Towards Specialized Translator Studies in a Minority-Language Context: The Multiple Lives and Times of Uya Pawan, Hero of Language Development

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Abstract
Although scholars had been interested in translators' agency since the 1990s, Andrew Chesterman introduced new terminology when he proposed an "agent model" for "Translator Studies" in 2009. While subsequent studies have shed light on the agency of literary translators, specialized translators have remained in the shadows, including in minority translation studies. This article is a case study of Uya Pawan, a specialized translator who translates ethnobotanical descriptions between Chinese, the majority language of Taiwan, and Sediq, a critically endangered Indigenous minority language spoken in central Formosa. In settler states around the world, in a race against time, heroic minority-language translators like Uya are translating specialized texts to develop ancestral tongues. As a hero of language development through specialized translation, Uya is an agent par excellence. But an agent model for translator studies must be complemented by a structural interpretation of why, what, and how a translator is translating, and with what effect. While Reine Meylaerts conducted such an analysis within a neo-Bourdieusian framework, this article adopts the framework of Anthony Giddens, whose structuration theory better accommodates a heroic view of linguistic history. There are different ways of being a linguistic hero; Uya's leads not to purism, but rather, surprisingly, to compromise with the majority language.
Keywords: translator studies, specialized translation, Indigenous minority, language development, Taiwan

Résumé
Bien que les chercheurs s'intéressent à l'agentivité des traducteurs depuis les années 1990, Andrew Chesterman a apporté une contribution terminologique en proposant un « modèle centré sur l'agent » pour les « translator studies » en 2009. L'agentivité des traducteurs littéraires a été mise en lumière, tandis que les traducteurs spécialisés sont restés dans l'ombre, notamment dans les études de traduction minoritaire. Cet article étudie le cas de Uya Pawan, un traducteur spécialisé qui traduit des descriptions ethnobotaniques entre le chinois, langue

majoritaire à Taïwan, et le sediq, une langue minoritaire autochtone en danger critique d'extinction parlée dans le centre de Formose. Dans les états coloniaux du monde entier, engagés dans une course contre la montre, des traducteurs héroïques de langues minoritaires comme Uya traduisent des textes spécialisés pour développer leurs langues. Héros du développement linguistique par la traduction spécialisée, Uya est un agent par excellence. Cependant, un modèle traductologique axé sur l'agent doit aussi comprendre une interprétation structurelle du pourquoi, du quoi et du comment un traducteur traduit, et avec quel effet. Reine Meylaerts a mené une telle interprétation dans un cadre néo-bourdieusien, tandis que cet article adopte celui d'Anthony Giddens, dont la théorie de la structuration s'adapte mieux à une vision héroïque de l'histoire linguistique. Il existe différentes manières d'être un héros; celle d'Uya ne conduit pas au purisme linguistique, mais plutôt, étonnamment, à un engagement envers la langue majoritaire.

Mots-clés: études sur les traducteurs, traduction spécialisée, minorité autochtone, développement linguistique, Taïwan

Introduction

This article is a case study of a specialized translator named Uya Pawan who compiles and translates ethnobotanical texts between Chinese, the majority language of Taiwan, and Sediq, an endangered Indigenous minority language of central Formosa, the main island of Taiwan. Spoken by some ten thousand people, most of them over the age of 50—Uya is 74—Sediq is a grandmother tongue. Until recently, it was mainly oral, spoken by elders in villages in daily life.

On 14 June 2017, to make up for decades of suppression under Martial Law, which was lifted in 1987, and to build on revitalization efforts under an Indigenous policy, which was first implemented in 1994, the *Indigenous Languages Development Act* was passed, declaring Indigenous languages like Sediq to be "national languages" and mandating their "preservation and development" (Ministry of Justice, 2017, article 1). What does developing these languages entail? Jean-François Dupré explains:

> Local (particularly Indigenous) languages needed more than just promotion or even revitalization. What activists had in mind was a broad project including the *development* of writing systems, educational material, vocabulary, etc., so that they could be turned into fully-fledged societal languages.[1]

1. I am quoting from an e-mail I received from Dupré on 24 June 2025. For the legislative background to the act, see Dupré (2018).

To this end, article 27 of the act mandated the establishment of a national Indigenous languages research and development foundation, and article 6, the creation of local language promotion offices. The Sediq language promotion office is located in the town of Puli, near Formosa's geographical centre, to the west of the mountains that the Sediq people have called home for centuries. Fourteen years into an active retirement, Uya Pawan works at this office, which is also home to the Puli branch of a master's program in Indigenous cultural heritage offered by Providence University in the city of Taichung, sixty kilometres to the west on Formosa's coast. Uya completed a master's degree there in 2023, and his work at the office, like his master's research, has focused on developing his language through specialized translation.

"Translator" as used in this article is an etic term, and one that does not do Uya justice. Although Uya has done at least 60,000 words of botanical translation, particularly as part of his master's thesis (Hung, 2023) on the ethnobotany of his home village, he described himself to me as a "language teacher," not as a translator, let alone a hero.[2] In fact, he combines teaching, research, writing, and translation, without the division of labour that professional translators are accustomed to. Previously, he was a high-ranking bureaucrat in the central government. Like many translators, Uya has many lives (Meylaerts, 2013, p. 103). Wearing many hats like Uya does may be common in minority-language contexts (Iso-Ahola, 2017, pp. 174-175). Nonetheless, given that Uya translates, I assume he can be studied as a translator. Both as a specialized translator and as a bureaucrat, he can also be regarded as a hero of language development.

A traditional Sediq hero was called a *sediq balay*. *Sediq balay* can be domesticated as "real man" or foreignized as "true human," but since nouns in the language can function as predicates, a translation that is both domesticating and foreignizing is possible: "truly human" (see Simon, 2023). *Sediq balay* has been used as a Sediq translation of 英雄 (*yīngxióng*), a Chinese analogue of "hero," notably in the subtitles of the epic feature film *Seediq Bale: Warriors of the Rainbow* (directed by Wei Te-sheng, 2011) about a 1930 rebellion against Japanese colonial rule. The film was shot in Japanese and Seediq with

2. Indigenous people in Taiwan were assigned Chinese names after the Second World War. Uya (given name) Pawan (patronym) was assigned the name 洪良全, which he would eventually romanize as Hung (family name) Liang-chuan (given name).

the help of heroic translators who worked on the Chinese-language screenplay behind the scenes and on set (Sterk, 2020).[3]

Traditionally, a *seediq bale*, or a *sediq balay* in Uya Pawan's dialect, was expected to defend tribal territory, particularly through headhunting. Under Japanese colonialism, this imperative was heeded through violent resistance. But even traditionally there had been other ways of imagining Sediq heroism. In a Sediq myth recorded and published by a pair of Japanese linguists, a *sediq balay* was an archer who shot down a second sun that, like a fire-breathing dragon, was scorching the sky (Ogawa and Asai, 1935, pp. 566-568). The myth is particularly meaningful in an ethnobotanical context, because the archer brought seeds of fruit-bearing bushes and trees to plant along the way, so there would be enough food to eat on the return journey. Generally, the Sediq archer's arrow can represent action, and his shooting down of the sun, the effect of action. Specifically, the arrow can represent a signifier and its target a signified. Uya Pawan is an archer who has been fashioning technical signifiers such as *mdayaw wasaw* (Hung, 2023, p. 127), literally "helping leaf," and shooting them at signifieds such as "stipule," a leaf-like structure that helps to protect the developing "petiole" or leaf stalk. In this way, as a specialized translator who is developing his language for use beyond daily life, he exemplifies how Sediq people have been reinterpreting what it means to be a *sediq balay*.

Is there a theoretical framework in translation studies that can accommodate a heroic view of a specialized translator? I turn to this question in the following section.

In Search of a Theoretical Framework Capacious Enough for Heroism

As a public-spirited, highly accomplished agent, a heroic translator is richly endowed with agency, the "willingness and ability to act" (Kinnunen and Koskinen, 2010, p. 6). Today in translation studies, the mention of agency recalls Andrew Chesterman's "agent model," which focuses "not on translations as texts, nor even on the translation process, but on the translators themselves and the other agents involved" (2009, p. 20). Chesterman proposed his agent model as part of what he called Translator Studies, or Transla*tor* Studies

3. The glottonym is spelled differently depending on dialect. In Tgdaya it is Seediq, in Truku Seejiq, and in Toda, Uya's dialect, it is Sediq. The cognate words *seediq, seejiq,* and *sediq* all mean "person" or "people."

or even TranslaTOR Studies (*ibid.*, p. 13). He also underlined the significance of his proposal by describing it as "a new branch" (*ibid.*) of James Holmes's "famous map" (*ibid.*, p. 14). Chesterman has a gift for theoretical neologisms, one of which has inspired the title of this article.

Chesterman was actually branding a trend in the discipline. Scholars had been interested in a translator's subjectivity or agency since at least the early 1990s, in an effort to go "beyond" the norm-oriented scholarship of the descriptivists in the previous decade (see Pym *et al.*, 2008). Daniel Simeoni described the translational agent as a socialized subject (1995, p. 452), drawing on Pierre Bourdieu (1998). Many scholars working on the sociology of translation followed in his footsteps in the 2000s (Wolf and Fukari, 2008). One of them was Reine Meylaerts, who was working within a Bourdieusian framework but finding it constricting. "[Gideon] Toury's model for Descriptive Translation Studies," she wrote, "has privileged collective schemes and structures instead of individual actors" (2008, p. 91). But Bourdieu's concept of habitus "seem[ed] to confirm all too often what it was supposed to avoid, i.e. the precedence of structure over agency" (*ibid.*, p. 94).

In "The Multiple Lives of Translators," which inspired my subtitle, Meylaerts tried to expand Bourdieu's framework by studying how a translator's many "lives" interact to produce a "plural habitus" (2013, p. 107). She adopted Bernard Lahire's "fragmented, plural and sometimes even contradictory" understanding of habitus (*ibid.*, p. 107). Fragmentation, plurality, and contradiction open spaces for "interactions between structure and agency" (*ibid.*, p. 106). Meylaerts examined these interactions in a case study on the early 20th-century Belgian bureaucrat, writer, and literary translator Roger Avermaete (*ibid.*, pp. 111-123). Avermaete retained a childhood sense (*ibid.*, pp. 110-111) of the superiority of French and inferiority of Flemish throughout much of his life, though he ended up embracing bilingualism for Belgium and Flemish as a literary language (*ibid.*, p. 124). In my own case study, I will show how Uya Pawan retained a childhood sense of the superiority of Chinese and inferiority of Sediq for much of his life and ended up embracing multilingualism for Taiwan and Sediq as a technical language. But, since a fragmented, contradictory habitus seems like a poor habit for heroism, I will not be studying Uya in Bourdieusian terms.

Like many translation sociologists who were active when Chesterman proposed the agent model (see Koskinen and Kinnuenen, 2010, pp. 7-8), I have turned instead to Anthony Giddens' structuration theory. Giddens explained his theory as follows: "History is the structuration of events in time and space through the continual interplay of agency and structure" (1984, p. 362). Giddens' example of a historical event is, in my view, heroic: the sinking of the Bismarck in 1941 (*ibid.*, p. 8), which thwarted German attempts to disrupt the trans-Atlantic delivery of supplies to Britain. The sinking of the Bismarck seems far removed from translation, but scholars have applied structuration theory to translation events and the agents who make them happen (see Tipton, 2019 for a review). I shall apply this theory to the case of Uya Pawan. Like the officer who pulled the lever that fired the torpedo that sank the Bismarck, Uya is shooting semiotic arrows to try to avert catastrophe. In the officer's case, it would have been catastrophic if the convoys from America had been cut off. From Uya's perspective, it would be catastrophic if his ancestral language were to become extinct, as will soon happen if it continues to be mainly oral, spoken only by the elderly in daily-life situations.

Structuration can be applied to language. Any linguistic agent has to accept what words mean in the lexicon of the language(s) he or she learns to speak before having a say in it; linguistic agency is structured from the start. Nonetheless we can all, as linguistic agents, put a unique stamp on the words in our languages by using them in distinctive ways. Speakers of minority languages can have an oversize influence. Translators who work in such languages "may turn out to be more influential than their colleagues in dominant languages" (Kuusi *et al.*, 2022, p. 157). Minority translators are much more likely to coin words like *mdayaw wasaw*, Uya's neologism for "stipule." Uya's coinage was already a linguistic event, and could well set off a series of linguistic events as or if it spreads through the speech community. If Uya's neologism catches on, then his linguistic agency will have structured the lexicon, ever so slightly.

I will return to Uya and his potential structuration of the Sediq lexicon. But I will first discuss a sub-field in the research literature that has shaped the way I conducted my case study.

A Review of the Literature on Specialized Translation in Minority Languages

Having selected Giddens' structuration theory as my overall framework, I now examine the literature on specialized translation, particularly in a minority-language context.

Before and after Chesterman, translator studies has focused more on literary translators than on their specialized counterparts. Notable examples include Antoine Berman's study of "the translator's subjectivity" in his 1995 book on the translation of John Donne's poetry into French and Spanish (2009 [1995], p. 69), a 2021 collection entitled *Literary Translator Studies* edited by Klaus Kaindl *et al*., and even analysis of the literary translator as a brand (Zhang, 2023, p. 123). A trawl of the literature for case studies on specialized translators netted nothing. There are articles on specialized translator *training*, where trainees are compared to professionals, as in Fernando Prieto Ramos (2024). Margaret Rogers attempted to shed "the non-literary tag" in her textbook (2016) on specialized translation, which demonstrates the creativity of specialized translators but does not include any case studies. Federica Scarpa's *Research and Professional Practice in Specialised Translation* (2020) similarly focuses more on translation than translators. Specialized translators toil in obscurity. No other translator is more invisible (Venuti, 1995).

The specialized translator is just as invisible in minority translation studies. *Less Translated Languages* (Branchadell and West, 2005) dedicated a "symposium" of six chapters to six Catalonian literary translators. As editor of an issue on lesser-used and lesser-translated languages and cultures in *The Journal of Specialised Translation* in 2015, Debbie Folaron implied that minority translation studies should include the study of specialized translation by minority-language translators. Timothy Pasch (2015) is the only scholar in the issue who discusses a kind of specialized translation—digital translation—into or out of a minority language that could be considered endangered. But by translation he means digitization, and he does not discuss the translation of technical texts or any technical translators. In the 2017 language revitalisation and translation issue of *trans-kom*, the focus is again on literary translators as the agents of revitalisation of endangered minority languages (Iso-Ahola, 2017).

Yet, in the same issue, Kaisa Koskinen and Päivi Kuusi (2017) addressed the agency of minority translator-trainees who were

translating specialized terminology. Koskinen and Kuusi were running a series of empowering training courses for speakers of Karelian, an endangered language of Finland and Russia. They have continued to write about the courses, with an important article on "filling in lexical gaps as language making" (Kuusi *et al.*, 2022, p. 133). While filling in such gaps, Karelian speakers had to be "ad hoc terminologist[s]" (*ibid.*, p. 141). Why had the gaps not been filled already? Presumably because Karelian speakers had been code-switching, "a mechanism of deep borrowing, language shift, and language death" (Myers-Scotton, 1992, p. 31). If so, then code-switching had interrupted linguistic development. The terms that Karelian speakers were asked to translate in the training courses were as basic as "revolution," "in transit," and "chest of drawers" (Kuusi *et al.*, 2022, pp. 147-148).

While translating such terms, students were asked to reflect on the possibility of Karelian being influenced by Finnish, Russian, or some other language in dozens of translation commentaries (*ibid.*, p. 146); it is unclear exactly how many terms were translated. This assignment was inspired by Michael Cronin's notion of what could be called the anxiety of majority language influence (cited by Kuusi *et al.*, 2022, p. 156). In a classic passage, Cronin compares "*translation as reflection* to *translation as reflexion*" (2003, p. 141; italics in the original). He explains the contrast as follows:

> The first term we define as the unconscious imbibing of a dominant language that produces the numerous calques that inform languages from Japanese to German to Irish. The second term refers to second-degree reflection or meta-reflection which should properly be the business of translation scholars and practitioners, namely, the critical consideration of what a language absorbs and what allows it to expand and what causes it to retract, to lose the synchronic and diachronic range of its expressive resources. (*ibid.*)

It is perfectly understandable for Cronin, as an Irish and French specialist, to be anxious about calques, loanwords, and other anglicisms, but I doubt that German and Japanese speakers share this anxiety, and neither does Uya Pawan, as I will show.

Differing opinions on calques are informed by "language ideology" (see Peterson and Webster, 2013, p. 93) or "ideologies" that influence translation (see Kuusi *et al.*, 2022, pp. 133 and 157). In a language development context, ideologues have debated the terms used to describe the machinery of modern life. The debates

are about "purism vs. compromise in language revitalization and language revival" (Dorian, 1994, p. 479). Purists tend to prohibit calques and loanwords, while compromisers allow for both. While there is something heroic in the language purists' resistance to foreign influence against all odds, one does not have to be a purist to be a hero of language development. By not insisting on purity (Kuusi *et al.*, 2022, pp. 148 and 153), the Karelian translators were compromisers, as is Uya Pawan. Ghil'ad Zuckerman, who draws lessons from his studies on the development of Israeli for the "reclamation" of Australian Indigenous languages, proposes a slightly different contrast: "Revivalists and Aboriginal leaders should be encouraged to be realistic rather than puristic, and not, for example, chastise English loanwords and pronunciation within the emergent language" (2020, p. 187). This is a realistic position. As long as people are using the language to communicate, including by translating, no matter how they use it, they are developing the language through their collective agency.

Two studies by linguists on the playful or creative translation of terms into Indigenous languages illustrate two potential trends in language development. Leighton Peterson and Anthony Webster's article on "speech play" in Navajo begins by discussing recent neologisms for concepts like "email" and "web-surfing" (2013, pp. 96-97). Apparently, Navajo speakers were just saying email and web-surfing with Navajo pronunciation, turning them into loanwords. They also added Navajo affixes, grammaticalizing the loanwords. Older neologisms in Navajo were adaptations, for instance, the Navajo word for "airplane," which means "flying car" (*ibid.*, p. 102). This suggests that loanwords might be an initial, passing phase in any minority-language community's creative response to modernity.

In their article on creativity in term translation, Szymon Gruda *et al.* look at Nahuatl neologisms for words like "bicycle." In different dialects of Nahuatl, "bicycle" has become "wooden dog" (2023, p. 5), "mechanical horse" (*ibid.*, p. 6), and "double moving machine" (*ibid.*, p. 7). This illustrates another possible trend: that minority languages, being dialect chains, can contain different neologisms for the same thing. With the standardization and use of Nahuatl in the mass media, competing neologisms will either survive in dialect or register niches, to use an ecological metaphor, or be replaced by a single standard. Like Kuusi *et al.*, Gruda *et al.* ran workshops with Nahuatl

speakers, during which they came up with medical terms in Nahuatl (*ibid*., pp. 10 *et seq.*).

It is clearly important to develop medical vocabulary in Indigenous languages, for the sake of public health in disadvantaged communities (see for example Romain, 2017). A similar case can be made for the translation of legal terminology into Indigenous languages, so people can know, defend, and even negotiate their rights (see Alberts, 1997). But there is another relevant context besides the clinic and the court, namely the classroom: "Teaching physics and other science subjects in the mother tongues of both teachers and students will improve science literacy, comprehension, and interest in the field" (Dlodlo, 2022, p. 91). Although ethnobotanical terms have been translated between mainstream and marginal languages (for instance, Turner, 2014), I can find no studies of the translation of botanical terminology into any Indigenous language, let alone a study of an Indigenous minority translator of botanical terminology. In previous research on "autoethnobotanical translation" (Sterk, 2025a, 2025b), I have touched on botanical terminology translation, but in this article I focus on it and on a particular specialized translator. I detail my approach to studying Uya Pawan in the next section.

Research Questions and Methods

Having chosen structuration as my framework and reviewed the research literature on specialized translation, particularly into minority languages, I propose the following three questions about Uya Pawan:

(1) How have Uya Pawan's different lives and times informed his decision to take up the task of the specialized translator?

(2) How has he approached translation—as a purist or realist—and what, if any, has been the effect?

(3) Could his Taiwanese experience serve as a model for other settler societies, for instance, Finland?

The third question is obviously more speculative, but I will attempt a tentatively affirmative answer in the conclusion. I would never have been able to answer the first two questions had I not gotten to know Uya personally. I first met him at a translation seminar that I gave in the summer of 2018 on my research into the translation of the screenplay of *Seediq Bale*. During the seminar, I shared my tripartite

typology of neologisms: loanwords, calques, and adaptations of modern vocabulary in the film, words like machine gun and flying machine (Sterk, 2020, ch. 7). During the drafting of this article in the summer of 2024, I asked Uya if he had ever taken a translation seminar, and he said, yes, he had: mine! After he reminded me of his attendance, I reminded him of my typology.

I next saw Uya at a WINHEC (World Indigenous Nations Higher Education Consortium) conference on Formosa's east coast in the summer of 2019, at a session introducing the experimental postgraduate program in Indigenous cultural heritage that Providence University was rolling out. Lin Shu-ya, an assistant professor of law at Providence, introduced the postgraduate program in Chinese, and I interpreted consecutively in English. She explained that the program would be innovative, in that half the courses would be taught by professors at Providence and the other half by Indigenous elders in communities in central Formosa who were experts in traditional arts like hunting or weaving but did not have academic credentials. Lin Shu-ya and Iwan Pering, a younger peer of Uya's, had found a way to hire these experts as instructors and allow them to serve as *rudan knklaan* or "knowledgeable elders." At the end of the session Uya came to the front to announce that at the age of nearly seventy, he had enrolled in the program. He would also be working as a researcher at the new Sediq language promotion office in Puli.

For four months in the autumn of 2022, Uya and I were classmates in the program, which I had enrolled in to do participant ethnography for my research on "autoethnobotanical translation" (Sterk, 2025a, 2025b). In our classes, we wove rattan baskets together, spun ramie yarn together, and rode together in the back of a pickup truck on a tour of Sediq villages in the mountains to the east of Puli. I misidentified plants along the way and Uya corrected me. "That's a liquidambar tree, isn't it?" I asked. "No," Uya said, "it's a Japanese maple. It was, in fact, planted there during the Japanese era." I was impressed by Uya's expertise.

I did a semi-structured interview with Uya in Chinese at the promotion organization office on 14 November 2022 (see Appendix 1). I did a follow-up interview on Line, a messaging app, on 8 July 2024. When Uya graduated from the program in the summer of 2023, I asked him for his master's thesis (Hung, 2023), which was still under embargo on Taiwan's postgraduate thesis and dissertation

website.[4] He kindly sent me the pdf file. With his permission, I extracted the Sediq and Chinese text, machine translated the Chinese into English using DeepL, and transferred the text of chapter 4 (*ibid.*, pp. 71-273), a series of ethnobotanical descriptions, to an Excel file (see Appendix 2). I mined these descriptions for botanical term translations using two methods, comparison with a book of Chinese translations of botanical terms published by the government and analysis by DeepSeek, in order to estimate the number of terms that Uya translated. To assess how he translated, I used the tripartite typology of loanword, calque, and adaptation that I have used in previous research (Sterk, 2020, 2021) on a sample of the terms in one of the entries in chapter 4.

I will get to Uya's approach to terminology translation in good time. But his approach only makes sense in the context of his lives and times.

The Lives and Times of a Minority-Language Specialized Translator

Uya Pawan was born in Pingjing Village in 1950 in the mountains of central Formosa, though he knew his home village in Sediq as Alang Toda, Toda Community.[5] Alang Toda was (and is) about a forty-kilometre drive east of Puli, the largest town in the area. In his life, like the Sediq sun-slayer that I mentioned in the introduction, Uya has made a hero's journey, there and back again, twice. Schooling would take him farther and farther from home, until he completed college in 1973. Then he made a first homecoming, to work as a civil servant; but as he rose through the ranks, work took him farther and farther from home again, until he retired in 2012, aged 62, and made a second homecoming. Since retirement, he has developed local ecotourism and the Sediq language.

Uya was born at the right time to undertake a hero's task—minority-language development through specialized translation. Had he been born any earlier, he would not have benefited from the implementation of Taiwan's Indigenous policy, which as a bureaucrat he helped to formulate. Had he been born much later, he would not have acquired his ancestral language to a sufficiently high level.

4. Available at: https://ndltd.ncl.edu.tw/cgi-bin/gs32/gsweb.cgi?o=d [consulted 7 August 2025].

5. Available at: https://maps.app.goo.gl/CHrPrTenVpSGXtD8A [consulted 7 August 2025].

In what follows, I expand upon the above précis, with an emphasis not only on ethnic plants, which have become Uya's pastime and his passion, but also on the evolving social structures that have shaped his life (and which, in his own way, he has shaped).

When Uya went out to play, plants became his playthings (Hung, 2023, pp. 55-56). He and his playmates would make "grass flutes" from the leaves of creeping smartweed. They would chew the fruits of mulberry mistletoe, like chewing bubble gum, and then catch bugs with the sticky "cud." They would blow spitballs through sections of arrow bamboo. They would shoot birds with slingshots, using the ball-shaped rhizomes of sword ferns as bullets, and then roast them over an open fire (the birds, not the bullets). Uya was fond of roasted laughingthrush.

Plants were part of his home life, too. When he peed the bed, his mother put a kind of fern in his undershorts, to wake him up when he turned over (*ibid.*, p. 73). When he had a tummy ache, his mother made him soup from another kind of fern (*ibid.*, p. 83). When he had a toothache, his mother would chew raspberry leaves and let him suck on the cud (*ibid.*, p. 172). When he was naughty, his father slapped him with the leaves of a biting cat bush (*ibid.*, p. 127). When he had an itch, his father would roast a branch from a poison sumac tree and have him jump over it, saying "I am me and you are you" (*ibid.*, p. 189). He ate a lot of soup of arrow bamboo shoots that his mother had gathered. He ate a lot of the vegetables she grew, too.

When he grew a bit older, he helped his mother out in the field, where she planted cabbage, spinach, peas, lettuce, peaches, sand pears, persimmons, and mushrooms. She would teach him about useful plants, which he learned to identify on sight; useless plants she would not bother to point out. She said that if you get thirsty, try the root, actually the rhizome, of a sword fern; it tastes bitter but it will quench your thirst. His father taught him plants, too, when he took him along on fishing and hunting trips. When they went fishing, his father would peel some of the bark of the "poison tree" to throw into the water and stun the fish. When they went hunting, Uya would hear all about plants that prey animals like to eat and plants they could use to make traps to catch them (*ibid.*, pp. 38-40). After a successful hunt they would roast flying squirrel, boar, muntjac, and sometimes even macaque.

On weekends, Uya would ride down the mountain with his folks, who would set out a produce stand in the town of Wushe, or even as far as Puli. They also set out the herbs and roots, many of them used in Traditional Chinese Medicine, such as Chinese asparagus, that they had gathered during the week, and which Uya had helped to prepare.

That was what childhood was like in the late 1950s in an Indigenous village in the mountains of central Formosa. In a way, life was largely the same as it had been since before colonization, which for Uya's people happened around 1910. Sediq people did not start taking mountain produce down to Puli in the 1950s; they had been doing so since the late 19th century. And since then they had, as a precondition for translation, been learning colonial languages: Taiwanese, Japanese, and Chinese.[6] But mechanization and infrastructure development were facilitating interchange with the outside world. Uya's family had a small truck, and while the road to Puli was narrow, it was modern and maintained.

In the 1950s, a monolingual national language policy was implemented, which meant children had to learn Chinese no matter what their ethnic background was. Uya's elementary school teachers, most of whom had retreated to Taiwan with Generalissimo Chiang Kai-Shek in 1949 after the Nationalists lost the Chinese Civil War, spoke strongly accented versions of the National Language. But if they caught students speaking Sediq, they would flog them or force them to wear signs around their necks that said: I will not speak in dialect![7] But Uya was never flogged, nor did he ever wear a sign; he was Hung Liang-chuan, a model student who had the odd, to his teachers, habit of using fern fronds as bookmarks (*ibid*., p. 71). Of course he continued to speak Toda Sediq at home with his parents,

6. For a history of translation and Taiwan's Indigenous peoples, see Sterk (2024).

7. Similar measures to suppress "dialect" were used elsewhere, as in the "Welsh Not." In her book on the development of the national language policy, Janet Chen reports on the situation in schools like Uya's. "The school," remembers one former student, "was chronically short of money. The children spent half the day collecting nuts from tung oil trees (for sale) and growing vegetables (as salary supplement for the staff). Most of the instructors had only graduated from primary school themselves; few took their duties seriously. […T]he contents of […] textbooks had been deliberately simplified. In 1951 education officials adopted special editions of 'mountain textbooks,' which reduced the difficulty of […] national language lessons by two grade levels. A solution meant to bolster remedial skills fostered further disparities by producing primary school graduates unable to meet the admission standards for middle school" (2023, p. 209).

and he heard and sang it at the True Jesus Church. The missionaries were Chinese, but they learned native languages like Sediq well enough to preach. Their counterparts in the Presbyterian and Catholic churches not only used Indigenous languages in church but also funded Bible translation. By letting in missionaries for the purpose of social control, the Nationalist government undermined the national language policy in Indigenous villages like Uya's. The Sediq of the day was full of Japanese loanwords like *nanasung kusa* for "toothed clubmoss" (*ibid.*, p. 73); when Uya Pawan was born, the Chinese Nationalists had ruled Taiwan for five years (since 1945), but before them the Japanese had ruled Taiwan for five decades (from 1895 to 1945). However many loanwords there were, Sediq was not a creole like Ilan Creole Japanese (Chien and Sanada, 2010; see Sterk, 2021 for comparison with Sediq). As Uya grew up, some Chinese words entered the language as loanwords, because people in Uya's parents' generation did not speak Chinese well enough to code-switch. Uya and his peers learned Chinese well enough to code-switch, and soon the Sediq language stopped developing.

Uya went away to boarding school for junior high school in Taitung City, several hundred kilometres away on Formosa's southeast coast. He went to high school in Nantou City, the seat of the county that included (and includes) Puli, Wushe, and Toda. Finally, he went to college in Taipei, in the far north. He studied economics at the best university in the country, National Taiwan University, with the understanding that he would join the civil service after graduation; the government was populating local bureaucracies in Indigenous-majority townships like Uya's with educated Indigenous elites.

At first, he worked in the township office in Wushe, the nearest town to his home village; later, when he was promoted, he worked at the county government in Nantou City. During the week, he would tour communities like his home village of Toda and survey how people were living, for instance whether they had a refrigerator, a television, or an electric fan. He was evaluating the implementation of a policy called "mountain plainsification" [山地平地化], meaning to raise living standards in mountain villages. In a way, he was already an agent of a certain kind of development.

On the weekend he went home to Toda to see the folks and go botanizing. Experience had taught him that any plant had its seasons and that its life was somehow like a human being's. Paying attention

to plants was a way to learn how to live with them, a form of personal cultivation. His perspective was obviously no longer that of a child, but that of a budding environmentalist and an amateur botanist. Like many men of his generation, he was also an orchid hobbyist. He would look for temperate orchids around Toda and tend them at his place in Puli. He became increasingly interested in plants and started to invest in field guides, from which he learned the characters that botanists scrutinize to identify a plant: opposite or alternate, simple or compound, stipulate (possessing a stipule) or astipulate (lacking a stipule), glabrous (smooth) or tomentose (hairy). These were terms that, in Chinese translation, he would go on to translate into Sediq, a few decades later.

At the end of 1984, a group of activists founded the Taiwan Aboriginal Rights Promotion Association to demand that the government recognize their special status as the descendants of the original settlers of Taiwan. Their Austronesian ancestors, after all, had begun settling Formosa over five thousand years before; by contrast, the ancestors of the Chinese majority only began arriving in significant numbers in the 17th century. The activists could still speak their ancestral languages fluently, but their children were switching to Chinese. A decade later, in 1994, the Kuomintang—the Chinese Nationalist Party—responded to the Indigenous movement with recognition; Indigenous people were recognized as Indigenous by constitutional amendment. In 1997, Indigenous peoples were recognized. The Sediq were still lumped in with another group, the Atayal, but would be recognized as distinct in 2008.

Uya Pawan continued to serve in the county government through the 1980s, but in 1988 he joined the provincial government. Given that the province in question was Taiwan, this was a step onto the national stage. Two years later, he was appointed to the provincial Indigenous Peoples' Bureau, where he stayed for the next eight years, until the powers of the Taiwan Provincial Government were transferred to the central government in 1998. Then Uya moved to an analogous agency in the central government. There, he played a role in the formulation, implementation, and evaluation of the Indigenous policy, including implementing romanizations developed by the linguist Paul Jen-kuei Li in teaching materials for use in elementary-school classrooms. The first teaching materials were printed textbooks, but later on Uya

supervised the implementation of a website for audiovisual language-learning materials.[8]

Concurrently, the government funded a compilation of dictionaries, which, like language-learning materials, were made available online.[9] Over the past eight years, in the wake of the *Indigenous Languages Development Act* mentioned in the introduction, the dictionaries have been augmented with modern vocabulary. Committees, including the Sediq one, on which Uya has served, are sent lists of terms to translate by the Indigenous Languages Research and Development Foundation that was mandated by the Act. Committee members do fieldwork to see if the terms have already been translated, and, if not, they translate the terms themselves. In my previous research (Sterk, 2021), I found that committee members respect and record the Japanese and Chinese loanwords adopted by their parents and grandparents, but otherwise they tend to calque from the Chinese term, which is familiar to almost anyone in Taiwan, or adapt when there is no clear way to calque. I also found that the kinds of terms they are translating are not very specialized. They are translating terms like "volcano," into *dgiyaq spreqan puniq*, literally "mountain where there is an explosion of fire." This is a calque from 火山 (*huǒshān*), "mountain of fire," in Chinese, but with the inclusion of "explosion" it is also a partial adaptation. Terms like "volcano" are about as specialized as "revolution" (Kuusi *et al*., 2022, p. 147). For truly specialized terms like "stipule," another approach would have to be found. This brings me back to Uya.

Uya's appointment in 2009 and 2010 as the director of the Indigenous Peoples Culture Park took him to the deep south of Formosa, and his promotion in 2010 to deputy minister of the Council of Indigenous Peoples took him all the way back north, and eventually earned him a page on Wikipedia.[10] But at the end of 2012, at the age of 62, Uya wanted to go home.

From 2012 to 2019, Uya served as founding chairman of the Nenggao Traverse Trail Ecotourism Association, where the trailhead is about ten kilometres from Toda, Uya's home village.[11] With

8. See https://web.klokah.tw [consulted 7 August 2025].

9. See https://e-dictionary.ilrdf.org.tw [consulted 7 August 2025].

10. See https://en.wikipedia.org/wiki/Hung_Liang-chuan [consulted 7 August 2025].

11. The Traverse Trail was first blazed by Sediq tribesmen, who headed in the direction of the rising sun to trade with their distant relatives on the east coast.

funding from the Forestry Bureau, Sediq tour guides were trained to introduce tourists to the flora and fauna of the trail. As these things go, animals may or may not appear, but plants are always there, and so most of a tour consisted of introductions to the plants along the way. Given that the tour guides were Sediq, the introductions were partly ethnobotanical. When a tour passed a Formosan alder tree, the guide might note that back in the day, when Sediq planters had exhausted a swidden, they knew to plant Formosan alders, for after a few years the soil would become fertile again. "We now know," the guide could continue, "that alders, which are called *sbiyuk* in Sediq, have formed a symbiotic relationship with nitrogen-fixing bacteria that they house in root nodules, and this is why alder trees can restore an exhausted swidden" (see Hung, 2023, pp. 103-105). To train the tour guides, the association worked with the noted ethnobotanist Yen Hsin-Fu, then assistant director of the National Science Museum. Yen expressed interest in Toda ethnobotany, and he and Uya started doing interviews with elders in Toda and other villages where the Toda dialect was spoken.

Uya Pawan as a Specialized Translator of Botanical Terminology

Professor Yen helped supervise a group of eight "autoethnobotanists," including Uya, who received funding from the Nantou Country Government to compile and translate a book of 103 ethnobotanical descriptions entitled 賽德克族 (*Tgdaya/Truku/Toda*)民族植物 [*Seediq/Seejiq/Sediq* (*Tgdaya/Truku/Toda dialects*) *Ethnic Plants*] (Pering *et al*., 2017; see Sterk 2025a, 2025b). A novel analysis of the 43,000-word bilingual text yielded 61 technical terms in Chinese ranging from ecology to morphology (see Appendix 2, p. 5). A few were not translated; some were translated in more than one way. Of 68 translations into Sediq, one was a loanword, *haypa*, from 海拔 (*hǎibá*), Chinese for "altitude," 18 were native adaptations, like *mssriyux qmuru*, literally "taking turns on the stem," a translation of an "alternate" leaf arrangement, and 49 were calques. Of the 49 calques, 18 could be described as literal, and another 10 reductive, omitting part of the original term; but 21 were partly substitutive, additive, or adaptive, meaning that a Sediq twist was added. For example, 氣孔

(*qìkǒng*), "air holes," the Chinese for the "stomata" that allow plants to respire was translated into *bling hengak*, "breathing holes."[12]

Uya translated a much more substantial number of botanical terms for his master's thesis (Hung, 2023). At 310 pages or about 110,000 words long, 55,000 words in each language, the thesis focuses on 190 ethnic plants growing in and around Toda. Completely bilingual, it is the product of a process of composition and translation. The *ethno*botanical descriptions in Uya's thesis were translated from Sediq to Chinese. In stating his research objectives, Uya emphasizes the value of the Sediq-Chinese translation:

> Elders who accompanied their fathers on hunting trips in the mountains are skilled in plant identification. Middle-aged and young tribesmen, however, are much less able to identify plants. If efforts to conduct ethnobotanical surveys are not accelerated, the wisdom of our ancestors in utilizing plants may be lost forever as the elders pass away.… [A record of] the way elders utilized plants can not only serve to preserve and promote Indigenous ecological wisdom, but can also be a basis for the conservation and sustainable use of plant resources and for the development of local teaching materials. (*ibid*., pp. 7-8)

It would be a tragedy if ancestral ecological wisdom were lost, and it is certainly important to preserve this wisdom, pass it on, and practise it for the sake of conservation and sustainability.

But Uya's thesis also contributes to developing the Sediq language through Chinese-Sediq translation. The thesis contains Sediq neologisms for academic words like contents, abstract, chapter, research motivation, background, scope, objectives, questions, methods, literature review, etc. (*ibid*., pp. viii-ix), and for general taxonomic vocabulary like species, genus, and family. It contains many more neologisms for botanical terms. As we will see, analysis of a single description reveals patterns in Uya's approach to composition and translation.

Here is the heading for the entry on Hayata's mountain rose, a highlight of a walk I took with Uya and his adviser Yen Hsin-fu along the Nenggao Traverse Trail in early January 2023:

12. The translation of terms like stomata into Chinese predates their translation into Sediq by around a century. The translation of the terminology of the physical sciences into Chinese has received more scholarly attention (see Wright, 2000), but there is at least some research on the Chinese translation of natural science terminology, including botanical translation (see Zhang, 2018 for an example).

p a k a w r o d u x
學 名 ： *R o s a t r a n s m o r r i s o n e n s i s* H a y a t a
科 名 ： 薔 薇 科
漢 名 ： 高 山 薔 薇

Figure 1. From the entry on Hayata's mountain rose (Hung, 2023, p. 169)

The top line records the name of the plant in Sediq, literally "chicken prickle."[13] The next line is the scientific name. The line after that is the family name: any rose is a member of the Rosaceae family. Finally, the Chinese name is literally "high mountain rose." The following two sentences represent the "cultural record" at the beginning of the entry.[14]

(1) *Tduwa uqun ka mplabu phpah, malu bay saun qmita phpah ka phpah na.*

花瓣能吃，也是很好的觀賞花。

[The petals (*mplabu phpah*=wrapping flower) are edible, and the flowers are ornamental.]

(2) *Tduwa lmuwan nngalun uuqun ka hiyi na, msibus mi malu uqun.*

果實採集可以當作零食使用，甜又好吃。

[The fruits can be snacked on and are sweet and tasty.]

This cultural description is followed by a more detailed botanical description, in 7 sentences:

(3) *Msama llbu qhuni ka pakaw rodux nii, kndkilan na lnglinay pa, smkuxul bay tndhawan, saw ka dxral mnsunu, dxral dadus mi nraaw ddwiyaq, tntaanun qpurinh msuupu sncikuh mhru.*

高山薔薇是常綠灌木，喜歡陽光充足的生長環境，如崩壞地、裸露地或高山草原，常形成小面積的群落。

13. In a botanical context, roses do not actually have thorns, which are derived from leaf shoots, they have prickles, which develop from epidermis. In Mandarin and Sediq, this does not have to be specified, because there is a superordinate term—刺 (*ci*) in Mandarin and *pakaw* in Sediq—that includes thorns and prickles, not to mention spines. Uya is more specific in the entry on *Rubia lanceolata*, which has *rhiq pakaw* (Hung, 2023, p. 226), skin/bark *pakaw*, in other words prickles. Disappointingly, Uya does not explain why the plant is called *chicken* prickle in Sediq in his thesis. It seems that the prickles reminded tribespeople of a chicken's toenails.

14. The English translations are mine.

[Hayata's high mountain rose is an evergreen (*msama*=resembling vegetables, meaning green) shrub (*llbu qhuni*=low tree) that likes sunny environments (*lnglinay*), such as landslides, bare ground, or alpine grassland, and often forms small colonies.][15]

(4) *Niqan mhungul pakaw mi mspaux pakaw, mtduwa dhuq 2-3 m ka knbaraw na ka qmuru na, mbiyax bay kndkilan.*

全株都具有鋭刺及鉤刺，莖長可達2-3公尺，蔓延性強。

[The whole plant has sharp, hooked prickles, and the stem length can reach 2-3 metres, with a kudzu-esque spreading growth habit (*mbiyax bay kndkilan*=truly strong growth).]

(5) *Mpdha paric hnyuwan na ka wasaw, 5-7 ka tipiq wasaw, 3 ka cikuh bay, mtumun mi bbaraw tumun, 0.4-2.5 cm ka knbaraw.*

葉為羽狀複葉，小葉5~7，稀3，橢圓或長橢圓形，長0.4-2.5公分。

[Leaves are pinnately (*paric hnyuwan*=wing body) compound (*mpdha*=to be in twos, meaning multiples), leaflets (*tipiq wasaw*=small leaf) 5-7, seldom 3, elliptic (*tumun*=round) or long elliptic (*bbaraw tumun*=long round), 0.4-2.5 centimetres long.]

(6) *Snkingal ka phpah, mbhuway, 5 ka mblabu [sic] phpah, idas 6-8 ka tmphapah.*

花單生，白色，花瓣5，花期為6~8月。

[Flowers are solitary (*snkingal*=one by one), white, with 5 petals, flowering from June to August (*idas* 6-8=6th to 8th moons of the year).]

(7) *Mhada idas 9-10.*

果色鮮紅，9-10月成熟。

[Fruits are bright red (omitted from the Sediq), ripening from September to October.]

(8) *Smkuxul hidaw ka lnglungan na, qtaan balay ssudu ssiyaw dha bang elu.*

性喜陽光，道路兩側之草叢中常可見之。

[It likes sunlight and can be seen in the grass on the roadside.]

(9) *Mtumun hnyuwan na ka buuc hiyi, wada na lingan saw hnyuwan tuyan phpah yuyun [sic] ruma, saw hari rhaq qtaan, mhada ciida daw mpbanah mi mcaas banah.*

15. I have focused on the translation of botanical terminology in this article, but Uya's thesis could also be mined for translations of ecological terms, which have been discussed by Kasprzak (2011) in a European context.

果實為球形瘦果包藏於壺狀的萼管裏面，好像種子一樣，成熟時呈紅色或黃紅色。

[The fruit is a spherical (*mtumun*=to be round) achene (*buuc hiyi*=bone fruit) enclosed (*lingan*=hidden) in a jug-shaped (*tuyan*=jug, originally a kind of calabash) calyx (*phpah yudun*=flower tube), like a seed, and is red or yellowish-red when ripe.]

Some of these descriptive characteristics can be observed in Figure 2 below:

Figure 2. Hayata's high mountain rose
Credit: Chuang Hsi, used with permission

The Sediq language description can be mined for the following 12 terms:

Table 1. A dozen botanical terms in Uya's thesis

No.	English	Chinese	Sediq	Approach	Consistency
1	petal, corolla	花瓣=flower petals	*mplabu phpah* =wrapping flower	calque/adaptation	yes
2	evergreen	常綠=always green	*msama* =like.vegetables, "green"	calque, with omission	yes
3	shrub	灌木=cluster wood	*llbu qhuni* =low tree	calque/adaptation	yes
4	spreading	蔓延=kudzu-style spreading	*mbiyax bay kndkilan*=truly strong growth	adaptation	no
5	pinnate	羽狀=wing-shaped	*paric hnyuwan* =wing body.shape	calque	yes
6	compound leaf	複葉=compound leaf	*mpdha […] wasaw* =to be in twos […] leaves	calque/adaptation	yes
7	leaflet	小葉=small-leaf	*tipiq wasaw* =small leaf	calque	yes
8	elliptic	橢圓形=oval-round-shape	*tumun* =round	calque, with omission	no
9	solitary	單生=singly-grow	*snkingal* =one by one	calque, with omission	no
10	spherical	球體=ball/sphere-body	*mtumun hnyuwan* =round body shape	calque/adaptation	yes
11	achene	瘦果=thin fruit	*buuc hiyi* =bone fruit	calque/adaptation	yes
12	sepal, calyx	萼管=sepal/calyx tube	*phepah yudun* =flower tube	calque/adaptation	no

Let me first address the issue of Uya's approach. Apart from the abbreviations "cm" and "m" for the metric measurements, there are no loanwords in the entry; actually, *haypa*, from 海拔 (*hǎibá*), the Chinese word for "altitude," is the only ecological or botanical loanword used in the entire thesis (Hung, 2023, p. 2 *et seq.*). Only one word (no. 4), for a kudzu-esque spreading growth habit, is adapted, into *mbiyax bay kndkilan*, "truly strong growth." Eleven terms in the sample are

calqued, but often with an adaptive twist. Two (nos. 5 and 7) count as pure calques. The word for "pinnate" is literally "wing shape" in Chinese, which is translated into basically the same thing in Sediq, as is "leaflet," which is "little leaf" in both Chinese and Sediq. Three (nos. 2, 8, 9) count as partial calques with omission; part of the Chinese term is omitted in the Sediq translation. If the meaning of the omitted part is recoverable in context, then the translation could not be faulted. But in one case, "evergreen" translated into *msama*, which just means "green." Most plants are green, but not all of them are evergreen. The rest (nos. 1, 3, 6, 10, 11, 12) are part calque, part adaptation. For no. 1, there is no word for "petal" in Sediq, or *phpah* is a hypernym from the perspective of Chinese in meaning both "flower" and "petal." So Uya free-associated and came up with "wrapping flower/petals," since the petals of a flower wrap around the pistil and the stamens. For no. 3, the meaning of the first character in the Chinese word for "shrub" is obscure here; I had to look it up in a dictionary, and it turns out that 灌 (*guàn*) means "clumping" in a botanical context. Instead of trying to translate it literally, Uya found a way to characterize a shrub, which is both low and woody. For no. 6, the Chinese for "compound leaf" is translated as *mpdha wasaw*, where *mpdha* means "to be in twos"—*dha* is "two"—and, by extension, "in multiples," and *wasaw* means "leaf." For no. 10, the word for "spherical" is literally "ball/sphere body" in Chinese, while it means "round body shape" in Sediq. Uya chose a Sediq word *mtumun*, "to be round," over a loanword *boru*, from the Japanese word for "ball." For no. 11, a spherical fruit is obviously not "thin," the literal meaning of the first character in the Chinese for "achene," so Uya described the fruit as like a bone, which, outside a body, is dry. For no. 12, *phpah* is "flower," not specifically "calyx," and *yudun*, "tube," is a literal translation from the Chinese.

Beyond the translation approach, I also looked for consistency. Eight of 12 translations are consistent throughout the thesis; I did not count misspellings like *mblebu* (for *mplebu*) or *yuyun* (for *yudun*) as inconsistency. For instance, petals are translated the same way all 36 times they are mentioned in the thesis. That leaves four of 12 translations that were inconsistent throughout the thesis. Roughly a third of Uya's term translations have not stabilized.

In comparison to *Sediq Ethnic Plants*, the level of terminological detail in Uya's thesis is truly impressive. From *Sediq Ethnic Plants*, I extracted 68 Sediq translations of Chinese terms covering ecology and botany and, from the thesis, 268 Sediq translations of Chinese

botanical terms (see Appendix 2, p. 2). In *Sediq Ethnic Plants*, the paperbark mulberry is described as "dioecious" (Pering *et al*., 2017, p. 168), where male and female flowers are borne on different individual plants. In an entry on a type of magnolia in his thesis, Uya distinguishes between "dioecy" and "monoecy," where the same plant has male flowers and female flowers (Hung, 2023, p. 141), and in the entry on heart leaf mistletoe he broaches "synoecy" (*ibid*., p. 131), where individual flowers are hermaphroditic. Botanists recognize other possibilities, but Uya's distinctions in Sediq between dioecy, monoecy, and synoecy go well beyond a layperson's knowledge.

Conclusion

This article has outlined how Uya became a specialized translator through an account of his lives and times. In the terms of Giddens' structuration theory, Uya developed his agency over the course of different "lives"—as a boy who lived a traditional lifestyle of hunting, gathering, and planting that was soon to be lost, as a student who learned independence at boarding school, as a bureaucrat who supervised the formulation, implementation, and evaluation of the language-pedagogy part of the Indigenous policy, as the director of an ecotourism association, and as a specialized translator. Over the past decade and a half, Uya has cast himself in the role of an agent of cultural documentation, but in my view he is also an agent of linguistic development. When he was growing up, his linguistic agency was structured by Sediq as it was spoken in the 1950s in his home village. Now, as an elder, he uses his linguistic agency to restructure his native language every time he comes up with a neologism. Before Uya came along, there was no way to say "stipule" in Sediq without code-switching into Chinese. Now you can say *mdayaw wasaw*, "helping leaf," and Sediq speakers who know their plants will know what you are talking about.

As for Uya's approach to translation, he is a realist or a compromiser, not a purist, in that he mostly makes use of calques. Given the number of loanwords that Kuusi *et al*. (2022, p. 133) found and discussed (in terms of borrowing) in the data from the Karelian language exercise they supervised, the lack of loanwords in Uya's translation needs explanation. A sociolinguistic explanation would be that since young Sediq people can guess the Chinese when they see a loanword like *haypa* and tend to just code-switch, it is better to avoid borrowing. What about calquing versus adaptation? My hypothesis

is that if there was an obvious way to calque, Uya calqued; otherwise, he adapted. It is important to note that, due to linguistic gaps in a minority language, perfect calques can be impossible, and part of the word has to be adapted. Kuusi *et al*. do not discuss the issue of borderline cases. This may be a function of the language pair I have discussed in this article, but it definitely deserves further investigation in different contexts, in and beyond Taiwan. It may also be a function of the simplicity of my typology, but then simplicity can be regarded as a feature, not a bug.

As for the desirability of calquing, there is a prescriptivist case to be made for it in a language revitalization context. Calques harness what language learners already know. Learning the Sediq word for "volcano" is easier if it is "fire mountain," the same as in Chinese, without the complication of the added "explosion." Learning technical terms in the language involves another complication. To learn how to say "stipule" in Sediq, one has to know what it refers to first. But as soon as one knows the Chinese, then learning the Sediq is easier if it is a calque. Once you know 托葉 (*tuōyè*), literally "supporting leaf," then it is easier to learn *mdayaw wasaw*, literally "helping leaf." Calques are like stipules in that they help linguistic knowledge to grow. Beyond being pedagogically justifiable, I think partial calques like "helping leaf" are clever. I do not think calques like this deserve to be dismissed as the "unconscious imbibing" of a dominant language (Cronin, 2003, p. 141), as though minority-language translators do not know what they are doing.

Ultimately, it is more important that minority-language translators continue to translate than how they go about it. The "how" will take care of itself, as long as Uya and his colleagues keep translating and communicating. Their future work may confirm the two trends identified in my literature review: adaptations replacing loanwords or calques, and different translations of the same term being used in different dialects. In any event, I will continue documenting the "linguistic creativity" and "play" that Sediq translators demonstrate (Gruda *et al*., 2023, p. 1; Peterson and Webster, 2013, p. 93). I will also watch out for "language ideologies" (Peterson and Webster, 2013) that place as much emphasis on developing the language as on recording it, though any time spent ideologizing is time not spent playing and creating.

Alas, I have not been able to document any linguistic effects in Uya's case. Has Uya missed the mark? One detail of the sun-slayer myth (Ogawa and Asai, 1935, pp. 566-568), which exemplifies Sediq heroism, deserves mention in this context. The shooting of the extra sun was regarded as a long-term, collective effort. The man who set out to shoot the sun was not the one who did the deed. It was his son, who was a baby boy in a sling when his father set out, a man when he shot down the second sun, and an elder when he returned, like Rip Van Winkle, to a village where nobody recognized him but everyone remembered him. Uya might not live to see the spread of "helping leaf" through the language community, but his children, and his children's children, could.

Despite these uncertainties, the Taiwanese experience, at least in Uya's part of the country, could be a model for other settler societies to follow, in the balance that has been struck between agency and structure. The Taiwanese model allows minority-language translators to pursue projects based on their pastimes and passions, yielding Sediq translations of terms like "petiole." Specialized translators of minority languages in Taiwan benefit from central and local government support that gives them a place to work, in a language promotion office, and funding for publications like *Sediq Ethnic Plants*. They also have access to "empowering" translation seminars, like the ones Koskinen and Kuusi have been offering in Finland. Finally, the Sediq translation community benefits from an innovative master's program, which they helped develop. With support from the central government, Providence University has managed to put together a linguistically and culturally meaningful program that is financially viable. At the time of writing, it has produced five bilingual master's theses in Sediq and Chinese, but many more are on the way. Uya Pawan has enrolled in a doctoral program at the same university. Uya's heroic journey, it turns out, is not over yet, nor is the story of language development in Indigenous minority communities in Taiwan. If one thing is certain, it is that specialized translation will be part of this story going forward.

Online Appendices

Appendix 1 (Interview). Available at: https://tinyurl.com/5deupd3d [consulted 7 August 2025].

Appendix 2 (Thesis). Available at: https://tinyurl.com/5y8far9y [consulted 7 August 2025].

References

Alberts, Mariëtta (1997). "Legal Terminology in African Languages." *Lexicos*, 7, pp. 179-191.

Berman, Antoine (2009 [1995]). *Toward a Translation Criticism: John Donne*. Trans. Francoise Massardier-Kenney. Kent, Kent State University Press.

Branchadell, Albert and Lowell Margaret West, eds. (2005). *Less Translated Languages*. Amsterdam, John Benjamins Publishing.

Chen, Janet Y. (2012). *The Sounds of Mandarin: Learning to Speak a National Language in China and Taiwan, 1913-1960*. New York, Columbia University Press.

Chesterman, Andrew (2009). "The Name and Nature of Translator Studies." *HERMES: Journal of Language and Communication in Business*, 22, 42, pp. 13-22.

Chien, Yuehchen and Shinji Sanada (2010). "Yilan Creole in Taiwan." *Journal of Pidgin and Creole Languages*, 25, 2, pp. 350-357.

Cronin, Michael A. (2003). *Translation and Globalization*. New York and London, Routledge.

Dlodlo, Tembla S. (2022). "Translating Scientific Terms Across European and African Languages: Physics in Nguni II." *WINHEC: International Journal of Indigenous Education Scholarship*, 16, 1, pp. 91-112.

Dorian, Nancy C. (1994). "Purism vs. Compromise in Language Revitalization and Language Revival." *Language in Society*, 23, 4, pp. 479-494.

Dupré, Jean-François (2019). "Taiwan's Indigenous Languages Development Act: Democratic Politics, Transitional Justice and the Quest for Diplomatic Recognition." *Journal of Multilingual and Multicultural Development*, 40, 8, pp. 652-664. Available at: 10.1080/01434632.2018.1543690 [consulted 7 August 2025].

Folaron, Debbie (2015). "Introduction: Translation and Minority, Lesser-Used and Lesser-Translated Languages and Cultures." *JoSTrans : The Journal of Specialised Translation*, 24, pp. 16-27.

Giddens, Anthony (1984). *The Constitution of Society: Outline of the Theory of Structuration*. Cambridge, Polity Press.

Gruda, Szymon *et al.* (2023). "Lexical Creativity in Modern Nahuatl: An Analysis of Multidialectal Data." *Lingua*, 285, pp. 1-26.

Hung, Liang-chuan [洪良全 (Uya Pawan)] (2023). "A Study on Toda Communities' Plants of Sediq People." Master's thesis, Providence University. Unpublished. Available at: https://hdl.handle.net/11296/c85g59 [consulted 7 August 2025].

Iso-Ahola, Riikka (2017). "Literary Translators as Revitalisers of an Endangered Language." *trans-kom: Zeitschrift für Translationswissenschaft und Fachkommunikation*, 10, 2, pp. 164-187.

Kaindl, Klaus *et al.*, eds. (2021). *Literary Translator Studies*. Amsterdam, John Benjamins Publishing.

Kasprzak, Wojciech (2011). *Translating Nature Terminology.* Newcastle upon Tyne, Cambridge Scholars.

Kinnunen, Tuija and Kaisa Koskinen, eds. (2010). *Translators' Agency*. Tampere, Tampere University Press.

Koskinen, Kaisa and Päivi Kuusi (2017). "Translator Training for Language Activists: Agency and Empowerment of Minority Language Translators." *trans-kom: Zeitschrift für Translationswissenschaft und Fachkommunikation*, 10, 2, pp. 188-213.

Kuusi, Päivi *et al.* (2022). "Translating into an Endangered Language: Filling in Lexical Gaps as Language Making." *International Journal of the Sociology of Language*, 274, pp. 133-160.

Meylaerts, Reine (2013). "The Multiple Lives of Translators." *TTR*, 26, 2, pp. 103-128.

Ministry of Justice (2017). Indigenous Languages Development Act. Available at: https://law.moj.gov.tw/ENG/LawClass/LawAll.aspx?pcode=D0130037 [consulted 7 August 2025].

Myers-Scotton, Carol (1992). "Codeswitching as a Mechanism of Deep Borrowing, Language Shift, and Language Death." In Matthias Brenzinger, ed. *Language Death: Factual and Theoretical Explorations with Special Reference to East Africa*. Berlin, De Gruyter Mouton, pp. 31-58.

Pering, Iwan *et al.* (2017). 賽德克族(*Tgdaya/Truku/Toda*)民族植物 [*Seediq/Seejiq/Sediq* (*Tgdaya/Truku/Toda dialects*) *Ethnic Plants*]. Nantou, Nantou County Government.

Ogawa, Naoyoshi and Erin Asai (1935). *Gengo ni yoru Taiwan Takasago-zoku densutsu-shū, VII* [*The Myths and Traditions of the Formosan Native Tribes, VII*]. Taihoku [Taipei], Teikoku Daigaku Gengo-gaku Kenkyu-shitsu.

Pasch, Timothy (2015). "Towards the Enhancement of Arctic Digital Industries: 'Translating' Cultural Content to New Media Platforms." *The Journal of Specialised Translation*, 24, pp. 187-213.

Peterson, Leighton C. and Anthony K. Webster (2013). "Speech Play and Language Ideologies in Navajo Terminology Development." *Pragmatics*, 23, 1, pp. 93-116.

Prieto Ramos, Fernando and Diego Guzmán (2024). "The Impact of Specialised Translator Training and Professional Experience on Legal Translation Quality Assurance: An Empirical Study of Revision Performance." *The Interpreter and Translator Trainer*, 18, 2, pp. 313-337.

Pym, Anthony *et al.*, eds. (2008). *Beyond Descriptive Translation Studies: Investigations in Homage to Gideon Toury*. Amsterdam, John Benjamins Publishing.

Rogers, Margaret (2015). *Specialised Translation: Shedding the 'Non-Literary' Tag*. London, Palgrave Macmillan.

Romain, Sandra J. (2017). "'We Don't Have the Words in Inuktitut': Pharmacy Translations in Nunavut, Canada." *Cogent Social Sciences*, 3, 1, pp. 1-15.

Scarpa, Federica (2020). *Research and Professional Practice in Specialised Translation*. London, Palgrave McMillan.

Simeoni, Daniel (1995). "Translating and Studying Translation: The View from the Agent." *Meta*, 40, 3, pp. 445-460.

Simeoni, Daniel (1998). "The Pivotal Status of the Translator's Habitus." *Target*, 10, 1, pp. 1-39.

Simon, Scott E. (2023). *Truly Human: Indigeneity and Indigenous Resurgence on Formosa*. Toronto, Toronto University Press.

Sterk, Darryl C. (2020). *Indigenous Cultural Translation: A Thick Description of Seediq Bale*. Abingdon, Routledge.

Sterk, Darryl C. (2021). "Ecologising Seediq: Towards an Ecology of an Endangered Indigenous Language from Taiwan." *International Journal of Taiwan Studies*, 4, 1, pp. 54-71.

Sterk, Darryl C. (2024). "A Double-Edged Sword: Indigenous Translation Under Colonisation in Taiwan." In Ruselle Meade *et al*., eds. *Routledge Handbook of East Asian Translation*. New York and London, Routledge, pp. 67-83.

Sterk, Darryl C. (2025a). "The Role of the Insider Translator in Conservation and Development: Comparing Multilingual (Auto)Ethnobotanical Books from Tanzania, Thailand, and Taiwan." *Multilingua*, 44, 2, pp. 153-180.

Sterk, Darryl C. (2025b). "After the Fairy Tale Ends: Towards an Ecological Account of the Translation of Traditional Ecological Knowledge." *The Translator*, 31, 3, pp. 309-322.

Tipton, Rebecca (2019). "Structuration Theory." In Mona Baker and Gabriela Saldanha, eds. *Routledge Encyclopedia of Translation Studies*. 3rd ed. Abingdon and New York, Routledge, pp. 545-549.

Turner, Nancy J. (2014). *Ancient Pathways, Ancestral Knowledge. Ethnobotany and Ecological Wisdom of Indigenous Peoples of Northwestern North America*. Montreal, McGill-Queen's University Press.

Wolf, Michaela and Alexandra Fukari (2008). *Constructing a Sociology of Translation*. Amsterdam, John Benjamins Publishing.

Wright, David C. (2000). *Translating Science: The Transmission of Western Chemistry into Late Imperial China, 1840-1900*. Leiden, Brill.

Zhang, He (2018). "The Symbol of Spread of Modern Western Botany into China: *Chih-wu hsüeh*, An Unconventional Translation in the Late Qing Dynasty." *Protein and Cell*, 9, 6, pp. 511-515.

Zhang, Wenqian (2023). "Constructing the Literary Translator as a Brand: Methodological Considerations." *Translation in Society*, 2, 2, pp. 123-145.

Zuckerman, Ghil'ad (2020). *Revivalistics: From the Genesis of Israeli to Language Reclamation in Australia and Beyond*. Oxford, Oxford University Press.