment. For instance, the reaction of iTadian to technological failures, such as power outages and loss of mobile phones, show how complacently enrolled they are in digital realities. Complacency can also be seen when intermediaries coalesce into brute force, as in the case of natural calamities. Moreover, new anxieties are formed as a response to complacency to the enrolment of digital technologies. One identified consequence of complacency is *lethophobia*, as manifested by the anxiety of being forgotten when one’s own phone was lost. As the meaning of life and presence become translated and stabilised through enrolment to digital realities, new forms of anxieties are evoked during dissidence and the success of anti-programs.

**Sites of Fractionalities**

Realities are fractional. The sites of these fractionalities or partial connections are located in the fluent oscillations of fully-competent mediators, the multivalent performances of actants, apprehensions, non-coherences and oscillations. These are the sites where ontological politics operate by competing for relevance and avoiding obsolescence, obscurity and oblivion.

*Fully competent mediators* are actants that fluently oscillate their meaning according to the translations that they transiently enrol. These mediators can easily transform according to competing ontologies within the exigencies of the hinterland. Examples of these mediators are kinfolk who can easily change the roles of spokespersons of mobile phones, the road system that enrolls and betrays the myriad
of performances and enactments that pass through it, and *sari-sari* that can transform itself into being both a venue for small business transactions and a de facto post office. Internet technology has also become a fully-competent mediator, as it allows itself to be translated into a state mandate, a thing of leisure, a venue for nostalgia and a tool for academic learning, among other things.

Ambivalences are sites of partial connections, as they take two or more realities into a single moment. Ambivalences have been practiced among the iTadian throughout history, even at moments of extreme violent coercion. One case is the conscription of American-led resistance movements by an iTadian against the Japanese occupation, due to being pressured by elders of the *ili* during World War II. One less violent example is the inactivity and manifested passivity of students in accessing internet for academic purposes, despite already being engaged in library work.

Ambivalences are not only performed by human actants. Through its capability of storing SMS text messages, mobile phones perform ambivalence by mediating both digital and leisure during ‘text-mating’. Mobile phones also perform ambivalence in both digital and marital enactments, as they receive and store messages of care and romantic love, by both becoming a black-boxed ICT appliance and a surrogate life partner at the same time. The eel of Cagubatan also performs ambivalence as it swims across its natural environment while exhibiting its enchanted feature at the same moment.

Oscillation is the movement of a mediator from one state to another in the process of translation. It is possible to locate interspersing ontologies of multiple realities that momentarily translate the mediator through different manifestations of oscillations.
Indigenous/Digital Heterogeneities: an Actor-Network-Theory Approach

Mediators oscillate their performances between acquiescence, betrayal, enrolment and direct attack, between leisure, boredom and tedium, and between silences and noises, to name a few cases. Pathos, likewise, oscillates between apathy, sympathy and antipathy. Mediators also oscillate between objects and things, such as the Dalit of Cagubatan (that is, by oscillating between an object, animal, enchanted entity, tourist attraction and YouTube video subject) and the digital photos of communities (that is, oscillation between the mundane, the exotic and the nostalgic). Even actants oscillate between being an intermediary, mediator, dissident and anti-program, as in the case of the rugged mountain range of Tadian. Materialities also oscillate between corporeality, virtuality and materiality. Other possible oscillations include presence and absence, coherence and non-coherence, and confusion and clarity. 94

Noise and non-coherences are also sites of partial connections of fractional realities. Noise is the cacophony of different mediators exerting their agency and interests at a given site. For instance, the actuations of the clientele of the small internet shop of Abatan are considered noise, as they perform a variety of enactments all at once. The crowded hustle and bustle of the internet shop consists of the various interests and predispositions of its occupants. Non-coherences are absences or manifest absences that are sought to be brought out and made present (Law, 2002b, pp. 129-130, 136). Examples of these non-coherences are the initial confusion the internet shop owner gets with overstaying patrons, unskilled users and the sight of family members shoving themselves in front of the computer monitor in order to get a glimpse of their relative through Skype. Noise and non-coherences are open to the

94 This list is not an exhaustive one. There are a lot more possible states where oscillation could occur.
enrolment of enactments that are struggling to be made clear and coherent. At the same time, they are also open to dissidence, particularly when the interests of their participants are hyper-punctualised. The shop owner sees his clientele not as passive imaginaries out-there, but as ambivalent actants having different sets of dispositions, proclivities and competencies.

Disruptions are also sites of fractionalities when a competing reality exerts its power at a moment where a particular enactment is operating. The landslide of Kayan had shown its biophysical power it can exert while its human inhabitants were busy engaged in preparing for their fiesta. The landslide completely disrupted the success of the fiesta, fully exposing its fractional features. The occurrence of electric power outages are examples of disruptions where fractional character of the electric grid is suddenly exposed by power disruptions brought about by dissenting human and non-human actants.

The Indigenous/Digital Collectif

The indigenous/digital collectif is an emergent assemblage of heterogeneous and fractional reticulation of human and non-human actants translated by indigenous and digital realities and enactments. Non-human actants may comprise tangible and non-tangible things, organisms, affections and occurrences, while human actants may be living or deceased. The term ‘collectif’ is derived from Callon and Law (1995, p. 485) as an “emergent effect created by the heterogeneous parts”. The use of a typographic slash (‘indigenous/digital’) instead of a hyphen (‘indigenous-digital’) is deliberate, as the former highlights the fractional character of these two realities instead of an oscillation between two inert states. The indigenous/digital collectif is stabilised by the dynamic enrolment and counter-enrolment of digital and indigenous realities, as well as other pre-existing and emergent enactments. New meanings,
metrologies, cartographies, complacencies and anxieties have emerged within the indigenous/digital collectif in the process of stabilising its enrolment. In addition, heterogeneous sites of fractionalities and partial connections are also found within the collectif, such as competence, ambivalences, oscillations, noise and non-coherences of its various mediators.

**Epilogue**

I started this thesis by inviting controversy with a critique of the current scholarship of information and communications technology and indigenous people. I argued that this scholarship delved into what is considered to be *sociology of the social* in which I further argued for a rethinking of ontological, theoretical and methodological strategies, particularly addressing the metrological power of oligoptic and panoramic reasoning. Both modes of reasoning are replete in sociological analysis in the field. By using the approach and methods of the actor-network-theory, I have worked to expose the heterogeneous character of the indigenous hinterland by investigating the courses of action of the participants and retracing their associations to other human and non-human actants. These associations reveal the various realities and their enactments, as well as how their ontologies flow across mediators through transportation and translation. Along the way, we have discovered how ontologies and their enactments become stabilised and betrayed. I moved on to make an assemblage of these associations, which I call an *indigenous/digital collectif*.

Apart from avoiding the ontological pitfalls of the *sociology of the social*, the approach of using the actor-network-theory provides more objectivity and rigour in sociological research. The method assemblages of actor-network-theory also demand more information, resulting in richer and deeper descriptions of data.
Messiness and complexities within the hinterland were also made present. These complexities were recognised, and not simply dismissed as externalities in the gathering and analysis of the data. More importantly, the ANT framework and methodology focused more on the ‘how’ than the ‘why’. By avoiding why questions, the data speaks for itself and action was not overtaken by the ontologies and ideologies of particular bodies politic.
Bibliography


Local Government of Tadian (ca.2004). *Tadian Municipal Profile*.


Indigenous/Digital Heterogeneities: an Actor-Network-Theory Approach


Republic of the Philippines, Senate and House of Representatives, Republic Act Number 8792 otherwise known as the Electronic Commerce Act of 2000.


Appendices

Appendix A
Information for Prospective Participants

PARTICIPATE IN RESEARCH
Information for Prospective Participants

The following research activity has been reviewed via QUT arrangements for the conduct of research involving human participation.

If you choose to participate, you will be provided with more detailed participant information, including who you can contact if you have any concerns.

The Social Impact Of The Internet On Indigenous Peoples: A Case Analysis Of Internet Use By The Kankanaey People In The Cordillera Region, Northern Luzon, Philippines.

Research Team Contacts

Gino Orticio
PhD Candidate
Division of Research and Commercialisation
Queensland University of Technology, Australia
0 939 800 2211
g.orticio@qut.edu.au

Professor Gavin Kendall
Research Supervisor
Faculty of Education
Queensland University of Technology, Australia
+61 7 3138 4613
g.kendall@qut.edu.au

Please contact the researcher team members to have any questions answered or if you require further information about the project.

What is the purpose of the research?

This research seeks to determine how the internet had an impact on indigenous peoples, particularly among the Kankanaey of Tadian, Mountain Province. It also investigates an “indigenous perspective” of internet usage/access and seeks to reveal the advantages and disadvantages of the internet on indigenous people.

Nan naay ay panag-adal et ilaena no kasano nan impluwensiya ya epekto nan internet sin umili ay nainsigudan ay ipogaw, amed nan Kankanaey ay grupo id Tadian, esa ay munisipyo di Mountain Province. Layden nan nay ay panag-adal ay ilan nan sigod ay panang-ila nan umili sin mayat ya madi ay epekto nan internet sin ili.

Who is funding this research?

Mr. Orticio holds an Australian Postgraduate Award. The funds will come from the usual postgraduate funding arrangement. A Grant-in-Aid application will also be applied for to cover the travel costs of this research.

Si Mr. Orticio et wadan Australian Postgraduate Award na ay men-gastos sin nay ay panag-adal ay nay isan nan Tadian.

Are you looking for people like me?

We are looking for young adults, women, community elders and other groups of people who are comfortable in sharing their views and experiences about the internet through interviews or focus groups.

Men-an anap kami si nataengan ay lallaki ya babbabai,nan nay da am-a ya in-a sin ili ya teke-teken ay grupo ay maka-istorya sin pang-ila ya kapadasan da maipanggep sin internet babaen sin panagdamdamag ya panakigaggag-ay.
**What will you ask me to do?**

Your participation will involve answering a set of questions put by the chief investigator along with a documenter/translator. These questions will take less than two hours on ______________ at ___________.

*Nan partisipasyon yo et mensungbat sin sumagmamano ay damagen nan chief investigator ya nan translator na. Non nay da madamag et adi lumabes si dua ay oras id____________ sina ay petsa___.*

**Are there any risks for me in taking part?**

The research team does not believe there are any risks for you if you choose to participate in this research. You and other participants will be treated with anonymity in the presentation of data results, through the use of fictitious names and codes to replace your real names. You are also free to withdraw from participation at any time during the project without comment or penalty.

*Mamati nan research team (men-ad-adal) ay maid pagdaksana no maitapi kayo sina ay research. Masalimetmetan nan nagan yo babaen sin panang-usar si teken ay nagan ya senyal isnan mai-presentaan nan resultan di research. Mabalin kayo met long ay men-adi sin naay ay project no adi yo kayat ay maitapi.*

**Are there any benefits for me in taking part?**

Although it hopes to be interesting and thought-provoking, the research project is expected not directly benefit you. However on a larger scale, your community may benefit by creating awareness on the implications of internet use/access.

*Adi man diretso ay maka-benepisyo na ken dakayo, mamati kami ay menbentahe nan ili yo sina ay research babaen sin makaaitedan na si panaakaammo sin impluwensiyan di internet.*

**Will I be compensated for my time?**

Your participation on this research will be on __________ at ____________, which is ensured to be conducted on a time and place of your convenience.

*Nan partisipasyon yo sina aypanaq-adal et maiikan id____________ isnan ______________________. Naay ket maiikan sin layden yu ay lugar ya oras.*

**I am interested – what should I do next?**

If you would like to participate in this study, please or contact Gino Orticio at his email address *(g.orticio@qut.edu.au)* or through mobile (0939800 2211)

You will be provided with further information to ensure that your decision and consent to participate is fully informed.

*No kayat yo ay maitapi sina ay research, paki-kontak si Gino Orticio sin cp # na ay nay 0939800 2211. Maagtan kayo si tapina ay pankaamo tapno maala nan desisyon ya pammakada yo sin naay ay research.*

**Thank You! Iyaman!**

QUT Approval Number: 1000000948
PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT (INDIVIDUAL INTERVIEW)

The Social Impact of the Internet on Indigenous Peoples: A Case Analysis of Internet Use by the Kankanaey People in the Cordillera Region, Northern Luzon, Philippines

Research Team Contacts

Gino Orticio – PhD Candidate
Division of Research and Commercialisation
Queensland University of Technology, Australia
0 939 800 2211
g.orticio@qut.edu.au

Professor Gavin Kendall – Research Supervisor
Faculty of Education
Queensland University of Technology, Australia
+61 7 3138 4613
g.kendall@qut.edu.au

Description

This research seeks to determine the social impact of the internet on indigenous peoples, particularly among the Kankanaey of Tadian, Mountain Province. It also investigates an "indigenous perspective" of internet usage/access and seeks to reveal the advantages and disadvantages of the internet on indigenous people.

Nan naay ay panag-adal et ilaena no kasano nan impluwensiya ya epekto nan internet sin umili ay nainsigudan ay ipogaw, amed nan Kankanaey ay grupo id Tadian, esa ay munisipyo di Mountain Province. Layden nan nay ay panag-adal ay ilan nan sigod ay panang-ila nan umili sin mayat ya madi ay epekto nan internet sin illi.

I have previously spent time with the Evangelischer Entwicklungsdienst Philippine Partners’ Task Force for Indigenous Peoples’ Rights (EEDTFIP), a network of Philippine NGOs advocating indigenous peoples’ rights with support from the Church Development Service of Germany, and have talked about this project with Igorot community leaders and groups to give them a proper understanding of the research agenda.


Participation

Your participation (through individual interview) on this research will be on ______________ at ___________, which is ensured to be conducted on a time and place of your convenience. It will take approximately two hours for your involvement. Questions are straightforward and will involve several follow-up questions. Examples include: "How long have you been using the internet?", "How did you discover the internet?", and "How often do you use the internet now?"


**Expected benefits**

Although it hopes to be interesting and thought-provoking, the research project is expected not to directly benefit you. However on a larger scale, your community may benefit by creating awareness on the implications of internet use/access.

*Adi man diretso ay maka-benepisyo na ken dakayo, mamati kami ay membentahe nan ili yo sina ay research babaen sin makaitedan na si panakaammo sin impluwensiyan di internet.*

**Risks**

The research team, in careful consideration, does not believe there are any risks for you if you choose to participate in this research.

*Mamati kami ay maid pagdaksana no maitapi kayo sina ay research.*

**Confidentiality**

Please take note that your participation in this project is voluntary. Should you agree to participate, your identity will be kept secret. It is possible to withdraw at any point without any comment and penalty.

*Nan partisipasyon yo et boluntario. No maitapi kayo, nan nagan ya et maamuan nan tapina ay participants sin grupo. Mabalín kayo ay kumaan ay maid saludsud wenno pusta/ dusa.*

It must be noted that all comments and responses will be treated in strict confidentiality. The names of individual persons are not required in any of the responses. Your responses will be recorded on a digital audio recorder and then translated and transcribed by a translator who is bound by an agreement not to disclose your identity. Your names will be stricken out and/or coded.

*Amin ay komento ya sungbat et conpidensyal (adi maila baga nan naitalek ay sungbat yu). Nan nagan nan dey da maitapi et adi kasapulan.. Nan sungbat yo et mai-record, mai-translate ya maisurat nan translator. Men usar kami sin audi recorder.*

Verification of research results will involve a rundown of your responses right after the interview. You will then be asked to verify your responses. Should the you disagree with them, specific answers will be corrected or stricken out.

*Malpas nan focus group (panag-istolya sin grupo) et pooten mi nu usto nan inted yu ay sungbat. Nu adi kayu umanamong sin naipabala ay sungbat, et masukatan uno makaan nan sungbat yu.*

**Consent to Participate**

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to participate.

*Maagtan kayo sin papel ay pamalubos no kayat yo ay maitapi.*

**Questions / further information about the project**

Please contact the researcher team members named above to have any questions answered or if you require further information about the project.

*Mabalin kayo ay saludsuden nan researchers (men-ad-adal) no wada damagen yo ya no wada nan kayat yo ay ipalawlawag maipanggep sin nay ay panag-adal.*

**Concerns / complaints regarding the conduct of the project**

QUT is committed to researcher integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Unit on +61 7 3138 5123 or email ethicscontact@qut.edu.au. The Research Ethics Unit is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

*Nan QUT ket respetoen na nan mayat ya gawis ay panaka-ikkran nan panag-adal sin ili yu. Ngem nu wada maila yu ay panaglabsing sin nay gawis ay panag-adal, mabalín yu ay tawagan nan QUT Research Ethics Unit sin nay ay numero +61 7 3138 5123 uno men- email sin ethicscontact@qut.edu.au*

*Thank you for helping with this research project. Please keep this sheet for your information.*

*Dakdake ay iyaman mi sin tulong yu sin nay ay panag-adal. Mabalín ay idulin yu nan nay papel para sin panakaamu yu.*
Appendix C
Participant Information for QUT Research Project (Focus Group Discussion)

PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT (FOCUS GROUP DISCUSSION)

The Social Impact Of The Internet On Indigenous Peoples: A Case Analysis Of Internet Use By The Kankanaey People In The Cordillera Region, Northern Luzon, Philippines

Research Team Contacts

<table>
<thead>
<tr>
<th>Gino Orticio – PhD Candidate</th>
<th>Professor Gavin Kendall – Research Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division of Research and Commercialisation</td>
<td>Faculty of Education</td>
</tr>
<tr>
<td>Queensland University of Technology, Australia</td>
<td>Queensland University of Technology, Australia</td>
</tr>
<tr>
<td>0 939 800 2211</td>
<td>+61 7 3138 4613</td>
</tr>
<tr>
<td><a href="mailto:g.orticio@qut.edu.au">g.orticio@qut.edu.au</a></td>
<td><a href="mailto:g.kendall@qut.edu.au">g.kendall@qut.edu.au</a></td>
</tr>
</tbody>
</table>

Description

This research seeks to determine the social impact of the internet on indigenous peoples, particularly among the Kankanaey of Tadian, Mountain Province. It also investigates an “indigenous perspective” of internet usage/access and seeks to reveal the advantages and disadvantages of the internet on indigenous people.

I have previously spent time with the Evangelischer Entwicklungsdienst Philippine Partners’ Task Force for Indigenous Peoples’ Rights (EEDTFIP), a network of Philippine NGOs advocating indigenous peoples’ rights with support from the Church Development Service of Germany, and have talked about this project with Igorot community leaders and groups to give them a proper understanding of the research agenda.

Participation

Your participation (through focus group discussion) on this research will be on _______________ at ____________, which is ensured to be conducted on a time and place of your convenience. It will take approximately two hours for your involvement. Questions are straightforward and will involve several follow-up questions.

Examples include:

- “How long have you been using the internet?”
- “Ay nabayag kayo ay nin-us-usar sin internet?”
- “How did you discover the internet?”, and “Kasanu yu naamuwan nan Internet?”, ya
- “How often do you use the internet now?”
- “Mamin-anu kayo ay men-usar sin internet idwani?”

"Nan naay ay panag-adal it ilaena no kasano no impluwensiya ya epekto nan internet sin umili ay nainsigudan ay ipogaw, amed nan Kankanaey ay grupo id Tadian, esa ay munisipyo di Mountain Province. Layden nan nay ay panag-adal ay ilan nan sigod ay panang-ila nan umili sin mayat ya madi ay epekto nan internet sin ili.”

"Isnan nakikadkadwa ak sin EEDTFIP, esa ay grupon di NGO sina Pilipinas ay mangitaktakdeg sin karbengan di nainsigudan ay ipogaw, et naistoryak nan naay ay panag-adal sin tapina ay grupo nan ligorot ay menturturay sin ili tapno maagtan da si usto ay panakaawat sin nay ay proyekto."
**Expected benefits**

Although it hopes to be interesting and thought-provoking, the research project is expected not to directly benefit you. However on a larger scale, your community may benefit by creating awareness on the implications of internet use/access.

*Adi man diretsyo ay maka-benefisyo na ken dakayo, mamati kami ay menbentahe nan ili yo sina ay research baban sin makaitedan na si panakaammo sin impluwensiyan di internet.*

**Risks**

The research team, in careful consideration, does not believe there are any risks for you if you choose to participate in this research.

*Mamati nan research team (men-ad-adal) ay maid pagdaksana no maitapi kayo sina ay research.*

**Confidentiality**

Please take note that your participation in this project is voluntary. Should you agree to participate, your identity will be known to the other participants of the group. It is possible to withdraw at any point without any comment and penalty.

*Nan partispasyon yo et boluntaryo. No maitapi kayo, nan nagan yo et maamuan nan tapina ay nakitapi sin grupo. Mabalin kayo ay kumaan ay maid saludsud wennodusa.*

It must be noted that all comments and responses will be treated in strict confidentiality. The names of individual persons are not required in any of the responses. Your responses will be recorded on a digital audio recorder and then translated and transcribed by a translator who is bound by an agreement not to disclose your identity. Your names will be stricken out and/or coded.


Verification of research results will involve a rundown of your group’s responses right after the focus group. You will then be asked to verify the responses. Should the group disagree with them, specific answers will be corrected or stricken out.

*Malpas nan focus group (panag-istolya sin grupo) et pooten mi nu usto nan inted yu ay sungbat. Nu adi kayu umanamong sin naipabala ay sungbat, et masukatan uno makaan nan sungbat yu.*

**Consent to Participate**

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to participate.

*Maagtan kayo sin papel ay pamalubos no kayay o ay maitapi.*

**Questions / further information about the project**

Please contact the researcher team members named above to have any questions answered or if you require further information about the project.

*Mabalin kayo ay saludsuden nan researchers (men-ad-adal) no wada damagen yo ya no wada nan kayat yo ay ipalawlawaq maipanggep sin nay ay panag-adal.*

**Concerns / complaints regarding the conduct of the project**

QUT is committed to researcher integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Unit on +61 7 3138 5123 or email ethicscontact@qut.edu.au. The Research Ethics Unit is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

*Nan QUT ket respetoen na nan mayat ya gawis ay panaka-ikkan nan panag-adal sin ili yu. Ngem nu wada maila yu ay panaglabising sin gawis ay panaka-ikkan nan panag-adal, mabalin yu ay tawagan nan QUT Research Ethics Unit sin nay ay numero +61 7 3138 5123 uno men- email sin ethicscontact@qut.edu.au*

Thank you for helping with this research project. Please keep this sheet for your information.

*Dakdake ay iyaman mi sin tulong yu sin nay ay panag-adal. Mabalin ay idulin yu nan nay papel para sin panakaamu yu.*
Appendix D
Consent Form for QUT Research Project

CONSENT FORM FOR QUT RESEARCH PROJECT

The Social Impact Of The Internet On Indigenous Peoples: A Case Analysis Of Internet Use By The Kankanaey People In The Cordillera Region, Northern Luzon, Philippines

Research Team Contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gino Orticio – PhD Candidate</td>
<td>Division of Research and Commercialisation</td>
<td>0 939 800 2211 <a href="mailto:g.orticio@qut.edu.au">g.orticio@qut.edu.au</a></td>
</tr>
<tr>
<td>Professor Gavin Kendall – Research Supervisor</td>
<td>Queensland University of Technology, Australia</td>
<td>+61 7 3138 4613 <a href="mailto:g.kendall@qut.edu.au">g.kendall@qut.edu.au</a></td>
</tr>
</tbody>
</table>

STATEMENT OF CONSENT

By signing below, you are indicating that you:

sin pirma yo, ipaila na ay:
• have read and understood the information document regarding this project nabasa ya naawatan yo nan impormasyon maipanggcep sina ay panag-adal
• have had any questions answered to your satisfaction nasungbatan nan saludsod yo
• understand that if you have any additional questions you can contact the research team naawatan ay mabalin kyu ay mensaludsud no wada pay tapina ay saludsod yo
• understand that you are free to withdraw at any time, without comment or penalty naawatan ay mabalin kayo kumaan no adiyo yo kayat ay maitapi
• understand that you can contact the Research Ethics Unit on +61 7 3138 5123 or email ethicscontact@qut.edu.au if you have concerns about the ethical conduct of the project naawatan ay mabalin yo contact nan Research Ethics Unit sin numero ay nay +61 7 3138 5123 uno men-email sin ethicscontact@qut.edu.au no wada problema yo maipanngep sin gawis ay panakaikkkan nan na-ay ay panag-adal
• understand that the project will include audio recording naawatan ay mausar nan audio recording sin naay ay panag-adal
• agree to participate in the project lumayad kayo ay maitapi sina ay panag-adal

Name / Nagan

__________________________________________

Signature/ Pirma

__________________________________________

Date/ Petsa

_________ / ___________ / ___________
Appendix E
Research Questionnaire

The Social Impact Of The Internet On Indigenous Peoples: A Case Analysis Of Internet Use By The Kankanaey People In The Cordillera Region, Northern Luzon, Philippines.

Research Team Contacts

<table>
<thead>
<tr>
<th>Gino Orticio</th>
<th>Professor Gavin Kendall</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD Student</td>
<td>Research Supervisor</td>
</tr>
<tr>
<td>Division of Research and Commercialisation</td>
<td>Faculty of Education</td>
</tr>
<tr>
<td>Queensland University of Technology, Australia</td>
<td>Queensland University of Technology, Australia</td>
</tr>
<tr>
<td>+63 939 800 2211</td>
<td>+61 7 3138 4613</td>
</tr>
<tr>
<td><a href="mailto:g.orticio@qut.edu.au">g.orticio@qut.edu.au</a></td>
<td><a href="mailto:g.kendall@qut.edu.au">g.kendall@qut.edu.au</a></td>
</tr>
</tbody>
</table>

GREETINGS AND PRESENTATION OF THE PROJECT’S PURPOSE

Warm greetings!
Gawis ay agewyu!

This research seeks to determine the social impact of the internet on indigenous peoples, particularly among the Kankanaey of Tadian, Mountain Province. It also investigates an "indigenous perspective" of internet usage/access and seeks to reveal the advantages and disadvantages of the internet on indigenous people.

Nan naay ay papeletnaalamid ta maadal no kasano nan impluwensiyan di internet sin deydaumiliwenno nammakwani ay nainsigudan ay ipogaw, amed nan Kankanaey ay gruposinaTadian, Mountain Province. Maadal met lang no kasano nan panang-ilayo sin usar di internetya no wada manpagmayatanunopagdaksanna.

I have previously spent time with EEDTFIP, a network of Philippine NGOs advocating indigenous peoples’ rights, and have talked about this project with Igorot community leaders and groups to give them a proper understanding of the research agenda.

Isnannakikadkadwaak s in EEDTFIP, esa ay grupon di NGO sinaPilipinas ay mangitaktakdeg sin karbengan di umili, et naistoryak nan naay ay panag-adal sin tapina ay grupoaymenturturay sin lilitopnomaagtan da siusto ay panakaawat sin nan ay research.

I will be asking you a set of questions and follow-up questions about your usage of the internet and internet use in Tadian.

Sino, saakmendamag ken dakayomaipanggep sin panang-usaryo sin internet yananusarnaisnaTadian.

RESEARCH QUESTIONS

1. How long have you been using the internet?
2. How did you discover the internet?
   a. What made you decide in using it?
   b. What were your initial difficulties in using and accessing?
   c. What do you think made it easier for you to eventually access it?
   d. How often did you use it then? (hours/week)
   e. What were you using the internet for?

3. How often do you use the internet now? Maminkaatyay uus-usarennan internet idwani?
4. What are you using the internet for? Sino nanusar di internet ken dokayoidwani?
6. Can you tell us something about the internet in your community? Sino nanmaibagayo sin kakad-an nan internet sin iliidwani?
   a. Can you tell me its history? Kasano ay inmalinan internet sin ili?
      • What were the initial technologies used before that? Sin kamaidnan internet id kasin, sino nan maus-usar ay technology?
      • Who initially used them? Why? Sino nanmang-usarsina da? Yaapay?
   b. What are the present main internet access points? Into nanmabalin ay makaalaanyu sin internet isnaiiyu?
      • Who access them and why? Sino nandey da nakaalasina, ken apay?
7. What are the most significant changes the internet has brought to you? Please elaborate. Sino nanpinakaimportante ay naaramid nan internet para ken dakayo? Kadyapokilawlawag.
8. In your opinion, what are the most significant changes the internet has brought to your community? Please explain.

Thank you for your time! Dakke-dakke ay iyaman!