

# Feedbacks on Chinese default setting of *Mojikumi* in Adobe InDesign

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## Issues

- Default *Mojikumi* settings of Chinese, both Simplified Chinese (SC) and Traditional Chinese (TC), are provided by a totally different algorithm from Japanese typesetting, making contradictions with JIS-complied InDesign's software design, which made it almost unusable for Chinese users.
- Bad translations not only cause UI display issues but also make the whole *Mojikumi* function not user-friendly at all.

## Background

In CJK typesetting, there are two different basic Modes for adjustment process for punctuations:

**Mode A: “halfwidth with addition” style:** most<sup>1</sup> of the punctuations (or *yakumono* 約物 in Japanese, *biāodiǎn fúhào* 标点符号 in Chinese) are in halfwidth, and different spaces (or *aki* アキ in Japanese, *kòngxì* 空隙 in Chinese) needed to be ADDED in adjusting process. e.g. IDEOGRAPHIC FULL STOP (。 ) alone is halfwidth by itself, but when it ends a sentence, a halfwidth space should be added to make its appearance looks as it is in fullwidth (= EM). But if it is followed by a FULLWIDTH RIGHT PARENTHESIS ( ) right after it, it just keep as halfwidth as it is, no space needs be added, and there is no spaces between the two punctuations, making them in solid (or *beta* ベタ in Japanese, *mìpái* 密排 in Chinese).

**Mode B: “fullwidth with compression” style:** all the CJK punctuations are basically in fullwidth, so IDEOGRAPHIC FULL STOP (。 ) alone is fullwidth. But if it meets a FULLWIDTH RIGHT PARENTHESIS ( ) right after it in horizontal typesetting, the right-half space of (。 ) should be COMPRESSED or deducted in the adjusting process.

The final appearance looks the same in both mode, Mode A considered it as “set in solid”, Mode B consider it is spacing compressed.

Mode A is the fundamental logic for CJK typesetting in traditional approaches in manual composition, when all the metal types are basically set in solid. The related concepts are also defined in JIS x 4051 (see 4.2 a)1) ), [W3C Japanese Layout Requirements](#) , and it is also used by *Mojikumi* function in CJK version of InDesign .

Mode B is quite believed by users who have few professional typography knowledge, and more and more people in CJK area prefer to think in this way because of the influence of monospace typefaces in early era of computer typesetting, and the insufficient functions of web typography nowadays.

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<sup>1</sup> By saying “most”punctuations, because there are two exemptions, FULLWIDTH QUESTION MARK(? ) and FULLWIDTH EXCLAMATION MARK (! ) in Japanese should always be fullwidth according definitions in 4.2 a)2) in JIS x 4051.

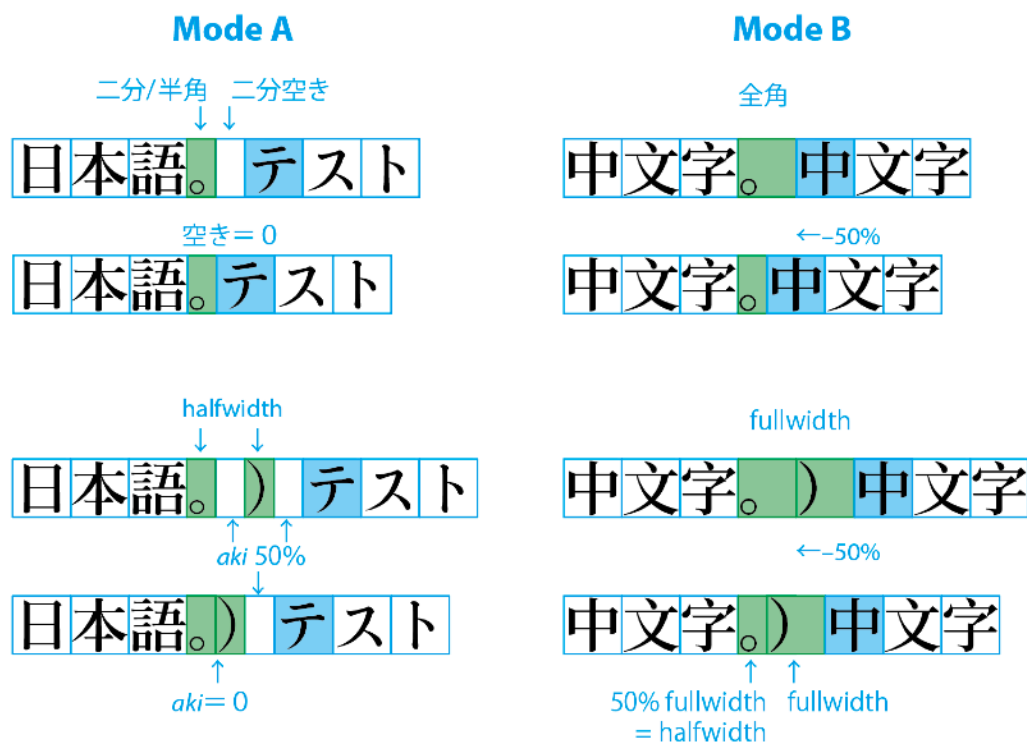


Fig 1. Mode A and B

The comparison these two modes is not the main purpose of this report, but obviously they are just opposite approaching for the same visual results – Mode A is doing addition to a halfwidth punctuation, while Mode B is doing subtraction from a fullwidth punctuation.

## Current Status

**Environment:** The report is made base on InDesign CC 13.0.1 with macOS High Sierra 10.13.3. Setting CJK-functional InDesign with English UI is possible but quite tricky, so all screenshots are taken by Chinese UI. However, the default Chinese settings kept no change at least since InDesign CS version in 2003.

**Important:** In order to focus on *Mojikumi* function, some testing samples in this reports are made with settings mentioned below

- CJK single-line composer
- paragraph align: left, ragged-right (in order to avoid justification adjustments) – this setting is not quite common because most CJK typesetting prefers justification.
- *kinsoku*-none: *Kinsoku* rules should be set as ON in normal composition

The only purpose of these settings is to avoid unnecessary adjustments effected by other adjust settings, making *Mojikumi* results more clearly shown. The results are just for testing, and might not following correct composition results.



Fig. 2 Default settings of Simplified Chinese – basic  
most values are in minus such as -50%



Fig. 3 Default settings of Japanese – basic  
(1/2 em in all line-end), values are positive

**Problem I:** The default setting values of Chinese in *Mojikumi* Setting dialogue boxes are in minus. e.g. in *Basic Setting* dialogue box, default values of *Contiguous Yakumono* of Chinese Simplified is set as 0% (-50% ~ 0%). c.f. default values of Japanese is 50% (0% ~ 50%). The minus values can be seen more clearly in *Detailed* dialogue box.

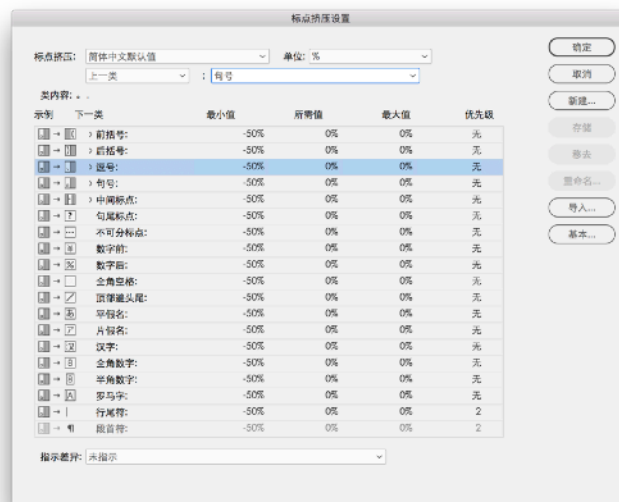


Fig.4 Default setting of Simplified Chinese – Detailed

This proved that the algorithm of Chinese sets are built by Mode B, considering punctuations as fullwidth and using minus value to compress/deduct the spacing, that is the reason it needs minus value to get the same result. This conflicts with Japanese sets, that is in Mode A, the InDesign software logic.

Due to fullwidth style of Mode B, if user put positive values into the fields as Japanese defaults, extra spacing will appear. See arrows in figure 5, in the first line, a 50%-aki is added before the left parenthesis, but itself still kept as fullwidth; and in 4th line, 50%-aki is also added between the two contiguous parentheses.

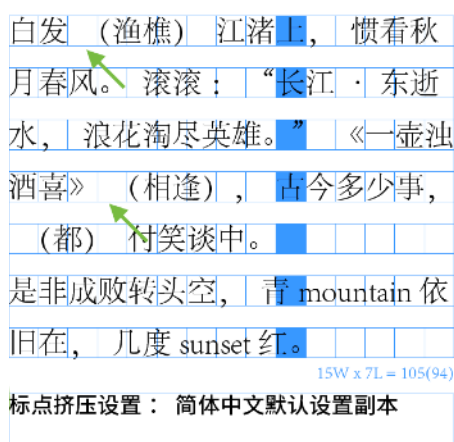


Fig 5. change Chinese default set with positive value will cause extra spacing because of fullwidth default

**Problem II:** Both Mode A and B share the same setting field, and the legal value of the fields is limited by range of -50% to +300%.

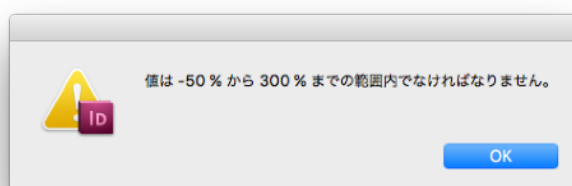


Fig 6. Warning message on the limit range of Mojikumi (in JP UI)

The range of -50% to +300% is quite sufficient for Japanese sets, who using Mode A because Mode A use “adding” mode, while minus values are seldom used, and will only be applied in extreme situations.

But in Chinese sets, since they are made base on Mode B of fullwidth, using “compressing/deducted” mode, the range limit of -50% is absolutely insufficient.

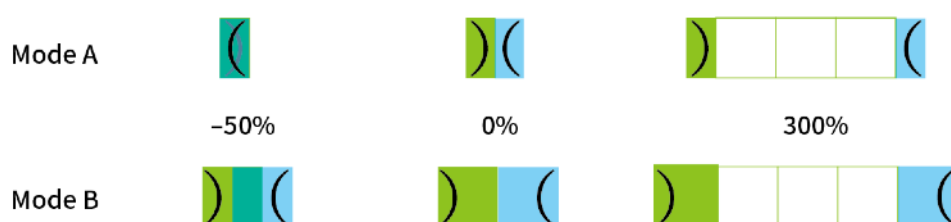


Fig 6. limit range of -50% to 300% effect differently in Mode A and B

As seen in Fig 6, the limit –50% of Mode B is not enough at all. If Chinese sets insist to use Mode B which conflict with current Japanese mode, the minus range should be changed from –50% to at least –100% or even –150%.

**Problem III:** Contradictions between UI options and actual results in Paragraph Indent settings, making confusions on Indent settings.

In *Basic* setting dialogue box, the setting of *yakumono* and *Contiguous Yakumono* are expressed in figure values, with which users could got a clue for the setting. But the setting of *Paragraph Indent* are not expressed in figure but words directly translated from English version, despite of the different modes are used, making the contradictions.

	Simplified Chinese UI	Read as	Internal algorithm = Mode A	Mistake algorithm = Mode B	Result appears as
A	段落首行缩进：无 半角前括号	Indent: NONE halfwidth left parenthesis	No Indent + 0% aki	No indent + 0% aki + fullwidth	No Indent + <b>fullwidth</b> left parenthesis
B	段落首行缩进二字 + 全角前括号	Indent: 2 EM +fullwidth left parenthesis	2 EM + 50% aki	2 EM + 50% aki + fullwidth	Indent: <b>3 EM</b> + halfwidth left parenthesis
C	标点挤压缩进二字 + 半角前括号	Indent: 2 EM +halfwidth left parenthesis	2 EM + 0% aki	2 EM + 0% aki + fullwidth	Indent: 2 EM + <b>fullwidth</b> left parenthesis
D	段落首行缩进二字 – 半角前括号	Indent: 2 EM – halfwidth left parenthesis	2 EM – 50% aki	2 EM – 50% aki + fullwidth	Indent: 2 EM + halfwidth left parenthesis

Table 1: Contradictions in Paragraph Indents settings

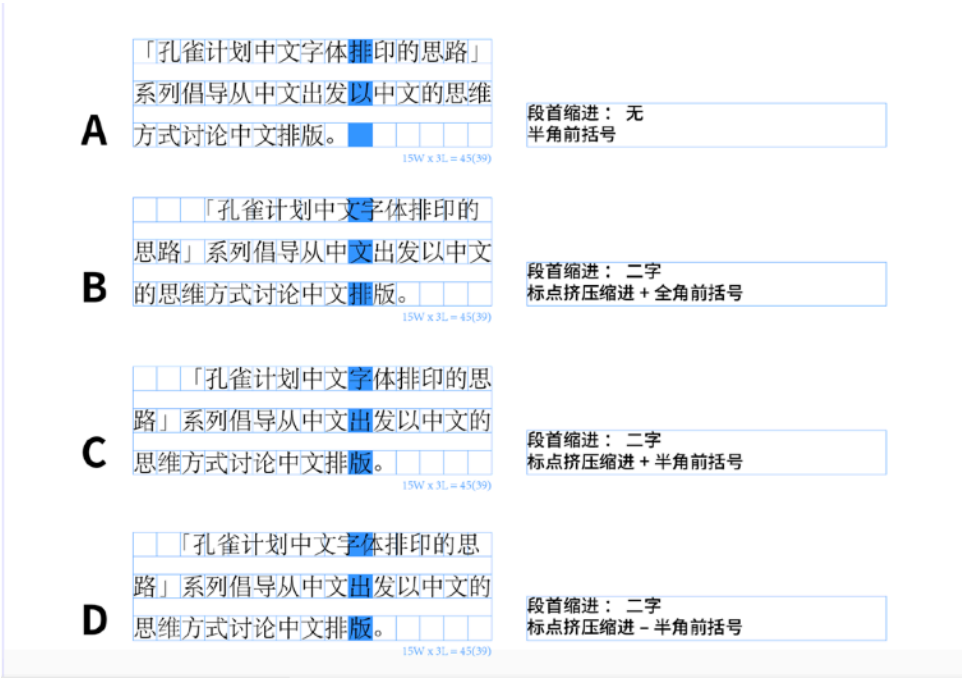


Fig 7: Contradictions in Paragraph Indents settings

If Chinese default sets use Mode B, the options should be rewritten here, and the 2nd option (indent of 2 EM + fullwidth left parenthesis) resulting 3 EM is just useless.

**Problem IV:** Bad translations made the character strings too long to be displayed in Chinese UI, especially when the unit is set as of EM, some of the options are cropped, resulting only 2nd half displayed, making confusions to users.

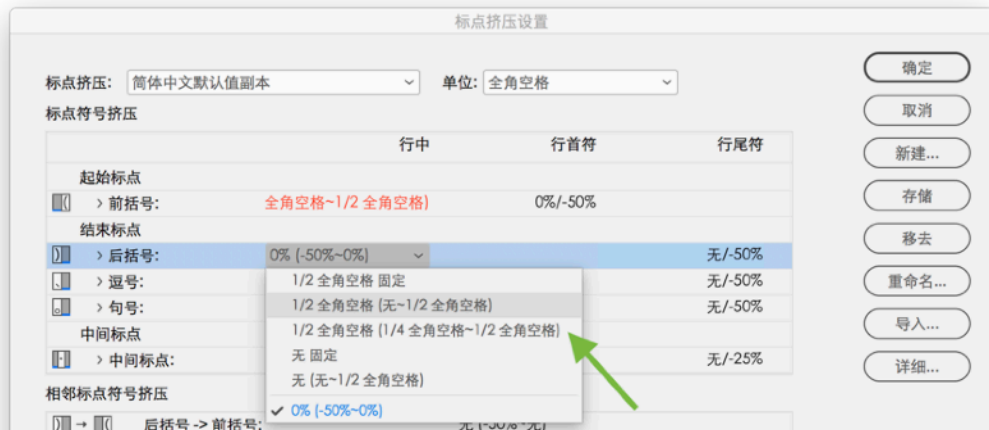


Fig 8: Bad translations made the character strings too long

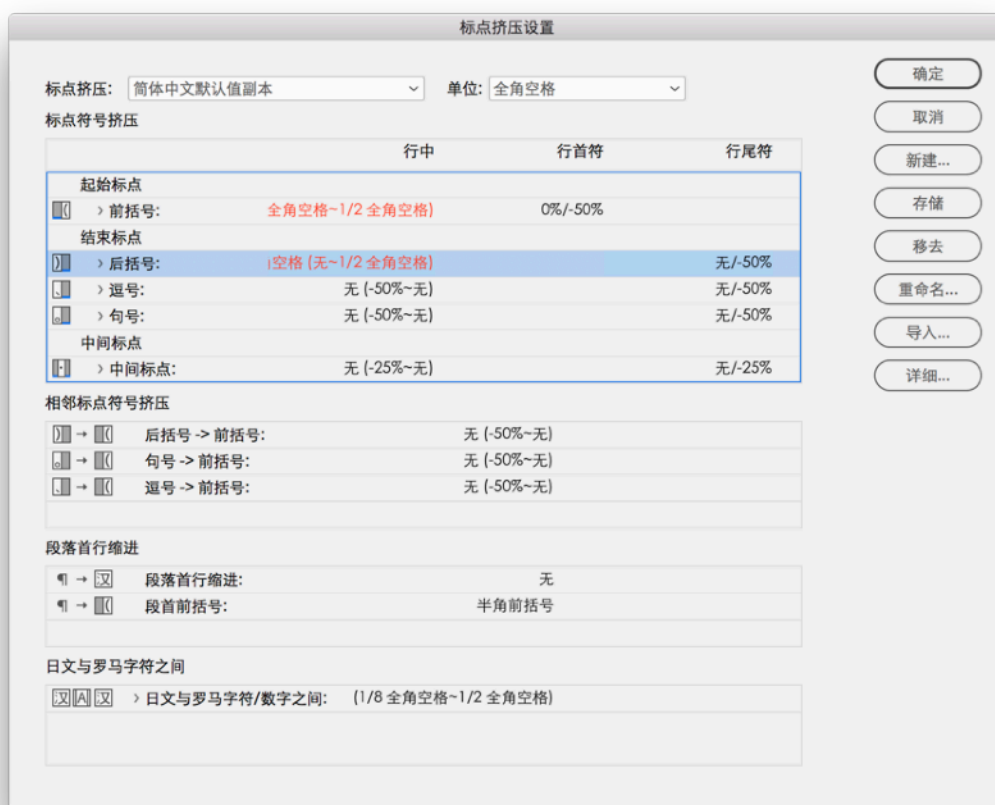


Fig 9: Long character strings are cropped when displayed

The Chinese UI seems to be translated from English, and the English word EM is improperly translated into 全角空格 without any considerations of UI. Here is the comparison.

English	bad translations in SC UI	good translations in JP
EM	全角空格	全角
1/2 EM	1/2 全角空格	二分
1/4 EM	1/4 全角空格	四分
1/2 EM (1/4 EM~ 1/2 EM)	1/2 全角空格 (1/4 全角空格~1/2 全角空格)	二分 (四分~二分)

Table 2: Translations of EM

As a matter of fact, in manual composition process with hot metal typefaces, Chinese professionals use the exactly same expressions with Japanese, this heritage is also used in professional composition software such as Founder's FenTart (方正飞腾). The current words just reflect the fact that the localization staff of InDesign cannot use the profession terms correctly.

Changing back the translations with current Japanese version will solve this UI problem.

**Problem V:** The Mode A is totally transparent for Chinese users by default, but since it is the exactly the core algorithm of InDesign, it will appear in other situations unexpectedly.

e.g. when user choose “none” for *Mojikumi*, it just mean no adjustments to do with the text, and for Chinese user who think with Mode B, the so-called fullwidth punctuation keep as fullwidth, which is good; but as soon as the user build a new customize set base on “none”(which is quite reasonable because common user will like to begin every adjustments from original statue), every punctuation will change from fullwidth to halfwidth.

This is the *normal behavior* for InDesign, because in the newly built customized set, the adjustment value is newly set as 0, the original status of Mode A. But for the Chinese user thinking in Mode B, everything should be in fullwidth, and this behavior just like a bug – the user would never thought of Mode A appears and every punctuations have just changed into halfwidth under the value of 0.

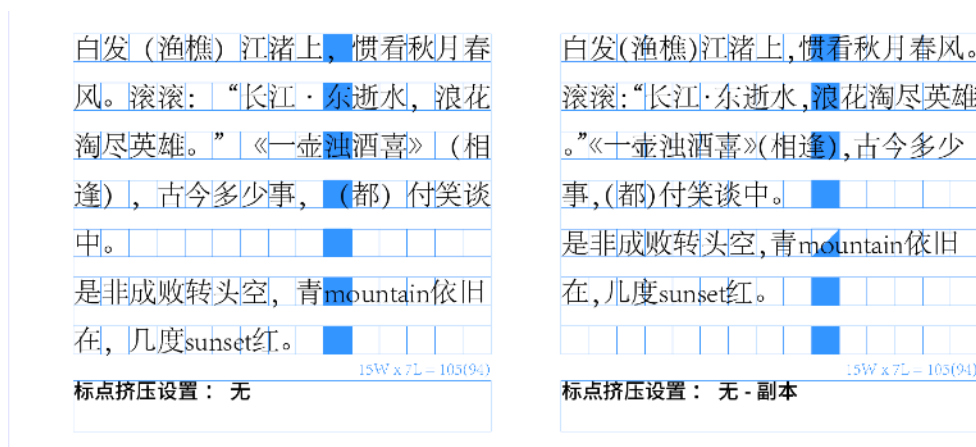


Fig 10: When building a new customize set from “none”, all fullwidth punctuation change into halfwidth

**Problem VI:** As a matter of fact, some Chinese user who can understand Indesign's algorithm Mode A are using Japanese default sets for common workings. But Japanese sets are not displayed by default, user will need to check the box in Preferences to let them shown in the pull-down list of Paragraph Panel. And the names of Japanese sets are just badly translated in SC UI, a common user could not understand.

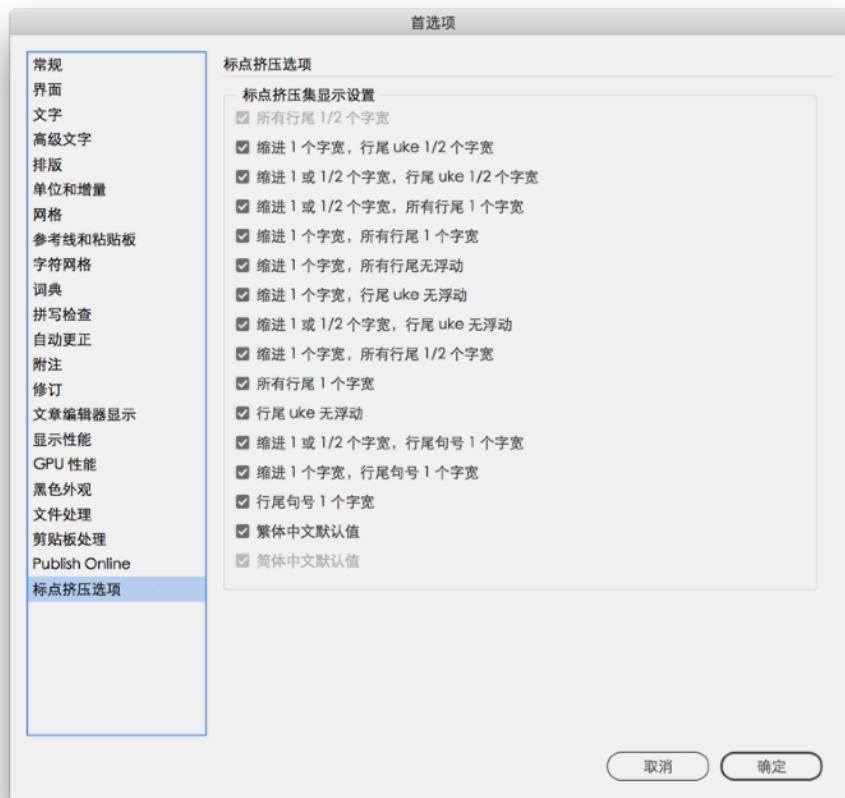


Fig 11: Preference setting of *Mojikumi* with bad translations in SC UI, mixing Japanese term *uke* in English

The UI items seems to be translated from English, while English UI are mixed with a lot of Japanese terms that the translator cannot understand. As a result, the Japanese term such as *uke* (class of closing parentheses) are just left in English in SC UI translation, without any explanations or instructions.

## Conclusion

The problems mentioned above are serious and urgent. The fundamental issue is, both SC and TC defaults set are using Mode B in the fullwidth thinking, instead of InDesign original algorithm. A common Chinese user could hardly know the existence of Mode A and the other *Mojikumi* sets for Japanese. What they can use is the default Chinese set. And since its algorithm is incorrect neither, users could never understand what exactly the setting value behaves.

There is no other resources that Chinese users can refer for *Mojikumi* function, which means no information provided to mention that InDesign is using Mode A, heritage of hot metal era. The Helps information only has tiny explanations, and are translated from English to Chinese directly, with no details explained, no more to mentioned about the Chinese default sets means. Adobe Japan published a Manual on *Mojikumi*,



which only has Japanese version, and the file is not updated ,its link is now broken, avoiding all users to access.

## Requests

If the Chinese default set insist to use Mode B, then at least Problem II should be solved as bottom line. But as the other problem still exist, and also for a unified algorithm for InDesign, it is better to rewrite the default settings for Chinese, just base on Japanese sets with least change such as the default of paragraph indent of Simplified Chinese should be set as 2 EM.

Translations causing UI problems must be edited and improved as reported as Problem IV and VI. These are minimum request to let InDesign usable for Chinese users.

And here are some more proposals to make InDesign easier for Chinese user.

**Proposal I:** As a core CJK function, it is named as *Mojikumi* (文字組み) in Japanese, which literally means “Character Composition”, obviously it includes major adjustment options for Japanese composition. But it is currently translated into 标点挤压 “Punctuation Compression” in SC UI. This is a bad translation because it is misleading. It suggests that this functions are using Mode B, and the default setting does use minus value to compress the spacing, which double confirms the situation. As a result, few user could understand the correct behave of Mode B.

*c.f.* In TC UI, it is translated as 文字間距設定 literally means “Character Spacing Setting”, this is better but still cannot cover the whole function such as Paragraph Indent.

Users of SC UI just consider this function is ONLY for punctuations judging from its name, so user seldom realize that the setting of paragraph indent of CJK should be set in this dialogue box, using a relative unit of EM. Instead, most Chinese user are seeking the function from Paragraph Panel, which is used for Western typography using absolute unit of points/mm.

As a candidate, 中文排版设置 (literally means “Chinese composition setting”) might be better.

**Proposal II:** Chinese Typography has different requirements, which needs different character classifications comparing with Japanese.

*e.g.* in Chinese mainland,

1. FULLWIDTH QUESTION MARK ( ? ) and FULLWIDTH EXCLAMATION MARK ( ! ) is half-positioned, not fullwidth-centered in the EM box as Japanese, so it should be treated as IDEOGRAPHIC FULL STOP ( 。 ).
2. FULLWIDTH COLON ( : ) is half-positioned, not centered as Japanese, so it should be put into the class like Japanese *nakaguro* ( ・ ).
3. The most required issue by Chinese designer: separate QUOTATION MARKS out from the opening/closing parentheses class. This particular requirement roots from UNICODE, because ideographic quotation shares the same code points of western quotations.

Although Japanese also use the current setting, Japanese users have solution for this: by switching on-and-off the option “*use CID-based Mojikumi*” in Preferences of InDesign. This option only effects to Japanese so Chinese user cannot benefit from it.

If the process of changing class is considered be difficult for 1. and 2., then keep the current Character Class and only do the separation of 3. will help a lot for Chinese users.

## Other Related issues

This report mainly covers the Chinese Mainland usage whose punctuation style is similar with Japanese. But in some area of Greater China, especially in Taiwan and Hong Kong, most user is considering that all the punctuations should be in fullwidth, as in Mode B.

The current algorithm of Mode A works badly with Taiwan-locale flavored typefaces, whose punctuations are positioned in center of EM box. These center-positioned punctuations should change their Character Class into centered class like Japanese *nakaguro* ( ・ ) and compress the spacings from both side. However, these requirements from Taiwan should be further discussed.

## Other Unrelated issues

There are other localization problems and issues for InDesign, including bad translations (*e.g.* proportional metrics as 公制字), bad default settings need to fix (Japanese kana options cannot be selected in Composite font), which are out of range of this document. *Mojikumi* is the core function for CJK compositions, so it has the priority to be fixed.