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THE SQUARE ENIX APPROACH TO LOCALIZATION

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What is localization?

localize (also **localise**):

to make local in character;

fix in, assign or restrict to, a particular place, locality etc.

- ⊕ Not just straight translation!
- ⊕ Tweaking cultural differences for the target audience
- ⊕ Creating a product that stands up to its native-language competition



An early example...

Chocobo Racing® (Japanese version): *Momotaro & Kiji* course
(removed to reduce file size)



Chocobo Racing® (North American version): *Hansel & Gretel course*
(removed to reduce file size)



Not just text and graphics...

Voiceovers and body language may need adjustments, like this scene in **The BOUNCER**® (removed to reduce file size)



Alternate mocap takes for the NA version.
(removed to reduce file size)



Tweaking the difficulty...

- ⊕ Sometimes we might make changes to difficulty or controls to better suit the target audience.

For Example...

- ⊕ Tweaked encounter rates for older **FINAL FANTASY**® games
 - Less random encounters
 - Lower monster HP
 - Higher experience point gains
- ⊕ Global familiarity with RPGs has made these changes unnecessary today, but there are other ways of tweaking the game balance to match the target audience...



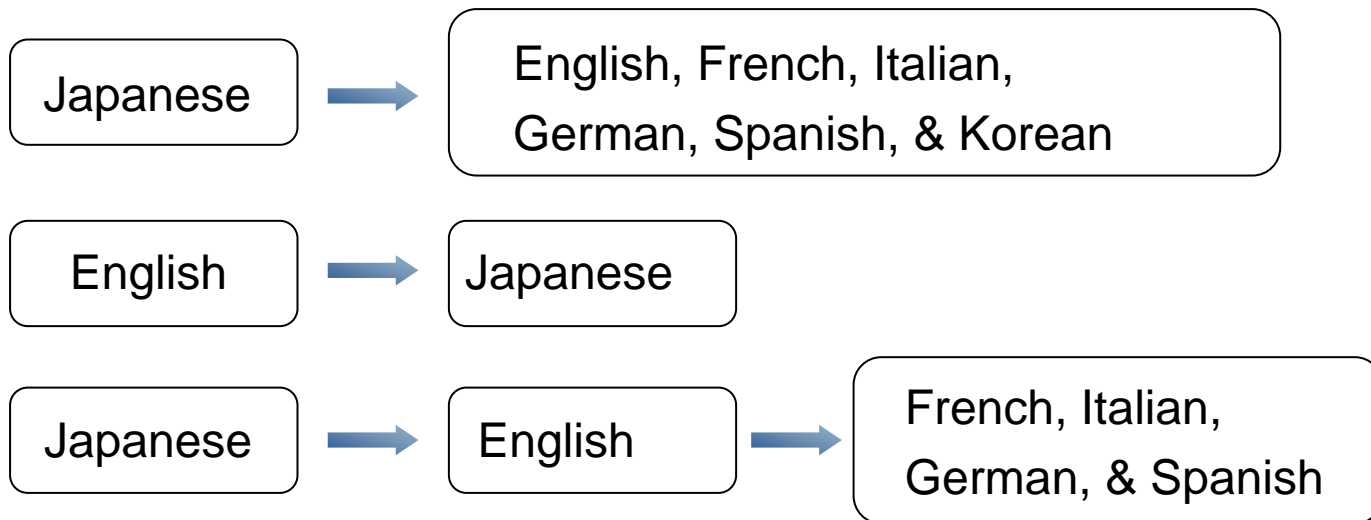
Spot the difference between the Japanese and US versions of **Chocobo Racing**®!



- ③ Taking these extra steps makes your game all the more accessible to your target audiences

- ③ **Japanese-to-English is only the beginning**

Square Enix's localization division has handled:



- ③ You don't just need good translators—you need cultural experts



The History of SQUARE's Localization Division

- Over the years, Square had used external translators, or 1 or 2 internal translators, based in the US office.

Results were hit and miss...

.....



- ③ 10 years ago, management decided to create a localization team inside the Tokyo head office.
- ③ The goal: create a pool of in-house translators in Tokyo.
- ③ Tokyo has grown from 2-3 employees to >40. Consists of native speakers of, not just J&E, but FIGS. Staff became specialized into different roles.
- ③ North American SQUARE ENIX INC. (Los Angeles) and European SQUARE ENIX LTD. (London) office expansion. (Not just EFIGS localization staff, but Marketing and QA who help us make calls on localization matters.)



Roles Within SQUARE ENIX's Localization Division

- ④ **Localization Coordinators**
(Lead Directors and Assistants)
Responsible for overall management
- ④ **Localization Specialists (Translators)**
Cultural experts for each target language



Editors

Brush up translated text, fix language issues, and maintain the SQUARE ENIX style across all products and marketing



Localization Engineers (Programmers)

Assist the development teams with region-specific programming issues

SQUARE's Approach...

- ③ Always use internal resources for English versions
- ③ Translators sit alongside the dev team
- ③ Whenever possible, fly outsourced translators to the Tokyo office for key points in development

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ENIX's Approach...

- ④ Primarily use outsourced resources
 - More cost-effective with a small number of titles to localize
 - Lowers the costs for under-utilized staff



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After the merger... *The Best of Both Worlds*

- ⊗ SQUARE uses internal resources for English, while ENIX prefers outsourced resources

This has created a new role in localization:

Translation Director

Oversees the translations of several projects, ensuring quality is the same high standard whether using different internal or external resources

- ⊗ “Hands-on” approach allows us to better use external resources.
- ⊗ Avoids stylistic changes between titles
- ⊗ Treats external dev teams like internal teams



THE LESSON:

"A cheap translation doesn't have to be a nasty translation!"

- ⊗ Communication flow between dev. staff and translator equals better quality
- ⊗ The more layers between the dev. staff and the translators, the more questionable the results
- ⊗ Dev. staff, translation firms, and distributors should learn: **"It's good to talk!"**
- ⊗ Higher motivation levels when you're *allowed* to care about the product



How SQUARE ENIX Selects Internal and Outsource Staff

The selection process is the same for internal and outsourced hiring:

- ③ Translators **write a composition** on a set theme
- ③ If creativity and language ability are apparent, the next step is a difficult, timed **translation test**
(This process is the same for translators from translation firms.)
- ③ **Coordinators** and **assistants** take basic **language tests**
- ③ The interview is the final step



This creates a reliable **translator pool**.

- ⊕ **Outsourced translators** are added to the pool for when we have more work than our internal staff can handle.
- ⊕ **Translation firms** are also added to the pool for large projects that require a “set of translators.”

Our general policy: Internal staff are matched to projects before we use external staff.



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The Stages of Localization

1			2				3				4				5				6				7			
15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	
Familiarization																										
			Glossary Creation																							
			Translation		4	5	6	7	8	9																
			Edit one week behind translation											9												
											Integration		4													
											QA prep		QA	2	3	4	5	Master Up								
																						Master Sub				

- 1) Preparation and Familiarization
- 2) Glossary Creation
- 3) Translation and Editing
- 4) Integration and QA
- 5) Master Up and "After Service."



1) Preparation and Familiarization

- ③ Create budgets, schedules, and a basic game plan with the dev. team
- ③ Allocate translators and allow them to familiarize with the game
- ③ Determine the game's lead translator
- ③ Prepare fonts, tools, and determine on-screen real estate



2) Glossary Creation

- ④ Gather all translators for a **brainstorming session**
- ④ **Name every** character, monster, item, place name and **thing** in the game
- ④ Determine the game's **writing style**
- ④ Set **characterization** for all characters
- ④ **Approve glossary**, style and characterization **with original creators**
- ④ Run **legal checks** for each region when necessary



3) Translation and Editing

- ⌚ After translation, run **cross-check** between translators
- ⌚ Run all text through an **editor** to fix all grammar/language issues and kill potential bugs

Each translator is responsible for their own files, but the lead makes the final call

Voiced files usually take precedence over event/message text



4) Integration and QA

- ③ Integrate menu and graphic changes first
- ③ Perform “dry-runs” of text integration to confirm the translation “works”
- ③ Perform final integration after translation & editing
- ③ Bring translators on-site with dev teams for QA
To cut costs, restrict this to lead translator/editor
- ③ Perform QA at Tokyo/LA/London offices
- ③ Translators fix bugs in their own files *but also have prerogative to waive them*



5) Master Up and “After Service”

- ③ Translate software manuals before master
- ③ While waiting for approval from Sony, Nintendo, or Microsoft, QA staff and translators check guidebooks
- ③ Translators remain on the project for press release translation, interview interpretation, etc.



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What makes SQUARE ENIX's approach to localization different?

- ③ Translators **have final say**
- ③ Translators must write song lyrics, lip-sync dialogue, suggest changes, etc
- ③ Though editors may help where a translator is weak, translation is a **multi-skilled profession** (instead of “pumping out words”)
- ③ Not just translators, “Localization specialists”



**The challenges we face
and how we overcome them...**



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Our games are just so darned complex and text-intense!

- ⊕ The Problems:
 - ▶ Obscene amounts of text
 - ▶ Text may be in random order
 - ▶ Plot branches and split conversations make for massive confusion
- ⊕ How we deal:
 - ▶ Add comments and documentation to the text
 - ▶ Ask the dev team questions
 - ▶ Allow outsourced translators to ask any questions they want
 - ▶ Use source control for all game text
 - ▶ Use a forum/BBS for outsourced translators to discuss issues



There's never enough time!

- ⌚ The budget and the schedule prevent us from being 100% perfectionists
- ⌚ When making final calls on going over the budget, we're forced to ask ourselves:
"Will changing this actually increase sales of our game?"



There's never enough money!

- ⌚ Depending on the project needs and projected sales, we have learned to combine internal/external resources.
- ⌚ It's about being flexible and coming up with creative solutions.



There's never enough space on screen

- 🌐 Kanji usage makes for space limitations in J→E titles
- 🌐 Many things can be stated in one kanji, but European languages can't compete with that
- 🌐 For event text, try to using smaller fonts and adding page breaks
- 🌐 For menus, try replacing kanji with icons
- 🌐 Don't forget auto-scrolling text!



An example from **FINAL FANTASY® VIII...**



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Online games are localization's equivalent of a war of attrition!

The challenges of online titles:

- ⊗ Keeping the English translation up-to-date with the Japanese
- ⊗ Translating >1,000,000-word scripts into English (and now French and German!)
- ⊗ Multiple languages, multiple formats, and multiple SKUs
- ⊗ Ensuring the dev teams lock down text before patch deadlines
- ⊗ We have to ensure the dev. teams stop adding or changing their text
- ⊗ ...And that QA has enough time to check it on all hardware platforms

- ⊗ Don't forget that ONE designer who has to make just one more last-minute change!



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There are never enough translators for all our projects.

- ⊕ We lack direct J.FIGS translators, so we have to resort to J.E, *then* E.FIGS
- ⊕ To avoid “Chinese whispers syndrome,” E translators *keep a record of what they change* from the J
- ⊕ With 1-2 week lead times between J.E and E.FIGS, translators/editors must “get it right” to avoid rewrites in 4 other languages



How am I expected to produce natural European language text when the original Japanese language system doesn't support basic grammar?

(e.g. singular/plurals, gender, or definite/indefinite articles)



- ④ Most Japanese game developers give translators single item/monster names – *minus articles and no plurals*
- ④ If you translate into a European language, heaven forbid if you ask for gender differentiation or grammatical cases!
- ④ The Japanese language doesn't have any of these concepts—it's like asking the average American to write Japanese or Korean
- ④ The frustrated translator has no choice but to write text like:
You got 2x sword!
You pay 50 gold piece(s).



- ⌚ For small games, you can branch the source code...
- ⌚ ...but European languages can have up to 16 grammatical variations, making it impossible to hard code
- ⌚ With 5 languages with different logic rules, manually splitting up messages can be impossible when your game's text is the size of a novel



- ④ Custom-built macro system that handles articles, singular/plurals, and masculine/feminine/neutral text branching
- ④ Work with dev team to implement singular/plural item names with definite/indefinite articles (also handling plural nouns and other grammatical quirks)
- ④ After programmers implement the code for this standard library of language macros, translators add the macros into the text where needed

This reduces the programmers' overall workload, and gives the translators the freedom of fine-tuning the text to their needs.



Item/monster name macros

```
<SGL_I_NAME>                <PLR_I_NAME>
<INDEF_ART_SGL_I_NAME>      <INDEF_ART_PLR_I_NAME>
<DEF_ART_SGL_I_NAME>        <DEF_ART_PLR_I_NAME>
```

Grammatical branching macros

```
<IF_MALE>...<ELSE_NOT_MALE>...<ENDIF_MALE>
<IF_SOLO>...<ELSE_NOT_SOLO>...<ENDIF_SOLO>
<IF_SING xxx>...<ELSE_NOT_SING>...<ENDIF_SING>
<IF_VOWEL_x>...<ELSE_CONSONANT_x>...<END_IF_VOWEL_x>
```

Real-world examples

```
<Cap><INDEF_ART_TARGET> <IF_TARGET_SOLO>appears
<ELSE_TARGET_NOT_SOLO>appear<ENDIF_TARGET_SOLO>!
```

- ▶ A slime appears!
- ▶ Slimes appear!

```
<Cap><DEF_ART_ACTOR>
<IF_ACTOR_SOLO>attacks<ELSE_ACTOR_NOT_SOLO>attack<ENDIF_ACTOR_SOLO>!
```

- ▶ Slime A attacks!
- ▶ The slimes attack!

```
Does <value> <IF_SING value>point<ELSE_NOT_SING>points<ENDIF_SING> of
damage to <DEF_ART_TARGET>.
```

- ▶ Does 1 point of damage to slime A.
- ▶ Does 6 points of damage to the slime.



The text macro system can even handle German's complicated case system.

We don't have to use 16 to 32 columns to handle every combination of German cases:

i.e. definite/indefinite x singular/plural x nominative/genitive/dative/accusative x with/without articles.

The compression system reduces it to 2 to 5 columns that are expanded at runtime to match the grammar.

Now there are no excuses for writing

“You got 1x Sword(s)!” or “You got 2x Sword!”

when these text macros enable you to write

“You obtain a sword.”, “You obtain an ax.”, or

“You obtain 2 swords.”



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How do I fit all those Japanese, Chinese and Korean characters into my Western-developed game?

- ⊗ If you localize an English game into an Asian language, how will you fit all those characters into your game – on a system with limited memory?
- ⊗ The trick from the NES/SNES days: *Only load the actual letters needed for each scene* into memory.
- ⊗ *Check what letters are used in a certain area, and load in a small subset of the font for that area.*
- ⊗ Compress double-byte characters to single-byte
- ⊗ It's easily automated with a tool



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Product Differentiation

All our game's translations have started to sound the same. We're even using the same voice actors across our own titles!

This is where the localization staff selection and style issues come into play.

Choose the “right staff” for the right title from your translator pool—some are skilled at writing cool-sounding text, while others may have talent for humor and wordplay

The **FINAL FANTASY**[®] games have traditionally used American English with slight variations, while **FINAL FANTASY**[®] **XII** mixed in both US/British accents.



For **DRAGON QUEST®**,
British English was used as a literary device.

- ⌚ Gives the game a more classical feel
- ⌚ Lets the game switch from the high speech of kings to wordplay and naughty humor

We used a British recording studio, and used stage actors instead of animation voices—and a theatrical director for all voice direction

Classically trained actors and comedians gave the game a totally different “flavour” from other SQUARE ENIX titles

- ⌚ Try using different accents – even in text-only games!



Taking localization further...

Some of the extra loving care we put into our work that you shouldn't notice if we do our jobs right...



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Real-time automatic accent generators

The Japanese **CHRONO CROSS**® featured 40 characters, all of whom had characterization generated on-the-fly

In Japanese, changing the last two syllables of a line can easily modify characterization

- Moogles just add “kupo,” while Slimes add “sula!”

We implemented an automatic accent generator

- ⊕ Macros were added into every syllable and were changed at runtime—the results were like the "dialectizer" websites that change text into Redneck, Jive, Swedish chef, Cockney, etc.



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Delays due to localization time aren't always a bad thing...

- ⊕ North American and PAL versions of the game often get new and improved features that didn't make it into the Japanese versions
 - ▶ Extra events/bonus bosses in **FINAL FANTASY VII**®
 - ▶ Bonus movies and other features in **KINGDOM HEARTS**®
 - ▶ Replaced MIDI music with full orchestral score in **DRAGON QUEST**® VIII
- ⊕ We occasionally make huge changes to help the games work better in Western markets
 - ▶ Added voices to **DRAGON QUEST**® VIII , even though the original Japanese was text-only



DRAGON QUEST® VIII (Japanese version): No voice. MIDI music.
.....
(removed to reduce file size)



DRAGON QUEST® VIII (PAL version): voices & orchestral score
(removed to reduce file size)



DRAGON QUEST® VII . DRAGON WARRIOR® VII 's menus



DRAGON QUEST® VIII's J & E version menus



Even more subtle: Voice and mocap replacement

- ⊕ For **The BOUNCER**®, we translated Japanese→English and recorded the English *first*. It was easier to lip-sync the J voices to match the E mouth movements—and saved us having to redo lip-synch animations
- ⊕ For games like **FINAL FANTASY**® **XII**, we use Western motion capture actors (for characters like Balthier and Ba'Gamnan) to give the game a more Western feel
- ⊕ As long as the acting works across cultures, it saves us having to redo animations later
- ⊕ When cultural differences make it hard to render actions that work in both cultures, we strive to take multiple versions of the motions



Rating and Cultural Checks on the Japanese Games

- ⊕ We generally check the Japanese games in early stages of development—part of this involves a foreign market check to avoid anything that could be offensive internationally
- ⊕ By catching issues early, it saves the team from using incorrect language or bizarre graphics in the English version (or forcing the team to redo it)

Some issues that almost made it out the door...

“FINAL FANTASY Heroins” collection





FINAL FANTASY X®'s blitzball / religious gestures

Ratings changes work both ways!

- ☹ A scene from **FINAL FANTASY® XII** , removed from the Japanese version due to ratings issues, but restored in the North American and PAL versions.



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Where we hope to go from here...

- ③ More simultaneous multi-language development
- ③ Format standardization across teams
- ③ Improved tools
- ③ Better lip-synching methods
- ③ Better market research and learning on what to release



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