Japanese for astronomers and engineers

Phil Edwards
Overview

• Some basic information
• Japanese words
• Names and honorifics
• The Japanese writing system(s)
• Numbers
• Common kanji
• Cultural differences
• Calendar
Japan (Nihon or Nippon)

- An archipelago of 6,852 islands
- Main islands Honshu, Shikoku, Kyushu, Hokkaido
- Divided into 47 prefectures
- Capital city is Tokyo
- Population 130 million
- Highest life expectancy (82.6 years)
- A constitutional monarchy
- Lies at the junction of three tectonic plates
The essential vocabulary?

- Yes and No
- Hello and Goodbye
- Please and Thank you
- Left, Right, Straight-ahead, and Stop
You already know many Japanese words

- Sushi, sashimi, tempura, teppan-yaki
- Kimono, geisha, obi
- Origami
- Zen
- Karaoke
- Karate
- Ninja
- Shogun
- Tycoon
- Honcho
- Hara-kiri
- Hunky Dory (?!)

Subaru 8.2m optical telescope
The writing styles

• Roma-ji
  – Two main variations
    • Hepburn system (shi, tsu, o)
    • Monbusho system (si, tu, wo)
  – Shinbun vs. Shimbun
  – Japanese find romaji difficult to read
• Hiragana (phonetic script, 46 characters)
• Katakana (like katakana, but mainly for transcriptions)
• Kanji (derived from Chinese, >5000 characters)
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Additional sounds (2)

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| ぴゅ びゅ じゅ ぎゅ りゅ みゅ ひゅ にゅ ちゅ しゅ きゅ |
| (pyu) (byu) (ju) (gyu) (ryu) (myu) (hyu) (nyu) (chu) (shu) (kyu) |
| ぴょ びょ じょ ぎょ りょ みょ ひょ にょ ちょ しょ きょ |
| (pyo) (byo) (jo) (gyo) (ryo) (myo) (hyo) (nyo) (cho) (sho) (kyo) |
のべやま
野辺山
NOBEYAMA
(長野県南佐久郡南牧村)
しなのかわかみ きよさと
SHINANO-KAWAKAMI KIYOSATO
Most common family names

• Most common family names
  – Satou (Satoh), Suzuki, Takahashi, Tanaka, Watanabe, Itou (Itoh), Nakamura, Yamamoto, Kobayashi, Saitou (Saitoh)

• Common boys names
  – Ichiro, Taro, Jiro, Saburo, Shiro, Goro
  – Daisuke, Jun, Takuya, Kenta, Yuuta, Naoki, Ken’ichi

• Common girls names
  – Yukiko, Yukie, Rieko, Reiko, Sumie, Momoko, Nanako
  – Yuki, Rie, Asuka, Haruka
Honorific suffixes

- San
  - General title of respect, like Mr, Mrs, Miss, Ms
  - Used with names, or occupations
- Sama
  - More respectful term, used, e.g., for customers
- Sensei
  - Used for teachers, doctors, experts
- Chan
  - Used for babies, children, girls
- Kun
  - Used for boys or those junior in rank
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Katakana words

• Ko-hi-
• Bi-ru
• Biru
• Bi-rusu
• Basu (which has three different meanings!)
• Resutoran
• Orenji juusu
• Go-ruden ui-ku (GW)
• Arubaito
• Natoriumu
マクドナルド
ハンバーガー
Word order

• The Japanese language is SOV (Subject Object Verb)
  – As is Korean, but not Chinese
  – (I) beach go. (I) book read.

• English, in contrast, is SVO
  – As is Chinese, Spanish, French, Italian, ...
  – I go to the beach. I read a book.

• Japanese and Korean are sometimes classed as Altaic languages, alongside Turkish and Mongolian, with similarities to Uralic languages, which include Hungarian and Finnish!
Other aspects of the language

• Verb conjugation is generally simple
• The verb ending changes the meaning
  – Taberu (the “dictionary form” of the verb to eat)
  – Tabemasu = eat
  – Tabemasen = don’t eat
  – Tabetai = want to eat
• There is no singular/plural
• Subject/object markers (“ha” and “ga”) are as confusing as in English (“a” and “the”)
Numbers

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<td>6</td>
<td>roku</td>
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<td>2</td>
<td>ni</td>
<td>7</td>
<td>shichi, nana</td>
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<td>san</td>
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<td>4</td>
<td>shi, yon</td>
<td>9</td>
<td>ku, kyuu</td>
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<td>5</td>
<td>go</td>
<td>10</td>
<td>juu</td>
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- 11=juu-ichi, 20=ni-juu, 21=ni-juu-ichi
- Large numbers are given in units of 10^4, not 10^3
- When counting, a suffix is added according to the type of thing being counted
- Four is the Japanese equivalent to 13!
The numbers from 1 to 10

一二三四五六七八九十
More kanji

川 口 山 母
月 日 本 木
Even more kanji

小 中 大

木 林 森
Remembering difficult kanji

出
面
高
線
出口
Useful phrases

- Hello
- Good morning
- Thank you
- Sorry
- I don’t understand
- Cheers!
- (Before a meal)
- Goodbye
Some cultural differences

• Always wear clean socks.
• Don’t get into a bath until you are clean.
• It’s okay to slurp if eating noodles.
• When you’re thirsty, fill someone else’s glass.
• If you don’t want to drink anymore, leave your glass full.
• Don’t be offended if someone falls asleep.
• Don’t blow your nose, especially on a handkerchief.
• When Japanese mean “yes” they say “yes”, when Japanese mean “no” they say “yes”.
Taxi etiquette

- Don’t open the door!
- Sit in the back
- Don’t close the door!
- Don’t be shocked at the flag-fall
- At your destination, don’t open the door!
- After you get out, don’t close the door!
The year

- This year started as Heisei 30 and has become Reiwa 1
- Emperor Akihito began his reign in 1989 and abdicated this year
- Akihito succeeded his father, Hirohito, and is succeeded by his son, Naruhito
- The Emperor is not referred to by name in Japan
- The financial and school years run from April to March
Owari!