Special Review Section: Top 21
Multimedia means Engagement
Machine Translation for Games

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Games and multimedia is always one of my favorite issues to put together from a content standpoint. It’s such an enormous emerging market, and the challenges are engaging and easy to understand. And visually, of course, there’s more opportunity than normal — localization doesn’t always lend itself to exciting images, particularly when anyone is waxing philosophical about standards, interoperability, or the more abstract tech concepts of emerging AI.

Since we’re launching a soft and continuing rebrand, we took the visuals especially seriously this time. You’ll likely notice that the issue looks different from the last one, and we hope you’ll like the changes. We’re committed to delivering the same great content we’ve always offered, and expanding on it in new directions — in this issue, for example, we’re starting things off by doing something we’ve never done before: we’ve created a special section reviewing best-localized content. In this case, we’re offering an in-depth look at the 21 best-localized graphic novels of the first 21 years of the 21st century. Individual translators get the kind of credit they deserve, and the issue is bookended by a Takeaway celebrating a few more translators.

Translators, interpreters, tech devotees, project managers, clients, and even the casually curious — we’ve got something for anyone interested in localization, and that’s only going to increase in the coming months.

Katie Botkin
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td>Postediting</td>
</tr>
<tr>
<td>08</td>
<td>NEWS</td>
</tr>
<tr>
<td>08</td>
<td>Featured Reader</td>
</tr>
<tr>
<td>10</td>
<td>Recaps</td>
</tr>
<tr>
<td>19</td>
<td>Calendar</td>
</tr>
<tr>
<td>20</td>
<td>SPECIAL REVIEW SECTION</td>
</tr>
<tr>
<td>20</td>
<td>Top 21 Seth T. Hahne</td>
</tr>
<tr>
<td>44</td>
<td>COLUMN</td>
</tr>
<tr>
<td>44</td>
<td>Demystifying the Office Manager Terena Bell</td>
</tr>
<tr>
<td>46</td>
<td>It’s my Parity and I’ll Cry if I Want To John Tinsley</td>
</tr>
<tr>
<td>48</td>
<td>Patient Centricity in Clinical Trials Christophe Djaouani</td>
</tr>
<tr>
<td>50</td>
<td>Old Words, New Meanings Marco De Pinto</td>
</tr>
<tr>
<td>108</td>
<td>Bursting the Bubble Andrew Morris</td>
</tr>
<tr>
<td>102</td>
<td>Buyers Guide</td>
</tr>
<tr>
<td>52</td>
<td>FOCUS</td>
</tr>
<tr>
<td>52</td>
<td>Chinese Game Challenges: Tencent’s First Attempt at World Domination Ben Wilkinson</td>
</tr>
<tr>
<td>60</td>
<td>The Challenge of Localizing Video Games for Latin American Spanish Marina Ilari</td>
</tr>
<tr>
<td>64</td>
<td>Multimedia means Engagement Jessica Roland</td>
</tr>
<tr>
<td>70</td>
<td>Is Fully Automated Multimedia Localization Possible? Radek Buchlovsky</td>
</tr>
<tr>
<td>75</td>
<td>Machine Translation for Games Yulia Akhulkova</td>
</tr>
<tr>
<td>82</td>
<td>How NMT is Revolutionizing Subtitling Evgeny Matusov</td>
</tr>
<tr>
<td>86</td>
<td>Simple Steps to Improve Game Localization Arle Lommel</td>
</tr>
<tr>
<td>96</td>
<td>INTERPRETING</td>
</tr>
<tr>
<td>96</td>
<td>Remote Interpreting: The New Face of Spoken Language Services Ramadan Breima and Afaf Steiert</td>
</tr>
<tr>
<td>90</td>
<td>TECH</td>
</tr>
<tr>
<td>90</td>
<td>Inter-Language Vector Space Andrzej Żydron</td>
</tr>
</tbody>
</table>
Old Words, New Meanings
Marco De Pinto

Remote Interpreting: The New Face of Spoken Language Services
Ramadan Breima and Afaf Steiert

Simple Steps to Improve Game Localization
Arle Lommel

Chinese Game Challenges: Tencent’s First Attempt at World Domination
Ben Wilkinson

Inter-Language Vector Space
Andrzej Żydron

March | April 2021  | MultiLingual  | 7
Would you introduce yourself?
Anne-Maj van der Meer, training and events director at TAUS.

Where do you live?
Amsterdam, the Netherlands.

How did you get started in this industry?
Well, 15 years ago, I was an English language and culture student at the University of Amsterdam when my father, Jaap van der Meer, started a new company — TAUS. He offered me a part-time job maintaining the website and doing some administrative work. At that time Jaap was also in charge of the program for the LocWorld conferences, and I was invited to help the staff at these events. This was when I first became aware of this amazing global language industry. As I was learning more about the business and the industry, I became more interested in it. I graduated and I was offered a full-time position at TAUS. Over the past 15 years I’ve been active in almost every aspect of TAUS: administration, website development, member services, business development, and organizing events. I’m most “at home” in these last two, as I enjoy talking with people and I love the thrill of organizing things with tight deadlines and putting on a great show that everyone enjoys.

What are you working on now?
As you can imagine, events are not a priority for me at the moment. We organize some virtual events, and of course we hope to be back with in-person conferences soon too — our Massively Multilingual Conference & Expo is scheduled for November 2021. At the same time, TAUS has completed a transformation to a data services company, which made it only a natural step for me to join the business development team and help grow our Data Marketplace. The Data Marketplace is the latest initiative from TAUS, which we launched in November 2020. It’s part of a European Commission-funded project that we work on together with FBK and Translated. The name speaks for itself: it’s a platform for data acquisition and monetization. The Marketplace has lots of data in hundreds of language pairs from TAUS as well as many other external data sellers. My energy goes into expanding this offering and attracting new data sellers to our platform. Over the past years, in all my conversations with MT gurus from various companies, I asked them about data vs algorithms and what is more important. Consistently, I got the answer that the data is the differentiator, as most algorithms are open source and everyone is using the same ones. The data is what defines the quality of the output.

As we all are experiencing, the industry is changing at a rapid pace, only made more evident through the global COVID pandemic. We cannot deny machine learning and AI applications...
“It’s a good source of information: you can read more about the latest research, innovations, and releases. If you’re new to this industry, MultiLingual magazine is a great start.”

anymore. And if you’re adopting these applications, data is now more important than ever. Our old business models are no longer sustainable. With the Data Marketplace, we open the black box, so to speak, and put the “data keepers” in the spotlight. By data keepers, we mean translators and (small) translation agencies. They are the ones who keep the data in optima forma. The Data Marketplace offers a new way for these data keepers to not only gain recognition for their hard work, but also to earn money from their historical or stock data.

The industry started a transformation in 2020, which accelerated even more at the end of the year, and now it’s time to execute on all these changes. I think 2021 is going to be an exciting year!

What language(s) do you speak?
I speak Dutch and English. I’m also quite okay in German. One of my Corona-times goals is to learn more. I’m currently trying to master Italian and improving my German. And I love “collecting” words and phrases in many other languages. So far, I can surprise you in Turkish, Japanese, Greek, Spanish, and Chinese, among others.

Whose industry social feeds (twitter, blog, LinkedIn, Facebook) do you follow?
Many! On LinkedIn I obviously follow TAUS and the Data Marketplace pages. But also Women in Localization, Nimdzi, LocWorld, GALA, ProZ, RWS Moravia, Lilt, Lionbridge, and many more. On Twitter I follow 157 people, so you can check out my profile to find interesting new people and companies to follow there. Furthermore, I subscribe to a number of industry newsletters like Slator, MultiLingual and Jost Zetzsche’s Toolbox.

What do you like to do in your spare time?
Well, I used to love all the traveling I was able to do for TAUS and LocWorld. Since last year I’ve had to find new things to love and rediscover old hobbies. Currently, I’m doing a lot of reading, workouts (walks and weight lifting), photography, cooking, watching series, and movies, and I’m really enjoying exploring my own country a bit more. I’ve discovered that the Netherlands has many beautiful places to admire too!

What industry organizations and activities do you participate in?
I obviously participate in all TAUS events and webinars. From 2005 - 2019 I also attended almost all LocWorld conferences as speaker, exhibitor, staff, or all three. Next to that I also have a good connection with the Women in Localization leaders, both globally and in the Netherlands. At TAUS we collaborate with many translation associations around the world, like ATC, VViN, JTF, GALA, AILIA, ProZ and Silicon Slopes, among others. With events going virtual (and the team not having to travel to attend), we’re also planning to be more active in other virtual events like SmartCat’s LocFromHome, with more to follow.

Do you have any social feeds of your own? Twitter handle, blog?
Yes, I’m not super active, but I do have a Twitter and LinkedIn account you’re more than welcome to connect with me on. I’m quite active on Instagram, but those posts are rarely work related. I recently got onto Clubhouse, as well.

Why do you read MultiLingual?
It’s a good source of information: you can read more about the latest research, innovations, and releases. If you’re new to this industry, MultiLingual magazine is a great start to catch up on who’s who, what everyone is working on and where you need to go to find what you’re looking for, whether that’s events, consulting, translation projects or anything else. I was quite fortunate to visit the team and their headquarters in Sandpoint, Idaho a few times, and they are the loveliest people you’ll ever meet. ♣
In a major reconfiguring of the media localization landscape, UK-based media localization provider Iyuno Media Group announced that it is acquiring its largest rival, SDI Media. The financial details of the transaction were not disclosed, but Iyuno has entered into the agreement with Imagica Group Inc., the current owner of SDI, to acquire 100% of its former rival.

“With both companies’ presence across APAC, EMEA, and the Americas, we are very excited about the opportunity to become the best-in-class global localization services company. We believe the size, scale, technology, and global reach of the combined company will support the growth of our customers, the collective industry, and consumers around the world,” said Iyuno executive chairman David Lee. Lee noted that due to the regulatory review and approval process, the company cannot discuss specific future plans until after the acquisition.

Lee was, however, very optimistic. “Our objective for the future is to continue to deliver the quality and service reliability that customers of both companies have come to know — now on a larger and more expansive scale,” he said.

The M&A is part of a continuing trend. The same week’s earlier news involved Ad Astra, Straker and Lingotek, Memsource and Phrase, as well as the announcement that Canadian private equity firm Volaris Group acquired Across, a Karlsbad, Germany-based TMS provider.

“Iyuno’s acquisition of SDI Media is big news for the industry, but not completely unexpected. Last year, we witnessed an increasing M&A trend in the media localization industry, with Iyuno acquiring BTI Studios, and Transperfect acquiring MoGi Group and Lylo,” said Belén Agulló García, lead media localization researcher at Nimdzi Insights.

Once the deal is complete — pending standard reviews — the acquisition will see Iyuno take over ownership of US-headquartered SDI Media, currently the world’s largest pure-play media localization provider by revenue. After the acquisition, Iyuno will be the largest. Iyuno generated revenues of $185 million in 2019, while SDI Media brought in $215 million the same year.
García stated that the big players in the media industry — broadcasters, streaming platforms, and film distributors — are increasingly setting highly specialized technical requirements, and are looking for service providers that are able to meet as many of those requirements as possible. “The workflows are more complex than ever, and the time-to-market in this globalized world is just getting shorter and shorter. So content creators need to make their lives easy by choosing the correct vendors. That is why technology is more important than ever, especially amid the pandemic.”

The alliance between Iyuno and SDI Media is a reflection of the media industry’s current needs, said García. “While both companies are well-known for their technology, Iyuno’s technical infrastructure and end-to-end platform for the localization industry plus their latest remote recording developments will add to the vast expertise and network of dubbing studios of SDI Media. This combination will be very attractive to the big players looking for end-to-end, high-quality solutions.”

Just “as Keywords Studios became dominant in the gaming industry,” said García, “we can expect Iyuno to become the consolidator in the media space.”
Australian language services provider Straker Translation has officially purchased American translation tool company Lingotek, according to mandatory public disclosure reporting in Financial Times. Straker Translation is traded on the Australian Securities Exchange (ASX). Under Australian law, listed corporations must notify the Australian Competition and Consumer Commission (ACCC) when “the products of the merger parties are substitutes or are complementary to each other” — as translation management systems (TMS) and services are to one another.

Grant Straker, Straker founder and chief executive, said the acquisition is key to Straker’s ongoing plans for expansion. The deal brings with it access to 20 enterprise customers and partners, including Oracle and Nike.

This is a roughly $6.74 million deal, with Straker Translations paying out $5.27 million in cash, and Lingotek receiving the remaining $1.2 million in stock. In 2020, Lingotek’s revenue was $7.9 million. The disclosure predicts Straker Translations will therefore reach break-even on the buy during the company’s 2022 fiscal year.

Lingotek is a cloud-based translation services provider, offering translation management software and professional linguistic services for web content, software platforms, product documentation, and electronic documents. In 2006, Lingotek was the first US company to launch a fully online, web-based, computer-assisted translation (CAT) system and pioneered the integration of translation memories (TM) with a main-frame powered machine translation (MT). Since then, the company has been expanding and modifying the tech it offers companies.

In the last six months Straker has seen its share price increase by 50%, and this acquisition is likely to continue to increase Straker’s stock prices.

Silver Springs, Maryland-based translation company Ad Astra has bought MontLingo, a language services provider (LSP) in Brossard, Quebec. MontLingo was founded by Bryan Montpetit. Montpetit is well known in the industry for prior sales roles held at various translation software companies as well as for his stint on the Association of Language Companies (ALC) board.

MontLingo will become Ad Astra’s first office in Canada, with Montpetit staying on as vice president of marketing.
Getting vaccinated against COVID-19 may do more than save your life. It could also save your language. That’s what Cherokee schoolteacher Meda Nix told National Public Radio (NPR) in an interview.

A member of the Cherokee Nation — a sovereign tribal government within the geographic boundaries of the United States — Nix grew up in an English and Cherokee speaking home, then studied Cherokee later as an adult. She is one of only around 2,500 people who speak the language fluently today.

Native Americans — including the Cherokee — have been disproportionately affected by the coronavirus pandemic, according to the US Center for Disease Control, contracting the disease at a rate 3.5 times higher than white Americans. The Cherokee Nation specifically has seen more than 11,000 coronavirus cases and 63 deaths. At least 20 of those who passed were Cherokee speakers, per NPR.

Initially, Nix had not planned on being vaccinated. Then tribal leaders held a Zoom call with covid-19 specialists, urging Cherokees to step up — not just for their lives but for their culture.

Cherokee is a member of the Iroquoian language family. Its writing system does not use an alphabet. Rather, 85 distinct characters represent the sounds used for speaking the language with one character assigned to each discrete syllable found in a word. For this and other reasons, the US Secretary of State considers Cherokee to be a Class IV language. Language classifications refer to the average amount of time required for English speakers to achieve proficiency when studying full time. At 88 weeks, Class IV languages are the most difficult group. Nix teaches Cherokee to fifth graders, starting with vocabulary she learned from her mother about the natural world — such as the names for trees and birds. ✤
Latino patients who don’t speak English are 35% more likely to die from COVID-19, Brigham and Women’s Hospital research suggests. Located in Boston, Massachusetts, Brigham is teaching affiliate of Harvard Medical School. In March 2020 — when the pandemic first struck the United States — Brigham patient safety reports started to flag “concerns about unequal access to care,” local public radio station WBUR reports. Research has long shown that US Latinos die from COVID-19 at disproportionately higher rates than that of white patients. But journalist Martha Bebinger reports Brigham staff noticed an additional disparity: death among limited-English proficient (LEP) patients was even higher.

“We had an inkling that language was going to be an issue early on,” Karthik Sivashanker, Brigham’s medical director for quality, safety and equity, told Bebinger. “We were getting safety reports saying language is a problem.” So Sivashanker and his team compared minority patient prognoses to that of white patients with similar chronic illnesses and found no difference in COVID-19 death risk. The discrepancy lay in language.

At the beginning of the pandemic, Sivashanker admits the hospital was not linguistically prepared. “We have really amazing interpreter services, but they were starting to get overwhelmed,” he told WBUR — as almost all sectors of American health care then were.

“We didn’t know how to act. We were panicking,” Spanish interpreter Ana Maria Rios-Velez told WBUR. Many of the words we now use to describe and treat covid-19 didn’t exist yet. Interpreters were confused about how close they could get to patients or whether they should even enter patient rooms. They weren’t always given adequate personal protective equipment (PPE). When they were, Rios-Velez said masks got in the way of establishing patient trust. Many Brigham interpreters were told to interpret by phone from home, which WBUR reports proved problematic.

Brigham resolved this issue by shifting its staff interpreters from telephonic interpreting (OPI) to video interpreting over iPad when possible. The hospital also started translating text messages about coronavirus. These messages benefited not just LEP patients, but employees — like limited English janitors. The hospital also added more interpreters.

As to whether increased language access measures have remedied Brigham’s LEP death disparity, Sivashanker told WBUR that’s hard to prove: “It’s never going to be as simple as we just didn’t give them enough iPads or translators and that was the only problem and now that we’ve given that, we’ve shown that the mortality difference has gone away.”
Women in Localization has a new president: Argentine translation leader Cecilia Maldonado began a one-year term in mid-January.

Founded in 2008, Women in Localization is a nonprofit organization that works to foster a global community for the advancement of both women and the industry by providing networking, education, career advancement, mentoring, and recognition of women’s accomplishments. Membership is free and both women and men are invited to join.

To select its officers, Women in Localization works through a succession committee. The committee interviews existing board members to determine their goals for the group, then selects a slate of candidates accordingly. Candidates are also interviewed then the final list is presented to the board, which votes. Maldonado served as vice-president in 2020 and was confirmed president for the upcoming year during the board’s last voting session.

In 2020, Women in Localization’s “high level objective” was to focus on growing global membership, “which included setting up a virtual/global chapter to focus on our remote members and provid[ing] stronger support to our non-US chapters,” according to Maldonado. Six new chapters were founded accordingly.

“I’m super excited about my new role,” Maldonado said. “After constant growth, 2021 will be a year for restructuring and reorganization, simplifying and streamlining our organizational structure so we can set the foundations for enduring success. With 28 chapters in 18 different countries today, we need to step up our game to be ready for the challenges and opportunities growth brings.”

Maldonado is well-known figurehead in the localization field, having cofounded both Translated in Argentina, an industry association, and Think Latin America, a popular conference that later became part of the Globalization and Localization Association’s Think! series. She is also an active volunteer for the Association of Language Companies, a US trade group.
The Globalization and Localization Association (GALA), an international trade group for language services providers (LSP) and their clients, has released its fourth quarter (Q4) 2020 pulse survey. Starting during the first quarter of 2020, GALA has surveyed LSPs every three months to provide a quick moving look at industry conditions.

According to the Q4 report, business is up internationally, but only by a little. From October to December last year, 53% of surveyed LSPs saw a slight increase in customer demand while 15% said demand “increased dramatically.” 16% registered a decrease.

According to the report, some variance may be geographically-based: “North and Latin America fared best, while Europe, Asia and Oceania reported higher loss in revenue.”

Size may have also impacted growth with LSPs that typically bill $5-10 million per year reporting a Q4 earnings bump. Of large LSP respondents — those annually billing more than $26 million — not a single one reported a revenue decrease. This is interesting considering more than one large LSP let employees go during the coronavirus pandemic. Between October and December last year, 10% of all respondents — regardless of size — laid people off. 6% reduced remaining employees’ salaries and 20% implemented a hiring freeze.

“As a whole,” writes Jessica DiPietro, author of the report, “we can see Q4 was the most prosperous quarter of 2020. But what does that mean in the context of mid-year losses?” When GALA started its pulse surveys first quarter last year, more than 300 LSPs responded. For the Q4 report, only 150 did. “What does it say that the number of those called to answer the survey has halved?” DiPietro asks, “Who we aren’t hearing from could be an indicator of who remains.”

Should Translators be on Clubhouse?

Ladies and gentlemen, boys and girls, translation is in the house — the Clubhouse, that is. Billed as the cool new social media app that all the rich kids are using, Clubhouse is an online chat forum created less than a year ago by repeat startup founders Rohan Seth and Paul Davison. Unlike Facebook, Twitter, and other forums, you must have an invite to join. Each new member is allowed to invite one other person and on it goes. At the time of writing, more than 2 million people were on the app globally — including well-known names in the translation community like Lingua Greca’s Catherine
Popular streaming service Disney+ has launched in Iceland, but not a single one of the movies it offers has been localized into Icelandic.

Companies that launch in new foreign markets may decide not to localize for a multitude of reasons, the more stereotypical being that executives with purchasing power either don’t

Christaki, Verbaccino president Kathrin Bussmann, and MultiLingual’s own Renato Beninatto.

The question is, should they be? After raising its venture capital series B on a $1 billion valuation, the app has certainly gotten its share of buzz. “Pretty much every marketing thought leader is on [Clubhouse],” Bussmann said.

“There’s a good size crowd from the localization industry, lots and lots of marketers and LinkedIn people. And big names, of course,” Christaki said. For example, celebrity marketer Guy Kawasaki recently hosted a chat in the app on entrepreneurship with MultiLingual board member Tucker Johnson. “It’s great to learn from,” Christaki added.

That said, the platform isn’t all that helpful in gaining clients, with Christaki explaining, “The translation chats I’ve seen are mostly about ‘educating’ non loc people and explaining the terms and how global business works.”

Bussmann echoed this sentiment, messaging that she uses the app to “try to educate folks about what [localization] is.”

While this sort of effort may be helpful to industry trade associations — like the American Translators Association (ATA) — the majority of translators and language services providers (LSPs) don’t have the resources bare-bones client education requires. Clubhouse also has considerable data security issues: it not only uploads your contacts’ information without their consent, it also records all conversations. If client information is stored in a translator’s phone, sharing may breach customer confidentiality agreements. In Europe especially, many are concerned Clubhouse’s lack of transparency over data handling violates General Data Protection Regulation (GDPR). On January 27, Germany’s largest privacy watch group, the Federation of German Consumer Organisations, filed a cease and desist order against the app, adding a lack of German language user agreements to GDPR concerns. And on February 9, China banned Clubhouse, citing data security.

This doesn’t mean the translation community is wrong to use the app. As Christaki mentioned, it does offer continued education benefits and — for an organization large enough to take it on — an interesting challenge regarding client education. As with any club, just know what you’re signing up for before you join. ♦
‘believe’ in localization — the “everyone speaks English” philosophy — or, for whatever reason, don’t feel as though translation is accessible. This, translator Thorarinn Eldjarn contends, is part of what makes Disney’s decision not to localize so baffling: a multitude of Disney movies have already been dubbed or subtitled in the language, localization taking place at the time of the films’ release. Popular Disney character Donald Duck, for example, is already known in Icelandic as Andrés Önd, Winnie the Pooh as Bangsímon. “I do wonder why they don’t at least offer the old versions,” Eldjarn told The New York Times, “Either they think Iceland is too small and unimportant to bother with, or they assume everyone understands English.”

This complete lack of localization has prompted Iceland’s education minister, Lilja Alfredsdottir, to formally complain to Disney, sending a letter this month to The Walt Disney Company’s chief executive officer, Bob Chapek. Despite being spoken by the country’s entire population, Icelandic is considered to be an at-risk language. Among children, English is preferred and Icelandic literacy — as opposed to English language literacy — is down, leaving schools to reevaluate curriculum since students are unable to read the history and literature books traditionally used in the classroom.

Subtitling is required for all foreign shows broadcast in the country; however, streaming services aren’t held to the same governmental rules. Disney has localized its offering for other countries: Films shown on Disney+ are currently dubbed and subtitled in up to 16 different languages, depending on the movie — just not Icelandic.
UPCOMING
INDUSTRY EVENTS

MARCH

01-03

ITA 2021 CONFERENCE
Israel Translators Association
Online

18

RE-IMAGINING SOFTWARE LOCALIZATION
IMUG
Online
meetup.com/IMUG-Silicon-Valley
events/271990288

23-25

GALA CONNECTED 2021
Globalization & Localization Association
Online
gala-global.org/events/conferences

APRIL

28-29

DIGIMARCON AT HOME: DIGITAL MARKETING, MEDIA AND ADVERTISING CONFERENCE
DigiMarCon
Online
idigimarconathome.com

MAY

06-07

ELIA’S FOCUS ON EXECUTIVES
Globalization & Localization Association
Rhodes, Greece
elia-association.org/our-events

JUNE

08-10

LOCWORLDWIDE44
LocWorld
Online
locworld.com

JULY

19-25

UTICAMP 2021
Ukrainian Translation Industry Camp
Dnipro, Dnipropetrovsk Oblast, Ukraine
utic.eu/en

AUGUST

16-20

ELIA’S FOCUS ON EXECUTIVES
Machine Translation Summit XVIII 2021
Orlando, Florida
gala-global.org/events/events-calendar
machine-translation-summit-xviii-2021

All events are subject to change.
The last 20 years have seen a rise in graphic novels imports into the US, largely from Japan, but also still trickling in from other Asian nations and Europe. While there are hundreds of great examples of localizers doing what they can to balance the issues confronting English-language editions of international work, with the following recommendations, we’ll look at 21 examples of how localizers have successfully navigated some of the challenges unique to the medium.

The graphic novel employs a unique set of tools to convey meaning. And with those differences come a different set of challenges for localizers.

Sound effects need to be conveyed, and signage needs to be translated. The methods for doing so will vary from publisher to publisher, or even sometimes from work to work.

Additionally, translators bringing work from Japan face opposition from a tradition of amateur localization that became entrenched through the early popularity of unauthorized translations, known as scanlations. These amateur translation teams believed strongly that retaining linguistic idiosyncrasies such as honorifics and particular Japanese phrases added to a translation’s authenticity. Today, as publishers seek to combat the draw of pirate translations of popular Japanese graphic novels, they have to choose between best translation practices and appeasing an errant fandom that demands their -sans and -kuns and -onsens.

Seth Hahne
Seth T. Hahne is a graphic novel critic, illustrator, comic creator, writer, and homemaker.
Taiyo Matsumoto’s *Ping Pong* is a frenetic story following five top-class high school ping pong players as they each strive to balance their desire to win with their love of the sport. Peco is a natural ace but has grown sloppy with too many easy victories. Dragon is the indomitable champion backed by the best gear, tech, and training. Demon isn’t a prodigy but has trained hard to beat Peco into submission. China has been kicked off the Chinese national team and hopes that winning the Japanese nationals will begin his redemption arc. Smile has lost his love for the sport because his best friend Peco goes easy on him. And everything hinges on what Smile does next.

Matsumoto’s virtuosic illustrations trade heavily on dynamism, making the smacks and dives burst from the page. Part of that art is the sound effects Matsumoto uses — and so important are they to experiencing the story that in adapting the book to an American audience, letterer Deron Bennett put substantial work into redrawing those effects into English. From uniquely tailored choice of fonts to hand-drawn text within the art, Bennett’s lettering across three localizations of Matsumoto’s work is careful, innovative, and has brought a level of quality to manga imports that is still relatively rare.

Because the original effects in *Ping Pong* are art themselves, Bennett hand-drew English-language substitutes and often found himself drawing in background art to fill the holes created by the absence of the Japanese script. In each case, he worked to put himself into the mindset of Matsumoto, trying to decide how the creator would have drawn a particular PAK or a KYAK or a POK. Method acting for letterers. Bennett describes it as somewhat like forging a signature: “You practice the forms, pushing aside your own tendencies to adopt the other person’s hand.”

*Ping Pong* is also helped by bringing on Michael Arias to translate. Arias, a longtime fan of Matsumoto, directed the film adaptation of an earlier Matsumoto work, *Tekkonkinkreet*, as well as translating two other of Matsumoto’s graphic novels, *Sunny* and *Cats of the Louvre*. Arias’ familiarity with Matsumoto’s work, with his narrative pacing and his voice, lends itself to a seamless translation, easy to fall into. *Ping Pong*, like most sports stories, lays out a series of character studies. Any excitement or inspiration derives not so much from the display of athleticism so much as from seeing these characters grow against the obstacles in their paths, crash against them, and become new creations. Arias’ script punches well and keeps us invested throughout.
The graphic novel adaptation of Shinji Kaijo's series of Emanon novels is marked foremost by the beautiful illustrations of Kenji Tsurutu. (This is reasonable because the visual nature of the medium usually pushes the illustrations to the forefront.) But quick on the heels of being struck by Tsuruta’s powerful drawings, the reader will find themself chest-deep in an ambling, heady Before Sunset-style discussion of the nature of being, memory, and identity; and whatever of that exists in Kaijo’s original text, it’s in translator Lewis’ prose that we find ourselves easily drawn into the discussion.

Emanon is a terrestrial science fiction story following a young woman who holds memories going back to the dawn of life, three billion years ago. Whenever she reaches an age of reproductivity, she has a child and that child receives all the memories of her mother and all prior iterations of herself.

The care with which the book has been localized is made evident in the afterwords by series editor Carl Gustav Horn. Beyond giving the reader access to a wealth of background information about the book, its context, and its original creators, Horn also praises both its translator and letterer. He happily characterizes Dana Lewis as not only a translator but also a detective, as she sussed out many of the historical details described in the books’ text. Horn also takes a moment to praise Susie Lee for her lettering, redrawing signage to look as if it was English in the original. Many Japan-to-US localizations will simply place notes translating signage in the gutter between panels — a less time-costly and intrusive solution, but also one that diminishes the fluidity of the reading experience.
Kim Thompson’s translation delivers a precise, antiseptic, staccato iteration of Tardi’s chaotic crime story that could sumptuously be read aloud with that rapid downbeat that André Dussollier uses in the opening narration of the film *Amélie*. It injects the American reader straight into a pop cultural vein built of familiar noir motifs, reminding one immediately of the rapid-fire patois that formed the dialogical bedrock of those films.

Jean-Patrick Manchette’s story erupts from the common noirish trope of the uninvolved man accidentally caught up in a dangerous world he doesn’t understand and doesn’t want to. Gerfaut witnesses what might be a car chase and rounds a bend in the forested road to find one of the cars wrapped around a tree. He begrudgingly helps the bleeding motorist to a hospital, dumping him there and leaving because he became bored of the whole scene. Shortly after, a series of attempts on his life begins, and a cacophonous year punctuated by crescendos of violence stretches out before him.

Tardi’s art in the book is blunt and his depictions of violence brash, keeping with the equally blunt and violent plot that unspools in Manchette’s story. Thompson’s translation heightens the drama by playing each line as a thudding hammer, relentlessly playing at the forge; so much of what the narrator tells us feels extraneous, but the dulling deluge of words words words plays counterpoint to the blam blam blam of gunfire.

The lettering team at Fantagraphics did a fine job playing into the scene as well. Paul Baresh created a font from Tardi’s original lettering, allowing Brittany Kusa and Gavin Lees to populate the book’s word balloons. Kusa hand-lettered various notes within the book, and Rich Tomasso took care of things like newspaper headlines (while there is a trend in contemporary comics to simply use a font for these elements — book titles, shop signs, newspaper headlines — that Fantagraphics took the time to hand draw these elements shows their commitment to a quality final product).

All of Fantagraphics’ localizations of Tardi’s work are worth considering, especially their work on *Goddamn This War!*, which includes translation of the book’s sizable backmatter, a detailed archive of WWI historical notes to embellish the graphic novel’s content proper.
In Ko Ransom’s translation of panpanya’s collection of short stories, the reader finds themself beckoned by the opening story’s titular invitation. An invitation into rumination, an invitation into curiosity, an invitation into the expansively claustrophobic, an invitation into a whole world of possibilities. More than anything though, an invitation into mystery.

*Invitation From A Crab* investigates our sense of the world through the oblique. Thoroughly mundane until thoroughly not, these stories are clever and fascinating, approaching everyday living from the tangential. They’re cynical, but not in a negative way. They’re skeptical, but not in a way that belies belief. They’re richly imagined, pushing the reader to laugh, to consider. They’re really weird but — and in seeming contradiction — not really all that weird at all. You just have to give yourself up to panpanya’s world.

A creator in the vein of Haruki Murakami, panpanya explores the hidden corners of the world, and so it’s fitting that Ko Ransom carries a tone throughout the work that seems an echo of Jay Rubin and Phillip Gabriel, Murakami’s own translators. This is especially evident in the ruminating mini-essays panpanya includes between each story. These are delightful excursions into a genre that might just be called *thinking-bout-stuff*. For instance, speaking of the old-timey sound of broadcasters in the past:

> find out the nature of the air we were once surrounded by after there are innovations in technology and media. We become capable of thinking that they’re old-timey.

Nicole Dochych does a great job rendering signage in the book in English, mirroring panpanya’s own scratchy style of art. And while use of the barred I for sentences beginning with the letter I is a bit contentious (going against what’s generally considered best practices), the lettering throughout is otherwise fine, keeping the reader focused on the mysteries unfolding across the page.
Angola Janga’s translator, Andrea Rosenberg, has spoken of the ethical dilemma of translation, a quandary that goes beyond any political questions that arise in a text. She acknowledges the fabrication that must occur when a translator overwrites the words of an author (an operation intrinsic to every translation), but she notes that to the reader, fidelity to the author often merely hinges on the question of readability, of fluidity. To the reader, a good translation is one that ceases to be conceived of as a translation, one in which the mechanics of story vanish into the experience of the book.

Angola Janga is historical fiction exploring the final days of the communities of runaway Angolan slaves in the forests of Brazil, following the life of Antônio Soares, a figure mentioned only once within the historical record, a man of ignominy. Brazil between 1500 and 1900 accepted 5.6 million African slaves, nearly 12 times as many as North America did in its own slavery period. In the latter half of the 17th century, escaped slaves formed communities in the jungle to protect themselves from slave-hunting parties and Portuguese soldiers. The collection of these communities was known as Angola Janga. Marcelo D’Salete has been particularly interested in these stories. In 2014, he wrote a collection of short stories published in the US as Run For It (2017), and in 2017 he created the far more expansive Angola Janga.

Rosenberg’s translation is interesting because she leaves words from under the Bantu umbrella alone (as D’Salete must have as well), delivering a text in plain English but also filled with non-English terms from either Kikongo, Kimbundu, or the large Bantu linguistic family. While an alienating choice (requiring either simple acquiescence or continued reference to the helpful glossary appending the book), it in a very real way strengthens readers’ experience of peoples catastrophically alienated from each other, on the one side by standing victim to inhuman atrocities, and on the other fear, hatred, and a monstrous sense of self importance.
How the World Was is a mediated memoir in which Emmanuel Guibert has interviewed the elderly Alan Cope (emigrated from America to France in 1948, now deceased) and spills out Cope’s recollections across a couple books. This volume follows on the heels of Alan’s War, which largely concerned itself with Cope’s place in World War II and its aftermath. How the World Was, the second volume, functions as a bit of a prequel, winding the clock back to explore both Cope’s childhood in Southern California during the Great Depression as well as life as immigrants to the state from the Midwest.

Guibert recreates a number of Southern Californian environments now lost to time save for the archival efforts of photograph collections and artistic renderings. They portray another kind of world and will be fascinating to students of human history and nature. Scenes from the early 20th century abound. Soda shops, old-town L.A. County, the boardwalk at Santa Monica, simple Depression-era housing. Guibert succeeds wildly in inculcating a nostalgia for a thoroughly American world now lost to us for all time.

Kathryn Pulver for her part is also victorious in lending Guibert’s Cope a voice that can easily be read as the ruminations of a sharp-witted older man (Guibert met Cope as a 69-year-old stranger in France and their daily conversations for the next five years until Cope’s death led to these books). Pulver’s Alan Cope is the eccentric, wise, and philosophical grandfather figure who remembers the past with great clarity and is happy to share it with any willing to exult in the mystery of a time forever vanished. It’s a treat to find this very American work brought over from France to an audience who can best appreciate it.

Designer Rob Steen (as Céline Merrien did also in the first volume of the collection, Alan’s War) uses a font in standard casing that resembles a clear, easy hand-printed style — and is in fact built from Guibert’s own lettering. The blocks of text are tight and comfortable (and resemble the lettering from the French original), making reading easy while further indulging in the hominess the storytelling proposes.
War is unfortunately an evergreen topic. While much of our war-related entertainment focuses on our soldiers’ pathos, glory, and tragedy, it can help to dive into conflicts from the perspective of the ordinary citizen who is caught up in such wars. And perhaps even more useful and fascinating are the stories of those who get stoked to believe their own side both right and true, even while atrocities abound.

Suzu grows up in Hiroshima, but an arranged marriage brings her to the nearby coastal city of Kure to petition her marriage. The alienation she feels married to a man she doesn’t know, dwelling with a family she doesn’t know, and living in a city she doesn’t know sets the foundational tone to the international drama about to play out.

As the story moves inexorably toward the Hiroshima Moment, we see daily life gradually squeezing tight under the rising tide of war. *In This Corner of the World* is a study in how the commoner interacts with a gradual increase of heat and pressure, and what it means to lose — and lose badly. The chaos and cost depicted bring the reader into the morass and evokes empathy for those people who were aggressors, who perpetrated countless war crimes, and who cheered for those things out of ignorance and nationalistic fervor.

Letterer Karis Page takes Adrienne Beck’s translated script and brings it to the page with able choices of font faces and word placement. More than that though, in laying out page after page of informational images, she helps bring the details of mid-war civilian life to the contemporary reader across the Pacific. Maps, charts, diagrams, inventories, paper dolls, and instructionals — Page does an excellent job making these accessible to the reader. *In This Corner of the World* is an important, life-affirming, heart-breaking work, and Beck and Page’s careful localization gives the reader the space to feel it, to grieve it, to find a home in these distant lives.
Portugal is beautiful, thoughtful, lively, and lived in. Sentimental without ever feeling cloying, Cyril Pedrosa’s story of lost and abandoned family connections explores real human dilemmas without ever feeling overbearing.

Simon is disaffected. He feels rudderless, aimless, and ambitionless; he remains inert in his career trajectory, in his longterm romance with Claire, in his connection to family (both immediate and extended). There is nothing for him, no sunshine in his life.

A chance trip to Portugal for his publisher sparks something nascent in him, some memory from childhood, some connection to his family’s long-dissolved connection to the place where they came from. Simon’s grandfather left Portugal to work in France during the tyranny of Salazar, and that’s where his branch of the family has remained. A series of dissolutions in Simon’s life and a visit with extended family gives Simon the opportunity to take an extended visit to Portugal, where he will explore, investigate, and tend to the once-pruned family vine.

Across Pedrosa’s gorgeously illustrated pages spreads a story built from the raucous impact of two rivers smashing together and then intermingling. There is French, there is broken French, there is Portuguese, and there is broken Portuguese. In Montana Kane’s translation the Portuguese (both fluid and broken) is retained as is, but the French is rendered in English — or in broken English depending on who’s talking. (There’s also a bit of German that remains untranslated, but that’s just a bit of the multicultural background flavor Pedrosa employs along the way.) Kane expertly gives the native French speakers deeply human dialogue, filled with the pauses and moments of consideration we’d expect from people picking their way through a life of turmoil and the hidden intentions we all know as native soil. Whether the broken English she uses for her Portuguese characters attempting to communicate in French actually mirrors the idiosyncrasies native to the Portuguese-to-English dynamic, I cannot say.
Inio Asano is somewhat an enigma in the graphic novel scene in that he seems innately to grasp some honest truth about the zeitgeist that readers aren’t finding in other authors. His bibliography is largely composed of cynical, embittered work that portrays the damages we acquire from life — frankly and without euphemism. His narratives are raw and the expression of them unfiltered. He depicts violence and sex without sentiment. The honesty with which he is perceived to treat the world endears him especially to readers in their teens and twenties; they tend to see in him an adult who won’t lie to them about the way the world is.

*Dead Dead Demon*’s seems a bit different at first glance. The unhealthy, often brutal sexuality of his other work (notably *Goodnight Punpun*, *Downfall*, and *A Girl on the Shore*) is absent, and the series is marked by hyperbolic humour and a zest for daily living. It’s not quite veneer, but this happy-go-lucky atmosphere — eventually explained as a plot element — does float atop a deeply critical work, taking sharp aim at the many, many failings of contemporary society (specifically Japanese society, but also easily applicable to the US social dilemma as well). For a 2014 book that mostly concerns following a couple young women through the end of high school and into college life against the backdrop of a failed alien invasion, the criticisms Asano levels seem almost prophetic of the national public discourse in 2020 America.

John Werry pours out a firehose of social chatter in the book’s text, catching the voice and flavor of all of Asano’s targets, whether young or old, liberal or conservative, authority or disenfranchised. His dialogue sparkles and shines in exactly the spastic oversaturated way that Asano clearly intends.

Annaliese Christman for his part blows the top off with careful lettering choices that exactly suit the mood of every panel. Text in messaging apps feels like text in messaging apps. News articles look like news articles. Advertisements, magazine covers, news chirons. They all look like they were originally presented in English. The transformation of Japanese sound effects to English is bold and striking, adding weight to the story as it rolls out. It’s breathtaking how much work Werry and Christman put into this localization.
Satoshi Kon died too young. Decades too young. One of the most exciting film directors at the edge of the new century, Kon died in the middle of his fifth film at age 46 of pancreatic cancer. His work is widely celebrated and homaged (when put charitably) by American directors like Christopher Nolan and Darren Aronofsky. Before Kon stepped into directing at age 34, he was a comics creator, notably assisting Katsuhiro Otomo on the landmark series, *Akira*.

Unfortunately for fans of his graphic novel work, Kon’s directing career took priority and he never again returned to comics. *Opus* is one of those casualties, a metafictional adventure series concerned with the collapsing boundaries between an author and the stories he tells. It also remains unfinished, sort of. Though ended prematurely with the cancellation of the bi-monthly anthology it was appearing in, Kon was in 1996 negotiating a graphic novel release with a final concluding chapter. However, busy directing *Perfect Blue* and subsequent films and television series, Kon never finished the book. Two months after his death in 2010, Tokuma Shoten published the collected *Opus* along with what existed from Kon’s draft of a final chapter, found in his files after his death. Four years later, Zack Davisson and Dark Horse produced a US edition of Kon’s book. Prepending the final chapter, there is a note from the Japanese publisher that includes the following:

This chapter was found in [Kon’s] files after his death. It is mostly uninked and drawn in rough pencils. However, even given the raw state of the art, we feel there is enough

Zack Davisson delivers an excellent translation, with a fluidity of text that delivers Kon’s story with electric verve. His dialogue is sparkly and exciting, exactly what a space-bending thriller needs. Dark Horse makes the decision not to reproduce the sound effects in English but does have letterer IHL add English versions of each as part of the art. It’s a workable cost-saving option, looks fine, and doesn’t hinder the book.
Growing up is hard. Not the least of our troubles comes from the directives we unconsciously absorb from the cultural atmosphere. We see our mothers who look fine to us fretting about the way they look, and we suddenly know that we must not look right either. We see the advertisements of diets, we note the emphasis on the approaching bikini season, we hear the whispers of pounds and BMIs, and we are affected. It’s in the air; it’s what we breathe. And then we throw in the savage catastrophe of pre-teen campaigns of ostracization and bullying focused on weight. It’s too much to bear, and none of it’s true. But it’s the atmosphere, what we inhabit. Our only hope is an intervention.

Hélène is a sausage, or so she sees herself. A sixth grader trying on swimsuits, in a frilly nautical-themed suit she describes herself as a ballerina sausage, in a plain black suit she is an undertaker sausage. She is, of course, neither of these things, but again, it’s the air she breathes.

Formerly a member of the popular group of girls at school, Hélène has somehow come under their negative scrutiny and is shunned. It’s never clear why, but they’ve targeted her weight and she believes their taunts. She retreats into reading *Jane Eyre*, and while she enjoys the book, her perspective twists Jane (clever, slender, and wise) into someone who deserves good things while she deserves none of it. It takes a momentary surprise encounter with a fox in the woods to push her to recognize and then grab hold of her desire for the kind of human connection she’s been reading about in *Jane Eyre*.

The translation partnership of Morelli and Ouriou is deft, and they deliver a script that shines with matter-of-fact reportage. Each reader will perform a text to their own taste, but *Jane, The Fox and Me* lends itself particularly well to a quick sort of aloof downbeat cadence.

Spring arrives and so do the flowers on our balcony.
Barely two months of school left.
A taste of eternity
My mom stops smoking,
Again.

Even with my grieving vine of an imagination
I’m always taken off guard by the insults she invents.
The same thing happens every time. Another
Her eyes open up in my
In her case,

Hearing everything.
Hearing nothing.

The English adaptation of Britt’s and Arsenault’s book does something rarely seen from a graphic novel localization. It appears that the book’s artist, Arsenault herself, has hand-relettered the book according to Morelli and Ouriou’s translation. This adds immeasurably to the feeling that the book is a work of art in its entirety.
Taking place in Yopougon (colloquially known as Yop City), a suburb of Abidjan in Côte d’Ivoire, *Aya in Yop City* tells more than the story of Aya and her friends, acquaintances, rivals, and relations. Through Oubrerie’s illustrations, Abouet unveils a culture unique to a 20-year period, one now lost to that era in history.

Between 1960 and 1980, Côte d’Ivoire thrived economically in a way that other newly independent African nations did not. Rather than drive out European populations and influences, those ties were welcomed and strengthened — and the wealth and assistance of France helped the economy boom in particular ways.

*Aya in Yop City* exists in the US as two volumes, each containing three of the original graphic albums in which the series originally appeared. Aya is in her early 20s, single, beautiful, wise, naive, and soberminded. Readers follow Aya negotiating life as a young woman, but also the stories of Bintou and Adjoua and Hervé and Moussa and Félicité and Mamadou and Innocent and Grégoire and their families and more. It’s a multi-multi-threaded narrative that’s rambunctious and cacophonous.

The book is also filled with proverbs, and this is one of many places where translator Helge Dascher shines.

A dead goat isn’t afraid of the knife.

No matter how long a log floats in the river, it’ll never be a crocodile.

It’s not the color of the husk that makes the coconut sweet.

One of the idiosyncrasies of life in Côte d’Ivoire as presented in *Aya* is the constant use of old proverbs to make points, comfort the abused, and perpetrate savage burns. In response, all the characters nod in understanding as if the speaker just irrevocably proved something. It’s very amusing when one of the cast moves to France and does the same thing and these poor French people have no idea what’s going on.
A videocast about video games, localization, and memes

Available on multilingual TV
Showa is the name for the era of Japanese history that spans the beginning of Emperor Hirohito’s reign at the end of 1926 until his death in 1989. An incredibly violent and tumultuous time (economically, socially, politically, and militarily), Showa is almost ironically named using the characters for “enlightened peace.” The period includes financial collapse, the abandonment of democracy, a decade of war, the destruction of society, foreign invasion, and then reconstruction. It also includes a lot of normal people just trying to get through it all with food and a roof. Mizuki’s graphic novel history of the era tackles both of these stories in a satisfying way.

Published in North America across four large 500-page volumes, Showa lands at over 2100 pages; but so much happens in the 63 years covered that Mizuki blows through moments and historical figures at a diabolical speed. Major incidents may receive a passing mention. Important cultural figures will be introduced and dismissed in the space of a single panel. For his Japanese readership, this probably works very well. They’re likely pretty familiar with cultural figures like Ryunosuke Akutagawa from reading his literature growing up, so mention of his suicide probably feels more like a known historical moment than it might for many North American readers. It would be comparable to a similar graphic novel history for American readers covering Hitler’s death on April 30 and then mentioning that “21 days later, Bogey married Bacall.”

So while Mizuki’s rapid-fire name dropping across the historical section of the book works fine for its intended audience, bringing the book to North America required special consideration. All major names and events are noted, and readers are directed to an appendix that contains a brief textual summary of each. Historical figures are named and dated, their birthplace and relevant position cited, and are given a brief summary to convey their historical value. It’s perhaps not ideal, because a reader constantly flipping to the end of a 500-page volume is going to interrupt the flow of story; but it still works and throwing in ten extra pages at the end keeps the book cheaper to produce than making the pages two inches taller to accommodate explanatory footnotes.

Mizuki tells the story of Japan through four avenues: 1) through dry recitation of facts via a narrator, 2) through conversations between people of the era, 3) through an explainer character who pops in from one of Mizuki’s other series, and 4) through Mizuki’s own self, related via a series of memoir vignettes. Translator Davisson keeps the voices of each appropriate to who they are so that it really feels as if Showa is being told by a wide cast of actors. While a first experience of the book might be stuttering as the reader stops fairly often to gather bearings and flip to the appendix or Wikipedia, on a reread one will find the flow easy to absorb — an excellent work to convey a complicated history.
It’s not a particularly large cut of the market, but the graphic novel format does particularly lend itself to depicting the dreamy, the illusory, and the hallucinogenic. Many use this for short episodes within a larger story, perhaps laying out a drug-induced vision or a potent nightmare. Some, however, indulge in book-length episodes of reality bending. Sandrine Revel’s recent graphic novel biography of Glenn Gould, for instance, takes place within Gould’s head in the moment of the massive stroke that would take his life.

Pachyderme also trades on the idea of a sort of pre-death hallucination, following the wandering of a woman’s conscious spirit after she is thrown from her vehicle in an automobile accident — only it’s more than that and there’s more than one conscious spirit involved in the hallucination. Pachyderme occupies a space similar to Kazuo Ishiguro’s The Unconsoled. It’s bizarre, magical, dreamlike, fuzzy. We know the scenes, the people, the places. We recognize that a story, or a couple stories even, are unfolding, but there’s dissonance. There’s a blurry, bleary sort of drunkenness that sets in, making discerning the what and the wherefore difficult. The whole thing is rather mind-bending, or at least something one has to bend their mind around, but Frederik Peeters’ illustrations and Edward Gauvin’s translation lead the reader by the hand so they cannot get too lost.

Peeters is a Swiss cartoonist who plays in multiple genres from science fiction to memoir to fantasy to westerns, but common to all his work is an interest in allowing surrealistic moments to intrude on the grounded sense of reality his characters inhabit. It’s a habit that his readers know to anticipate and look forward to. That Pachyderme should be devoted to this penchant marks it as an ambitious work, wildly disorienting on the first read but falling more easily in place once anticipation gives way to expectation. Gauvin enables Peeters’ choices by providing a theatrical translation, full of the furtive mystery that rules this woman’s reveries. Haunted by a life in which she gave up on dreams for stability, this Cold-War-era woman has probably nurtured her longing for the adventurous on thrilling serials and films, on the French mid-century equivalent of dime novels — and this is what comes through in Gauvin’s work.

Even Lizzie Kaye’s lettering, an irregular hand-written font mixing uncials and miniscules, adds well to the quiet, understated chaos of the experience. It’s a particularly interesting choice because the font is not what one would usually find in a graphic novel but also doesn’t remotely resemble Peeters’ own lettering, so it feels itself still more like an informed artistic choice to emphasize for the English reader the disorienting dream-state being entered.
Comedy is hard, but translating comedy and bringing it over to a whole-nother culture with different puns, different idioms, and different cultural boundaries for humor is harder. Much harder, actually. That Delicious in Dungeon page after page brings laughs and mirth and good feeling volume after volume is incredible. Never a false note, never a joke that fails to land. Ryoko Kui’s book about Dungeons & Dragons-style adventurers stuck in a dungeon, forced to subsist on the monsters they kill along the way is wildly entertaining thanks to Taylor Engel’s beautiful script.

Delicious in Dungeon isn’t even primarily a humor book. It’s funny, sure, but it’s also exciting, mysterious, adventurous, and an exhibition of as creative a world-builder as any working in the fantasy genre today.

The setup feels too simple. A group of adventurers is working to clear out a dungeon full of monsters, discover treasure, and find riches and rewards for their labor. With a bit of bad luck, one of their members is eaten by a dragon while they are teleported to the surface. The leader insists on returning immediately (without taking time to reprovision) to find the dragon, dispatch it, and recover the body before she (his sister) is digested so they can resurrect her (a normal function of dungeon adventuring). Without fresh supplies, they will have to eat the monsters they kill. What rolls out looks like it will follow the conventions of the cooking comic genre, with lots of images of food prep, cooking, delicious looking meals, and satisfied gastronomes — only with meals like hippogryph tempura or walking mushroom hotpot. While this would get old relatively fast, Kui builds in several compelling mysteries to be picked at as the adventurers travel deeper into the dungeon’s ecosystem.

Engel’s work is excellent whether in drawing laughs, in conversationally situating characters and their relationships, or in conveying the lore and world-building that Kui very thoughtfully has laid out.
Daisuke Igarashi is a unique creator. There is nothing available in the North American graphic novel scene that is nearly so dedicated to the sacred mystery of the realms of nature as his *Children of the Sea*. These five volumes, in a way, serve as a church, as a holy place, that directs the reader to sit awestruck before the majesty of the sea. Every line he draws is a vector pointing toward exultation and exaltation.

Igarashi’s illustrations are delicate in that his penwork is thin, glancing, lean. His style is sketchy, scratchy, rough, and atypical. There is no polish on his pages, and it may be easy for neophyte readers to mistake his masterful work for that of an amateur draughtsman. If one throws themselves into his work, however, they’ll find themselves suffused in a lushly reverent, organic style that succinctly takes the chaos and scattered beauty of nature and concatenates it into a specific image, crafting a kind of paragon nature — a nature that is more nature than nature itself — which may sound spacey.

But *Children of the Sea* is a spacey book. It posits a cosmic connection between the sea, its creatures, and the wider universe. It’s one of those books that gets so far out into the mystical that it can be hard to pin down what it’s actually suggesting. Translators JN Productions do well with Igarashi’s script. It would have been easy to get lost in the spacey cosmic-babble, but JN Productions keeps the work grounded in down-to-earth conversational dialogue - and when they can't, they just dive into the mystery, allowing the reader to be washed over by wave of the numinous.

Macasocol and Christman (replacing Macasocol for the fifth volume) do well with the lettering, keeping things clear and legible. Their scrubbing of Japanese sound effects to make room for English-language onomatopoeia is seamless and only detectable by close examination.
Mari Okada is particularly known in film and television for her depictions of youth and youthful romance, with the playful, hesitant back-and-forth that denotes that kind bumbling, awkward attempt at wooing and at being wooed. And of course, much of the credit for those depictions in North American localizations of her work rests in the facility with which her mediators convey those raucous, delicate, hilarious conversations. Contrasting to her film work, in Okada’s first graphic novel series, *O Maidens in Your Savage Season*, the absence of actors’ inflections lending to the experience means much more weight is put on the translator’s work in painting a believable, entertaining story world for readers.

*O Maidens* is a book that could have gone horribly wrong. Four high school girls, each with their own situations and problems to overcome, are the four members of a classic lit club. They use their time together to read erotic scenes from classic literature aloud, exploring the curiosity for their own burgeoning sexuality in a safe way. The description sounds both implausible and very easy to get wrong. Still, despite expectations, what unrolls is a funny, poignant, and highly nuanced exploration of four individuals and their tumultuous coming-of-age stories. The feeling of the book swings from mood to mood: from funny to nerve-wracking to sweet to uncomfortable to thrilling to inspiring, and back and forth and around and about.

For a book about girls written by a woman and drawn by a woman, publisher Kodansha could have easily torpedoed their English-language edition by giving the job of translation to a man. It’s not so much that a man couldn’t translate *O Maidens* well, but more a question of conveying trust. Even before opening the book, a reader will generally trust a woman to depict the intimate hearts of young women before they would a man. On top of this, Kodansha’s selection of Sada Matsueda Savage is a delightful choice, delivering a crisp script that is sweet and scandalous, heartfelt and harrowing, and feels like it gets at something we don’t often see in coming-of-age stories.
One of the great unsung military units of the Second World War was La Nueve, the first to enter Paris at its liberation. Composed largely of refugees from the Spanish Civil War conscripted into the French Foreign Legion and then held in Vichy concentration camps for years, their goal was to help the French push fascism out of France so that France could help push fascism out of Spain in turn. Only 12 of the 160 members of La Nueve survived the war, and their contributions were largely forgotten until recently. The last surviving member of La Nueve died at age 99 in 2020, a casualty of COVID-19.

Paco Roca’s *Twists of Fate* tells the story of La Nueve from the flight from Alicante at the end of the Spanish Civil War through to the liberation of Paris. Roca’s narrative conceit is that he’s interviewing elderly, forgotten Miguel Ruiz about his part in the company, hoping to turn Ruiz’s experiences into fodder for a *Kelly’s Heroes*-style wartime adventure. Rather quickly, he realizes that Ruiz’s own life tells a more important and poignant tale than what he’d planned; and so, the reader listens in on Roca’s interview and watches Ruiz’s life play out in the intervening pages. And while it reads very well as non-fiction, Ruiz is a creation of Roca’s and the memories related are a conglomeration of elements from other people’s lives and stories. That this isn’t ever apparent during the reading of the book is a testament to Roca’s talent as a storyteller.

The job of a translator is often that of a detective as well, and Erica Mena makes for a great Holmes. *Twists of Fate* is filled with places, names, battles, events, and the machinery of war — a lot for military enthusiasts to get aggravated by if not translated properly, using common conventions. She also unveils well the attitudes and personalities of the French and Spanish, the fascists and communists, the officers and the soldiers. And best of all, the delicate touch Mena gives the growing, warming relationship between Roca and ex-patriated Miguel is the standout performance of her script. It’s where the heart of the book lies, and it’s through Roca’s eyes that we see and process the horrors Miguel’s endured.
The convention of including honorifics in translations of Japanese graphic novels generally comes from the ‘80s and ‘90s, when legitimate animation and comics imports from the country were rare. There had built up a fan culture in the US in which amateur translators would add subtitles to Japanese videotapes, and copies of these bootlegs would circulate like cyclical, being copied and passed on. The trend was toward leaving some Japanese terms in place if the translator believed there was no suitable way in which to translate them or if they could convey a distinct (and illusory) sense of “Japan-ness” to the viewers. So terms like onsen (hot springs bathing), baka (idiot) and onisan (older brother) remained merely transliterated. As well honorifics used (somewhat) to convey position in social hierarchy also survived translation. This contrasts with best localization practices, in which translators seek to unveil rather than to gatekeep.

The convention established in bootleg video translation carried over to comics as well, so that when publishers began to import Japanese work in earnest in the early 2000s, there was already an entrenched fan community that had expectations for what authentic translation should look like. Japanese graphic novels in the English-language market usually included an appendix explaining honorifics for readers not yet accustomed to the translation idiosyncrasy. Translators have regularly pushed back for a couple decades against this trend. And while translators like Wandering Son’s Rachel Thorn and Zack Davisson (of Showa and Opus) still find themselves having to argue against including honorifics in social media forums, Wandering Son is the one place where Thorn has decided to retain honorifics. Describing her translation decisions in an afterword, she explains that as Wandering Son is so intimately concerned with gender implications and self-conception, her job would have been immeasurably more difficult without retaining the honorifics:

After 20 years of professionally translating manga, I am hard pressed to recall a case in which I retained honorifics. In the case of Wandering Son, though, skipping over honorifics would completely close off to the reader an aspect of the work that is both important and intrinsiically interesting.

Nearly 20 years after writing that, Thorn stands by the choice and says it’s still the only title in which she’s retained honorifics.
Beginning in 1957 Héctor Germán Oesterheld and Francisco Solano López produced 350 pages of an eerie Twilight Zone-esque comic strip across 106 issues of the weekly comics magazine *Hora Cero Semanal*. The series, positing an extraterrestrial invasion of Argentina, became iconic within Argentina and Latin America both for its crisp sci-fi storytelling as well as its veiled (and in sequels, less veiled) anti-fascist themes. Oesterheld eventually was disappeared in 1976, a victim of the Dirty War (along with his three daughters).

There’s this thing about a lot of older graphic novel works that are well-venerated. Despite all the dignity associated with the place they hold in comics history, despite all the ways they influenced what we see in the field today, and despite all the ways they stood apart in their day — despite all these very important and legitimate things, many of the great works of the canon feel hackneyed and primitive when held in comparison to our contemporary greats. And we should expect this. We should expect that when giants stand on the shoulders of giants they should loom much larger.

*The Eternaut*, however, remains fresh. Unlike the unending adventure-story engines of their North American contemporaries, Oesterheld and López craft a sustained narrative while simultaneously driving toward a definitive climax and conclusion. The story begins with an improbable, eerie deathbringing snowfall in a climate resembling south Florida, follows a group struggling to survive an alien invasive, and ends in a Serling-esque twist. Not only were comics stories this long unheard of in the US in the 1950s, but *The Eternaut* reads probably as well today as it did then. And Osterheld’s insistence that the individual is not the hero but that the hero is the collective reads as novel now as it must have 60 years ago.

Erica Mena’s translation adds an additional kick by mirroring the style of the pulpy science fiction and horror comics of the 1950s that dominated the racks before Marvel turned the comics world on its head in 1963. It’s intentionally a little bit kitschy perhaps, but the American reader in 2021 will know exactly where to hang their hat even from the first page. And this translation choice holds the additional benefit of easing the reader into believing they know what they’re in for. This makes what comes next all the more surprising. *The Eternaut* is an important release, and Fantagraphics does a great job down all lanes, from translation to printing to packaging. The volume additionally contains an introduction by Argentinian science fiction specialist Martin Hadis and an afterword by Juan Caballero, who publishes work about the Buenos Aires literary scene.
I didn’t appreciate Alexis Siegel, translator of Lastman, nearly as much before the English language release was suspended at six volumes out of twelve. Left on a literal cliffhanger (the main character is hanging from a cliff), I purchased the French volumes, hoping to pick my way through with a translation app. I knew that I would be missing out on nuance and that the experience would be less than ideal, but at the least I could find out What Happened.

I’d underestimated just how much the authors relied on slang and idiom. It took me hours and hours to get through just a single volume, and I had only the barest sense of what people were saying from page to page.

Imagine you don’t speak English but you try to use Google translate to render a character’s speech in your own language, only the character is colossally drunk. “Shmaybe yooou should minnnd yer own bizshnizz.” You’re not going to get very far.

Then I encountered an unlicensed translation of those final six volumes. The translator worked hard to bring the idioms, slang, dialects, and jargon into understandable English, but the difference between the professional translation and the unlicensed labor of love was still evident.

A good professional literary translator doesn’t just convey the meaning of the original text. They are also talented writers in their own right, creating highly readable text in their own writing. Lastman is a world-spanning fantasy, sci-fi, mixed martial arts adventure featuring dozens of unique characters, each with their own manner of speaking. If it were not for the collapse of the series in the North American market, I would never have been able to truly appreciate just how great a job Alexis Siegel did with the books.
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Behind the Scenes

Demystifying the Office Manager

Terena Bell

Great translation requires more than translators. From project managers to in-country reviewers, linguistically, an entire team must come together in order to get each message right. But what about the behind-the-scenes, non-language roles that make translation happen? From salespeople to marketers to accountants, localization companies are filled with other professionals who form the industry. How come nobody ever talks about them?

Welcome to “Behind the Scenes,” a new MultiLingual column that looks at the non-language roles that language services wouldn’t exist without. In this issue, we interview Nikki Cowland, office manager for England-based provider Anja Jones Translation (AJT). AJT is located in Newquay, on the north coast of Cornwall.

So, what does an office manager do exactly? AJT has 18 employees, which affects Cowland’s role, she says. “I have found that working for a smaller company, the role of an office manager can be truly varied and challenging, as you may find yourself wearing a number of different hats. It is constantly evolving, and I have found myself taking on new responsibilities all the time.”

Her current role is very hands-on and encompasses four key areas. The first is managing the physical office: utilities; fire alarm; liaising with managing agents, landlords, tradespeople, cleaners, trash and recycling collections; that kind of thing. Then, she is also tasked with looking after the health and safety of all AJT’s employees, such as ensuring the company’s policies and risk assessments are up to date, as well as monitoring general wellbeing and happiness. Cowland notes that this job has became much more important during COVID. In her current work, Cowland mentions “an increased focus on mental health and wellbeing, as well as being set up with a safe workspace and the right equipment.”

Her final task has been in accounts and payroll, managing payroll for in-house and freelance teams. “It’s about accuracy and keeping comprehensive records, so you have to be on the ball with your wits about you at payment time,” says Cowland. Then there’s the bookkeeping, the banking, the invoicing, the credit control, the reconciliation, and the VAT European value-added tax.
opposed to a different industry, she says it wasn’t a conscious decision. “If I’m honest, I was surprised to learn that there was a translation company in Newquay [but] as soon as I saw Anja’s advertisement, I knew I wanted the job. I enjoy admin, I’m organized, I’m a stickler for detail, and I love languages, so the job seemed to fit the bill very well.”

And indeed, says Cowland, it did fit the bill and she ended up learning a lot. “Now that I’m working in the translation industry, surrounded by language lovers of all persuasions, I know this is where I want to be. It’s wonderful speaking with translators from all over Europe and some from further afield.”

Between interview and press time, Cowland’s office duties will change again, since AJT is closing its physical offices and going fully virtual. “Naturally, I’m involved with managing that transition too, along with Anja [Jones, company owner]. My role just keeps on evolving,” says Cowland.

Why does the language industry need office managers? “An office manager can be a lynch pin — a conduit — between the various facets of a business and its people, and also a face for the business in the [managing director’s] absence,” says Cowland. “An office manager is generally in the office during working hours, when the management team might not be. They can pick up on the subtleties in an office environment: who’s happy, who’s not, who’s struggling, where communication is breaking down.” Additionally, an office manager can be the link between translators and management.

“Our translators spend a lot of time concentrating intensely at their computers for hours on end, and I’ve always encouraged them to take breaks, get away from their desks, not overdo things and get out of the office to get some fresh air,” Cowland notes. “I’ve found that my own role has sometimes been that of a facilitator for communication, of getting people talking. It’s important to enjoy your time in the office and get to know your colleagues.”

As for what made her want to work in translation as opposed to a different industry, she says it wasn’t a conscious decision. “If I’m honest, I was surprised to learn that there was a translation company in Newquay [but] as soon as I saw Anja’s advertisement, I knew I wanted the job. I enjoy admin, I’m organized, I’m a stickler for detail, and I love languages, so the job seemed to fit the bill very well.”

And indeed, says Cowland, it did fit the bill and she ended up learning a lot. “Now that I’m working in the translation industry, surrounded by language lovers of all persuasions, I know this is where I want to be. It’s wonderful speaking with translators from all over Europe and some from further afield. I learn something new every day, be it a new word, a new food or an understanding of a new culture. Languages open doors in all sorts of ways and I am very happy to be working in this industry.”

Cowland says there are misconceptions people in her day-to-day life have when she talks about her job, however. “People always assume I’m a translator and are disappointed to hear that I don’t actually translate. My friends know I speak Spanish and French, so naturally [they] make that connection.” Aside from that, she says people are generally surprised that there is a translation company in Newquay, a smaller beach town of around 22,000 residents, where most jobs are in tourism. ♦
When it comes to machine translation (MT), the question of quality and how to effectively carry out evaluations has always been near the top of the agenda. The topic came even further into focus with the advent of neural machine translation, and that’s when we were introduced to a new phrase: human parity.

An MT engine that has achieved human parity means, ostensibly, that it can produce translations of equal quality to those produced by a human translator.

These two simple words first raised eyebrows, and then raised the ire of (most) MT practitioners and translators. Those who claimed to have developed MT engines that achieved human parity gained headlines in the media, but were widely pilloried by parity poopers within the research and development community.

This fallout did not make the human parity claims go away, but it did inspire a lot of debate and research into what exactly it means to achieve human parity, and to how best to conduct these assessments to add more robustness, diligence, and consistency to the process.

**What is human parity?**

At this stage, you might rightly be asking, what does human parity actually mean? A few definitions have been proffered: a human judging the output from an MT engine to be equivalent to that produced by another human. Or perhaps a set of machine translations achieving the same score as a set of human translations using some scoring mechanism. More loosely, it means that MT output is statistically indistinguishable from human output. To summarize in simpler terms, it refers to machine translations that are as good as human translations.

We’re already on very shaky ground when trying to discuss what constitutes a “good” translation, so let’s park this topic for the time being and take a look at the evaluation process.

**Raising issues with the claims**

Many questions were asked when the first human parity claims were made: what was the test data used in the assessments? Who produced the human translations being compared? Who is making the judgments and what are their credentials?

Researchers found that the test sets had already been translated, and then back-translated into the original language. This means the content of the test sets would be simplified from a linguistic...
"Let’s step away from the idea of comparison, and look at the process of evaluation itself and how it can be improved to make it more consistent and less open to dispute."

That is to say, rather than creating test sets from a random selection of sentences, they should comprise text that exhibits a range of linguistic characteristics. These characteristics could be anything from punctuation, dates, and currency notation, to long distance dependencies, compound nouns, and ambiguities. This is a more holistic approach to the task that can give us the comfort that, if an MT system does well in an evaluation, it has well and truly covered the bases.

Related to this is the idea, mentioned earlier, of sentences being evaluated as part of a larger body of text rather than independently. In a perfect world, we might even have test suites of documents, but maybe we should learn to walk before we start running!

Assessors.

Lastly, we come to the question of who actually carries out the assessments — who are these arbiters of quality? Many of the larger scale assessments have been carried out via crowdsourcing out of necessity, though in that perfect world we talked about, assessors would be professionals — linguists, translators — who can capture those nuances inherent to translation.

Regardless of who carries out the evaluations, they should always have access to the source text and make judgements on the accuracy of the translations, as well as the fluency. Believe it or not, there are cases where assessors only have access to the target, and judgements are made based on the fluency of the output. Assessing translations using a combination of both fluency and accuracy (also known as adequacy) should be a minimum.

Looking beyond graphs

At the end of the day, there is a balance to strike between the efficacy of the process and what is practical. However, given that we are still relying heavily on flawed metrics like BLEU scores, there is clearly room for improvement.

If you’re planning on carrying out your own evaluations in the near future, make sure to consult the large body of recent work for some guidance and guidelines.

And the next time you’re reading an evaluation report, whitepaper, or blog post, remember to ask questions! Maybe it will help you to see beyond a pretty graph and identify cases that are built on less than solid foundations. As with MT itself, the evaluation process is never going to be perfect, but we should strive for it nonetheless! ♦

perspective, and thus easier to machine translate.

Sentences from the test sets were also evaluated independently from one another. When assessing a document, one mistranslated sentence could render the whole translation unfit. Breaking down documents and evaluating at the sentence or segment level has been shown to somewhat level the playing field when it comes to comparing human and machine translations.

The assessments were also crowdsourced, as opposed to necessarily being carried out by professional linguists. A lot of previous research has shown crowd assessments to be much more tolerable of issues in the translated output.

Therefore, while human parity may have been achieved in the particular assessment in question, the dice may have been somewhat loaded. However, what’s done is done. The question is, how can we do better in future?

Refining the evaluation of MT

The notion of human parity inherently pits machine translation against the human translator. I fundamentally believe that is the wrong way to frame the conversation, but that’s a topic for a future issue! Let’s step away from the idea of comparison, and look at the process of evaluation itself and how it can be improved to make it more consistent and less open to dispute.

Test data.

There’s an adage in AI that systems are only as good as the data used to train them. This applies to MT, and it also applies to the data used for evaluating translations. Ideally, test sets should contain original source material and not translated data from another language. Similarly, the reference translations — that is, the human translations against which all judgements will be made — should be good translations, and reflective of the source to the extent possible. This might seem like an obvious statement, but it is not always the case in practice.

While there will inevitably be some overhead in creating and validating test sets in this way, the ends should justify the means if we are interested in getting a true reflection of how good the translations actually are.

Test suites and context.

On the theme of test data, more recent work has proposed the creation of specialized test suites for evaluating translations.
Think about this: every time you reach into your medicine cabinet for some type of aid like headache relief or pain management, a clinical trial will have brought your medication to market.

Clinical trials have traditionally provided a controlled testing environment to ensure the safety and efficacy of any drug. Patients play an ever more important role in clinical trial design and execution. The ability to recruit, retain, and communicate effectively with clinical trial participants may make the difference in a drug’s approval.

And then came COVID-19, throwing a huge curveball into the drug development process, and leaving contract research organizations (CROs) scrambling to keep clinical trials up and running. Many clinical trials were paused or delayed given the safety challenges to enroll and dose participants. Investigative sites were disrupted, driven by staff furloughs, social-distancing protocols, and concerns over patient safety. According to the US National Institutes of Health, an estimated 80% of non-COVID trials were impacted by the pandemic, forcing clinical studies to develop flexible, innovative and patient centric approaches. With patient centricity on the rise, CROs are focused on patient engagement, communication, and the execution of clinical trials to remove physical, geographic, and communication barriers to adequately address the needs of patients. In a post-pandemic era, patient centricity has to become best practice as opposed to something that’s nice to have.

What is patient centricity?

Patient centricity is a holistic approach to treating patients as collaborators in the clinical research process. This trend pivots clinical trials from purely scientific to trials tailored to engage, retain patients and caregivers, with increased transparency. It can take many forms, from the actual trial design to setting realistic expectations on how patients might benefit from the therapy, to the overall patient experience in an effort to drive more effective patient-centric care.

Patients are consumers even when enrolled in a clinical trial and expect CROs and partner sites to deliver the best possible experience. Understanding what patients want and expect is the first step towards patient centricity. A high level of understanding and patient engagement can only be achieved by creating avenues for continuous communication and feedback which will ultimately benefit not only trial patients but the healthcare system as well. High quality therapy whether...
delivered in-person or remotely, must reduce patient burden and meet patients’ needs and expectations. And it’s not one size fits all. When you’re delivering care that is convenient for participants — whether it’s in-home visits, video chat via digital portals or in-person appointments — top priority is placed on patient comfort and needs.

The emergence of virtual trials

Virtual or decentralized clinical trials are more of a necessity than ever. Traditional brick and mortar visits and monitoring can now be accomplished with advances in telehealth and telemedicine. A wide variety of patient-facing digital technologies have been developed to support virtual clinical studies. The ubiquity of mobile technologies like tablets, smartphones, and wearables, along with cloud technology, has eased the way for legitimate electronic data capture that can generate reliable clinical data. Data can be collected at home or wherever it’s convenient for the patient.

These patient-facing technologies add additional challenges where local or native language is required. This goes beyond the translation and localization of clinical trial documents normally used in a traditional randomized clinical trial. Now, consideration must be given to the various patient-facing interactions. This includes target language user interfaces, real-time virtual interpretation, translating documents for regulatory authorities, electronic informed consent forms, and other patient-related materials.

Language plays an even more important role when it comes to virtual clinical trials. Patients must adapt from face-to-face interactions to digital ones. The precise meaning of what’s being communicated is critically important to ensure that the captured data is accurate.

Including voice of the patient

Making sure therapies reach target patients starts with patient engagement during trial design. Proactive, bilateral patient communications are crucial for study retention and efficacy results. Content must engage, inform, and clearly communicate important information to patients throughout the entire clinical trial lifecycle.

Traditionally, quantitative measures have served to evaluate the safety and efficacy of clinical trials, but these approaches don’t directly address the voice of the patient. New methodologies are being adopted that capture the patient experience through qualitative measures providing valuable patient feedback on their experiences throughout the clinical trial process. Recently, the FDA produced guidance documents to address how patient experience data can be collected in a systematic approach. The output is a series of guidelines which address collecting patient input, methods to identify what is important to patients and developing fit-for-purpose clinical outcome assessments. By incorporating the voice of the patient in study design, it’s possible to minimize obstacles, improve efficiency, and trial outcomes.

Best practices for effective patient communication

Research shows that patients who are engaged and receive personalized care are more likely to stay in a clinical trial. Retaining patients means providing access to resources in a way that is convenient for each individual. Preferences may range from video check-ins to in-home visits to telephone calls. Physical limitations and technology accessibility must be considered to ensure therapy and patient monitoring can be adequately delivered during the trial.

For multilingual participants, cultural adaptation and linguistic accuracy must be incorporated across interactions and study materials. Working with native speakers who possess broad experience in clinical trial documentation in multiple therapeutics is critical for ensuring patient recruitment and retention — and ultimately clinical trial success.

Vision of a patient-centric future

This year has seen the emergence of patient-focused drug development (PFDD), an FDA Center for Drug Evaluation (CDER) approach for patient centricity. Top pharma organizations are also implementing patient-centric strategies for drug development, and hiring patient-focused leads.

These emerging initiatives support a unified vision where the patients’ experience, perspectives, needs, and priorities are put at the forefront, with detailed patient experience mapping and a comprehensive patient-focused story across all stakeholders. These guiding principles will only gain momentum in the coming year and drive new approaches in the future.
Not all English dictionaries reached the same conclusion, but if you ask the average person on the street, they will probably tell you that the words that most represented 2020 are “lockdown” and “pandemic.” This was the decision reached, for example, by Collins Dictionary.

The very fact that the dormant English word lockdown saw its frequency of use rise in such a staggering and sudden way makes us think that words are almost like laws unto themselves, reminding us that in language as in everything else, change is inevitable. The word itself has seen its semantic core shift, from meaning the confinement of prisoners to their cells following a riot or other disturbance (which, according to my Random House Unabridged Dictionary, dates from the 1970s and was coined by analogy with compounds like crackdown and shutdown) to a situation in which buildings are shut down for safety, as in the case of attacks or shootings. Finally, it now refers to staying home because of a virus.

Let’s change linguistic domains and talk a little about linguistic borrowing and acceptance. As we discuss how several language communities have decided to express the concept of “lockdown” in their languages, you’ll see that some of them chose to keep the English word, whereas others decided to localize it. With exceptions such as Italian, which incidentally abounds with other borrowings from English, many Romance languages in Europe chose to use already-existing words, such as the Spanish confinamiento, Portuguese confinamento, and perhaps not surprisingly, French with confinement. The Brazilians, however, to maintain their tradition of adopting foreign words unchanged, chose lockdown (pronounced /lɔki̍ daũ/). It would indeed be very odd, almost disrespectful, to be a linguistic purist now, at a time when governments are occupied thinking about the solution to the pandemic — another word with negligible frequency that has witnessed a staggering spike in use. And indeed both Italian and German have decided to maintain the original English word, used alongside their mandatory articles, respectively il and der.

Let’s now give examples of languages further afield, very different from English. Arabic, as is often the case, has multiple words for the same or a similar concept. One is popular (or low register, in linguistic parlance) and dependent on the regional variety of Arabic being discussed, and another one is more formal (or high register). This situation, in which two languages or varieties of a language exist parallel to each other and are used in different domains, is typi-
“It is my hope that, in all the present chaos in the world we can at least also find solace in the thought that one day the world will be like it was before. Because, after all, as languages and history show us and Solomon so wisely declared, there is nothing new under the sun.”

cally described as diglossia. However, limited examples may occur in other non-diglossic languages as well, as seen in the words for restroom in Brazilian Portuguese: *sanitário* (high) and *banheiro* (low). No one will ever ask you in Brazil “onde é o sanitário?”

In Arabic, *īghlāq* (ṣāmīl), literally complete closure, was used to mean lockdown in the high register, and *ḥajr sīḥīh*, literally “health prohibition,” was used in many low register varieties — though it occasionally makes an appearance in its expanded meaning in the high register as well. Persian, also known as Farsi, an Indo-European language like English, has a more poetical slant: *tātīlī*, literally “holiday.” Originally a borrowing from Arabic, it means “break,” or “interruption” in Persian. Turkish takes another approach: *sokağa çıkmak yasağ*, or “prohibition of going out into the street.”

The larger point here is to ask a pertinent question: why are some words readily accepted by a given speech community while others are doomed to oblivion? Sorry to disappoint you, but the answer is not as straightforward as we would like it to be. The renowned British linguist David Crystal goes so far as to say that “[i]t remains a lexicological puzzle why some words were accepted and some rejected. We do not know how to account for the linguistic ‘survival of the fittest.’”

Analogy here certainly plays a role, but it is not always so easy to guess what a whole language community thinks of all the associations behind a newly coined word. You might think here of Ferdinand de Saussure’s description of a linguistic sign — house, in English, does not conjure up exactly the same images that the word *casa* would for a Spanish speaker, to give but one example.

Let’s look at the matter closely and cross-linguistically. The other day, as I was translating a document from Turkish into English, I came across a word that made me smile: *faks* (fax, in case it’s not obvious). I smiled not only because it is rarely used anymore due to technological advances, but because its use was banned by the TDK (Türk Dil Kurumu), the Turkish Language Academy, as a detestable borrowing. The TDK suggested *belgegeçer* instead, a compound made up of *belge* (document) and *geçer* ([it] passes). It is not uncommon to find such structures in other languages, especially for older devices, as can be seen in the Spanish word *tocadiscos* ([it] plays records). Ironically and maybe not surprisingly, the word *belgegeçer* was not the chosen one in the document I was translating, but — believe it or not — it is still used on the official site of the TDK (www.tdk.gov.tr) alongside the word — and here is another irony — *telefon*, meaning, of course, telephone. This little Greek-derived word, a compound which so many Indo-European languages adopted, is not universal and, as one might guess, was the target of puristic attitudes by some language communities, giving us translations such as the German *Fernsprecher* (far + speaker). In this case, the untranslated loanword *Telefon* won in German as well as Turkish.

For the same word, in Arabic we find *ḥātif*, derived from a root meaning to shout or cry. A telephone, then, is “that which shouts.” This does not tell the whole story, however, and we must revisit another sociolinguistic term, diglossia. Originally the word for bilingualism in Greek, it was first used in an expanded sense by the Greek writer Emmanuel Rhoides, adopted into French as *diglossie* by Greek linguist Ioannis Psycharis, and later used by the William Ambroise Marçais in an article entitled “*La diglossie arabe.*” Diglossia is a common feature of some language communities such as Arabophone ones, and as far as the telephone goes, *talîfôn* is the preferred word in everyday usage, while *ḥātif* is used only in formal contexts, written or otherwise.

An interesting example of purism that actually succeeded in ousting a borrowing is the Italian word for football (soccer), *calcio*, derived from the Latin word for heel, *calx*. This stands in contrast to the almost universal “football” in its different local variants. According to Roger Hughes, “during the Fascist *ventennio*, the growing popularity of the sport was not lost on the (highly Anglophobe) Duce, who uncovered/invented some supposed Italian roots for it (including the Florentine *calcio in costume*) and decreed that the vocabulary of the sport should be stripped of English loanwords and native Italian terms used in their place.”

In short, amidst all this chaos we find — for better or for worse — communication. It is my hope that, in all the present chaos in the world we can at least also find solace in the thought that one day the world will be like it was before. Because, after all, as languages and history show us and Solomon so wisely declared, there is nothing new under the sun."
Chinese Game Challenges: Tencent’s First Attempt at World Domination

Ben Wilkinson
The Chinese games market has been booming in recent years, being valued at $26 billion in 2017, and has been battling against the United States in the past few years for the spot of the highest-valued games market in the world. This young and ever-growing market has seen the inception and meteoric rise of two of China's most prominent game developers and publishers: Tencent and NetEase, which in 2018 owned 69% of the gaming market in China combined. In recent years, Tencent has been increasing its influence in the West through the acquisition of lucrative American companies such as Epic Games and Riot Games, and has made attempts to enter a number of its own home-grown IP into foreign markets outside of China.

Perhaps the most noteworthy of any of Tencent's ventures into markets outside of China was the launch of *Arena of Valor*. *Arena of Valor* is the localized version of China's hugely successful game *Honor of Kings* (王者荣耀), which has broken several records in its home country and has become a cultural phenomenon there. It is safe to say that *Honor of Kings* has been one of the most popular and culturally significant games in the world over the past five years, with approximately 200 million active players at any one time, making it one of the largest communities of a single game in the world, only falling behind other phenomenally successful games such as *Fortnite*.

It is therefore no surprise that Tencent saw the potential of their game and wanted to attempt to replicate the success they had in China abroad. However, in order to enjoy the same level of success which *Honor of Kings* enjoyed in its domestic market, Tencent believed that *Arena of Valor* would need some changes. Thus, in 2016, development began on a localized version of *Honor of Kings* with the intention of making a game that was appealing to the market outside of China. It was clear from the start that this would be a monumental task, and one of Tencent's most ambitious projects up to that point.

When translating and localizing a game from one region to another, there is both a cultural chasm and linguistic chasm that must be overcome in order to successfully market the game in the target market. After all, even a completely text-based translation is just as much a cultural exercise as it is a linguistic one. A game, however, is not just a text; it is an interactive ludic...
product developed and marketed with a specific purpose: to be fun and enjoyable to the largest number of players within the target market. The localization of a game is therefore a venture that carries reward and risk in equal measure; a successful localization will allow a game to flourish in markets outside of its original domestic market and therefore greatly boost the profitability and popularity of the game on a global scale. However, a failed localization can be ruinous both financially and commercially, resulting in both damage to the company’s revenue and possibly their global reputation.

Over the past couple of decades, localization has been an area of great importance for game publishers. In the age of the internet, the chances for huge success and profit are well within reach for many game publishers as long as they understand the market in which they release their games and make adjustments accordingly. Therefore, there has been an increased emphasis on the idea of culturalization within the game localization industry in recent years. Culturalization can be considered a sub-branch of localization where the focus is not on the adaptation of the text but “rather about tailoring at a more fundamental level, so that gamers perceive the game as something as 'local' in nature or at least very locally relevant,” in the words of game culturalization expert Kate Edwards.

Culturalization is the adaptation of any cultural aspects of a game that may be considered unattractive, offensive, or incomprehensible to the target audience and the proactive adaptation of games to make them more attractive and culturally relevant to their target market. It is therefore a very relevant localization strategy in the modern age, and particularly for publishers who come from a culture and market that is vastly different from the target market.

Tencent is a Chinese publisher, and therefore shares China’s cultural heritage of approximately 5,000 years of civilization. Having such a rich history and culture, it is common for Chinese games to contain characters from mythology and well-known periods of their history, with many games entirely based on Chinese legend, mythology, and classic stories. The Chinese are knowledgeable and proud of their history and culture, which makes it no surprise that many Chinese games draw on these themes. Video games are a form of cultural expression and video games are therefore a reflection of the culture from which they originate. It thus stands to reason that Chinese games generally reflect the culture of their Chinese creators.

Due to the difference in culture and way of living, Chinese gaming market demographics, practices, and methods of consumption are all distinctly different from those in the Western world. In China, the gender demographics of the gaming market are split almost exactly in half, with an almost equal number of females and males participating in regular gaming activities. The main method for video game consumption in China is also through smartphones, tablets, and PCs, with only a small number of console gamers, meaning that even the way in which the Chinese market is used to consuming video games is distinctly different from other countries.

Additionally, the government regulates the gaming industry and the publishing of every new game which enters the market with a rigor that is unseen elsewhere. The direct government intervention in the sale and release of video games in China, not present to anywhere near the same degree in any other country, has profoundly affected the video game culture of China.
Tencent therefore had a monumental task set before them if they wanted their localization of *Honor of Kings* to be a success comparable to that of the original. There was not only a linguistic barrier but also a cultural one and potentially a disparity in market demographics compared with the domestic Chinese market.

Due to the cultural chasm which exists between the Chinese and English-speaking worlds, it comes as no surprise that Tencent decided to do a complete overhaul of their immensely popular mobile game *Honor of Kings* (王者荣耀) to create a new, fully-localized title called *Arena of Valor* for the international market. Within China, *Honor of Kings* has been a cultural phenomenon, grossing $1.61 billion in 2017 and almost $2 billion in 2018, and has continued to go from strength to strength through 2019 and 2020. This success in the home market, along with a gap in the market in the West for more “serious” mobile games was what led to the wholesale culturalization of *Honor of Kings* into Tencent’s new localized game: *Arena of Valor.*

When Tencent started their production of *Arena of Valor,* one of the main differences between the Chinese domestic market and those abroad was the way in which consumers played their games. When development was drawing to a finish in late 2017, console gaming and PC gaming still dominated the US gaming market, however mobile gaming had been steadily growing around the world, leading to mobile occupying 42% of the global games market in 2017. It was this development which gave Tencent confidence in their product in the West, with their PR manager Chris Schmidt even saying that he believed “there is enough of a critical mass of people here on mobile in the United States and Canada… Phones have gotten to the point where they are powerful enough to play great-looking games and that fans want to experience a more involved, intensive, experience rather than the casual games people play most of the time here in the states.” Tencent’s aims were clear; they wanted to bring their successful product to a new market in an attempt to capitalize on a growing niche that had yet to be fulfilled in the international market.

The localization of *Honor of Kings* and *Arena of Valor* seemed to adhere to one of the fundamental principles of localization: to create a game that provided an experience equivalent to the original. The driving principle behind *Arena of Valor* was to create a game that would essentially blend into the international market through a thorough ‘domestication’ of the original content into a more westernized aesthetic.

*Arena of Valor*’s localization team appears to have used an active culturalization strategy as their guiding principle, with the entire game being remade from the ground up in order to appeal to audiences outside of China; removing all Chinese cultural references which the localization team believed would not appeal to the international market. Nearly all of the original assets, including the game’s logo, menus, interfaces, in-game character models, and other non-textual assets, were all modified to appeal to the target audience, with very little being left unchanged.

One look at the initial start-up screen and main menu interface for each game presents users with two rather different aesthetics. Where *Honor of Kings* is generally lighter and more cartoony, with a more colorful blue color scheme, *Arena of Valor* is much darker and tends to focus on an aesthetic based on mobile in the United States and Canada...
around realism. This demonstrates an appeal to the target market by the localization team; markets in the west have long favored realism and darker aesthetics with more “serious” games, hence the popularity of games such as Call of Duty and Red Dead Redemption 2.

When Arena of Valor was developed and eventually released in 2017, the mobile gaming market was yet to be taken seriously by many gamers in the West, therefore it was a reasonable assertion on the part of the localization team that in order to break into the western market and create a popular mobile game, they would have a higher chance of success if they marketed the game as a “serious” game on mobile, rather than just another mobile game.

Another noteworthy difference between the two versions of the game is the functionality and integration with social media. While Arena of Valor can be linked to a Facebook account, it is merely optional and not actually necessary, whereas Honor of Kings requires a QQ or Wechat account to be bound to it in order to play it long-term. Due to the preeminence of Wechat as a social media platform in China, currently almost everything can be linked to a person’s Wechat account, including bank accounts and payment services to name just two. The integration of Honor of Kings with Wechat in particular allows for a dynamic which is not possible through any social media platforms outside of China such as Facebook, as the social media platform does not have the same amount of penetration into daily life as Wechat does now in China.

The binding of social media accounts with in-game accounts has created gaming communities which are focused around competition within relatively tight-knit social groups along with sophisticated incentive systems which encourage players to continue playing for tangible rewards. The culture around gaming in the West has not seemed to favor the reward-based culture that can be seen in China and this may have something to do with the nature of Chinese society in which both the players and game companies are in a fiercely competitive environment; players want to improve their in-game status for social credibility and companies want to ensure that players keep on coming back to their game.

In MOBA (multiplayer online battle arena) games, the in-game characters are the main point of interaction between players and the digital gaming world. These heroes are also able to be purchased or acquired, making them not just a point of interaction between game and players but also an in-game commodity. As a result, there is often a great emotional connection between MOBA game players and the in-game characters, which is strengthened through character backstories, purchasable skins, and other customizable features that may be used as a point of customization or interaction between player and character.

Being an ancient society with one of the most ancient literary traditions in the world, it is no surprise that China has developed its own sophisticated mythology and legends based upon its history. Modern-day Chinese culture is greatly influenced by these stories of the past, with its media unceasingly reproducing great literary works, well-known stories, and historical periods as movies and TV shows to the extent that there is even a specific genre used for movie and TV adaptations of ancient stories and myths.

The European Commission has said that “video games can act as a vehicle for images, values, and themes that reflect the cultural environment in which they are created and may act on the ways of thinking and the cultural references of users.” It therefore comes as little surprise that Honor of Kings has a distinctly
Chinese aesthetic, with over two thirds of the characters being related to Chinese culture. One of the elements that has contributed to the game’s success has been its appeal to users by using characters the players are already familiar with. Games are a product of the culture from which they are created, meaning that the appeal of games can be lost on audiences from other cultures. *Honor of Kings* is very distinctly Chinese in its style; the in-game characters and character design, the models and systems used within the game such as the integration with Chinese social media, and the application of various in-game reward systems that have become a staple of the Chinese mobile game market, are all designed for the Chinese audience. With such a distinct Chinese style, the localization strategy for *Arena of Valor* was to focus on creating a distinctly “Western” version of the game, with the expectations of the target audience always taking precedence over the game’s original content.

This localization strategy has led to an almost complete overhaul of the characters from the original game. There are only five characters that are actually shared between the two games, with only three of those characters actually being related to Chinese culture at all. The omission of most of the original character lineup demonstrates the localization team’s culture-oriented domestication strategy, where their main goal was to appeal to the widest possible audience. This is further shown by the inclusion of DC comic book characters in the international release of *Arena of Valor*, characters that have never made it onto the *Honor of Kings* roster before or since.

This localization project by Tencent is an example that demonstrates just how fluid a localized game can be, bearing little true resemblance to the original with even some elements of gameplay being adjusted for the target market. Perhaps, due to Tencent anticipating the playing styles of the two markets being different, the actual makeup of the two games’ rosters also have evident discrepancies between one another. The Warrior and Mage classes account for approximately 64% of all characters within *Honor of Kings*, meanwhile the same two classes in *Arena of Valor* account for approximately 51% of all the characters. These numbers suggest that the players of the two different markets favor different gameplay styles which led to the adjustment of the gameplay in an attempt to appeal to the Western market.

When looking at localizations of games, it is worth evaluating whether the purpose for the creation of the localized version is more or less in keeping with the original. In this case, we can safely say that is not the case; the two versions of the games were developed in different years and into different markets which each had their own set of factors which would determine the success or failure of Tencent’s game. Games are not static, nor is the market in which they exist, or the society and culture for which they are developed. When *Honor of Kings* was first released in 2015, the Chinese mobile games market was in a completely different situation to that of the global mobile games market in 2017 when *Arena of Valor* was released. *Honor of Kings* was released into a market free of competitors in its genre and on a gaming platform that was already firmly established in China. However, by the time of *Arena of Valor’s* release, there were already well-established
MOBA games for mobile devices in these markets and *Arena of Valor* also had to compete against games in the console and PC markets as it was released on a gaming platform that had yet to establish itself in many other markets around the world. The localization of *Arena of Valor* was therefore very thorough, with the team replacing and changing everything which they believed may conflict with the target audience’s expectations or that may appear thematically or aesthetically out of place within the game. Through following this culturalization strategy, the original art-style and even gameplay have been adjusted to no small degree, creating a game that is essentially a parallel version to the original.

Overall, Tencent made an extremely thorough localization that was designed to appeal to the culture of the target market and even ‘blend in’ with it rather than stand out. But it perhaps did not turn out to be quite the commercial success Tencent was hoping for. Despite a relatively warm initial reception and a Metascore of 80 on Metacritic, with a User Score of 7.4 and a score of 4.4 in the Google Play Store *Arena of Valor* has never managed to replicate the success of its Chinese cousin. Looking at *Arena of Valor*’s gross income of $200 million from its release to March 2019, it would appear at first glance as though the game can be considered a success in its own right, albeit a minor one. However, after comparing it to other competitors in the mobile market such as Tencent’s *PUBG Mobile* which has grossed more than $320 million outside of China since its release in 2018, or Epic Games’ *Fortnite* which has managed to gross just shy of $500 million on Apple handheld devices alone in 2018, it is evident that *Arena of Valor* did not meet expectations. The fact that *Honor of Kings* itself has made $4.3 billion dollars in total in its slightly under five years of existence, which averages out to a gross revenue of approximately $860 million per year, demonstrates just how disappointingly *Arena of Valor* has performed overall.

Overall, *Arena of Valor* is a significant example of a top-selling domestic Chinese game from a successful and established company being localized for the international market. The localization strategy was heavily focused around culturalization as a means of attempting to reproduce the appeal of the original game in a new target market. It was perhaps not as commercially successful as the patron of the localization expected, but it was an ambitious attempt to overcome cultural barriers with a combination of strategies and techniques that sought to broaden the concept of game localization and challenge what game localization as a concept allows, further blurring the lines of fidelity, creativity, artistic license, and ownership. This localization shows that even localization projects from larger companies can still fail to achieve success in their target market, and this project specifically was afflicted with assumptions that the game should conform to the target market, thus any aspect of the original game that may have given it a unique and different appeal in the new market was changed in favor of more conventional, westernized content. *Arena of Valor* is a great example of how a game can resonate profoundly with its audience in one market, yet completely fall flat in another. This demonstrates that success in one market can not necessarily be replicated in a new market, regardless of the size of the company, the investment into the project, or the scope of the product’s development and marketing itself. Successful localizations are able to transcend cultures and appeal to audiences worldwide, but what this localization demonstrates is that sometimes even actively attempting to appeal to the target audience will not necessarily guarantee success.
Big Fish Games is a Seattle-based game developer. You might be familiar with some of their games, like EverMerge, a puzzle game which invites its players to mix and match their way through a magical world on their mobile devices. Big Fish's catalogue of games is impressive, with hundreds of games in over a dozen genres that are available on virtually every platform.

With so much content to translate, how does a developer like Big Fish ensure that their games are accessible to users all over the world?

“Localization is a core tenet of the Big Fish Games global strategy,” says Yumi Okubo-Shuman, Localization Engineering Manager at Big Fish Games. “Meeting our players where they are, especially those who have a strong preference for their native language is a key part of this strategy.” To reach as many people as possible, each Big Fish game is translated into as many as 15 languages, which requires new translations to be added virtually every week. For a developer with as much content as Big Fish, localization can be challenging.

Successful localization requires a powerful translation management system that’s well suited for game localization. For over 2 years, Big Fish has relied on Memsource to help efficiently localize their content. Memsource’s robust file support, end-to-end automation, and ability to connect to the most popular version control systems makes it an ideal candidate for continuous localization for software and app development.

We continue to be impressed with Memsource and the features that enable us to execute real time updates, quickly and efficiently, across internal and external resources; easily tracking our translation projects start to finish.”

Besides its extensive set of features that help human translation, Memsource is well suited to efficiently leverage machine translation using its patented AI technology. This makes it especially suitable for customers with large volumes of text like Big Fish.

Big Fish games has trained their own customizable engines using their data sets to handle their gaming and marketing content. Both of these engines are integrated with Memsource's machine translation engine management solution Memsource Translate, which continuously evaluates the performance of the engines against the performance of the three most popular generic engines available today. If the recommendation algorithm suggests that one of these generic engines should be used, it might indicate that it's time to retrain the custom engine. Post-editing of segments is guided using Memsource's Machine Translation Quality Estimation.

That’s not where the benefits of Memsource end: “Being cloud-based, our linguists enjoy faster translation, less overhead, multiple MT engine options, and cross-device compatibility from anywhere in the world. Additionally, Memsource’s commitment to integrations with other key business tools helps them stand out. By utilizing connectors, delivering to online code repositories, as well as automated workflows, the translation process is completed with relative ease.”

Much like in EverMerge, the localization puzzle can be solved by matching up with the ideal translation partner.

You can level up your game localization with Memsource at go.memsource.com/game-loc.
As a kid, I did a lot of pretending with my younger brother. We would talk through our toys and act out all kinds of scenarios with them. What I didn’t realize at the time is that the voices we gave our toys didn’t sound like our Argentinean voices at all. Our toys actually spoke neutral Latin American Spanish because that’s what we were accustomed to hearing actors use on TV and in movies. Looking back, I think it is pretty strange that our own toys — our own imaginary characters — did not speak the same way we did. It was almost as if they were from some faraway land that had little to do with our own culture and dialect.

Latin American (LATAM) Spanish doesn’t speak to any one audience in particular. Instead, it attempts to speak to many audiences across Latin America, regardless of the country they are from. There are some particular things to consider when localizing video games into LATAM Spanish and localizers face specific challenges when trying to implement a one-size-fits-all approach.

One for all and all for... none?

Having worked as a LATAM Spanish linguist for over a decade, I’m all too familiar with the “neutral Spanish” terminology intended for the Latin American audience; nine out of ten projects I have worked on have required this variant. LATAM Spanish is not actively spoken anywhere, but rather it is a dialect of Spanish purposefully designed to sound neutral, and thus widely understood throughout the region. And, for the most part, it does accomplish this mission. People in Latin America are used to reading this variant of Spanish in subtitles and hearing it in dubbed audiovisual content. We are exposed to it from a young age through cartoons and video games. And — just like my brother and I did when we were kids — we internalize it.

However, neutrality doesn’t come without consequences. In order for a localization to make sense in the 20 different LATAM countries where Spanish is spoken, regionalisms have to be deep-sixed. Think about a stripped-down language with no colloquialisms, no slang, no jargon… basically nothing that would be included in the Urban Dictionary — where, by the way, you can find the definition of “deep-sixed” (a synonym of “disposed of”) if that one stumped you. Regionalisms
spice up the language; they can make it more fun and playful, more relatable. Without these country-specific words and phrases, you’re left with a bland, washed-up version of Spanish. This is especially relevant in video game localization because, depending on the genre, video games can be packed with colloquialisms. From narrative to dialogue, there’s no question that cultural references, jokes, slang, idioms, and wordplay abound in video games. And when, as a localizer, you are barred from transferring these ideas into a particular country’s target language and culture, you may end up with a lackluster result. The translation will be understood, but it probably will not resonate as well with the target audience.

Don’t they all speak Spanish though?

Perhaps the most widely-known Spanish variants are European Spanish, spoken in Spain, and Latin American Spanish, spoken nowhere but targeted to 20 different countries. When a video game developer or publisher is looking to have their game localized into Spanish, the first distinction they have to make is between the European and LATAM variants. These variants are very different from one another and definitely should be considered separate languages, especially if you are trying to truly resonate with one market or the other. European Spanish speakers would be turned off and even confused by the LATAM Spanish variant, and vice-versa.

When localizing into European Spanish, you are targeting a potential market of roughly 50 million people that speak one variant of that language. Sure, there are different accents and dialects within Spain, but they all speak what is known as “European Spanish” or Castilian Spanish. Localizers for this variant of Spanish have a huge advantage over those localizing into LATAM Spanish. Because they are targeting one specific country, they can use colloquialisms to make the text relatable and ensure it resonates effectively with that target audience.

When the content to be translated uses a lot of colloquial language, defining the target audience can make a huge difference in the content’s reception. Take, for instance, the subtitling and dubbing of a movie like Deadpool. The Spanish localizers who translated and adapted the dubbing script for Deadpool 2 actually won a prestigious award in Spain for their work. Their script was inventive and full of humorous swearing — just like the original. Moviegoers in Latin America, on the other hand, had to sit through a Deadpool 2 with no slang, no country-specific curse words and no foul language that people they know actually use. In Argentina, a group of fans took things into their own hands and fan-dubbed a portion of the movie into Argentine Spanish. This version was full of Argentine slang and colloquialisms. The video went viral and people are still sharing it, which just goes to show how impactful a country-specific localization can be, especially for an audience so used to settling for a watered-down and unrelatable neutral version.

You might want to avoid this common mistake

One additional challenge when localizing into LATAM Spanish is that you need to make sure the translation is not offensive or inappropriate in any country. Some words or terms are completely offensive in some countries but taboo in others. It would be virtually impossible for a translator to know all the different meanings every single word has in so many different countries, so native speakers of the Spanish dialect are needed to detect possible faux pas.
"In this game, the developers decided to localize to European Spanish. The tone in general is neutral enough to be comprehensible for Latin American audiences, even though not ideal because many words are lost."

I have heard and seen so many instances of this kind of mistake in game localizations — some so offensive or ridiculous that gamers just can’t let them go. So, what’s the solution? Ideally, your localization partner should have a diverse team representing all the different Spanish-speaking countries. This team should scour any Spanish translations for offensive and inappropriate language, and place all forbidden words on a blacklist so that their translation tools automatically flag these terms and help the team avoid them.

**Houston, we have a neutrality problem**

There are some subjects for which it’s simply impossible to find an applicable word in all different variants of Spanish. When you encounter this dilemma, you can resort to using the terms that would be the least confusing or specific. Sometimes that means using the term that the country with the largest population employs, which in the case of Latin America is Mexico. However, often Mexican speakers will say something differently than everyone else in Spanish-speaking Latin America, so in those cases, you will need to use your best judgement and determine whether it’s worth siding with the majority. It can be a constant push and pull. It’s certainly difficult to navigate, and it’s never perfect.

An extreme example of these problems is the Spanish voiceover of *Grim Fandango*. In this game, the developers decided to localize to European Spanish. The tone in general is neutral enough to be comprehensible for Latin American audiences, even though not ideal because many words are lost. For example, the poisoning with “gazpacho” at the beginning of the game (which is left as in the English original) might reveal that we are in a world of Mexican characters for a US player, but it would not mean much for a Latin American player.

Also, though Spanish-speaking audiences have praised this voiceover, there is one big problem with it: for the voice of the main antagonist, Domino Hurley, the developers chose an Argentine accent. You might not know this, but Argentines are known all over Latin America for being wise guys, both in the sense that they are always trying to cheat and in that they can sound overconfident.

Being an Argentine myself I know this is a prejudice, but from the business point of view the decision can be questioned because it risked alienating Rioplatense (the Spanish variant spoken in central Argentina and Uruguay) players who in general would not get the “joke” of the wise guy talking like an Argentine. To add to the problems, instead of using an Argentine actor they used a Spanish actor faking an Argentine accent, which can be quickly recognized by any Rioplatense speaker.

**Should I just go with Mexican Spanish?**

Since Mexico is the Latin American country with the largest Spanish-speaking population, 126 million people, would it make sense to just localize your content into Mexican Spanish? You certainly could, and it would resonate better with that audience. However, you would be essentially alienating the 300 million Spanish-speakers in the rest of Latin America. Mexican Spanish is unique to that country and the colloquial language used there is not applicable to other countries. If you aim to reach all of Latin America, and you cannot localize for each specific country, your best bet would be to use neutral Latin American Spanish. It’s not ideal, for the reasons outlined above, but it’s collectively accepted in the region.

For example, in *Batman: Arkham Knight*, we experience an outstanding Latin American Spanish voiceover that has also been praised by audiences. The quality of the acting makes it
feel like we are watching a real movie equal to the original English voice acting. Yet it is still not a perfect experience for players in most variants. There are many street expressions throughout the game and during the fights, but translations like “¿Qué diablos?” (for “what the hell?”) or “bastardo” (for bastard) sound extremely unnatural, naïve, and even dumb in most Spanish variants. This threatens the suspension of disbelief for many players, as it is very unlikely that threatening thugs would talk like this. But also, everyday things in the game can be hard to understand for some audiences due to the use of the Mexican alternative, as in the opening sequence in which Agent Owens orders waffles with “tocino” (bacon), which is not the word for bacon in other regions.

If you are looking into localizing your Spanish content further to truly resonate with specific markets, you may want to follow the trend of using Mexican, Argentinean, and Colombian Spanish as primary variants for Latin America. And if you do localize regionally, your content will stand out. Not many companies do this, but if you buck the trend, you will probably give native-speakers of those countries a reason to talk about your game. Of course, you’ll want to make sure you have a good following or big potential following in those regions in order to get the best ROI. The localization targets need to be part of your brand’s strategy.

**Know thyself and know thy audience**

When thinking about localizing your materials into Spanish, you need to be especially aware of what type of content you have. For materials such as ads and websites, which market and promote your game, it might be a good idea to localize the content to a specific audience. It’s no secret that well-localized, targeted copy sells better.

You could also consider using different Spanish variants and accents for the characters in your game, and even tie these identities into the story. This would add character dimension and diversity to the game, and it would be something original that Latin American audiences would notice and appreciate.

There is so much unexplored territory when it comes to localizing games effectively for LATAM Spanish. There is room for improvement, innovation, and change. As Don Quixote de la Mancha said: “To change the world, my friend Sancho, is not madness nor utopia. It’s justice.” Giving Latin American Spanish speakers some justice by fully localizing for them might be the change the region is yearning for.
FOCUS

An article published in *Scientific American* in 2012 asserted that “[s]ensory crosstalk helps us navigate the world.” It seems that humans are hard-wired with the ability to deal with multiple sensory inputs. It’s not surprising, therefore, that multimedia is so attractive and effective as a communications technique, especially during these pandemic times when there’s a distinct lack of face-to-face contact and interaction.

Multilingual multimedia production is one of the most interesting and high-growth areas in the localization industry, and the pandemic has only accelerated its growth. Our own experience shows a huge increase in demand. Media production increased by 50% in the last 4 months of 2020, a testament to the need for media content and how we responded to COVID-19 requirements.

Quora Creative notes that audio as a standalone medium has been increasing, due to increasing use of digital assistant voice commands. Video as a standalone medium, in apps such as Instagram and TikTok, has become hugely popular according to Social Media Today. Audio and video together are riding a wave of unprecedented popularity as we all deal with remote work due to the COVID-19 pandemic.

**Video is already a proven winner**

Video has already proven to be a valuable part of apps, eLearning, online product demos, and webinars. A picture is still worth a thousand words when it comes to showing viewers how to do a task, and it is well-established that video increases online audience engagement. In fact, an article from the marketing blog Convince and Convert reveals that the majority of web users prefer watching a video to reading words, that using videos on a landing page can increase conversions by 86%, and that the average user spends 88% more time on a website with video.

On-page engagement is a positive factor in search engine optimization (SEO). Video also helps improve organic search visibility, and many search engine algorithms are pivoting their ranking towards the inclusion of video, so not having video actually decreases the chances of
audiences finding your brand.

Sabine Jolly, head of multimedia production at SDL (now part of the RWS Group) notes: “10+ years ago, media localization was the cherry on the cake, a nice to have if budgets allowed. Media is now the norm, the quickest and most effective way for brands to communicate with their audience be it internally or externally.”

**Video consumption is changing**

In today’s environment, there are several key factors influencing the way multimedia is being deployed and consumed. The introduction of 5G, for example, will eliminate many of the previous barriers that existed to further accelerating video content. Consumer consumption habits are also changing: younger audiences, born during the “internet age,” are consuming information in shorter formats and prefer images or video to reading text (think Instagram, TikTok, Pinterest), and there is a big rise in the use of internet-connected TV devices (CTV), as well as social media platforms. 43% of consumers are spending time on YouTube now, with TikTok being most popular among 18- to 24-year-olds.

The biggest recent change of all is that the COVID-19 pandemic is driving the widespread use of video, both live and pre-recorded, as a substitute for in-person communications. Working from home during COVID-19 is resulting in B2B video consumption becoming more like B2C consumption.

**The pandemic is creating huge demand for video and opportunities for localizers**

Since the start of the pandemic, global daily online content consumption has doubled, shifting from an average of three hours 17 minutes to six hours 59 minutes according to the marketing consulting agency WARC. Heavily contributing to this is the fact that most office workers are now working from home, and meeting with colleagues virtually has become the new normal. In October, Microsoft reported that Teams use had increased 50% over six months in 2020 to reach 115 million daily active users.

Whether it’s day-to-day video conferencing, or virtual events such as customer conferences and sales kickoffs, the global market size of virtual platforms was estimated in 2019 to be more than $77 billion. Since COVID-19, one virtual events platform reported its events are up 1000%, with over 52,000 events since the pandemic started, according to Forbes. Virtual platform use is projected to be over $404 billion by 2027.

These trends are creating major opportunities for translation and related localization services:

- For pre-recorded content, prepared LSPs could see video transcription, subtitling, and voiceover services growth, and cultural adaptation of content for international audiences.
- For real-time communications, whether in office meetings or virtual events, providers could see growth in online interpretation services, as well as growing use of speech recognition plus machine translation as supporting technologies.

**Execution challenges**

For LSPs and their customers, the increase in pre-recorded video demand is exciting, but comes with a set of typical challenges (Figure 1).

While virtual event platform use is clearly growing, there are challenges to switching from in-person to digital meetings. One issue is that, as COVID-19 stretches on, workers are increasingly experiencing “digital event fatigue,” where they simply leave events early. In a study conducted by Redback Connect of digital events over a year-long period in 2019-2020, by the end of the study 86% of the 1,500 participants admitted leaving events early, versus 66% a year earlier. The reasons most commonly given for leaving were, surprisingly, not technical reasons, but had to do with the content and the way it was presented. If the content was not as expected, or the presentation was irritating, they left — far easier to do virtually than in-person!

Another challenge is enabling digital event interactivity for participants in different time zones or who speak different languages. Virtual events present a terrific opportunity for expanding event participation by making them accessible to participants with limited travel budgets. However, while broadband availability is improving in general, there are still many geographic areas with limited or poor-quality internet access, and also, of course, language coverage for those areas may not be part of the event plan. There are structural approaches to addressing this; for example, setting up a series of virtual hubs with a defined group of persons in one location. In COVID-19 times, this approach would need to be combined with proper distancing and mask precautions. Assuming that is in place, then the idea would be that each hub consists of a computer attached to a webcam and speakers, with a stable internet connection, so that multiple participants can benefit from the same infrastructure. Conference fees can be spread across hub participants to make participation more affordable.

**COVID-19 is driving B2B to become more like B2C**

With the digital fatigue factor mentioned above, there is a definite trend toward shorter-form content, for both consumers and businesses. According to Splash, an event marketing technology company, fewer than 7% of event attendees believe virtual events should be longer than an hour, while 97% of companies have had to adapt their format during the pandemic. At SDL’s own event, the Tridion Expert Summit, our marketing team found that sessions of no longer than 45 minutes (versus the traditional hour) were the optimal
lock-down memory loss? Either way, readers are coming back to savor that content again!

Splash reports that 66% of their survey respondents are still using the same event tech as they did before COVID-19 forced everything online. But shortened viewer attention spans are driving creative B2B content producers to focus more on “entertainment” — another way B2B content is becoming B2C-ish. For example, in virtual events, beyond making sure that the content itself is compelling, getting people to stay in the sessions can be encouraged by the event structure — keeping shorter sessions with plenty of breaks. Other tips include using celebrity emcees and having swag available in either digital form (like free eBooks) or sending it in physical form to participants willing to provide their home address for that purpose. In-conference tools like polling technology and breakout rooms are frequently used to encourage event participants to stay engaged. And because what is “entertaining” differs from culture to culture, this can represent marketing solutions consulting opportunities for experienced LSPs.

How the localization industry is responding

At the Tridion Expert Summit in December, we learned firsthand the challenges of turning an in-person conference of several hundred international attendees into a successful amount of time for a virtual session. This seems likely to be a long-term change, as in-person conferences are not coming back in force anytime soon.

Other signs of the changing event landscape: according to Yahoo! Money, 43% of companies moved all events to virtual and are hosting more virtual events than originally planned, while 79% of companies now expect to host events that include an online component, even once in-person events resume.

Another way that B2B multimedia consumption is becoming more like B2C is that B2B viewers are not only consuming more online content, they also have their own way of binging. B2B content platform PathFactory recently reported that B2B customers and prospects who often access marketing content are now on average spending an almost 20 minutes engaging with online marketing assets. While nothing like the time investment in binging Netflix content, this is still a seven-fold increase from the previous average.

Also, during the pandemic, B2B customers and prospects have been returning to the same content more frequently, similar to how consumers return to their favorite content. Komarketing.com reports B2B viewers returned to consume content an average of 3.92 times at the height of the pandemic (Figure 2), which is a 43.3% increase over the period from earlier measurements. Really good content? Or pandemic

| Costs | Professional quality video content typically costs significantly more than text content. To the basic cost of making the video itself (which may be an internal or external cost), the customer must budget for the translation cost. The latter can be minimized with use of subtitles instead of voiceover for example, but needs to be carefully budgeted, and well-planned to avoid expensive re-dos. A good provider will help efficiently plan execution and manage costs. |
| Usage considerations | Voiceover artists are contractually required to be paid a buyout to allow re-use or public performance of their work, so budgeting for this is key. A good provider will make negotiating this process safe and easy for the customer. |
| Asset management | Storage, search, legal, and lifecycle management are key issues for companies with large quantities of video content. Customers often use digital asset management (DAM) systems to manage this. A good provider will have DAM expertise and partnerships to help customers plan. |
| Speed | For virtual time-bound events, a frequent challenge for the localization provider is that source materials may be finished “just in time,” creating a major time crunch for translation. A good provider will plan in advance for this contingency, with relevant processes and commercial agreements, so that there are no surprises and no extra delays. |
| Quality is king | Viewers, especially in COVID-19 times, will quickly abandon video content that is irritatingly low quality, whether in the images, sound, or translation. They won’t revisit it, either. To be effective, video content needs to be well-produced and worth watching. A professional approach is key. |

**Figure 1: Typical multimedia challenges for LSPs.**
virtual event. Jessica Connolly, SDL’s events manager, learned that when working with virtual event platforms, all the details need to be worked out well ahead of time and perfected. There is very little margin for last-minute maneuvers or improvising solutions. “Connect was a mix of pre-recorded and live,” she noted. “Pre-recorded is easier for organizers, and live is easier for speakers. Presenters tend to work on content up until the last minute. Pre-recording allows for adding graphics and flair to increase content engagement.”

Juniper Networks also had its first virtual customer conference in 2020, and successfully translated pre-recorded content to provide a stellar experience for worldwide attendees throughout several regional broadcasts. They were so successful that Juniper received the 2020 award for Best Globalization of an Event from the virtual platform provider ON24. Silvia Avary, Juniper’s head of globalization, led an agile localization effort that was key to the company delivering its first-ever global virtual customer event in just 45 days, earning praise from CMO Mike Marcellin for “far exceeding outcomes and our historical in-person event averages.”

Another remarkable example of virtual conference mastery is the Church of Jesus Christ of Latter-day Saints. They had a head start on virtual conferences, many years in advance of COVID-19, as their semiannual General Conference has been broadcast to their millions of members for years. Up until 2020 they combined the broadcast with substantial in-person attendance, but with the 2020 COVID-19 shutdown, they needed to go completely virtual. With all their previous experience, it was no problem! They have an amazing team who pre-translates planned conference content, which is then delivered by English speakers who are video-recorded with simultaneous voiceover interpretation. Viewers choose what language they want to hear via a drop-down on the broadcast web page. Switching back and forth between the many available languages is both easy and fascinating. The interpretation is live in order to capture any ad hoc changes the speakers may feel inspired to make. After the conference, the original translations are updated to match the recordings of the videos and interpretation. It is a very effective combination of translation, interpretation, and technology that ensures high-quality translation while allowing speakers flexibility.

These are just a few examples of how companies are successfully using multimedia for virtual events, remote meetings and for online content in general.

In summary:

- Technology is key for video translation — software that handles automatic creation of transcripts and subtitles, and allows for easy review, makes the process much faster and less error-prone.
- Machine translation (MT) can be used to get a head start on the process, but for video content MT is best used in combination with human post-editing to ensure proper quality.
- Customers may mix in live interpretation when perfect real-time understanding is necessary. This applies to virtual work meetings as well as conferences. For example, product management teams getting worldwide feedback on product
localization challenges then could include localized gesture recognition, for example.

- Getting the source right is also crucial. An experienced LSP will provide checklists and education to ensure customers do not have to redo video translation work.
- For virtual summits where a live speaker and live interpretation is planned, it is prudent to have pre-recordings available as a contingency plan, in case there are platform issues.
- To maximize viewer engagement in these times of shorter attention span, virtual summits need to be entertaining as well. Of course, as previously mentioned, how to be entertaining differs from culture to culture. Larger LSPs with marketing solution services can provide cultural consulting to help customers avoid gaffes.
- Make it easy for international customers to feel engaged by taking the time and care to create culturally appropriate event content in their own language.
- Getting the right combination of technology, language and cultural know-how for successful content, meetings, and events is incredibly complex.

The future

If we look beyond current video business usage in online pre-recorded content and events and into the future, there is some indication that virtual reality broadcasts, virtual world-style meeting environments, and augmented reality apps may be the next challenge for localizers. We already see the beginnings of this in the gaming world, where localizers are already active. So perhaps the line between business multimedia communications and gaming will be fuzzier in the future, further blurring the line between B2B and B2C style. The business localization challenges then could include localized gesture recognition, for example.

Will video, audio and virtual experiences as we know them today be around in 10 years? Hard to tell. We’ve seen with COVID-19 how little certainty there really is. In the inimitable words of George and Betty Parker from the 1998 film Pleasantville (Figure 3):

“So what’s going to happen now?”
“I don’t know. Do you know what’s going to happen now?”
(Laughing) “No — I don’t!”
Multimedia takes on many forms, some of them easy to localize — like a simple website or an animation — and others more difficult. Video is probably as complicated as it gets. A dream state would be to localize video, accurately, on-brand, on-message and adapted to cultural sensitivities, with no human intervention. If this were to happen, content creation for international markets would increase at an exponential rate that would surprise even the most global of brands. The benefit? Consistently reaching current and new markets with relevant, timely, on-brand content that will meaningfully engage your customers with your product and ultimately increase sales and brand awareness. Plus, your operation is cost-effectively running 24/7, saving you time and money while increasing efficiency.

Sounds ideal, and experts think fully automated multimedia production for localization is not only possible, but will happen in the future. But first: it is important to stress here that we are not talking about automation technology replacing people. What we are talking about is technology that will free creative people up to do what they do best — create. By automating the localization of a piece of source content, which goes far beyond merely translating it, teams of creative talent can save hundreds or even thousands of hours a year in repetitive tasks and instead build imaginative source content that resonates with new and existing customers, and drives brands forward.

But how far away are we from this tipping point?

Take video as an example. This is a complex form of multimedia to produce because it typically has layers of video, audio, text, and graphics that all have to be married into a single, cohesive form. To fully automate this process for localization, you would start with your source content, put it through the automation process and end up with your localized version. Voilà — images, graphics, audio, and everything else would change through a single process without human intervention.
How close are we?

There is a lot that we can already do. Sticking with the video example, we can use voice recognition to translate the audio. Smart software takes the source voiceover, translates it, and gives us a new recording using a computer-generated voice. These voices are becoming increasingly more realistic as the industry focuses on voice tone and inflection to make sentences sound like fluent human speech and not just a string of words. We can also generate subtitles in other languages automatically by using suppliers such as CaptionHub, whose software can translate the subtitles and provide target-language versions that are married to the video in the right places. These areas bring different automation technologies together to localize the content and get us close to our desired end state of full automation.

Three areas where automation is missing

We can translate, but we cannot adapt some source material because it is too complicated for current software to break down, understand and recreate. For example, if the video has a CEO running through a PowerPoint deck, we can translate the CEO’s voice, but we cannot change the PowerPoint slides. There is no technology that can look at the slides and create new versions without human intervention. Having to translate the slides elsewhere through a different process, we are left with different visual assets for each language that now need to be integrated into the project by a professional.

Traditional optical character recognition (OCR) software is nothing new. There are a lot of good options out there. Techradar.com lists the likes of Adobe Acrobat Pro DC and OmniPage Ultimate as a couple of the leaders in the field, but the flaw for multimedia automation is in the name — optical character recognition means characters, not images with embedded text. Image-based optical recognition would allow us to translate an image the same way voice recognition translates our speech. So, if we are looking at a PowerPoint slide and we can pass it through the magic optical recognition scanner, it would read both font-based text in a text box and any words embedded in graphics, images or pictures. It would recognize and translate them all.

Mainstream technology is already moving in this direction. If you take a screenshot on most smartphones, the phone will suggest you crop it based on the image shapes within the screenshot. So, our hand-held technology can identify basic shapes, which was not possible a decade ago.

And how about quality assurance (QA)? When the output file is created, whether it is a video, a brochure, or a website, can the quality be trusted without a set of human eyes giving it a once-over? Is there a creative director in the world that would have that kind of faith? Being able to trust a process like this to handle QA would be a huge step forward for the marketing, advertising, and communication industries, whose reputations and livelihoods depend on the accuracy of the message within their content.

Automation and true cultural adaptation

Before we dive into our projections for the future, let’s back up and talk for a minute about what localization really means. Of course, any time we talk about fully automating multimedia localization, we are talking about translating the source content. But it is important to remember that the goal is not just a translated video, but a localized video that fully represents the meaning, tone and message of the source video. This is not translation; it is transcreation, which is the process of fully adapting content for a specific target locale. But can we trust machines alone to get the meaning and intent of the message right?

Maybe one day, but not yet. Perhaps image-based optical

“The multimedia creators among us will understand that this is multimedia alchemy, and the answer to translation changes and localization issues. Does this exist yet? No, but neither did digital technology (not really; not for the mass market) 30 years ago.”
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Leiden, The Netherlands
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www.medilingua.com

The future
Imagine a world where all the elements of a multimedia file — all the layers and creative assets that make up each layer — are accessible to anyone who has the file because they are all within the file. A file that never needs to go back to the source software to be changed. A self-contained file that can be automatically localized into any language without the need for Photoshop, InDesign, Premiere, AfterEffects — whatever software created it — because the elements to create it are all within that file.

The multimedia creators among us will understand that this is multimedia alchemy, and the answer to translation changes and localization issues. Does this exist yet? No, but neither did digital technology (not really; not for the mass market) 30 years ago. And software evolution is speeding up exponentially, so this could happen in the foreseeable future thanks to AI.

The idea is that AI would deconstruct the final file back into layers, make the changes to those layers necessary for localization and then render and recreate them back into the final viewable file again.

In layman’s terms, you baked a cake but you want to change the sugar from white to brown. With AI, you could take the white sugar out of the cake and add brown sugar without...
having to go back to bake a new cake. Magic.

Backgrounds are already creating themselves in software like Photoshop. When you cut out a foreground object or move it, Photoshop will create the new background for you using AI to estimate what should be there. So, if you have a photo of a horse running on a beach and you cut the horse out, Photoshop will add water and sand to fill the hole where the horse was, because it is anticipating that this is what would naturally go there. AI can read the elements of the photo around the cut-out object and figure out it was sand and water.

With the right knowledge, there is no reason why this technology cannot evolve to also recognize elements that need to be localized and change images, videos, websites, digital platforms or any form of media, so that it fits a specific country or region without human intervention.

**Getting there**

What we are talking about is the Holy Grail of localizing multimedia content. There is a lot we can currently do, but we are still missing a few key ingredients. When we can get those ingredients in place — and it is a “when” not “if” — there will be a game-changing shift in the localization of multimedia, enabling very local, high-quality content to reach more customers more quickly and at less cost.

The biggest question at the moment is: can we really trust AI processes to preserve the meaning of the message? Can we trust that message to be transcreated? Do we really want to send media out into new markets, in new languages, without a human checking it? Remember: machines, when programmed correctly, eliminate the mistakes humans sometimes make. AI, when it can handle the cultural component capably, may prevent “bad” content from getting out there. More content is not always better, and humans in a hurry can make mistakes and cut corners.

We believe we can trust AI to be intelligent, to really “learn” and to achieve the goal of full automation. At the moment, we are still on the journey. But when we do reach that destination — and there are a lot of people in the industry who think we will get there in the not-too-distant future — then we will have unlimited multimedia localization potential. Content in any language, accurately on-message, precisely on-brand, taking business forward at scale, at speed… at last.
Russia-based Social Quantum is ranked among the top ten biggest game publishers in Russia and Eastern Europe. The mobile game developer has created such titles as Megapolis, Wild West: New Frontier, Dragon's World, Ice Age World, and Poker Jet, and is in the process of making a few more new ones. The company has also been conducting successful experiments in the area of machine translation (MT) and machine translation post-editing (MTPE). Mikhail Gorbunov, head of localization at Social Quantum, shared his insight on the company’s MT initiative.

01 | What languages did you have in your MT initiative? Also, have you added new ones since you launched the MT?

We’ve always had 11 target languages: English, French, Italian, German, Spanish, Portuguese, Simplified Chinese, Traditional Chinese, Japanese, Korean, and Turkish. And we did not add new ones — we rarely add locales at all, preferring to translate projects into all languages simultaneously.

We started experimenting with MT in August 2019, after talking with the guys from EA and Supercell. At first, it was a question of competition, like, if they can do it, why can’t we?

In October 2019, the Russian to English pair on our existing projects completely switched to MTPE, with the exception of marketing materials. For those, transcreation is needed rather than translation. The rest of the languages switched to MTPE in February 2020. Before that, we played with all the MT engines we could reach. Now we are experimenting with trainable engines, but the result leaves much to be desired.

It’s also worth mentioning that we translate games where quality depends on the translator’s qualification; the linguist’s desire to work on the project; adequate turnaround time requirements; and the quality of the original text. All these points are primarily tied to us, the localization managers.
02 | So you compared the MT engines on the principle of time spent on post-editing? Did you track how much time did you actually save?

Yes, we compared the engines based on this principle. But we also used a “like/dislike” approach when comparing them as well, as a “yes, I do want to work with this engine” kind of metric. After all the wanderings, the team chose DeepL, mostly motivated by the fact that it had the least amount of post-editing required.

It’s worth mentioning here that we have a team of perfectionists. If the translator doesn’t like the phrase even slightly, he deletes it and writes the translation from scratch, performing human translation instead of post-editing. With DeepL, the number of segments rewritten from scratch is two to three times less than with any other MT engine that we have tried. But this does not mean that the general number of rewritten segments is small. You should not perceive MT as a solution to all your problems, or DeepL as the king of MT engines suitable for any purpose.

03 | So exactly how cool was DeepL? Was its output 5% or 50% better as compared with other MT engines?

One way to measure this is to ask the translators. I collected translators’ feedback about our current MT experience, keeping their original wording. The results are in Table 1, although they’re all talking about time savings compared to translating from scratch.

The gained increase in translation speed is difficult to measure objectively for many reasons.

Source texts have different content and complexity; fuzzy matches from the translation memory (TM) may be different. Also, things like a Mercury retrograde period or a linguist’s bad mood might change the outcome. So let’s just say, the speed gain ranged between 5% to 50% depending on these and other factors.

We actually have not tested the engines in a way that Intento does, for example. What we did was MTPE of our current games updates (10-1500 source words per iteration) and then analyzed of the results together with a team of translators and editors.

I really don’t like to complicate processes, especially if there is no clear goal behind it. In this case, as there was no ultimate goal to have a set of MT evaluation criteria and strict metrics for academic or commercial research purposes, why would we do this? So we didn’t.

I was given a simple task: to reduce the cost with minimal loss in quality, while the timing was of secondary importance. The most obvious solution seemed to cut out editing. So we had had a full translation, editing, and proofreading (TEP) cycle, with at least two translators working in each language pair. The problem was that without the editing step, the quality dropped noticeably: typos and misspellings were not corrected, and actual errors became more frequent.

Let me stop here for a moment and tell you more about how we actually measure the translation quality: there are major errors, and there are minor errors. Major ones either contain a major factual, political, or cultural error, or do not allow the player to perform the required action and correctly understand the essence of the game task. Such errors are subject to immediate correction, as they affect the monetization and general image of the project. And there are minor errors, which encompass everything that has to do with the grammar rules but will not drastically affect the gameplay or

Mikhail Gorbunov
### Italian

MT pretty much does what it says on the tin: it is a machine translation, which often translates words out of context. The more frequent mistakes I am having to correct is having to change mistranslations and also tone of voice, as for some reason it seems to always opt for a more formal register as opposed to the informal style we have always used for SQ projects. Verb tenses often need to be corrected, as well as some conjugations. The main problem with MT of colloquial texts is fluency. With video games, I save 10% of time only when the texts are repetitive.

### Japanese

I’d say machine translation is useful, but my work is mostly translation from scratch, not post editing, since I’m not satisfied with the MT output quality yet.

### Traditional Chinese

MT’s problem in my language is that the core is always based on Simplified Chinese. And the terminology and expressions are not very compatible with our language. In addition, MT might not work that well with East Asian languages because of the syntax and grammar issues. MT engines have improved a lot, but they are still not a practical alternative to human translation. It may work better with technical materials because they are highly formatted and have comparatively fixed syntax.

### Simplified Chinese

It is actually not a bad experience. Most of the time, the translation gets the general idea right. There are some weird errors sometimes, like repeating sentences as if the AI doesn’t know which way is better, so it puts them both on. Most of the translated strings were not very fluent, and I had to edit them. The mistakes that I always had to correct are usually grammar related, which means almost all of the sentences have to be retranslated. I doubt this problem can be improved in the near future, due to the natural differences between Chinese and English grammar. Translations of short phrases and names were usually okay to keep. I would say that using MT engines saves about 10% or 15% of the time compared to translating from scratch.

### Turkish

For me it’s efficient to use MT and it clearly has come a long way. However, it’s much easier to omit errors in machine translations. The errors are inherent to Turkish language, mostly in personal pronoun suffixes, giving rise to grammar issues.

### Korean

I have experienced several other crappy MT engines and didn’t expect much, but your MT engine is better than I expected. It cannot handle complex phrases, of course, but translates simple texts quite well, and I think it saves about 30% of working time.
I am not against machine translation in general, but still it’s not as good as it should be. For example, shorter strings that do not necessarily address the player directly are still mistranslated, as the engine cannot consistently use one grammatical mood for task summaries. I have tried using MT myself on some projects to study the results. There are cases in which MT works surprisingly well, actually, but it’s usually longer, continuous texts in perfect English, which are easy to work on even without MT — for that reason I’m not convinced of the whole concept just yet.

<table>
<thead>
<tr>
<th>Language</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>Translations are now completed way faster than before, as MT sometimes provides good solutions.</td>
<td>Machine translations might not always read as natural as human translations. Even if most grammar and linguistic errors get corrected during the review stage, we cannot retranslate all texts and the general style might be slightly less idiomatic/funny/catchy.</td>
</tr>
<tr>
<td>Spanish</td>
<td>The most significant advantage is that MT can provide a first draft and, thus, prevent the translator from typing the whole text. The most prominent disadvantage of using MT is that it does not accurately translate nuances and slang, it assumes every subject is male, and it can influence the revision process by its textual cues. I would say MT helps save around 20%-30% of translation time, as it provides a decent rough copy, but a lot of editing is still needed. Although MT can indeed save some of the translation process time, I still prefer translating most segments from scratch, as I feel less constrained and can be more creative. The MT system used in SQ projects tends to make me “conditioned” to produce a literal translation.</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Translator estimates on time savings was as high as 30%, but varied by language and was difficult to measure.
generate negative feedback from the users. These errors are being fixed in a general order.

In general, we adhere to an industry-wide rule for TEP: a maximum of one major error and three acceptable (minor) errors per 1200 words of the source text, excluding tags and placeholders — provided that the linguist made these errors without the influence of external factors, meaning they had the needed context or at least time for clarifying questions.

So here comes what I like about MTPE: an acceptable MT is easier for a translator to edit rather than to come up with another version from scratch. The post-editors get less tired and make fewer mistakes, since they only need to assess how correctly the meaning is conveyed, and then adjust the wording if necessary. In this scenario, the number of both unacceptable and acceptable errors was 50% less as compared to the scenario when a translator does a translation from scratch and without further editing.

What is also worth mentioning: we do not use MT on our new projects or non-standard tasks. We use MT only where a TM, a glossary, and a styleguide are available, and the linguists already know the project.

04 | So the whole process is currently “MT output + 1 translator”? or is there also a separate editor? And by the way, what is the discount on MT (if you can disclose it) for translators?

Yes, it’s now just MT + 1 post-editor. But we also perform an additional editing step as an exception for quality monitoring, if any doubts occur. And yes, we have implemented discounts, but they depend solely on the translator. For some it is a 30% reduction of the translation rate, while some others are not ready to take a discount at all. In the beginning, we asked our future post-editor two simple questions:

1. Are you ready to perform MTPE instead of translation on our projects?
2. If yes, at what rate are you willing to be remunerated for this job?

And we did not demand immediate answers to these questions: we gave our linguists several months to “play” with the MT engines. The bottom line here is that linguists themselves need to want to work with MT. You think we spent six months solely on testing the MT engines? Mostly, we spent this time on negotiations with the team, searching for compromises, agreeing on the rates, discounts, establishing processes, and some internal motivation.
“We started by discussing with each translator individually their view on MT and gave them time to adjust, to get used to it, to conduct their own research of engines on the market. Some even came with suggestions to try this or that engine!”

We started by discussing with each translator individually their view on MT and gave them time to adjust, to get used to it, to conduct their own research of engines on the market. Some even came with suggestions to try this or that engine! In parallel, we were looking for MTPE specialists on LinkedIn. We then compared the post-editing done by our team with the post-editing by these specialists. Our team performed much better, because they are perfectionists and know their projects very well. As it happens, the so-called MTPE specialists just slightly polished up the MT output so that it did hurt the eye. Also, many of these “specialists” offer dynamic rates: for 5-7 cents you will have a decent text, very similar to a human translation, and for 3-4 cents you only get light post-editing. In the second case, this post-editing looks exactly like post-editing — that is, the MT stays very visible behind some tiny edits.

05 | Sounds familiar! Earlier you mentioned custom MT engines. Is there any progress there?

Indeed, we have successfully completed an unsuccessful test of one very famous engine. I will not name it here so as not to do an anti-advertising, which the development team of this engine does not deserve. They helped us a lot and actually gave us the engine to play with for free. The effect of customization is simple: the MT output presents a hodgepodge of the engine’s “intelligence” and TM based on which it was trained. Unfortunately, initially the engine is not very smart, so as a result we get a poor MT with bits of phrases and terms from our projects.

Does it work? It does. But is it really usable? Well, not yet, in our case, since the wrong segments still have to be rewritten from scratch. And some nice trick customization does do not radically improve the situation.

To sum it all up:

- We perform MTPE on our older projects. We do not use it in marketing materials and new games.
- We do not use MT in projects with lots of phraseologies, wordplay, and references to other works.
- The translation team is the same. Some of the translators left after the launch of MT initiative, but most of them stayed to work with us.
- Linguists have been already familiar with MT concepts and ways.
- As compared to TEP (for old projects), cost savings are significant.
- Custom MT engines can work, but they are of little use if the engine does not work well without training.

All in all, answering the question of whether MT can be used in game localization, I can definitely say that it is possible*. But under the * notation, there will be a bunch of text with additional conditions, as they have in Terms of Use or banking contracts. ♦
Advances in neural machine translation (NMT) technology have media and subtitling companies now relying on it to assist translators in post-editing workflows. However, while NMT certainly offers a productivity boost, cost and resource utilization benefits are still constrained by the limits of most popular machine translation (MT) systems.

That’s because off-the-shelf MT systems function rather like a black box — you input data, and the system outputs the translation in running text format, which translators then turn into subtitles by incorporating corrections and text segmentation as needed. Fewer MT errors and faster turn-around can be expected when an off-the-shelf solution is replaced by a NMT system customized to the media and entertainment domain using available in-domain data from this industry vertical. Such customized systems may also include components for automatically outputting semantically and syntactically segmented translations in a proper subtitling format.

Customization is needed to significantly increase the quality of the MT output, producing texts that are more like the ones that need translating. It is with such customization that one may successfully implement MT in the creative industries — something that was unimaginable not so long ago.

But from a language service provider’s point of view, if you need high-quality MT for ten different domains or genres, it means that you would need to train, deploy, and maintain ten systems — even though they may be idle some of the time. The result is a high environmental footprint and increased costs. There is also a risk of “over-fitting” the training, making it so precise to a particular domain that its performance is actually worsened with slightly different data.

Adding metadata transcends translation limitations

The latest advances in NMT offer a more productive and cost-effective approach. The technology has reached not only much higher quality, especially for in-demand, high-resourced language pairs, but also offers flexibility not possible in previous NMT generations. A single NMT system can now be easily customized by inputting minimal additional metadata relevant
to each unique domain and scenario that a business requires. The concept is similar to an acoustic mixer that allows you to modify the same sound in various ways. With NMT, the user simply adds an extra parameter value in an API call that generates a desired translation; for example style=formal or length=short.

Specific metadata attributes that can be customized include:

- **Style**, such as formal vs. informal language, which is often context-dependent. An especially tricky translation to this point has been the English "you" (both singular and plural) which is more uniquely distinguished in some other languages. Advanced NMT can now choose the right translation and adjust sentence structure if necessary, including:
  - **Speaker gender**, especially given that not all languages treat gender pronouns the same way.
  - **Domain or genre**, such as news, patents, talks, entertainment, and the like.
  - **Topic**, catering to more specific document-level style and terminology differences.
  - **Length**, generating shorter or longer translations with minimal information loss or distortion.

- **Language variety**, where parallel training data for related languages or dialects can be combined in a single system, such as Castilian and Latin American Spanish, Canadian and European French, and others.

- **Extended context**, assessing whether or not the context of the previous or the next source sentences should influence the translation of a given sentence.

- **Glossaries**, relating to terms with official or mandatory translations, which the system may otherwise translate differently.

The metadata can come from a variety of sources, including information about the origin of a translated document. It can also be computed from the text data itself using rules and regular expressions, or predicted through separate machine learning algorithms.

Implementing this approach in MT system training allows you to train single models, reducing both environmental footprint and cost at the same time. Switches for various captured metadata can be made available through APIs, so that translator interfaces and platforms can leverage such flexibility and offer UI solutions that facilitate respective workflows.
Honing accuracy

Metadata customization is not the only way to increase translation accuracy. Regular model retrainings, after feedback from linguists, also help steer the quality of the output closer to what each business requires. One way to achieve this is with reinforcement learning.

Reinforcement learning is training on post-edited data, which allows the system to learn how to correct its own mistakes, rather than use other translations that may cover additional domains but won't directly improve translation errors. It is very important for continually maturing the MT platform and improving accuracy. However, since it also poses the risk of over-fitting, customized expert intervention and accompanying knowledge transfer is needed in the system training and deployment process.

Of course translation accuracy is a key concern; predicting it is even harder. It's possible today to output quality values that estimate how sure the MT system is about a translation. Those confidence scores can then be used in translation management systems to specify thresholds for routing documents to different translation workflows: to a light or full post-editing workflow, or a classic translation, editing, proofreading workflow, for a translator to edit or translate from scratch.

What does this mean?

These NMT-driven advances can deliver significant benefits to media clients, language service providers, and the post-editors and subtitlers who shoulder the high-pressure responsibility of accurate subtitling.

Having proper data regarding style and length, for example, means fewer words and sentences would need to be post-edited. By flipping the switch to the desired metadata, translators can experiment with the technology and get a new tool to make their daily work easier. By applying confidence measures, a translator can quickly go through easier translation segments and put more energy into harder ones. What's more, the number of easier segments increases over time due to machine learning.

A smart user interface to take advantage of the full flexibility offered by MT systems today could easily solve a lot of the issues post-editors are currently reporting in production. The mission is to deliver organizations greater control over whatever subtitling output is given back to them. Ultimately, it's all about better business performance and results.
Localizing gaming applications is very different from typical enterprise applications in many ways. It poses particular challenges that may not apply to other kinds of content. Many games work because they succeed in building a compelling and immersive experience in a virtual world, one that engages and sustains a sense of believability throughout gameplay. Subpar localization that jars users out of the story can annoy gamers and create a poor experience.

Contrast this with typical office or productivity applications where poor localization may be an irritation, but is far less likely to render the product itself less acceptable. For instance, language serves a supporting role in a spreadsheet, but the application’s core functions do not typically change from market to market. As a result, even though the words appearing in the user interface (UI) or elsewhere are important in guiding users to accomplish tasks, they are not part of its core function. Similarly, a user manual or online help site is successful if it helps users accomplish a task, even if the language isn’t stylish or doesn’t sound perfectly native.

As you localize your gaming content, factor in the following during the planning process.

**Language selection requires in-depth knowledge of local market preferences**

The first item on this list starts even before localization — it begins at the point you make your plans for market entry. For most enterprise localization, language selection is relatively straightforward: you select which markets you want to support, and provide the language needed to facilitate sales and use of the product in the market. For productivity apps, you can assume that buying patterns will be similar around the world and you choose the languages needed to meet economic demand. Most often, you’ll be drawing from the pool of 135 languages that CSA Research tracks for measurable economic demand. Most enterprises choose from among those in the top language tiers, and gradually extend to more languages (Figure 1).

By contrast, with games you have to account for local preferences in gaming culture. For example, casual farming games are quite popular in France, and Russian gamers tend to prefer combat strategy games. As a result, the localization portfolio of a farming game is likely to be quite different

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*Arle Lommel*

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from a tank combat simulator set in World War II (which would be the “Great Patriotic War” in Russian).

As you select languages, review country-level popularity data to determine whether your game title makes sense for a given market. However, just because you don’t see similar titles as top sellers in a country doesn’t mean that localization will not be worth it. You may have the break-out title for a genre or it may be that even a less popular title will still justify the (relatively low) cost of localization, particularly for puzzle-matching games or other ones with relatively little linguistic content. Whatever you decide, temper your expectations with data and solid competitive research.

Leave enough time, plan ahead, and provide guidance

Closely related to the previous point, the need for adaptation and testing also means that you need to start early and give your localizers time to complete their work. Holding off until a few weeks before your release date is an almost-certain recipe for disaster. Even as the rest of the software world seems to be rushing to agile and continuous release models, be aware that these are particularly difficult for gaming when you factor in localization. Translating or updating a few strings at a time or rushing the work can lead to inconsistencies and poor success at building a believable in-game world.

Similarly, gaming is one area where you cannot “throw text over the wall,” use unedited machine translation, or skimp on instructions. Game localizers will need detailed guidelines

Figure 1: The economic power of the top 100 online languages. Source: CSA Research 2020.
about what sort of localization you want and what you expect them to deliver. Many localization quality disputes arise from unclear guidance and mismatched expectations, something that is especially true in gaming where different parties may have very different visions of what the end result should look like. It is critical to align these areas early on.

Note as well that games tend to require highly adaptive translation (also known as transcreation), and that this takes time and can require changes in areas that developers may not think of. It also requires clear guidance concerning what can and cannot be changed. For example, if you develop a word puzzle game, just changing dictionaries will not be enough for many languages as different languages use different characters and have them in different frequencies. Successful localization in such cases requires knowledge of what changes can occur and how to accommodate them.

Help speed up localization by focusing your development efforts where you can nail down text early on. Start localization on aspects such as cut scenes or introductions that are important in establishing the game and likely to be complete relatively early, even if gameplay may not yet be perfect. Provide guidance and context to localizers so they understand the role their content plays and what your expectations are. If you don’t know what the best localization approach is for something, talk to your localization providers and involve them as the skilled professional partners that they should be to you.

Worldwide deployment requires multiple platforms

Novice game developers may only be familiar with their home market. They may assume that “everyone” has iOS, Android, particular consoles, or a PC. But the reality is that different markets have different realities. For example, a casual puzzle game created to work on Facebook might be successful in the United States, France, and Germany, but not be successful at all in China (where Facebook is usually blocked and WeChat would be a better option) or Russia (where VK Gaming would be an appropriate option). And of course, the opposite is true: Games created for WeChat or VK Gaming will struggle in the markets where those platforms have negligible market penetration.

Similarly, a developer of a console or PC game may find that sales would fall below expectations in markets where mobile gaming is more common, or an app developer who targets iOS would need to provide an Android version to address certain markets. For example, according to online usage monitor StatCounter, iOS had a market share of approximately 61% in the United States as of November 2020, but just 31% in Europe, 16% in Asia, and 3% in India. As a result, picking the wrong platform provides a hard limit to sales in certain languages and regions.

Determine which platforms you will need to support, and plan for them from the beginning. Design around a common feature set that will ensure that titles that can function independently of particular platforms, devices, or OSes. Keep in mind too that not all customers will have the latest and greatest hardware or bandwidth around the world, so titles must be robust enough to work even in suboptimal conditions. Test them in all the conditions you would sell or deploy them in — and on all platforms.

Internationalize, internationalize, internationalize!

Games are some of the most unforgiving environments for internationalization errors. Their combination of text and graphics can make it very difficult to fix mistakes if developers don’t leave room for text expansion or don’t allow for the need to flip UIs for Arabic and Hebrew. Also, novice developers will frequently concatenate strings in ways that make it difficult, if not impossible, to localize dynamically generated text. Because these problems have a way of cropping up near the end of the development cycle, they run the risk of delaying shipment or requiring subsequent updates to deliver the proper language experience.

Internationalization actually extends beyond technical aspects as well, and should include a review of text and concepts to make sure they can be translated. This requirement is separate from transcreation — where adaptation is desirable in order to build compelling worlds — and applies to content that could be written in a way that makes it more translatable. Things like word play are notoriously difficult to translate. Although they may contribute to an overall feeling, if they aren’t essential enough to where you would want to transcreate them, consider leaving them out instead.

Check game code early and often for embedded strings and concatenated text. Here you can use automated code scanners to find problems and push them back to developers. Even if your text is not yet stable enough to translate, use pseudo-translation or machine translation with appropriate expansion factors to identify problems and repair them. In addition, keep in mind that text expansion affects not only written text, but spoken dialogue, so make sure to internationalize cut scenes and other cinematic-style portions of games by leaving enough time for localized dialogue to play out. Verify that meaning is clear and unambiguous to help localizers get the right nuance in the target language.

Conclusion

Gaming localization is not an insurmountable challenge, but it does require thought and care. Planning ahead and thinking about international audiences can make all the difference between a strong localized title and one that flops. Be aware of the areas where localized games can struggle or fall flat and make sure to address them from the beginning. ✪
Have you ever been in a situation where you overhear a foreign language conversation in a language you don’t really know, but you hear a familiar sounding word, and intuitively think that you kind of know what people are saying based on context?

Maybe you hear the word *limón*, and you think that sounds like *lemon*, and figure they are talking about food produce. Then you pick out the word *lechuga* and it kind of sounds like *lettuce*, then *atún* which sounds like *tuna*. So you smile, knowing that your initial guess about food is probably (and magically) right. Then you get curious about what they were talking about, perhaps a nice tuna salad recipe.

Your AI technology (your brain) has a dataset of words and connections it has gathered, and it can use this map to make smart assumptions even across languages it doesn’t necessarily understand.

We have developed an NLP AI technology framework called inter-language vector space (ILVS) that does something similar within and across languages and seems almost magical in its operation.

First, though, let’s take a look at the AI landscape generally and within our industry, and why AI is both getting more traction and more deployment in the language industry as a whole. Artificial intelligence (AI) has become a generic placeholder for smart technology and it is embedded in every aspect of our lives. From autonomous vehicles and ride-sharing apps, through AI-powered disease diagnosis and treatment and intelligent incident detection, to intelligent search recommendations and ad personalization, AI is a constant.

According to a recent *Forbes* magazine article, it is the ability to learn from and act upon data that is critical to AI’s exponential adoption; some are calling this the intelligence revolution. AI needs data, and lots of it, in order to learn and make smart decisions. When you consider the sheer volume of data that surrounds us today, this gives us a clue as to why the intelligence
revolution is happening now.

Simply put, we're in the middle of the fourth Industrial Revolution, driven by AI and big data, and the localization industry is not immune to its impact.

**The evolution of AI in localization**

AI has started making inroads into localization relatively recently. The biggest impact beyond a doubt has been machine translation (MT), specifically when it evolved into neural machine translation (NMT) and became standardized as the industry AI of choice. NMT has now reached a saturation point and has lost its disruptive potential. As Jean Senellart (CEO of Systran, a leading machine translation provider) recently claimed, “NMT as a tool is done.” Senellart said that in a few months, NMT totally changed the research on MT, but that its cutting-edge impact subsequently waned. “Since then there has been improvement, quite a lot the first year, and less and less over the following years.”

Simply put, traditional MT and NMT are where AI’s impact has been the most profound in the localization industry. Both technologies have evolved, made substantial progress, and reached a point where further innovation is limited.

**AI beyond NMT**

In the midst of the intelligence revolution, driven by data and AI, natural language processing (NLP) has made advances. Organizations have more data than ever before, and current computing power enables the storage, processing, and analysis of data to be smarter, faster, and performed in a more controlled way. The advances in AI, data processing, and computing power lead to what Markus Meisl of SAP SE recently referred to as the “intelligent enterprise” with a “new, more distributed type of intelligence across all areas of a company.” Intelligent companies develop quickly and deploy faster within an agile, integrated technology environment.

**Current use of NLP in localization**

It is surprising that up to this point, most localization technologies have used little or no linguistic NLP technology such as morphological reduction or speech analysis. This is all about to change. Many of the required software libraries are now available, as are the big data repositories needed for the task. However, just like many innovative technologies we have seen, the key is not using them, but knowing how to make effective use of them.

One such technological breakthrough worth looking at is ILVS, something that Google, Facebook and Babylon Health are currently involved with.

**ILVS arrives to the localization scene**

ILVS is a neural network-based technology framework that is able to work out relationships between words and how close their meanings are to one another. Each word is associated with a mathematical vector of 300 values which uniquely describes the word within the corpus and its relationship with other words. It’s as if every word is represented with its own unique fingerprint. The resultant word-based data structures for the corpus are known as vector spaces.

ILVS is a technology framework distinct from NMT. Both are complementary and when combined give users a very powerful toolset.

If you were to compare NMT to a map intended to get you somewhere — a top-down approach — ILVS instead allows for a bottom-up approach focusing on specific landmarks on a route. It zooms in on the exact location of mountains or lakes in the area, for example.

Adding a multilingual layer to vector space produces accurate results, aiding the human translation process. ILVS is able to analyze correspondence between words in the source and target sentence (Figure 1). This specific piece of information, not available in NMT, can be used to identify potential translation errors, transfer technical tags, and much more.

The concept of vector space in NLP terms came into being thanks to research conducted by Google and Facebook. In 2013, Google showed that by using their own news corpora,
algorithms, and a vast neural network, you can predict the current word based on the context, and the surrounding words given the current word. This is to say that when the algorithm is given a sentence with a gap such as “the _ continues to bark” it is able to predict that the word to fill the gap should be “dog.”

This new framework utilizes advanced AI algorithms and well more than 200 terabytes of textual data (the size of the Bible multiplied over 40 million times) — massive bilingual dictionaries and the crawl of all of the internet across 250 languages (upwards of 31,000 language pairs) to identify connections between source and target words. Importantly, all of the data is accessible from publicly available resources, completely eliminating the risk of customer or private data breaches. In fact, the only information that can be retrieved from ILVS is the value for the probability calculation, so the actual data is not stored. Not a single sentence of private data was used to train ILVS; all its resources had been previously published on the internet.

It’s a bit like a road with no signs. NMT is the road and ILVS is the road markings and the distance markers.

Figure 1: Vector space probabilities across two languages.
A large corpus of documents is a common task for localization teams. Performed manually, it is arduous and takes time. By using ILVS, it is possible to create functionality that makes better judgements on what entries are actually terms and should be extracted. Using ILVS, you can mimic what the human brain would do to extract accurate term candidates. The net impact of doing this is that the heavy lifting part of term extraction is done, and linguists can focus on higher value activity and reviewing the final output.

We have seen quite amazing results with this type of functionality; it takes on average 85% less time to create glossaries and there is a knock-on effect to cost reduction as a more accurate and consistent terminology database is built. We see 90% accuracy levels for term candidates across 50 languages.

Linguists perform dozens of routine operations in addition to actual translation. Transferring inline elements, which entails changing fonts or inserting hyperlinks from a source to target segment, requires considerable legwork by the linguist, and this is where vector space enabled functionality can offer a solution. Whenever a linguist comes across an inline element in a source segment, algorithms automatically position it in the correct location in the target segment, like magic. There’s no need for linguists to spend time moving functional elements around segments. Auto-inline placement frees up the translator’s time so they can concentrate on more creative aspects of their work.

**Why is ILVS disruptive?**

Let’s delve into what makes ILVS such an important AI technology. In contrast to current mechanisms for performing bilingual word alignments, ILVS ensures that the probability of word alignments is calculated instantly — in most cases the whole process takes well under a second. Take, for instance, the translated sentence in Figure 2. Matching words are highlighted by black rectangles.

The results of ILVS word alignment enables opportunities, such as the identification of potential translation errors (for example, words with low matching probability to source words), translation suggestions, and many more applications not yet identified. ILVS is also able to identify potential translation candidates even if they have never appeared in the available resources. This is very useful when creating multilingual glossaries — ILVS can detect even highly specialized narrow domain terms.

**Use cases of ILVS**

ILVS technology opens up a new frontier for research and feature development in translation management and related technology. It can assist localization stakeholders with tedious, repetitive operations such as bilingual term extraction, inline character placement and automatically aligning corpora. Let’s explain a few of these use cases.

Building terminology from translated documents or a corpus of documents is a common task for localization teams. Performed manually, it is arduous and takes time. By using ILVS, it is possible to create functionality that makes better judgements on what entries are actually terms and should be extracted. Using ILVS, you can mimic what the human brain would do to extract accurate term candidates. The net impact of doing this is that the heavy lifting part of term extraction is done, and linguists can focus on higher value activity and reviewing the final output.

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Depending on the subject matter, auto-inlines can provide up to 20% improvement in translator productivity. This increases up to 80% for MT post-editing.

Aligning a previously translated document or corpus of documents in order to create translation memory (TM) is another cause of productivity loss for project managers and linguists. Quite often the source and target documents available are not from the same version and the segmentation of the text into segments may be different between source and target versions. The application of auto-alignment functionality results in up to 90%+ effort and cost benefit for new translation projects where no previous TM exists.

ILVS technology provides a baseline for building further functionality. Here are some of the types of future functionality that ILVS makes possible:

• Post-edit verification tool allowing users to flag MT, or even human translated segments, that contain errors.
• MT evaluation feature to select the best-performing MT engine for content.
• Word and phrase suggestions as linguists translate.
• Automatically learning and implementing MT post-edit corrections.
• Other features based off learning from the linguist as they translate.

Conclusion

AI in localization has gone through a first wave of maturity, moving from an emerging technology to an essential asset. In the era of the intelligence revolution, NLP is a natural successor to NMT and will continue to be a fertile ground for innovation. The positive effects of ILVS as a subset of NLP will spill over to people, resources, and processes, causing localization to be faster and more cost-effective.

Future innovations in localization will be a mix of new technological breakthroughs, such as the development and deployment of new frameworks like ILVS, and innovations in the use and curation of already-existing platforms such as NMT.

The next time you find yourself in a foreign destination (hopefully in the not too distant future), try your own in-built ILVS features when you order that cup of café or a glass of vino.
Due to the global COVID-19 pandemic, remote interpreting (RI) has quickly replaced most on-site and face-to-face interpreting. But despite the excitement accompanying the surge of RI and the proliferation of platforms facilitating the RI process, there are many challenges from both the technological side and the position of the interpreter.

Remote interpreting now... and then
RI, as the name implies, is performed by remote or offsite interpreters to facilitate communication between people who speak different languages. It’s similar to video relay services used by the Deaf and hard-of-hearing for sign language interpretation, in which the parties are located in different places.

In the past, RI services, if available, were generally provided via telephone. RI is traditionally known as a service that is rendered to hospitals, police stations, airports, and border posts — in other words, locations and situations where there is immediate demand for an interpreter, but an interpreter is not present onsite due to logistical or cost-related factors. Like all interpreting, RI facilitates communication between people who speak different languages and otherwise cannot communicate with each other. Events of this nature are, in normal practice, conducted face-to-face among two or more individuals and the remote interpreter’s role is to enable or facilitate communication between them.

Pre-COVID-19, the number of interpreters who would render RI services were few in comparison with interpreters pro-
“Other platforms stepped in to solve these issues, such as KUDO and Interprefy. These two platforms are designed specifically for the purpose of remote interpreting, and they have all the facilities one would expect to find in an interpreting booth.”

Providing onsite or face-to-face interpreting, for two main reasons. The first is that RI interpreters, especially those working with hospitals and law-enforcement agencies (such as medical and legal interpreters) are specialized in their field of interpreting. The second reason involves body language and facial expressions, which are easier to read in a face-to-face setting.

Within a short time, RI evolved dramatically from being mostly phone-based to instead being conducted on new platforms that emerged to assist in all aspects of the interpreting ecosystem. Zoom comes to everybody’s mind, and while it was developed for enabling online meetings, it quickly became useful for interpreting during the pandemic. However, Zoom was not built to easily embed language interpreting support such as relay and other forms of an interpreter’s communication with booth partners. Other platforms stepped in to solve these issues, such as KUDO and Interprefy. These two platforms are designed specifically for the purpose of remote interpreting, and they have all the facilities one would expect to find in an interpreting booth. An interpreter can communicate with their booth partner (in this case the booth partner may be in an entirely different part of the world) smoothly and can listen to their booth partner without causing any disruption to the audience. The only shortcoming is that using these platforms requires some degree of training. Some among the older generation of interpreters may feel a bit more challenged with getting used to new technologies, so learning to use these platforms can be more difficult.

While Zoom is easy to use and is thus popular even for interpreting sessions, there are two major downsides with Zoom. One is that not all languages are included in the system, which means, for example, the Arabic audio feed may be labeled as Japanese or Korean. This may cause confusion to audiences when they are asked to select, following this example, Korean or Japanese to listen to the Arabic interpreter’s voice. The second problem with Zoom is that the interpreter needs to log in with two devices, on one as the interpreter and on the other as a meeting attendee (in order to keep up with the entire online meeting progress). This two-device solution also works as an
alternative arrangement for relay interpreting. Another way of solving the relay problem is for the interpreter to connect with their colleagues of other language combinations through a separate messaging service such as WhatsApp.

**COVID-19 gives fresh impetus to RI**

The COVID-19 pandemic has changed the world irrevocably, forcing almost every industry to rapidly adopt online technologies to continue operations.

Interpreters have been severely impacted by the COVID-19 pandemic, given that the lockdowns in major parts of the world that restricted all in-person events, including conferences and other public meetings. In a recent study by CSA Research, 55% of language service providers reported a decrease in business since the outbreak of the pandemic, and showed great concern over the uncertainty of how long the pandemic will last and what its impact on business will be.

However, even though the professionals who have continued to perform their duties in a traditional way found it hard to cope with the requirements of simultaneous remote interpreting (SRI), the COVID-19 pandemic has been a blessing in disguise for other interpreters who reside in less accessible parts of the world, or who find it difficult to travel internationally to interpreting events due to visa requirements. These RI interpreters are now able to cover events in countries and regions where they had not been able to travel before.

Video RI can be a cost-effective, quick, and easy way of providing interpreting services. RI is cost-effective for event organizers since they do not need to pay for airplane tickets, hotel accommodations, remunerations, or meal expenses for the delegates, as is often the case with traditional in-person events. All the remote interpreter needs, for their part, is a strong and reliable internet connection, a laptop, a headset, and a relatively quiet environment.

In this way, organizing an event attended by thousands of people becomes as inexpensive as the one accommodating a handful of people. While the events held behind closed doors cater to a small number, virtual events are attended by a potentially limitless number of people.

**Technical challenges**

Despite the positive aspects RI has provided to professional interpreters, technical challenges are a major obstacle. In many countries of the world, internet connections are weak or unstable. This network instability or weakness leads to blurred images and interrupted sounds. In many cases the movement of the speaker’s lips and the sound are out of sync, which makes simultaneous interpreting rather challenging. A strong internet connection is key to successful RI services, and those remote interpreters who lack access to a reliable internet connection are left behind.

It can also quite frequently be observed that during the progress of an event, a panelist is new to online conferences and meetings and has not practiced using the online systems. They might not be aware of how the interaction with the remote interpreter works and be oblivious to the presence of the interpreter. This in turn may leave the interpreter struggling to catch up with a fast-speaking presenter who otherwise might have been reminded or made aware of such a situation.

Other challenges for the remote interpreter working from

"All the interpreter needs now is a strong internet connection, computer, headset, a quiet environment, and simply being familiar with the available RI tools"
their home base may include any type of background-related disturbances, mostly noise — for example from children, pets, visitors, unexpected construction activities, and so on.

**Professional challenges**

One of the professional challenges of RI has been terms of payment. Some agencies impose rather unfavorable payments thinking that the interpreter needs to be paid far less because of working from the convenience of home. In the authors’ experience some agencies have tried to impose rates-per-minute payments and no longer offer hourly pay with the industry standard two-hour minimum. Also, non-payment for online appointments that were canceled last-minute has been suggested. Some agencies tend to forget that interpreters prepare for new meetings, especially conferences, ahead of time and that preparation time should be priced into the interpreter’s pay. After all, the agency or end client still saves on traveling costs to and from assignments, and it seems unfair trying to save money on the actual service the interpreter is hired for.

Added to professional challenges, there is also a lack of physical presence in remote communication that makes rapport-building exceedingly difficult. This may cause discomfort to some speakers who are not familiar with this type of communication, which can have a negative impact on the way they organize their thoughts, and ultimately RI interpreters will take the blame should anything go wrong. This lack of physical presence also impacts how interpreters handle unfamiliar (to them) accents. With face-to-face interpreting, the interpreter has the chance to talk to presenters prior to the event to familiarize themselves with presenters’ accents and the way they pronounce certain words. However, this is not the case with RI, which sometimes requires that the interpreter guess the words intended by speaker. If their guess is wrong, then the meaning is compromised. In one of the authors’ own experience, the most difficult accents that cause disturbance to RI interpreters are those of English and French speakers from Asia, particularly India, and from West Africa, particularly southern Nigeria, Liberia, and French-speaking West Africa.

Some interpreters’ associations may have to revise and update their bylaws regarding qualification and certification of simultaneous interpreters, since the conditions of interpreting are changing with the absence of booth presence, and interpreters will not be familiar with each other on a more personal level as has been the case in the past. In fact, a new etiquette for the use of RI platforms must be introduced to interpreters to make sure the interpreter is using proper equipment such as good microphones for sufficient sound quality, and there is plenty of light from the front and not the back. The interpreter should also continue to be dressed professionally and be present in front of the camera during the entire interpreting session to keep the connection with the audience.

**Coping with technology pays off**

Despite the panic that overwhelmed interpreters in the first few months following the outbreak of COVID-19, those interpreters who managed to go virtual survived the pandemic’s toll. They managed to turn peril into a blessing. Instead of traveling long distances, RI interpreters can now cover events in any part of the world. In fact, they can even cover more than one event in different parts of the world during a single day. Coping with the new RI environment means that interpreters need to learn what it takes to be an RI interpreter. Getting familiar with RI
Platforms such as KUDO, Interprefy, and others have given RI the proper tools to allow the interpreter to work with a virtual booth partner as if they were in the same place. It is sometimes even better and smoother than being in one place, because the traditional method of handover between interpreters may be perceived by the audience as an interruption.

RI has gained momentum and thus changed the landscape of the interpreting industry, due to the fact that the importance of strong internet connectivity is being taken seriously by countries aspiring to further their development. And many countries are, in fact, now realizing the importance of having a network that supports strong internet connections for the sake of development. Many of them have made solid strides in this respect and can now pride themselves on having robust networks.

With the possibility of overcoming the challenges of RI, the interpreting industry will witness an unprecedented transformation. All the interpreter needs now is a strong internet connection, computer, headset, a quiet environment, and simply being familiar with the available RI tools.

Takeaways

Platforms such as KUDO, Interprefy, and others have given RI the proper tools to allow the interpreter to work with a virtual booth partner as if they were in the same place. It is sometimes even better and smoother than being in one place, because the traditional method of handover between interpreters may be perceived by the audience as an interruption.

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102 Associations
Conferences
Enterprise Solutions
Localization Services

104 Nonprofit Organizations

105 Translation Management Systems
Translation Services

107 Translation Tools
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Languages: 45, including all EU languages
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Anyone venturing into the online translator space in 2014, as I did for the first time, could have been forgiven for thinking that translation was the preserve of mostly white, relatively affluent, middle-class professionals who lived in North America, Western Europe, and Australia — and that applied to both the rank and file and the various luminaries who led the field.

The assertive tone, the discussions about what were “acceptable” rates, and the repeated chanting of certain mantras all reflected this perspective. To cite just one example, we were assured by all and sundry that translation should only ever be into your mother tongue. Now while there may well be a strong case for that in the most popular and commercially viable languages, with their armies of qualified and experienced translators, little mention was made of colleagues working with Rohingya, Quechua, Tagalog, or Twi, for whom translating both ways was simply a given. It was as if those languages did not exist on the map. They were, in more than one sense, whited out.

If the subject of the Global South ever came up, it was seen as something of a nuisance — these were countries that undercut “our” rates and lowered the bar on quality, led by the likes of China, India, and Egypt. The fact that there were translators trying to make a living in all three countries, as well as in dozens of other similar contexts, barely merited a mention. They simply didn’t count.

For someone like me who had spent over a decade in a former career in education living in Bangladesh, China, Turkey, Eritrea, and Somaliland, this Western-centric attitude proved troubling, but there was little to be done, apart from sporadic attempts to raise awareness in comments when the occasion arose.

Fast-forward five-plus years, and two events conspired to create an opening for change. One is that I joined the ProZ.com team and was assigned the task of breathing new life into their Facebook group, which was large but relatively inactive at the time. This brought me into contact with translators from Mozambique to Mongolia, and Venezuela to Vietnam. The group doubled in size within a year, and is now over 46,000 strong. The second factor was the pandemic: the fact that travel had now become a pipedream inspired an idea for a series of Translation Postcards — feature articles about translators from throughout the world, focusing on their daily lives, backstories, aspirations, and challenges.
While the Postcards are free of any political or ideological agenda, and we’ve also featured fascinating stories from translators in cities such as Rome, New York, Brussels and Munich, the real innovation of the series has been to shine a light on the daily lives of translators in countries hitherto unheard of in most translation forums.

Take Thomas Chahweta in Zimbabwe, who grew up as one of 11 children in an impoverished family. He first became a schoolteacher, before volunteering and being trained as part of a Jehovah’s Witness translation program. Using their internet service in his lunchtime breaks, he discovered ProZ and then managed to get enough work to buy his first ever computer — no mean feat in a country ravaged by hyperinflation. Now he can earn three times a teacher’s monthly salary with a single text from an international agency.

Or Dachiny Ewekengha in the Congo Republic, a former hotel receptionist who insisted to his boss that she try him out as a translator. She discovered what he already knew; he had talent. Incidentally, shortly after featuring in a Postcard, he was offered a job as a remote project manager in a Swiss agency, and wasted no time seizing the opportunity.

The Postcards also give us insights into countries that are either overlooked or demonized in the media. I “traveled” to Iran to meet Parastoo Khoshpasand, a multilingual, cosmopolitan and liberal-minded woman who presented a vivid contrast to the image we are fed of a radically conservative country. In Hue, I talked to Lan Hoang Bao, who painted an interesting picture of the way the language has changed in Vietnam itself, while that of the huge diaspora has remained static, and by now curiously archaic. In passing he mentioned the war, known to Vietnamese as the “American War.”

There are frequent observations on life around the world as well as into language. Edith Koumtoudji, a Cameroonian postdoctoral student and translator living in Johannesburg, laughed when I asked how she might be treated these days by a white security guard: “There are no white security guards.” In Bosnia and Herzegovina, Cmilja Milosevic, who lost her own brother in the Bosnian war, shared her view on how peace has returned to village life, despite the fact that tensions from the conflict-ridden 1990s are never too far from the surface.

In addition to such wide-ranging reflections, the series has also brought us a panoply of impressive characters. Norhan Mohammed, an entrepreneurial young Egyptian setting up her own company in a country where it’s never been easy for women to strike out independently. Dalih Sembiring in Indonesia, a literary translator whose day begins with 4 am morning prayers at the mosque. Sayda de Pineda, a Guatemalan living in Las Vegas along with three generations of her family; Marlys Estrada in Cuba, where internet access can often cost more than the monthly wage of a civil servant; or Zena Alzinc in Syria, working with her husband as freelance translators in a country still blighted by religious tension, where power cuts are frequent and the trade in back-up generators is dominated by warlords.

Despite the differences in language pairs, age, experience, and context, there is much that unites all my interviewees: a love of and talent for language, a natural resilience and independent-mindedness as freelancers, a desire to do good, well remunerated work, a need for solidarity in a solitary profession, and above all an aspiration to a better life.

It’s been a great privilege to meet all these colleagues, popping up on their screens, seeing their living rooms as we’ve interacted online, and then sharing their stories with the world.

One on level, talking with all these people offers a splash of local colour and hint of armchair travel. But the deeper aim remains to raise awareness in the Western bubble of just how global the profession is, and how similar we translators are, irrespective of ethnicity or context. If it achieves that objective, it will all have been worthwhile.
In 2010, Translators without Borders (TWB) was formed in response to the Haiti earthquake. We translated aid information into Haitian Creole, established a translation platform, built a community of skilled linguists, and established a non-profit organization to help with this crisis and respond to other emerging crises around the world.

In 2020, to meet the unprecedented multilingual communications challenge of the COVID-19 global pandemic, TWB rapidly mobilized. We translated millions of words of COVID-19 information, partnered with a myriad of NGOs from around the world, and developed innovative language technology.

It's been ten years. Throughout it all, TWB has helped people overcome crisis, poverty, and many other challenges by providing the means for them to access important information and communicate in their own language.

This year, celebrate ten years with us.
Today, ten years from our founding, TWB is the globally recognized humanitarian non-profit that believes that overcoming language barriers is key to safety, security, and to building our shared humanity. We work with a network of over 30,000 volunteer translators and a wide range of partners to deliver information, power and agency to people in need.

In humanitarian crises, we create tools like glossaries and multilingual chatbots. We ensure health information reaches everyone, especially speakers of lesser-served languages. More broadly, we develop scalable technology for these languages. Without such resources, speakers of marginalized languages face an ever-widening global knowledge gap.

TWB’s ultimate goal is to shift control of communication, helping people to access information in their language and, just as importantly, to share their own ideas and raise their voices. We must build technology that facilitates listening to what people have to say, no matter what language they speak.

TWB seeks a world where knowledge knows no language barriers. Without your help, we cannot continue this work. And, if we don’t continue, millions of people will be left behind. It is time to act.

On TWB’s ten year anniversary, we want to thank you for all of the support you have given us over the years. The work is far from over. We need your help to use the power of language and effective communications to help solve the world’s most challenging problems.
COVID-19 has shifted people to online shopping, e-learning and digital healthcare quickly. In this new normal, it’s essential that these applications be as interesting and effective as possible. Gamification, a technique to add game-like elements to web and mobile applications, can help impact and inspire your users.

My mission is to provide gamification strategies and deployments to ensure that global enterprises have engaging, motivating and innovative e-solutions for their employees and customers.

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