

Bridging Tongues

...with which bridge though?

A Study on Google and Weblio Online
Machine Translation Services in
Japanese → English Translation

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Agenda

- Introduction
- Methodology
- Findings
- Discussion
- Conclusion



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Introduction

Key Concepts

- **Machine Translation (MT)**
= “computerised systems responsible for the production of translations from one natural language into another, with or without human assistance” (Hutchins and Somers, 1992)
 - ****Automates translation****
 - Approaches:
 - Rule-based, Example-based
 - Statistical, Neural
- **Online MT services**
= websites providing automated translation services



Online MT Services

Google

- America-based, since 2006
- Supports >100 languages
- Statistical → Neural MT
- Training:
 - Corpus data (UN & EU)
 - Translate Community



Weblio

- Japan-based, founded 2005
 - Online translation service available since 2012
- Provides online dictionary, translation services
 - Dictionaries of Japanese and 6 other languages
 - Translation in JP ⇔ EN/CN/KR
- Unspecified MT approach
 - Makes use of dictionary and example sentence searching results

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More on Weblio

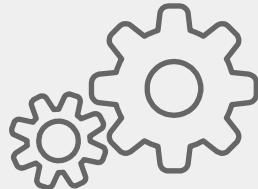
The screenshot shows a search results page from Weblio. At the top, there's a search bar with the query '私の趣味は読書です' and a '検索' (Search) button. Below the search bar, there's a 'OFF ON' toggle switch for '検索範囲' (Search range). The results list 20 items, each with a snippet of text in Japanese and English, followed by a link to 'Weblio Email例文集' (Weblio Email Example Collection). Some examples include: '私の趣味は読書です' (My hobby is reading), '私の趣味は読書と編み物です' (My hobbies are reading and knitting), '私の趣味は旅行と読書です' (My hobby is traveling and reading), and '私の趣味は読書とゲームです' (My hobby is reading and games).

- Helps users learn foreign languages
 - Dictionary
 - Translation
 - Sample sentences
 - Self-developed email corpus
 - Wikipedia JP ⇔ EN parallel corpus
 - Theme/context-oriented example base
 - Business English
- Online English speaking practice opportunities
 - Human and AI
- Provides support on studying/working/travelling abroad

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□ Automatic Evaluation

- Computes similarity with standard
 - Bilingual Evaluation Understudy (BLEU)
 - Metric for Evaluation of Translation with Explicit word Ordering (METEOR)
 - Edit (Levenshtein) Distance
- String-based; Accuracy-oriented



□ Human Evaluation

- Rather subjective
 - Evaluation framework needed
- All-rounded
 - Ensures output is grammatical, has the original meaning kept and target language/culture-appropriate



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□ Formality in Japanese

- Example: *I am Hanako.*
- Casual: *Watashi-wa Hanako-da.*
- Formal: *Watashi-wa Hanako-desu.*
- Written: *Watashi-wa Hanako-de-aru.*
- Honorific: *Watakushi-wa Hanako-de-gozaimasu.*

□ Japanese orthography



- **Kana** (Japanese characters, phonetic)
 - わたしは はなこ です。
- **Kanji** (Chinese characters)
 - 私は 花子 です。
- The same *kana*(s) → different *kanjis*
- A *kanji* can be different combination of *kanas*

□ Ellipsis

- (*I*) am Hanako → (*Watashi-wa*) Hanako-desu.

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Methodology

Methodology

1. Prepare text

- a. Find text with parallel Japanese and English versions
- b. Preprocess the texts

2. Perform MT

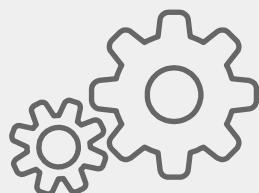
- a. With Google
- b. With Weblio

3. Evaluate results

- a. BLEU
- b. Human



Evaluation with BLEU



- Checks if MT output matches with standard
 - Score range = 0-1
 - 1 = perfect match
- BLEU in NLTK
- Match each sentence with list of standard sentences
- Calculate the average BLEU score attained by each sentence

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Human Evaluation Metrics



- Accuracy
 - Whether the translation contains the same information as the original
- Fluency
 - Whether the translation is readable
 - Whether the TL is used appropriately w.r.t. the content and intention (Hutchins and Somers, 1992)
- Error identification
 - What kind of errors are present?

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3 Trials

1. Story for Children

- In full *kana* (no Chinese characters)
- Generally formal with occasional dialectic/old-time/informal expressions in dialogues



2. Story for Children (with *kanjis*)

- *Kanjis* restored when appropriate
- Whether if the use of *kanjis* affect translation accuracy

3. News Article

- Formally written
- Japanese translation of English original (preprocessed to be roughly parallel)

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ゆきおんな
The Snow Woman

(にほんのむかしばなし)
(Japanese classical stories)

ほんやく(Translation) ブラッド・ランド (Brad Land)
YouTube <http://www.youtube.com/user/mrbradleyland>

♪Reading in Japanese
▶ 6:41 / 8:15 音声 Smile STATION

♪Reading in English
▶ 0:00 / 6:31 音声 Google Translate

にほんご(Japanese) ←→ にほんご(Japanese) & えいご(English) ←→ えいご(English)

むかしむかしの、さむいさむいきたぐにでのおはなしです。
Once upon a time, in the cold, cold northern lands...

BBC NEWS

Home Video World Asia UK Business Tech Science Stories Entertainment & Arts Health World News TV More

Huawei SmartLi UPS Digitizing Your Power

NEWS

Coronavirus: World Health Organization members agree response probe

World Health Organization (WHO) member states have agreed to set up an independent inquiry into the global response to the coronavirus pandemic.

Top Stories

Almost five million virus cases worldwide
The number of cases reach a milestone, the true number of infections is likely to be higher.
4 hours ago

Cyclone Idai devastates Malawian city
48 minutes ago

Man arrested for 'murdering cousins over video'
57 minutes ago

PRESENTED BY FINANCIAL SERVICE INNOVATION IN FINANCE Democratizing Money

World Health Assembly met online

WHO本部会議がオンラインで開催されました

WHO、新型ウイルス対応を検証へ 全加盟国が同意

WHOが新型ウイルス対応を検証するため、独立した検証委員会を設置することを合意した。

世界保健機関 (WHO) 加盟国は19日、WHOの新型コロナウイルスの世界的流行 (パンデミック) 対応について、独立した検証委員会を設置することを合意した。

この合意は、WHOがバイオ・ショーネーの名前と共にオンラインで開いた世界保健会の決議に含まれた。決議は加盟194か国の全会一致で採択され、WHOの現行そのものも認定することを決めた。

WHOの新型ウイルス対応は、特にアメリカが強く批判している。

決議案は、歐州議会 (EU) が100か国を代表して提出した。

読み物・解説

あるところに、しげさく(もさく)とおのきちというきこりのおやこがすんでいました。

there lived an old logger named Shigesaku, and his son, Onokichi.

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Findings



1. Children's Story (in full kanas)

Yukionnna (The Snow Woman)

```

[15] Average BLEU score for * google YUKI 1.txt *: 0.5865032312730494
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 4-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().
warnings.warn(_msg)
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 2-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().
warnings.warn(_msg)
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 3-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().
warnings.warn(_msg)

1 ##### Preparing the output
2 fn = "weblio_YUKI_1.txt"
3 translation = open(fn)
4 output = []
5 score = 0
6 count = 0
7 for trans in translation:
8     t = trans.split()
9     #print(trans.split())
10    #output.append(t)
11    if t != []:
12        #print(t)
13        count += 1
14        score += sentence_bleu(standard, trans.split())
15    #print(len(output))
16 print("Average BLEU score for *", fn, "*:", score/count)

[16] Average BLEU score for * weblio_YUKI 1.txt *: 0.5468600985063935
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 2-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().
warnings.warn(_msg)
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 3-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().

```

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BLEU score

A	B	C
1 Source	Standard	Google
2 むかしむかしの、さむいさむいきたぐりのおはなしです。	Once upon a time, in the cold, cold northern lands...	Once upon a time, this is the story of the cold and cold weather.
3		
4 あるところに、しげさくとおのきちという きこりのおやこがすんでいました。	there lived an old logger named Shigesaku, and his son, Onokichi.	At one point, there was a sickly-smoked kid who lived.
5		
6 このおやこ、やまがすっぽりゆきにつつまれるころになると、 てっぽうをもってりょうでかけていくのです。	Every year, when the mountains became white snow, they would take their rifle and go hunting.	When it comes time for this oyster, Yama to be comfortably wrapped, he will take the teppoka and take it with him.
7		
8 あるひのこと、おやこはいつもゆきやまへはいってきましたが、 いつのまにかそらはくろぐもにおおわれて、ふぶきとなりました。	One day, while they were out, vicious clouds rolled in and they found themselves in the middle of a blizzard.	One day, the boy went to Yukiyama as usual, but before he knew it, the sky was covered with black cloud and became fluffy.
9		
10 ふたりはなんとか、きこりごやをみつけました。	Fortunately, they were able to find a small hut.	The two managed to find a woodcutter.
11		
12 「こんやはここだとまるより、しかたあるめえ」	"We have no choice but to spend the night here."	"Koya is a way to stay, rather than stop here."
13		
14 「うんだなあ」	The son agreed.	Yeah.
15		
16 ちろちろともえるいろいろのひにあたりながら、 ふたりはひるまのつかれからか、すぐくねむりこんでしまいました。	They were both tired, and while listening to the crackling of the fire, soon fell asleep.	While hitting the fluttering squirrels, the two immediately fell asleep, probably because of the sardines of the sardines.
17		
18 かぜのいきおいでとがたんとひらき、ゆきがまいこんできます。	The hut's door, pushed by the strong wind, was slammed opened...	You can enjoy the warmth of the cold and the snow.
19		
20 そして、いろいろのひのがつときました。	and in an instant the fire was put out.	Then, I heard a lot of hilarity.
21		
22 「うー、さむい！」	"Brrr.... It's cold!"	"Wow, it's cold!"
23		
24 あまりのさむさにめをしましたおのきちは、 そのとき、ひとかけをみたのです。	The chill awoke Onokichi, and it was then that he saw the figure of a person.	Onochi, who was too angry, saw a shadow at that time.
25		
26 「だれじや、そこおるのは？」	"Who is there?"	Who are you there?
27		
28 そこにすがたをあらわしたのは、わかくうつくしいおんなのひとでした。	From the darkness emerged a young and beautiful woman.	It was a beautiful and beautiful woman who expressed herself there.
29		

Results from
Google Translate

A	B	C	D
Source	Standard	Weblio	
1 むかしむかし の、さむいさむい きたぐに での おはなし です。	Once upon a time, in the cold, cold northern lands...	さむいさむい きたぐに での おはなし です of old days old days.	
3			
4 あるところに、しげさくとおのきちという きごりのおやこがすんでいました。	there lived an old logger named Shigesaku, and his son, Onokichi.	In a certain place, it is しげさくとおのきちというきごりのおやこがすんでいました.	
5			
6 このおやこ、やまがすっぽりゆきにつまれるころになると、 てっぽうをもってりょうにでかけていくのです。	Every year, when the mountains became white snow, they would take their rifle and go hunting.	When when このおやこ, a mountain are surrounded to go completely, become, てっぽうをもってりょうにでかけていくのです.	
7			
8 あるひのこと、おやこはいつものようにゆきやまへはいってきましたが、 いつのまにかそらはくろぐもにおおわれて、ふぶきとなりました。	One day, while they were out, vicious clouds rolled in and they found themselves in the middle of a blizzard.	あるひのこと、おやこはいつものようにゆきやまへはいってきましたが、 いつのまにかそらはくろぐもにおおわれて、ふぶきとなりました.	
9			
10 ふたりはなんとか、きごりごやをみつけました。	Fortunately, they were able to find a small hut.	The two are きごりごやをみつけました somehow.	
11			
12 「こんやは ここで とまる より、しかたあるめえ」	"We have no choice but to spend the night here."	こんやは ここで とまる より、しかたあるめえ	
13			
14 「うんなどなあ」	The son agreed.	Yes	
15			
16 ちらちらともえるいろいろのひにあたりながら、 ふたりはひるまのつかわからか、すぐにねむりこんでしまいました。	They were both tired, and while listening to the crackling of the fire, soon fell asleep.	ちらちらともえるいろいろのひにあたりながら、 the two have fallen asleep from fatigue of the day immediately.	
17			
18 かぜのいきおいでとががたんとひらき、ゆきがまいこんできます。	The hut's door, pushed by the strong wind, was slammed opened...	I go かぜのいきおいでとががたんとひらき, and there is a toad.	
19			
20 そして、いろいろのひがふつときえました。	and in an instant the fire was put out.	And it is いろいろのひがふつときえました.	
21			
22 「うへ、さむい！」	"Brrr.... It's cold!"	Ugh, ... is cold!	
23			
24 あまりのさむさにめをさましたおのきちは、 そのとき、ひとかけをみたのです。	The chill awoke Onokichi, and it was then that he saw the figure of a person.	あまりのさむさにめをさましたおのきちは, it is ひとかけをみたのです then.	
25			
26 「だれじや、そこおるのは？」	"Who is there?"	Whose being there	
27			
28 そこにすがたをあらわしたのは、わたくうつくしいおんなのひとでした。	From the darkness emerged a young and beautiful woman.	It was a young, beautiful woman that expressed a figure there.	
29			

Results from
Weblio Translate



2. Children's Story (with kanjis)

Yukionnnna (The Snow Woman)

```
[18] Average BLEU score for * google_YUKI_2.txt *: 0.6159589397087278
  ↳ /usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
    Corpus/Sentence contains 0 counts of 3-gram overlaps.
    BLEU scores might be undesirable; use SmoothingFunction().
      warnings.warn(_msg)
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 2-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().
  warnings.warn(_msg)
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 4-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().
  warnings.warn(_msg)

1 ### Preparing the output
2 fn = "weblion_YUKI_2.txt"
3 translation = open(fn)
4 output = []
5 score = 0
6 count = 0
7 for trans in translation:
8 | t = trans.split()
9 | #print(trans.split())
10 | #output.append(t)
11 | if t != []:
12 |   #print(t)
13 |   count += 1
14 |   score += sentence_bleu(standard, trans.split())
15 #print(len(output))
16 print("Average BLEU score for *", fn, "*:", score/count)

  ↳ Average BLEU score for * weblion YUKI_2.txt *: 0.6134340739849183
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 3-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().
  warnings.warn(_msg)
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 2-gram overlaps.
```

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BLEU score

Source	Standard	Google
2 昔々の、寒い寒い北国でのお話です。	Once upon a time, in the cold, cold northern lands...	It's an old story in a cold northern country.
3		
4 あるところに、しげさくとおのきちという樵の親子が住んでいました。	there lived an old logger named Shigesaku, and his son, Onokichi.	In one place, Shigeru Sakuto and Onokichi lived as a parent and child.
5		
6 この親子、山がすっぽり雪に包まれる頃になると、鉄砲を持って銃に出かけていくのです。	Every year, when the mountains became white snow, they would take their rifle and go hunting.	When it is time for the parents and children to be completely covered in snow, they will go out for hunting with a gun.
7		
8 ある日のこと、親子はいつものように雪山へ入ってきましたが、いつの間にか空は黒雲に覆われて、吹雪となりました。	One day, while they were out, vicious clouds rolled in and they found themselves in the middle of a blizzard.	One day, parents and children went into the snowy mountains as usual, but before I knew it, the sky was covered with black clouds and it snowed.
9		
10 二人はなんとか、 樵小屋 を見つけました。	Fortunately, they were able to find a small hut.	The two managed to find a cottage.
11		
12 「今夜はここで泊まるより、仕方あるめえ」	"We have no choice but to spend the night here."	There is no way to stay here tonight.
13		
14 「うんだなあ」	The son agreed.	Wow!
15		
16 ちらちらと燃える囲炉裏の火にあたりながら、二人は長間の疲れからか、すぐに眠り込んでしまいました。	They were both tired, and while listening to the crackling of the fire, soon fell asleep.	The two fell asleep immediately, probably because of daytime fatigue, while hitting a blazing hearth fire.
17		
18 風の勢いで戸がたんと開き、雪が舞い込んできます。	The hut's door, pushed by the strong wind, was slammed open...	The door opens with the force of the wind, and snow comes in.
19		
20 そして、囲炉裏の火がふつと消えました。	and in an instant the fire was put out.	Then the fire in the hearth suddenly went out.
21		
22 「う~、寒い！」	"Brr.... It's cold!"	Wow, it's cold!
23		
24 あまりの寒さに目を覚ましたおのきちは、その時、人影を見たのです。	The chill awoke Onokichi, and it was then that he saw the figure of a person.	When he woke up to the cold, he saw a figure at that time.
25		
26 「誰じや、そこおるのは？」	"Who is there?"	Who are you there?
27		
28 そこに姿を現したのは、若く美しい女人でした。	From the darkness emerged a young and beautiful woman.	What appeared there was a young, beautiful woman.

Results from
Google Translate

Source	Standard	Weblio
1 首歌の、寒い寒い北国のお話です。	Once upon a time, in the cold, cold northern lands,	It is the story in the cold cold northern country of ancient times.
2 あるところに、しげさくとおのきちという樵の親子が住んでいました。	there lived an old logger named Shigesaku, and his son, Onokichi.	Parent and child of the woodcutter who seemed to have a certain place, and a fence faded away, and said a little lived.
3 この親子、山がすっぽり雪に包まれる頃になると、	Every year, when the mountains became white snow,	I go out for hunting with a gun when it becomes when these parent and child, mountain are surrounded completely by snow.
4 鉄砲を持って獵に出かけていくのです。	they would take their rifle and go hunting.	
5 ある日のこと、親子はいつものように雪山へ入っていましたが、	One day, while they were out, vicious clouds rolled in and	It was one day, and parent and child went into the snowy mountains as always, but the sky was covered all too soon by black clouds and became the snowstorm.
6 いつの間にか空は黒雲に覆われて、吹雪となりました。	they found themselves in the middle of a blizzard.	
7 二人はなんとか 樵小屋を見つけました。	Fortunately, they were able to find a small hut.	Two people found a woodcutter hut somehow.
8 「今夜はここで泊まるより、仕方あるめえ」	"We have no choice but to spend the night here."	Than "I stay tonight here was あるめえ"
9 14 「うんだなあ」	The son agreed.	Yes
15 ちろちろと燃える圍炉裏の火にあたりながら、	They were both tired, and while listening to the crackling of the fire, soon fell asleep.	What ちろちろと warmed itself by the fire of the hearth which burnt.
16 二人は昼間の疲れからか、すぐに眠り込んでしまいました。		two people were from daytime fatigue or have fallen asleep immediately.
17 風の勢いで戸ががたんと聞き、雪が舞い込んできます。	The hut's door, pushed by the strong wind, was slammed opened...	Doo ががたんと difference, snow come by force of the wind.
18 そして、圍炉裏の火がふと消えました。	and in an instant the fire was put out.	And the fire of the hearth went out incidentally.
19 「う～、寒い！」	"Br... It's cold!"	Ugh, ... is cold!
20 あまりの寒さに目を覚ましたおのきちは、その時、人影を見たのです。	The chill awoke Onokichi, and it was then that he saw the figure of a person.	覚ましたおのきちは looked at the shadow of a person with eyes for excessive cold then.
21 「誰じや、そこおるのは？」	"Who is there?"	Whose being there
22 そこに姿を現したのは、若く美しい女人でした。	From the darkness emerged a young and beautiful woman.	It was a young, beautiful woman that appeared there.

Results from
Weblio Translate



3. News Article

“Back Translating” a BBC article

```

[12] Average BLEU score for * google CORONA.txt *: 0.43392365355268764
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 3-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().
    warnings.warn(_msg)
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 4-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().
    warnings.warn(_msg)
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 2-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().
    warnings.warn(_msg)

[13] 1 ### Preparing the output
2 fn = "weblio_CORONA.txt"
3 translation = open(fn)
4 output = []
5 score = 0
6 count = 0
7 for trans in translation:
8     t = trans.split()
9     #print(trans.split())
10    #output.append(t)
11    if t != []:
12        #print(t)
13        count += 1
14        score += sentence_bleu(standard, trans.split())
15 #print(len(output))
16 print("Average BLEU score for *", fn, "*:", score/count)

Average BLEU score for * weblio CORONA.txt *: 0.47792150239144227
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 2-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().
    warnings.warn(_msg)
/usr/local/lib/python3.6/dist-packages/nltk/translate/bleu_score.py:490: UserWarning:
Corpus/Sentence contains 0 counts of 3-gram overlaps.
BLEU scores might be undesirable; use SmoothingFunction().

```

25

BLEU score

JP	EN	Google
WHO、新型ウイルス対応を検証へ 全加盟国が同意	Coronavirus: World Health Organization members agree response probe	WHO to verify new virus response All members agree
世界保健機関（WHO）加盟国は19日、WHOの新型コロナウイルスの世界的流行（パンデミック）対応について、独立した検証委員会を設置することを合意した。	World Health Organization (WHO) member states have agreed to set up an independent inquiry into the global response to the coronavirus pandemic.	Members of the World Health Organization (WHO) agreed on the 19th to establish an independent verification committee on the WHO's response to the new coronavirus.
この合意は、WHOがイスラエル・ユーステップの本部とオンラインで開いた年次総会の決議に含まれる。決議案は加盟194カ国での一致で採択され、WHOが役割そのものも検証することを決めた。	The resolution, approved without objection by the WHO's 194-member annual assembly, also allows for the inquiry to look into the health body's own role.	The agreement was included in a resolution of the annual meeting held online by WHO with its headquarters in Geneva. The resolution was unanimously adopted by 194 member countries and decided to examine the role of WHO itself in the pandemic response.
WHOの新型ウイルス対応は、特にアメリカが強く批判している。	The United States in particular has been highly critical of its response.	The United States has strongly criticized WHO's response to new viruses.
決議案は、欧州連合（EU）が100カ国を代表して提案した。	The EU presented the resolution on behalf of 100 nations.	The resolution was proposed by the European Union (EU) on behalf of 100 countries.
決議の内容	What is in the resolution?	Contents of resolution
決議は、WHOの国際的な新型ウイルス対応について、「公平で独立した全般的な評価」が必要だ。	It calls for an "impartial, independent and comprehensive evaluation" of the international response to the new virus.	The resolution called for a "fair and independent global assessment" of WHO's international response to new viruses.
新型ウイルスの感染症（COVID-19）のパンデミック対応の経過を検証される。	This will also focus on the WHO's "timelines pertaining to the Covid-19 pandemic".	The course of pandemic response to the new virus infection (COVID-19) will also be verified.
WHOに対しては、健康上の危機と宣言するのが遅かったとの批判が出ている。	The body has faced criticism that it was late to declare a health emergency.	WHO has been criticized for delaying the declaration of a health crisis.
決議はまた、各国が治療やワクチンを「透明性が高く公平な方法でタイミングよく活用」できるようWHOに対し、「ウイルスの発生源と人間への感染ルート」を調査するよう求めている。	The resolution also calls for the world to ensure "transparent, equitable and timely access" to treatments and vaccines and pushes for the WHO to investigate the "source of the virus and the route of transmission to humans."	The resolution also calls for countries to be able to "use their treatments and vaccines in a transparent and impartial manner." We are asking WHO to investigate the "source of the virus and the route of transmission to humans."
WHOへの圧力	Why is the WHO under pressure?	Pressure on WHO
ドナルド・トランプ米大統領はWHOを中国「偽り人形」と呼び、拠出金の支払いを停止した。	President Donald Trump has labelled the organisation a "puppet" of China and suspended contributions.	US President Donald Trump called WHO a Chinese "puppet" and stopped paying contributions.
アメリカはWHOにとって最大の資金源出団となりたい。	The US is the largest donor.	The United States has become the largest contributor to WHO.
トランプ氏は中国について、大流行の発生を隠そうとしたと非難している（中国はこれを強く否認）。	He has also accused China of trying to cover up the outbreak - something it strongly rejects and said the WHO had failed to hold Beijing to account.	Trump accuses China of trying to cover the outbreak, which China strongly denies.
またWHOに対しても、中国の責任を明確にしていないとしている。		It also said it did not clarify China's responsibility to the WHO.
トランプ氏は18日、WHOのテドロス・アダノム・ゲブレエスラ事務局長に送った書簡を公表。	The president on Monday published a letter he sent to WHO head Dr Tedros Adhanom Ghebreyesus outlining specific issues the US has.	On the 18th, Mr. Trump published a letter sent to the WHO Executive Secretary Tedros Adhanom Ghebreyesus. Clarity America's position.
アメリカの立場を説明した。		
同日のWHO年次総会では、米保健福祉省のアレックス・アザール長官が強き口頭でUS Health Secretary Alex Azar was scathing in his address to the assembly.		At the WHO Annual Meeting on the same day, US Department of Health and Welfare Secretary Alex Azar addressed the assembly.
「今回の大流行が手におえなくなった主要な理由を、私たちは率直に認めなくてはならない。	"We must be frank about one of the primary reasons this outbreak spun out of control: there was a failure by this organisation to obtain the information that the world needed, an	President Trump faces re-election this year
世界が必要としていた情報を、この組織（WHO）は入手できなかった。それが多くの犠牲者を生じさせたのです。	and opponents see his criticism as an attempt to deflect blame for his handling of the crisis.	Mr. Trump is due for a presidential election, which will be re-elected in November this year.
トランプ氏は今年11月に、再選がかかる大統領選挙が控えている。		There is a view that his criticism of WHO seeks to change the point of criticism against new virus measures in the US.
同氏のWHO批判は、アメリカ国内における新型ウイルス対策への非難の矛先を変えようとするもの。		

Results from
Google Translate

JP	EN	Weblio
WHO、新型ウイルス対応を検証へ 全加盟国が同意	Coronavirus: World Health Organization members agree response probe	All member nations agree to inspection by WHO, new virus correspondence
世界保健機関（WHO）加盟国は19日、WHOの新型コロナウイルスの世界的な流行（パンデミック）対応について、独立した検証委員会を設置することで合意した。	World Health Organization (WHO) member states have agreed to set up an independent inquiry into the global response to the coronavirus pandemic.	The World Health Organization (WHO) member nation agreed about global trend (pandemic) correspondence committee.
この合意は、WHOがスイス・ジュネーブの本部とオンラインで開いた年次総会の決議に含まれる。決議案は加盟194か国の全会一致で採択され、WHOの役割そのものも検証することを決めた。	The resolution, approved without objection by the WHO's 194-member annual assembly, also allows for the inquiry to look into the health body's own role.	This agreement was included in the resolution of the annual meeting that WHO held with the headquarters and its members.
WHOの新型ウイルス対応は、特にアメリカが強く批判している。	The United States in particular has been highly critical of its response.	The United States in particular strongly criticizes the new virus correspondence of WHO.
決議案は、歐州連合（EU）が100カ国を代表して提出された。	The EU presented the resolution on behalf of 100 nations.	European Union (EU) suggested the resolution on behalf of 100 countries.
決議の内容	What is in the resolution?	Contents of the resolution
決議は、WHOの国際的な新型ウイルス対応について、「公平で独立した全般的な評価」が必要だ	It calls for an "impartial, independent and comprehensive evaluation" of the international response.	The resolution said that "a general evaluation independent with fairness" was necessary about international new virus response.
新型ウイルスの感染症（COVID-19）のパンデミック対応の経緯を検証される。	This will also focus on the WHO's "timelines pertaining to the Covid-19 pandemic".	It is inspecting in progress of the pandemic correspondence of the infectious disease (COVID-19) of the new virus.
WHOに対しては、健康上の危機と宣言するのが遅かったとの批判が出ている。	The body has faced criticism that it was late to declare a health emergency.	A resolution is a demand in it being possible for "utilization by the method that transparency is fair highly with transparency".
決議はまた、各国が治療やワクチンを「透明性が高く公平な方法でタイミングよく活用」できる	The resolution also calls for the world to ensure "transparent, equitable and timely access" and pushes for the WHO to investigate the "source of the virus and the route of introduction".	A resolution is a demand in it being possible for "utilization by the method that transparency is fair highly with transparency".
WHOへの圧力	Why is the WHO under pressure?	Pressure on WHO
ドナルド・トランプ米大統領はWHOを中国の「操り人形」と呼び、輸出金の支払いを停止した。	President Donald Trump has labelled the organisation a "puppet" of China and suspended payment of dues.	The U.S. President Donald Trump called WHO a Chinese "marionette" and stopped payment of the money of contribution.
アメリカはWHOにとって最大の資金供出国となる。	The US is the largest donor.	The United States becomes the biggest fund contribution country for WHO.
トランプ氏は中国について、大流行の発生を隠そうとしたと非難している（中国はこれを強く否認）。	He has also accused China of trying to cover up the outbreak - something it strongly rejected and said the WHO had failed to hold Beijing to account.	Trump blames that I was going to hide all the rage outbreak about China (China strongly denies this). In addition, for WHO, it is said that I do not make responsibility of China clear.
トランプ氏は18日、WHOのテドロス・アダノム・ゲブレイエス事務局長に送った書簡を公表	The president on Monday published a letter he sent to WHO head Dr Tedros Adhanom Ghebreyesus outlining specific issues the US has.	Trump publishes the letter which I sent to a Tedros Adanom Ghebreyesus's secretary general of WHO on 18th. I did a viewpoint of the United States clearly.
同日のWHO年次総会では、米保健福祉省のアレックス・アザール長官が強い口調でUS Health Secretary Alex Azar was scathing in his address to the assembly.	"We must be frank about one of the primary reasons this outbreak spun out of control: there was a failure by this organisation to obtain the information that the world needed, and	In the WHO annual meeting of the same day, I criticized WHO in the tone that Alex Azar - Director General of Health and Welfare of the United States -
「今回の大流行が手におえなくなった主要な理由を、私たちは直率に認めなくてはならない。	President Trump faces re-election this year	We must accept the main reason why this rage became unmanageable openly.
世界が必要としていた情報を、この組織（WHO）は入手できなかった。それが多くの犠牲者を生む	and opponents see his criticism as an attempt to deflect blame for his handling of the crisis.	This organization (WHO) was not able to obtain the information that the world needed.
トランプ氏は今年11月に、再選にかかる大統領選挙が控えている。		A presidential election to require reelection has Trump that it produced many victims in this November.
同氏のWHO批判は、アメリカ国内における新型ウイルス対策への非難の矛先を変えようとするも		A viewpoint that his WHO criticism is going to change a spearhead of the criticism to new virus measures in the United States.

Results from Weblio Translate

Discussion

BLEU Scores Overview

	Google	Weblio
Children's Story (full Japanese)	0.5865	0.5469
Children's Story (with kanjis)	0.6160	0.6134
News Article	0.4339	0.4779

- Kanjis are important in Japanese meaning disambiguation
- Google is more suitable for everyday translation
- Weblio is better for translating formal texts

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*...but then kanas could be useful too
(disambiguation by pronunciation)*

1	Source	Standard
16	ちろちろともえるいおりのひにあたりながら、ふたりはひるまのつかれからか、すぐにねむりこんでしまいました。	They were both tired, and while listening to the crackling of the fire, soon fell asleep.
Google	While hitting the fluttering squirrels, the two immediately fell asleep, probably because of the sardines of the sardines.	ちろちろともえるいおりのひにあたりながら, the two have fallen asleep from fatigue of the day immedi

1	Source	Standard
16	ちろちろと燃える暖炉裏の火にあたりながら、二人は昼間の疲れからか、すぐに眠り込んでしまいました。	They were both tired, and while listening to the crackling of the fire, soon fell asleep.
Google	The two fell asleep immediately, probably because of daytime fatigue, while hitting a blazing hearth fire.	While ちろちろと warmed itself by the fire of the hearth which burnt, two people were from daytime fatigue or have fallen asleep immediate
Weblio		

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Overall Comments



Google

- TL-oriented, natural and fluent
- Fluency > Accuracy
- Able to translate unknown words/names
- Fails to capture pragmatic meanings

Weblio

- SL-oriented, faithful
- Accuracy > Fluency
- Able to capture Japanese-unique meanings
- Style tend to be formal, rigid
 - Fail to accommodate different speech styles

Common Problems

- Incorrect translation of open class words without Chinese characters
- Insertion of extra subjects ("I")

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Conclusion

Conclusion

(From the POV of an unprofessional translator...)



- Japanese → English MT is yet to be perfect
- Choose service according to purpose by the time being:
 - Google:
 - Everyday Japanese input
 - Natural English output
 - Weblio:
 - Technical Japanese input
 - Formal purposes

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Thank you!

... any questions?

ありがとうございます

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