

Refracting “tools for conviviality” through the lived experience of machine translation in higher education

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Abstract

This short paper is work-in-progress towards a fuller treatment of a study that adopts a phenomenology of practice approach to analyse the lived experience of machine translation (MT) in higher education, in the context of a bilingual country, Cymru (Wales, UK). The 2021 revised definition of networked learning replaced ‘digital’ with ‘convivial technology’ to state what NL is for, linking with Illichian ideas and thus better reflect the field’s historic commitment to critical pedagogy and emancipatory education. MT, as manifest through Web and mobile applications such as Google Translate, is briefly discussed and considered for its conviviality, in helping students overcome language barriers that are especially acute for non-native Saesneg (English) speakers. However, current instantiations of MT, such as Google Translate, may clumsily confound, rather than facilitate, attempts to obtain useable translation and thus comprehension when mobilised in use. With its Cymru/Cymraeg (Welsh) context, this paper adds a postcolonial aspect as the Welsh Government aims to support the survival of our native language, requiring all educational service providers inside and into Cymru not to treat Cymraeg any less favourably than Saesneg. The Welsh Government expects technology, MT especially, to play a key part in enabling the use of Cymraeg in formal settings, whether for written or spoken Cymraeg. As MT technologies, and their applications, advance, developers advertise gadgets that seemingly dissolve language barriers. Some scientists argue that effective MT would benefit indigenous scientific communities by allowing them to work in their native languages. This could accentuate digital divides, since new technology adoption is skewed in favour of the more financially privileged sections of society. Furthermore, translation and linguistics scholars argue that human translators achieve more than the exchange of equivalent words. With its focus on lived meanings, it is proposed that phenomenology can help to disclose insights into the ways or extent to which MT is a convivial technology. Van Manen’s phenomenology of practice approach operationalises core phenomenological concepts and method, and the work begun by framing a personal anecdote and reflection: a lecturer, lacking confidence in Cymraeg, tries to use Google Translate to humanise an email with a line of Cymraeg whilst on the move. Despite the intent, instrumental use of machine translation may be anticonvivial. Further areas for analysis are briefly proposed.

Keywords

Language, machine translation, phenomenology, postcolonialism, lived experience, international students, Wales, Cymru, Cymraeg, Bilingual, Illich, Convivial tools, healthcare students

Introduction

This short paper reports work-in-progress towards a fuller article that seeks to phenomenologically refract the concept of *convivial technologies* in networked learning, through one manifestation of large language model (LLM) applications, *machine translation* (MT) within the context of higher education in Cymru (Wales, UK), a bilingual country.

Convivial technologies is a pivotal term of the 2021 definition of networked learning (NL) (Networked Learning Editorial Collective (NLEC), 2020). The NLEC team aimed to improve earlier definitions of NL by indicating what NL was *for*, surfacing ideas from critical pedagogy that have been a “strong undercurrent” in NL (NLEC, 2020, no page). Peter Goodyear’s blog post (Goodyear, 2020) claims that the word *digital*, as used in the earlier definition (Goodyear et al., 2004), is mostly redundant in an era that may be characterised as *postdigital*. Noting Jones’ (2021) caution about the implications of allowing *the digital* to slip from the NL community’s collective attention, the main aim, however, in replacing *digital* with *convivial tools*, was to definitively steer the field towards Illichian, and emancipatory, ideas, where *convivial tools* may, “give each person who uses them the greatest opportunity to enrich the environment with the fruits of his or her vision” (Illich, 1973/2009). Given the globalised status of Saesneg, especially in science discourse (Steigerwald et al., 2022), MT may enrich

environments, such as higher education, by, democratising language translation (Tosun, 2024), offering to help students circumvent the Saesneg language barrier.

Machine translation (MT), offered by computer applications such as Google Translate (GT), has technically progressed, with some scholars claiming that MT has achieved parity with human translation (Hassan et al., 2018). GT offers camera and microphone input, so that images containing text and spoken words may be translated. Clearly, for those living within monoglot settings, GT would be a fringe application, perhaps useful when travelling or helping foreigners. For language learners with GT installed on their mobile phone, GT may be more available and agile than dictionary, be it paper or Internet. Scholars of linguistics critique simplistic text-matching models underlying MT, which may not convey nuanced meaning and culture as well as fluent interlocutors (Urlaub & Dessein, 2022). However, fluency is relative, depending on specific usage and context. In Wales, issues of translation and language are a key frontier of postcolonial aftermath and resistance. Following the partially self-inflicted decline of Cymraeg (Johnes, 2024), successive Welsh Language Acts¹ sought to re-assert Cymraeg² into public life. Universities are required by law to enable students to conduct every aspect of their studies in Cymraeg. Realising this vision is easier, if not routine, in some parts of the country where the population predominantly speak Cymraeg. However, the Annual Population Survey for Cymru revealed that ~30% (891800) could speak Cymraeg and 23% (712900) could write in Cymraeg (Welsh Government, 2024). Prominent voices within Welsh Government have expressed hopes that technology, specifically MT, could aid the language's survival (Welsh Government, 2018) and government funds have supported Cymraeg's inclusion within MT developments, such as speech-to-text, voice input, and integrating Cymraeg into Microsoft Office (BBC News, 2014). Business meetings within public bodies, in-person or online, are required to agree which language to use, but MT can provide live translated subtitles of speech, although this is less accurate than hearing a professional interpreter: any detriment may present an acceptable compromise to enable Cymraeg to be not just *recognised* but *used* in formal settings. Microsoft recently released Copilot Interpreter™ which is an agent that instantaneously performs speech recognition, MT, text-to-speech, and detects the speaker's intonation, simulating emphasis for listeners in their language of choice, although not yet for Welsh (Microsoft, 2025). Apple recently announced that their latest AirPods Pro 3's could perform audio translation while owners are talking in-person in any setting, not just in the technically easier set-piece online meeting contexts (Aguilar, 2025). These developments may give the impression that MT will soon liberate millions who have been disadvantaged at the wrong side of the (Saesneg) language barrier, and may even remove the need for fluency in more than one language. Steigerwald et al. (2022, p. 988) argue that MT can enable multilingualism in science which could make it "more resilient, accessible, globally representative, and impactful beyond the academy." However, leading-edge MT technologies are typically available to the richer segments of a society (Çimendereli, 2025), increasing their existing socioeconomic advantage, but there are other reasons phenomenologists are cautious about MT. In a distant echo of Dreyfuss' infamous scepticism of early artificial intelligence research (Lundblad, 2022), Norman (2024) highlights Damion Searls' phenomenological approach to translation, which aims beyond equivalence, or even meaning *per se*, "to reproducing *how* a text means". Van Manen (2023) offers a route to operationalising phenomenology for researching lived experience, as outlined and taken up by Healey-Bension et al (2022). In brief, the phenomenology of practice approach requires the researcher to gather material for 'lived experience descriptions' (LED); review and select anecdotes from the LED's; then, perform hermeneutic analysis of anecdotes, considering existential aspects and themes. Finally, reflections are composed in response to each anecdote. In this short paper, only one cycle of anecdote and reflection is presented below. As recommended by Van Manen (2023), when starting a phenomenology of practice project, it is useful to begin with one's own experiences, as an aide to 'bracketing' ones own preconceptions and theories, before gathering others' lived experience descriptions (LED's). The following LED seeks to convey one lived experience of a networked learning infrastructure moment, a lecturer multi-tasking on the move.

MT may confront the user with an unsettling hiatus, not just a translation

I check email climbing the stairs, using Outlook on my phone, and, nodding a *sut mae*³ to descending Anna, I notice a message I can answer quickly, it is an enquiry about escalating our

¹ To name a few: 1967 gave Welsh equality with Saesneg in legal proceedings; 1993 brought this equal status into public life; 2011 Welsh language status was further elevated, introducing standards, and a commissioner to enforce them. See www.comisiynyddygybraeg.cymru

² In this article, I will use Cymru/Wales, Cymraeg/Welsh, Saesneg/English interchangeably.

³ *Sut mae* is an informal greeting in Cymraeg that means 'how are things?'

concerns about a non-engaging student. But I'm paused in the gloom outside my office door to try and reply with a single sentence of Cymraeg, which the recipient will like. Standing to type becomes increasingly uncomfortable, with my door more or less opposite the Ladies bathroom where it is unseemly to linger; but I'm not sure if my office shares are in, so I prefer to stay outside my room for a lengthening moment. Realising that even the single-sentence reply is beyond my level of fluency, I swipe up on my phone's screen with my right thumb to swap out of Outlook, revealing the home screen, and select the Google Translate app icon. My typed words, "Sadly, no news from Sam. ...", appear in the lower box as "از سام خبری نیست", because I didn't notice that the interface is set to translate to Farsi. I flip the language to Welsh and, "Yn anffodus, dim newyddion gan Sam", shows up. I partially recognise these words but the grammar... presents a new dilemma - whether this will be good enough to please my friend without making me seem patronising on one hand or rubbish at Welsh on the other. My limited Cymraeg is often too feeble to tell the difference when presented with alternatives. On this occasion I decide time does not allow extra double-checking. So I copy, paste, send, sigh and eyeroll. How can't I just write a simple phrase?

Machine Translation (MT) apps may offer to equip the user with on-the-fly linguistic elan; but in this case, MT reinforced a sense of personal inadequacy with Cymraeg. The envied polyglot glides through linguistically cosmopolitan landscapes, while mere mortals may aspire to imitate them with MT ready to hand. In use, belying the simple type-in/read-out interface, MT apps may draw more attentional resource than anticipated, perhaps because *writing* in another language, for the language learner especially, is more complex than can be pressed into a transit between floors, even if, on the way, they may have exchanged unthinking a *spoken* second language greeting. Socrates preferred speech, the written word somehow ossifies; it has at least caused our GT user some buffering. He opted to use email in a convivial manner, seeking to *enrich* his message for the recipient. However, for Gadamer (1992) translation always incurs interpretation, a more subtle and nuanced challenge, especially in text, and not one our GT user is yet ready for. It seems that GT has reaffirmed the user's inability, denting real progress in learning the language by a thousand short-cuts, while mobile-phone convenience and LLM's implicit promise to improve the platform over time keep him coming back along the rut of instrumental use, instrumentalised by Google. If convivial tools *give each person who uses them the greatest opportunity to enrich the environment with the fruits of his or her vision*, MT's apparent communicative affordances may mask other *anticonvivial* effects, such as perpetuating linguistic injustice (Çimendereli, 2025) and weakening, if not erasing, language, that is a key component of, and vehicle for, culture and sense of identity (Urlaub & Dessein, 2022). Illich's claims, such as that, "scientific discoveries can be used in at least two opposite ways" (Illich, 1973/2009, p. xii) ought not to trip analysis into dichotomising lived complexities.

Next steps

Settings and moments that may throw light on the conviviality of MT include students' experiences of learning and collaborating, online and in-person, international students especially. For healthcare students clinical work placements may offer opportunities to use Cymraeg informally, but also, when completing electronic placement assessment documentation (e.g. using MyProgress™), MT might provide majority monoglot Saesneg placement staff with translations so that they can understand and respond to what students write. However, as Jones (2002, p. 180) remarks, the "range of capacities that technologies have are constituted finally when they are mobilised in use." Therefore, data gathering, reflection and reduction, along phenomenology of practice lines will be necessary to progress the study.

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