

ARTICLE



Online videos for self-directed second language learning

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Abstract

Recent years have seen an explosion in video content available online. Yet there is relatively scant research on if, how, and why second language (L2) learners engage with videos in their target language as part of their self-directed study—especially for languages with a smaller media footprint. This paper presents qualitative findings from a longitudinal study of the self-directed study behaviours, collected through learning diaries and stimulated recall interviews, of eight intermediate-advanced learners of Auslan (Australia Sign Language) enrolled at an Australian higher education provider. Findings show that our participants were sporadic video watchers, who largely relied on YouTube and social media for discovering Auslan content. The lack of an Auslan media industry means that online texts were often dry informational texts or user-generated content of varied quality and this negatively affected some participants motivation for watching. However, when they made time to engage with it, participants proved themselves to be highly strategic L2 viewers, who used a sophisticated range of approaches in comprehending linguistically demanding content.

Keywords: *Sign Language, Videos, Extensive Viewing, Learning Beyond the Classroom (LBC)*

Language(s) Learned in This Study: *Auslan (Australian Sign Language)*

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Introduction

Kozar and Benson (2016) note that the field of language learning and technology is increasingly concerned with exploring the ways in which learners (and teachers) draw on digital technologies that were not designed explicitly for language learning. YouTube and other platforms dedicated to hosting user-generated video content are one such technology that has radically altered the type and amount of video materials potentially accessible to second language (L2) learners. This effect is particularly marked for less commonly taught languages (Terantino, 2011), where foreign language learners may have previously had few to no opportunities to engage with target language media; either because mass-media L2 content was not readily available where they live or there was no large-scale industry producing content in that language. While English remains an undoubtedly prominent language on YouTube, the platform is deeply multilingual. Surveying the 250,000 most active YouTube channels at the time, the Pew Centre found that 67% of those that uploaded videos in the first week of 2019 did so exclusively in languages other than English, while a further 5% used a mix of languages including English (van Kessel et al., 2019).

Video sharing platforms are undoubtedly a high-potential resource for L2 learning, yet few researchers have examined how learners engage with these resources—and none have done so where the L2 is a sign language. Exploring the ways these technologies are used is important, because “although technology has the potential to facilitate LBC [learning beyond the classroom], it does not necessarily do so” (Reinders & Benson, 2017, p. 569). There are many factors, including the type of videos selected and the way that learners engage with them, that affect the efficacy of video watching as an L2 learning strategy. In this article, the focus is on the engagement of eight classroom learners of Auslan (Australian Sign Language)

with video resources watched as part of self-directed study (i.e., not as homework/assessment requirements). Video content is especially important for sign language learners because sign languages are visual languages with no written forms. Videos thus perform roles in sign languages that might be filled by written texts (or audio-only media) in other languages. However, with the increasing ubiquity of video online it is clear that the experience of sign language learners watching videos online will have parallels with the experience of many learners of spoken languages. This article asks:

1. To what extent are learners engaging with video content as part of their self-directed study of Auslan?
2. What types of content do they watch and why?
3. What strategies do they use for making linguistically demanding content intelligible to them?

In answering these questions, we seek to contribute to the growing literature on sign language L2 learning, as well as to wider research on videos—and particularly user-generated video content—as a resource for self-directed L2 learning.

Our study does not limit itself to smartphone use, but we note that smartphones are an increasingly important way that students access L2 videos outside the classroom. Already in 2012, Kukulska-Hulme noted that the growing uptake of mobile phones was allowing students to undertake informal L2 practice in a range of settings beyond the classroom. Some learners in Kukulska-Hulme's (2012) study had developed clear routines around when and how they undertook mobile-based language study (e.g., commuting to work, late at night) while others were much more spontaneous in undertaking short bursts of L2 study to fill dead time or whenever the mood took them. These observations inspired us to explore in this article the circumstances under which learners engage with L2 videos and if/how the growth of social media in the ensuing years might be mediating both the content students watch and the patterns of when they engage with L2 videos.

Extensive Viewing and L2 Learning

The L2 literature for learners has long discussed the design and benefits of extensive reading programs as a supplement to classroom language instruction (see e.g., Nation, 2013). In the last 20 years we have seen an increasing focus on the benefits of extensive viewing, which Webb (2015) defines as “regular silent uninterrupted viewing of L2 television inside and outside of the classroom” (p. 159). In the current day and age, this definition can be extended to encompass all video content, while noting Webb's observations that texts with “shorter running times... [that allow] the development of background knowledge through viewing different episodes of one program” (2015, p. 160) are likely to be particularly suitable. Despite the clear relevance of extensive viewing for sign language learners, we believe this article is the first academic foray into the topic. In the rest of this section, we focus on studies where both L1 and L2 are spoken languages, while the subsequent section of the article discusses issues specific to the sign language context.

Extensive viewing confers a range of benefits for language learning. Perhaps most marked is the attractiveness of video viewing to learners and its potential to increase their exposure to the L2. As with extensive reading, learners can stay motivated by choosing content that matches their personal interest and language level, and benefit from exposure to large quantities of comprehensible input, including low-frequency words and less commonly used grammatical structures (Nation, 2013; Webb, 2011, 2015). Extensive viewing provides learners access to a range of accents, listening conditions and types of speakers/signers that they are unlikely to encounter in the classroom (Lai, 2015; Vanderplank, 2016; Yang, 2020). Moreover, the audio-visual nature of the media may assist the viewer to make sense of unfamiliar vocabulary (Rodgers, 2018). Video materials also provide a window on to culture and interaction patterns in the L2, and the plots of dramas may further allow learners to gain insights into important social issues in the L2 community (Wang, 2012; Yang, 2020). Above all else, learners often report watching L2 videos to be an entertaining way to connect with their L2 (Lai, 2015). The free-form nature of extensive viewing makes it challenging to quantify its effect on language learning, but findings suggest that engaging in

extensive viewing correlates with higher scores on vocabulary tests (Peters, 2018), and listening and reading proficiency (Lindgren & Muñoz, 2013), but also that incidental learning is higher if core vocabulary items are pre-taught prior to students watching a video (Pujadas & Muñoz, 2019).

While videos can provide linguistically rich, authentic texts, there is the risk that learners will not have the necessary L2 skills to make sense of the input (Guillory, 1998), and that possible negative experiences will turn them off L2 viewing for good (Webb, 2015). Captioning and subtitling here can aid comprehensibility. While the terms are sometimes used interchangeably by laypeople, in the literature, captioning refers to a written representation of what was spoken in the same language, whereas subtitling is a translation of what was spoken/signed into a different written language. Subtitling is the only option available for sign language content. Impressionistically, learners often remark that they feel watching captioned and subtitled L2 content helps improve their L2 development (see e.g., Lai, 2015; Yang, 2020). Experimental studies on the impact of captions or subtitles on learners' comprehension or vocabulary learning when watching specific videos in class returned more mixed results. Reviewing the research, Pujadas and Muñoz (2019) found that both captions and subtitles increase comprehension compared to no support, but captions are often more effective. Yang (2020) suggests this is because captions facilitate more efficient processing: the aural input and written captions match and help learners to recover meaning through these multiple channels. Subtitling, by contrast, adds an interpretive step, since the words on screen do not match what is heard. However, if the learners' language skills are well below the demands of the video, subtitling remains the more effective strategy for boosting comprehension (Bianchi & Ciabattini, 2008, cited in Pujadas & Muñoz 2019).

In much of the experimental work on the efficacy of videos in L2 teaching, there is a focus on videos selected for one-off playing in language classrooms. However, this varies considerably from the ways learners engage with television/videos outside the classroom context. Many learners appear to approach L2 viewing as a largely recreational activity undertaken in the same manner to L1 viewing (Lai, 2015; Vanderplank, 2016). But this is not the only option. Vanderplank (2019) discusses the watching behaviour of 36 students watching captioned L2 films made available for their recreational viewing over the course of 6–12 weeks. He found that around one third of students approached the task by essentially letting the film run, with very occasional pauses or rewinds for difficult dialogue. Around half of the participants also started out watching unstrategically, but over time changed their behaviour to make greater use of features such as noting down/looking up unfamiliar vocabulary, rewatching difficult scenes, switching to English subtitles to check/boost comprehension, or paying attention to structural information (such as the gender of nouns) that becomes more obvious in the caption (where the fast pace of speech can make these features harder for novice listeners to discern). The remaining participants in Vanderplank's study were highly strategic viewers from the beginning. Students in this group were experienced language learners who had longstanding experience using videos as language learning resources and made viewing choices carefully based on both their interests and caption quality.

Wang (2012) presents a further case study of the recreational watching behaviour of five language teachers in China who were avid fans of English language dramas who reported numerous deliberate viewing strategies. Chief among them was a repeat viewing strategy, where an episode or series was first watched with subtitles in Chinese to understand the plot, then with English captions and finally with just the audio to see how much they could still follow. Like Vanderplank's more strategic learners, Wang's (2012) participants frequently took notes of new vocabulary. Additionally, they often paused to imitate pronunciation and intonation, as well as actively participated in informal online language study groups established by fans of these dramas. When taken together, Wang and Vanderplank's studies demonstrate that L2 viewing absolutely need not be a passive or 'submersive' learning experience. However, not all students will intuitively grasp the affordances offered by L2 video content and may benefit from explicit direction from teachers about how best to approach L2 viewing.

The discussion so far has largely assumed that learners are viewing mass-media products. But user-generated content on platforms such as YouTube provides additional affordances for language learning.

Traditional television viewing is a largely passive experience without the opportunity to interact in the target language or negotiate meaning. However, YouTube features such as commenting, sharing and producing one's own texts are decidedly more interactive. Benson (2017) gives an excellent discussion of how the affordances of YouTube can be used for spoken L2 learning, however signed L2 present somewhat different challenges and opportunities. While Benson notes that YouTube comments are an avenue for L2 expressive practice in written languages, this does not hold for sign languages, since comments must be text-based rather than videos. What we do see instead is YouTube (and also Facebook) sign language videos serving communicative roles that would be used by text-based social media posts in a spoken language—for example, as a way to ask a question to a group or give information about an upcoming event. Videos of this nature blur the line between public and private texts (and indeed between conversational and media texts) and potentially allow learners to 'eavesdrop' on social media conversations between deaf¹ people in ways that have been historically difficult to do—since communication between signers used to require people to be physically co-present. Even if learners do not actively participate in conversations, these sorts of exchanges seem to have high potential for the sorts of language and culture learning that Benson (2017) describes as emerging from YouTube comments discourse.

The issue of producing one's own texts for public consumption is also somewhat fraught for Auslan learners. In recent years, there has been an explosion of hearing sign language learners producing (often poorly signed) videos purporting to translate pop songs or teach sign language vocabulary. This genre has been roundly critiqued as a form of cultural appropriation (see e.g., Handspeak.com, n.d.; Lloyd, 2020), and has led to more general advice to learners that part of being a good ally is neither seeking the limelight online, nor asking questions that might be seen as challenging the quality of a deaf person's signing (De Meulder, 2019; Snoddon, 2018). In practice, learners may well decide that the safest course of action is to not post videos at all in these public contexts.

Auslan Learners and Video Options

Sign languages are visual-spatial natural languages used by deaf people and their family and allies. In recent years, there has been strong growth internationally in the number of hearing students studying sign languages as an L2, and concomitant growth in SLA research on the experiences and acquisition trends of this learner group (for an overview of the field, see e.g., McKee et al., 2014, and Rosen, 2019). As we have discussed in a previous study on hearing L2 signers (Willoughby & Sell, 2019), there are a number of parallels in learning an L2 regardless of whether the modality is spoken or signed. However, our literature review on hearing L2 signers identifies the following as particular challenges for hearing students learning to sign for the first time:

- Development of requisite perceptual and motor skills to produce/perceive signs (including the linguistic meaning ascribed to subtle differences in the use of space/motion)
- Internalisation of new communicative norms (e.g., around eye contact)
- Coping with high levels of sociolinguistic variation (Willoughby & Sell, 2019)

Watching videos of fluent signers is a widely used pedagogical tool in L2 signing classroom, which seems particularly suited for helping students develop their perceptual skills and familiarity with sociolinguistic variation. Our prior research on out-of-class Auslan study at Melbourne Polytechnic found that video-watching was the second most frequently reported study behaviour, trailing only conversing with other hearing students of Auslan (Willoughby & Sell, 2019). This inspired us to dig deeper into watching behaviours in the current study. In that study, we found that higher level students reported greater engagement with videos than those at lower levels, leading us to anticipate that engagement with videos might increase over time for students in our longitudinal study. Notably, given the discussion of cultural appropriation above, we also found less than 1% of participants were creating their own Auslan content for YouTube—which accords with our impression that teachers at our provider are socialising students that this is unacceptable behaviour.

As noted, this study focuses on the experience of students studying Auslan. Together with New Zealand Sign Language (NZSL), Auslan is descended from British Sign Language (BSL). To this day, the three languages retain a high degree of grammatical similarity and common lexical items (Schembri et al., 2010), meaning that fluent signers can often understand texts produced in any of these languages, and thus that Auslan students may also access BSL and NZSL media as study resources. However, Auslan (and NZSL/BSL) also has high levels of internal sociolinguistic variation based around factors such as age, region, and people's connection to specific schools for the deaf (Johnston & Schembri, 2007; Schembri et al., 2010). An individual's signing style may also be influenced by factors such as their level of exposure to invented signed systems (e.g., Signed English), grammatical transfer from English, and/or the presence of an additional disability (e.g., the preference of deafblind signers for certain signs that are easier to distinguish by touch) (Johnston & Schembri, 2007; Kusters, 2019; Willoughby et al., 2020). Collectively, this means there is great diversity in the ways Auslan is used by Australian deaf people, and a key challenge for Auslan teachers is helping students to negotiate this plurality.

While Auslan, BSL, and NZSL have a degree of mutual comprehensibility, the same cannot be said for these languages and American Sign Language (ASL). The affordances of the visual modality for language has led to a number of shared grammatical properties across sign languages (Sandler & Lillo-Martin, 2006), however, unrelated sign languages will have very different lexical terms, and one could not expect an Auslan signer to follow discourse in ASL without prior knowledge of the language. This is important to the current study, because ASL has an outsized media footprint: a search of "ASL sign language" in June 2020 yielded 3.5 million hits on YouTube and 4.4 million videos through Google. By contrast, a similar search of "Auslan" yielded only 19,200 YouTube hits and 87,000 Google videos². This highlights the relative paucity of media available to Auslan learners and somewhat explains the interest in videos in other sign languages that we will explore in our data.

While there is a cottage industry producing content targeted at adult beginner Auslan learners, few (if any) commercially produced resources go beyond CEFR A2 level³. More advanced learners—such as the participants in our study—must thus make do with a mix of videos designed for other audiences/purposes. For example, announcement stories for children (either L1 or L2 signers) or interpreted events aimed at adult native signers. Relatively few producers make creative/entertainment-focused content for adults in Auslan, meaning Auslan learners have relatively limited options for following their own interests, or seeking L2 entertainment in online videos. Auslan interpreting is also not routinely incorporated into Australian news bulletins or other commercially produced television programs⁴, further limiting the currency and availability of Auslan video resources. Yet despite these limitations, the availability of video resources online represents an enormous advance on the handful of commercially available DVDs or VHS cassettes that were learners' only video options 20 years ago.

Methodology

Data for this article comes from a longitudinal study with eight classroom learners of Auslan, completed iteratively over a 12-month period as part of a wider Australian Research Council Linkage Project exploring the teaching and learning of Auslan⁵. Each data collection cycle involved participants keeping a week-long learning diary of their use of Auslan outside the classroom, followed by a stimulated recall interview (Gass & Mackey, 2016). The learners were all L2 signers studying in an intensive Auslan program at Melbourne Polytechnic (equivalent to a community college), where full-time students have around 20 contact hours a week of language teaching. The program is structured around four courses that each run for six months full-time and are designed to be taken in sequence from beginner to advanced proficiency: Certificates II, III and IV, and Diploma. However, as each Certificate/Diploma is a free-standing course, many students elect to leave before Diploma level⁶. This proved challenging for a longitudinal study tracing students' engagement with out-of-class study resources over multiple course levels.

Participants

The study initially recruited participants from the Certificate III level and asked them to participate in three data collection cycles over a 12-month period of enrolment in the program. Six participants were retained through all cycles from this cohort. Additionally, one student each at Certificate II and IV volunteered to participate. Both completed all three cycles of data collection: the Certificate II student over twelve months and the Certificate IV student over eight months, which took them to the end of their Diploma.

Table 1

Key Participant Characteristics

Name	Gender	Prior education	Prior formal L2 study ^a	Study Mode	Starting level	End level
Gus	Male	Bachelor	Moderate	Part-time	C III	C IV
Kim	Agender	Bachelor	Extensive	Full-time	C IV	Dip
May	Female	TAFE certificate	Extensive	Full-time	C II	C IV
Oli	Non-binary	TAFE certificate	None	Full-time	C III	Dip
Peg	Female	Master	Moderate	Part-time	C III	C IV
Rob	Male	High school diploma	Moderate	Part-time	C III	C IV
Tom	Male	Bachelor	Extensive	Full-time	C III	Dip
Zoe	Female	Bachelor	Extensive	Full-time	C III	Dip

Note. C II, C III and C IV are the abbreviations of Certificates II, III and IV respectively. Dip is Diploma.

^aL2 study of between 1–2 years categorised as minimal, 3–5 years as moderate and 6+ years as extensive.

The Auslan courses that students were enrolled in have no entry requirements and are fully government-funded for Australian citizens or permanent residents. As such, they attract a diverse student cohort, reflected in the participants (Table 1). The participants encompassed men (4), women (2), and non-binary/agender individuals (2), whose prior education ranged from high school diploma to Masters level. Three were studying part-time and five full-time, but all were working alongside their study. Their prior experience of formal L2 study also varied dramatically, from none to university-level. One student (Gus) was hard of hearing and another (Rob) had an acquired disability that affects his speech. While forming a highly disparate group, participants shared the experience of studying Auslan at the same provider, and all reached the Certificate IV or Diploma level by the end of the research. At the start of our longitudinal study, Tom, Oli, May, Kim, and Zoe had already decided to pursue careers as Auslan interpreters, while Peg, Rob, and Gus were considering other avenues for utilising Auslan in their careers. All were highly committed language learners, and the diversity of the group provides a window for exploring how different social identities may affect out-of-class study behaviour.

Data Collection and Analysis

On their recruitment into the study, learners completed the demographic and study behaviour survey outlined in Willoughby and Sell (2019). For each data collection cycle, learners were provided a learning diary template (available at <https://doi.org/10.26180/19100309.v1>) with a full blank page for each day. The

template included a cover page requesting that they fill out the diary each day while their memories were fresh, or to indicate if a given entry was written on a later day. Participants were largely able to record their memories daily. While learners were not provided with categories or specific prompts, the cover page included suggestions of what kinds of things to write about, suggesting that they write about their ‘experience learning Auslan,’ including experiences ‘in class and outside of class,’ and ‘any particular tools, resources, or ways of learning’ they used.

As per Dörnyei’s (2007) recommendations, stimulated recall interviews were held with participants after each diary round to allow them to clarify and elaborate on the diary content and further reflect on their learning (interview template available at <https://doi.org/10.26180/19100309.v1>). The focus of the interviews was clarifying any unclear entries and exploring participants’ rationale and evaluation of the experiences they recorded. The interviews were conducted in English but were video recorded in order to capture any signing produced by participants alongside speech. All participants chose to use Auslan intermittently during at least one of their interviews, typically while discussing particular signs or reflecting on their own communication, so this is an important methodological point for future studies of learning behaviour of sign language L2 learners to bear in mind. Author 2 transcribed both the speech and Auslan components of the interview; cross-checking the Auslan transcription with a NAATI-certified Auslan Interpreter⁷. Transcripts and completed learning diaries were then loaded into Nvivo for thematic analysis and coded by both authors utilising topic coding and analytical coding methods (Richards, 2015) to identify participants use of videos for Auslan learning purposes.

Findings

Overview of Engagement with Video Resources for Self-directed Auslan Study

All of our participants bar Tom reported engaging with online Auslan videos as part of their self-directed study (i.e., not as homework/coursework) in at least one of the three weeks they kept learning dairies for us. In the interviews, all students discussed a range of experiences and strategies for using Auslan videos for self-directed study, suggesting that this was something that they were familiar with—and felt they should be doing—but were finding time for to different degrees and with varied degrees of effectiveness.

Participants fell into two broad groups: those who made minimal use of Auslan videos for self-directed study throughout the research (Gus, May, Peg, Tom) and those who went through at least one phase of regularly watching videos during our data collection cycle (Kim, Oli, Rob, Zoe). None of the demographic factors listed in [Table 1](#) had a clear-cut effect on students’ level of engagement with videos, but there is a pattern that three of the participants who went through video ‘phases’ (Zoe, Oli, and Kim) reported much more extensive video viewing in Diary 1 than in subsequent dairies. We see an example of this in Zoe’s dairies, where over the week of Diary 1 she reported approximately 1h 45m spent watching sign language videos, falling to approximately 30m in the week of Diary 2 and none in Diary 3. Given the small sample number, this may simply be an artefact of the particular weeks chosen for study⁸, but was a surprising finding given that in our previous study students were more likely to self-report Auslan video watching at higher levels of study (Willoughby & Sell, 2019).

The students’ dairies clearly indicate that watching Auslan videos is a study option that exists in competition with other potential uses of students’ time and may not be seen as high priority. All participants worked part- or full-time in addition to their study, and their dairies chronicled their busy lives. These competing pressures have largely escaped research around out-of-class language learning to date (but see Kukulska-Hulme, 2012 as an exception). Yet they are an inevitable reality that participants face and greatly shape their choices. Of course, students retain agency about how they split their time, so we cannot say, for example, that the fact that Tom was working near full-time hours (as well as studying full-time) was the reason that he did not watch any videos in the weeks that he kept a diary for us, but nor does it seem irrelevant. Similarly, the fact that students were studying in a program that—like many sign language programs around the world—stressed the importance of immersion in the deaf⁸ community (see e.g.,

Wilcox & Wilcox, 1997) seems to have shaped participant behaviour. All participants recorded attending multiple deaf/Auslan interpreted events and/or socialising with signing friends during the weeks where they kept their diaries, and clearly prioritised this ‘real life’ Auslan exposure over video watching.

In this context, video viewing was often relegated to the margins of participants’ days: something that was undertaken while commuting (Zoe), unwinding before bed (Kim), or quickly checking social media when one has time to kill during the day (Rob). In the diary study, Kim was the only participant who successfully established a daily routine for video watching (though Rob notably attempted a routine, lasting only a few days). Others were much more spontaneous in what they watched and when, occasionally “fall[ing] down the YouTube rabbit hole” (Oli, Interview 1) and binge-watching numerous videos recommended by the platform, then going days without engaging with further video content. These viewing patterns are quite similar to the wider patterns in out-of-class mobile language learning reported by Kukulska-Hulme (2012) and reflects the fact that much of participants’ spontaneous Auslan viewing took place on their mobile phones. They also somewhat mirror the ways in which audiences increasingly engage with content on streaming platforms such as Netflix (Castro et al., 2021) and demonstrate the ways in which changing patterns and affordances of L1 media consumption are bleeding over in L2 media use.

What Type of Content are Learners Watching – and What do They Get from It?

Auslan learners have minimal access to mass-media products, thus facing a very different media landscape to the learners of major global languages that have been the focus of most studies of out-of-class L2 learning. In this context, it is instructive to explore what type of content our participants access, how they find it, and what benefits they feel they get from this viewing.

Teacher recommendations of specific series have often emerged in the literature of spoken L2 learning as the key hook to engage students in L2 video-watching (see e.g., Lai, 2015). However, in our study these recommendations seemed to play a more peripheral role. While participants sometimes viewed videos for self-directed study because their teachers had mentioned them in class, this was not typically how they discovered new content. Instead, the combined forces of social media feeds and the auto-suggest algorithms of YouTube/Facebook were the major sources of Auslan content. May summed this up in stating that she “do[es]n’t often go looking for the [Auslan] videos, but I find through doing other things I come across them, and one thing leads to another” (Interview 2). Participants’ social media feeds played an important role here, and particularly their membership of Auslan-focused Facebook groups, such as Auslan Matters. As Gus explains below, these groups form a highly valued network for accessing and sharing video content:

There’s a lot of Auslan out there on Facebook, which is really good. So, I’m a member of a lot of the Auslan groups on Facebook. Deaf Community, Auslaners, Deaf Auslan Matters, umm, there’s lots out there. So I certainly use that as a resource.... So lucky nowadays. The internet, and all the video out there in Auslan. It’s– compared to what it was. (Gus, Interview 1)

The Auslan videos posted to Facebook groups were often short informational text (e.g., advertising events) that participants valued for their content but did not treat as major language learning resources. However, participants noted that these groups sometimes became sites of debate among deaf people about issues affecting the community. In these situations, videos emerged that are much more linguistically rich, as Oli explains in more detail:

Yeah, I think that there’s also the fact that videos being made by deaf people for primarily a deaf audience are going to be a lot more geared toward a deaf audience than our teachers. You know, they know that we’re learning, and that we’re students, so they slow down their signing, umm, check for our understanding and so on, whereas I was just watching video, like, raw, umm, plus regional variation, and so it was like ohhh. But, like, it was good. I think that I understood for the most part. Definitely got the gist if not, you know, every single sign or the exact context that was being used. (Oli, Interview 1)

This ability to access authentic signed texts without being physically co-present for the interaction was undoubtedly one of the major motivators for our students in accessing online videos and harks back to the

literature on extensive viewing in spoken L2s, where it is also cast as a highly valuable feature (Lai, 2015; Yang, 2020). This is particularly important given the high levels of variation within Auslan (Johnston & Schembri, 2007; Schembri et al., 2010): witnessing deaf signers expressing their unedited opinions on social media platforms gives learners exposure to aspects of variation (regional, stylistic, socially-conditioned) that may not emerge in casual conversations with deaf friends and is often sanitised out of teaching resources. Given the small and geographically dispersed nature of the Australian deaf community, videos of this nature provide an important (and efficient) window on real life signing practices and variation that are particularly important for students like Oli, who aspire to work as Auslan interpreters.

While social media has greatly expanded the content available to learners, a downside is the variable quality of language modelling in user-generated content. In particular, participants noted the preponderance of videos produced by L2 signers who are poor language models. Rob was especially forceful in his condemnation of these learners:

Please don't do that [post L2 signed videos to YouTube]! I know you've learnt something, you wanna get it out there and you wanna be an interpreter. I understand that sort of thing, but I want like, proper—I sound a bit rude, but proper, like, stuff... I want that stuff to take that on board, and you've gotta filter through so much crap to watch. (Rob, Interview 3)

Learners seeking videos on social media thus must discerningly choose which L2 users to take as models and which to disregard (or understand as modelling a certain style/sociolinguistic identity not appropriate for mainstream use). But, as long as they are aware of the issues, there is a useful learning opportunity embedded in this variation as Zoe illustrates:

When I first started, I couldn't tell whether someone was deaf, or hearing and signing, and whether they were students who had recently started, and now it's very obvious. So I feel like I've developed a skill of spotting that. So that makes me happy. (Zoe, Interview 1)

Alongside the more informal Auslan texts participants encountered on YouTube and Facebook groups, there are an increasing number of public information texts being produced in Auslan (e.g., by disability organisations), as well as recordings of public lectures/events in the deaf community. These resources are often bilingual, with some combination of English voiceover and/or captions alongside the Auslan content. Participants valued these texts because they provide more authoritative language models and access to more formal register, and they were the types of texts most likely to be subjected to the detailed rewatching behaviour we describe in the next section. However, many are quite dry, so there is little entertainment value for these learners in viewing these texts: they are engaged with them strictly as a L2 learning resource rather than for recreation purposes. Rob provides the most strident example of reluctantly viewing these texts, but was not alone in finding the offerings in Auslan somewhat dull:

Just watching videos. Which, for me, I struggled with. Cause like I can't do it. I don't know why just, I can watch things, but if they're boring, it's like "I need to watch it, I need to watch it". It's like watching instruction manual videos it's like, oh just get to the POINT. (Rob, Interview 2)

Writing about New Zealand Sign Language (NZSL) videos online, McKee and McKee (2020) note a similar preponderance of informational over entertainment-focused videos. The deaf people in their study report that they often turn to entertainment-focused content in either British Sign Language (BSL) or American Sign Language (ASL), where the larger signing communities have engendered greater production of high-quality entertainment content. In our study, Peg, Zoe, and Kim all reported at least occasionally watching content in sign languages other than Auslan (particularly BSL) and valued this content especially for illustrating the 'visual grammar' of sign languages (e.g., the use of space, perspective taking, and enactment that are handled in similar ways across sign languages). Zoe epitomises this sentiment in discussing why she watches content in ASL, BSL, and Japanese Sign Language (JSL) alongside Auslan:

I feel like signed languages are all very, very similar, much more so than most spoken languages, and so just picking up different things about how signed languages work, from—it doesn't really matter

what sign language it is. And there's so little Auslan on YouTube. (Zoe, Interview 1)

While there remains a dearth of entertainment-focused resources, informational texts and user-generated content do provide access to a wide range of topics and signing styles. Participants have also shown themselves to be discerning and resourceful viewers, engaging with content of questionable linguistic quality and in other sign languages as well as authoritative Auslan texts. In the following section, we zoom in on their specific viewing behaviours and what this can illustrate about video content as a tool for more deliberate study of L2 features.

Making Sense of Linguistically Demanding Videos

As discussed previously, the relatively limited range of Auslan videos available online means that participants frequently engaged with videos targeted at native signers, and thus above their current language level. In the extensive viewing literature, such content is frequently flagged as potentially problematic, because it can be off-putting for learners due to comprehension difficulties (Webb, 2015; Yang, 2020). But this did not seem to be the experience of our learners. Throughout the interviews we have multiple accounts of learners being highly resilient watchers of texts that they do not entirely grasp. Indeed, we have seen examples of this already with Zoe watching videos across four different sign languages and Oli reporting that they “got the gist” of videos posted online even if not “every single sign or the exact context that was being used.” This resilience may be in part due to the heavy emphasis on immersion in the deaf community used in sign language courses (Wilcox & Wilcox, 1997) with tacit acknowledgement that students will not understand everything in those contexts and that that's ok. The experience of non-understanding, communicative gaps and negotiation of communicative practices across boundaries and modalities is part of deaf people's daily reality (Hodge, 2020) and doubtlessly further reinforces a flexible approach to difficult texts by our learners. It may also be helpful that in most cases in our study learners were looking at relatively short videos, rather than investing the time or effort required to watch a full-length TV show or movie if they are struggling to understand what is going on.

A number of the videos that participants were watching came with subtitles or a consecutive interpreted voice-over in English. These provided an additional pathway to understanding the content, but participants were unanimous that simultaneous input in Auslan and English was confusing and difficult to process. This was especially so for subtitles as simultaneously attending to a visual language and written text is not possible. Below, May outlines her solution to this problem while still benefiting from the English translation:

So, I try and watch the video in Auslan first. I- I usually watch it three times in Auslan, and then if it has captions available, I'll put the captions [i.e., subtitles] on then, and then watch it another three times. And if it has a voice-over I'll turn the volume on then and watch it another three times. So, that's kind of the process, but sometimes you don't have the option. Sometimes it's just, the captions are automatically there, so I'll do the same thing, just try and watch the signing, and not read the text. I find three times, the first time I understand the context, the second time I understand some signs, and the third time I sort of put it together. (May, Interview 2)

This iterative watching behaviour was a hallmark of how all our participants reported engaging with Auslan videos for self-directed study. May's nine times per video may seem extreme and may be an ideal that she does not always meet. But many others discussed rewatching four, five, or even six times per video; in various permutations of subtitles on and off, but always starting without subtitles/voice over if possible. Clearly in Vanderplank's (2019) terms they are highly strategic viewers in this respect. It is also noteworthy that they employ the opposite order to Wang's (2012) participants, who uniformly recommended that one start an L2 TV series with subtitles/captions on to understand the content and take them off over time. Again, this may link to resilience and comfort in non-understanding. But perhaps also at play is the fact that our learners were explicitly framing video watching as an L2 learning exercise, whereas Wang's participants seem at least partially motivated by recreational reasons. It may also simply come down to the degree of difficulty of the texts involved. Peg, for instance, noted that she would normally start with subtitles

off and see what she can understand but “if I look at it and [it’s] completely out of left field, I’ll be like, I’m calling it now, and I’ll play it [the subtitles]” (Interview 1). Others noted that when watching videos as part of preparing their assignments (as distinct to self-directed study), they always started with subtitles on to ensure that they had correctly understood the information. When taken together, these preferences show a complicated interplay worthy of exploration in further studies between the learners’ reason for watching, the difficulty of the specific text, and their subtitling preferences.

In addition to rewatching and adjusting subtitling, another common technique participants noted for negotiating tricky sections was slowing down the playback speed. This technique may be more efficacious for sign language learners than spoken language learners, since slowing down signing does not cause issues such as pitch drop associated with speed changes to audio files. The visual nature of sign languages also means that students can use pause or slow playback to see the detailed phonology of a new sign, whereas spoken language learners must rely on their ears to catch the details of how a new word is pronounced and must infer the mouth movements they themselves will need to make to pronounce this new word. A downside to the visual nature of sign languages though is that the process of discovering the meaning of an unknown sign is not as straightforward as looking up a plausible spelling of a new word in a dictionary (a technique employed by a number of students in Vanderplank, 2019). Rewatching (with or without subtitles) and trying to figure it out themselves was the main technique participants reported for decoding unknown signs, but Oli also mentioned two others. The first was to film themselves producing the sign and then ask a deaf friend or teacher to explain the meaning (either in person or online). The second was to flick through relevant pages of the Johnston (1998) Auslan dictionary, which is ordered by handshape, looking for the sign. While Oli reported “some success” with this method, this was said with a tone of mild incredulity, reflecting the complicated nature of the process and difficulty of dealing with a somewhat dated dictionary.

In sum, though we did not explicitly measure the degree to which learners acquired new vocabulary (or better understanding of grammatical forms/sociolinguistic variation) through their watching behaviour, it is clear from the behaviour reported here that they are focusing on form as well as meaning in their watching. Moreover, participants clearly view time spent watching videos as a valuable way to improve their Auslan skills.

Conclusion

This study has aimed to shed light on the ways in which students of a minoritized and signed L2 navigate the online video landscape available to them and make decisions about what, how, and why to watch as part of self-directed study. Our learners made relatively sporadic use of videos, but nonetheless valued them as learning resources. They principally used their social media feeds and YouTube’s recommendations algorithm to discover Auslan content to watch, with teacher recommendations also playing a small but important role. This contrasts to previous studies, such as Lai (2015), where teacher recommendations seemed to play a much larger role. Whether this difference stems from the different L2s involved (Auslan in our case, English in Lai’s) cannot be answered here, but regardless the findings point to the increased affordances for finding video content that online social networking technology provides and its potential to boost the degree to which learners engage with L2 videos.

Auslan is a minority language without an established media industry and this means the range of videos available to learners is relatively small, with a preponderance of informational and user-generated texts. This makes the experience of “extensive viewing” in Auslan quite different from the possibilities in a major global language (though similar to the experience of many minority languages) and removes much of the learners’ ability to tailor content to their own interests. Perhaps as a result, learners in our study tended to approach sign language video watching quite strategically (Vanderplank, 2019). All reported that they typically watch videos more than once (perhaps turning on subtitles where available) to check/improve their understanding of what was being signed. They were also highly attuned to new vocabulary or regional/stylistic variation in the videos that they watched and commented on the perceived helpfulness of videos for understanding how the language is used outside the classroom. While some aspects of the video

finding and viewing behaviour we observed (such as those around slowing down videos and looking up new words) seem to be specific to the sign language modality, we were struck by the fact that most seem highly transferable to spoken language contexts. It will be interesting to see the results of other studies in coming years in order to disentangle the effects of language modality, size of the speaker/signer base and media industry, as well as learner motivation and proficiency level on viewing behaviour.

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Notes

1. While a convention has emerged of writing Deaf with a capital D when referring to deaf people who sign and their communities and cultures, the distinction between deaf and Deaf is being increasingly problematised (see e.g. Kusters et al., 2017). In this article we follow Kusters et al. (2017) in using ‘deaf’ to encompass people who may make varied use of sign languages as well as other communicative practices in their daily life.
2. The YouTube results are much lower than the 41,000 hits reported by Willoughby and Sell (2019, p. 458) and the 28,000 hits reported by McKee (2017, p. 348). It is unclear whether this is due to alteration to the YouTube search algorithm or a mass migration away from YouTube by Auslan content producers. Either way, it demonstrates the volatility of trends in user-generated content production and distribution that need to be taken into account in studies of learners’ engagement with these materials.
3. For more on these levels see <https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions>.
4. Though it is now routinely provided for press conferences on disasters, and thus has been prominent in Australia in 2020–21 due to the NSW bushfires and the unfolding COVID-19 situation.
5. LP1150101101 awarded to Adam Schembri, Louisa Willoughby, and Cathy Clark, with Melbourne Polytechnic and Expression Australia as partner organisations.
6. For more on the wider project and the Auslan program at Melbourne Polytechnic see Willoughby and Sell (2019).
7. NAATI is the National Accreditation Authority for Translators and Interpreters.
8. It is also possible that ‘diary fatigue’ was a factor in the lower amount of viewing recorded over time. But we note that other types of out-of-class study were extensively recorded across the three data collection cycles, so this seems a less-likely explanation.

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