OhMyMN

MarginNote Addon Development Framework

Also a toolbox that can process excerpts automatically

Development | API | Guide | Download | View on GitHub

>>> To Developer

Modern Development Framework

Developed with TypeScript, bundled with ESbuild. A lot of APIs are encapsulated to help you develop more powerful mnaddon.

Control Panel & Profile Management

Easily create mnaddon with control panels, with powerful profile management.

Modular Development

Develop mnaddon with modular development, just like building blocks.

>>> To Normal User

Custom

With the control panel, MarginNote addon can finally be customized.

Automation

No need to manually turn on the addon, everything will be executed automatically according to your requirements.

Work Together

Different modules can work together to get more magical effects

Gesture & Shortcut

Quickly process the mindmap card through gestures and shortcut, full score efficiency.

Contributors

Welcom to join us, and develop more powerful mnaddon!

Introduction

> **Module**
>
> It is similar to plugins/addons, which are internal to OhMyMN.

OhMyMN is essentially a toolbox. All the functionalities inside are in separate modules, each of which is provided with three capabilities:

1. When excerpting, modify the excerpted content or get the excerpted content and perform other operations.
2. After selecting a card in the mindmap, make changes to the card or get information and perform other operations.
3. After selecting text in a document, get the text or selection information and perform other operations.

Some modules may use all three capabilities, some may use only one of them, and some may use none of them with only a few options.

Modules that use the first capability usually start with Auto, such as AutoTitle and AutoDef, indicating that they can be executed automatically on excerpt (this is not by default though. You need to turn on `Auto Run When Excerpting`. Modules that use the first capability usually also use the second capability in order to handle cards that already exist.

The second and third capabilities are also often used together, for example, for copying, searching, and exporting. They have a common name - Action. The actions of all modules are in MagicAction for Card and MagicAction for Text. The button, when clicked, performs the corresponding action.

Apart from that, all modules are divided into two main categories.

1. Required modules: Modules that cannot be disabled.

   - OhMyMN
   - MagicAction for Card: Some card-related actions
   - MagicAction for Text: Some text-related actions

2. Optional modules: You can select the modules to be enabled in the `OhMyMN — Module Quick Switch`.

- **Shortcut**: Use URL Scheme to trigger actions. You can set your own shortcut keys to open the URL Scheme.
- **Gesture**: Use gestures to trigger actions.
- **CopySearch**: Copy or search for selected text or selected cards.
- AutoX
  - **Another AutoTitle**: Auto convert titles.
  - **Another AutoDef**: Auto split excerpts into two parts (title and excerpt) and extract the title.
  - **AutoFormat**: Auto format excerpts, such as automatically adding spaces.
  - **AutoComplete**: Auto complete English word forms, fill in word information, and make word cards.
  - **AutoReplace**: Auto replace the content in the excerpt.
  - **AutoList**: Auto break the line at the specified position and add the serial number.
  - **AutoTag**: Auto add tags or extract parts of the content as tags.
  - **AutoComment**: Auto add comments or extract parts of the content as comments.
  - **AutoStyle**: Auto set the excerpt color and fill style.
  - **AutoOCR**: Auto OCR recognition or correction of extracted selections.
  - **AutoTranslate**: Auto translate the excerpted content.
  - **AutoSimplify**: Auto convert from Traditional Chinese to Simplified Chinese.
- ~~Export to X~~
  - ~~Export to Flomo~~
  - ~~Export to Anki~~
  - ~~Export to Devonthink~~

Points to Note

1

The logic of using OhMyMN is different from any previous plugins, especially the modules that begin with "Auto", which have truly achieved full automation. You need to set the conditions for execution and turn on `Auto Run When Excerpting` so that it can execute automatically when you need it. Modules often offer presets. You can choose to use the presets directly, or customize them. OhMyMN does not recommend indiscriminate executions, so there is no global switch to turn OhMyMN on or off with a single click.

2

The priority of customization is always the highest in all module presets.

3

If you are creating a notebook, you will need to re-enter after creation to let OhMyMN know about the document you just imported.

4

OhMyMN can only handle excerpts. Anything you drag in from your browser or type in yourself is viewed as comments.

5

Do not use OhMyMN and other plugins that execute automatically during excerpting simultaneously. Conflicts may occur.

6

You need to press `Enter` to confirm the custom input,

The prompt of saving successfully will appear and the input method editor will be closed. Otherwise, there is an input error.

7

Deactivating OhMyMN in the plugin settings will `clear the config`. If an error causes a crash, you can disable and re-enable the plugin. Of course, in most cases, there is no need to clear the

configuration since it will be very inconvenient to reset it.

8

If you are highlighting content, MarginNote will reacquire the new excerpt content, which will nullify the OhMyMN processing. After highlighting content, you can re-process the excerpt by slightly modifying the excerpt selection.
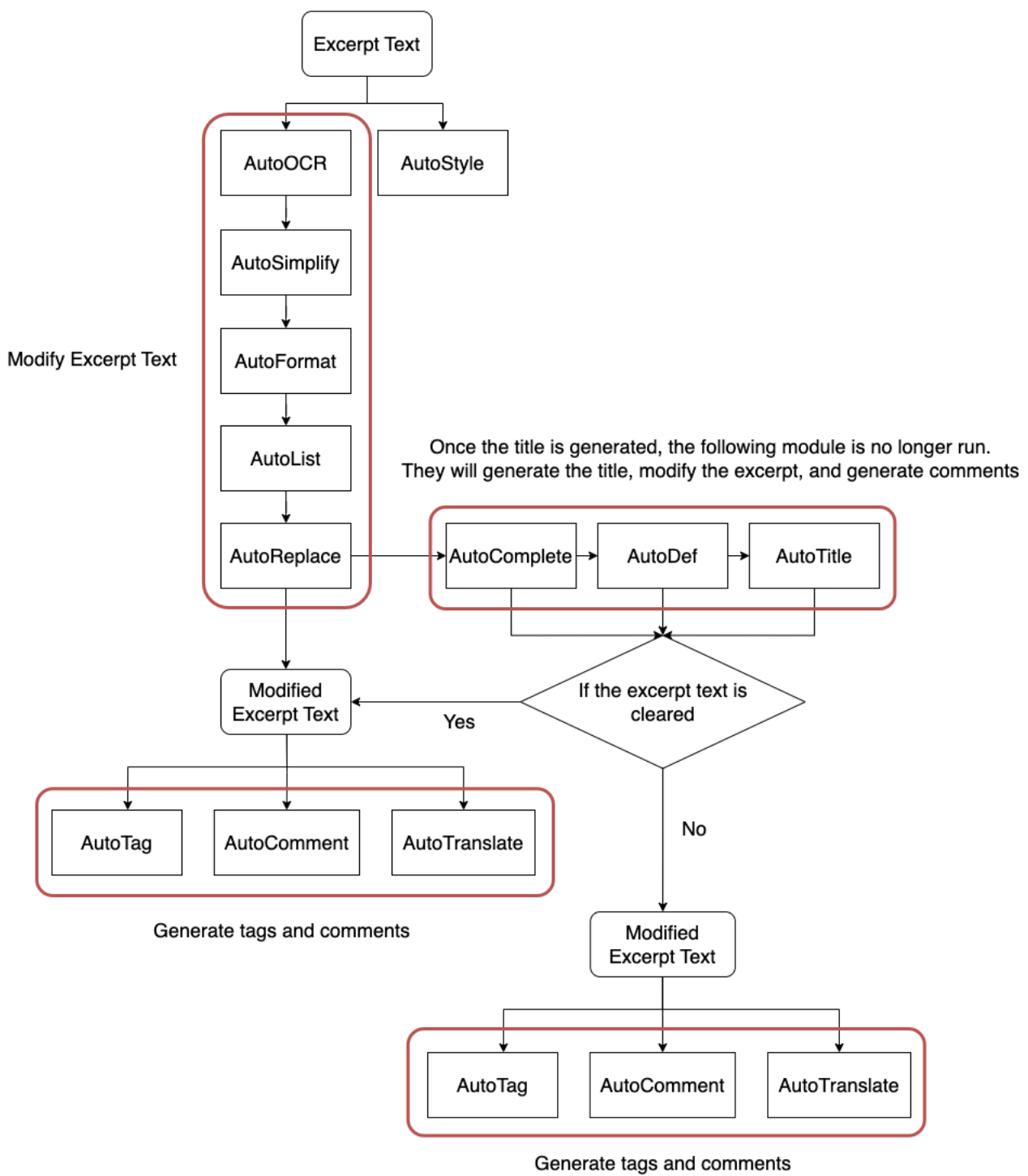
9

After highlighting content, two `*` s will appear on both sides of the highlighted content captured by OhMyMN, e.g. `*This is the highlighted content**` . Please pay extra attention when doing operations such as replacing, filtering, extracting, etc.

10

If you can't see the smiley logo after installing the plugin, you can try to re-install it. If it still does not work, then the system version is too low and you can upgrade the system.

11

If you want the "Auto" modules to work together, you need to know the order of execution of the modules.

```
Excerpt Text
```

```
AutoOCR          AutoStyle

AutoSimplify

Modify Excerpt Text    AutoFormat

AutoList

Once the title is generated, the following module is no longer run.
They will generate the title, modify the excerpt, and generate comments

AutoReplace → AutoComplete → AutoDef → AutoTitle

Modified              If the excerpt text is
Excerpt Text          cleared
          Yes

AutoTag   AutoComment   AutoTranslate

Generate tags and comments

          No

Modified
Excerpt Text

AutoTag   AutoComment   AutoTranslate

Generate tags and comments
```

Basic Concepts

Excerpt, Note, Card/Node, Comment

- Excerpt. Excerpt can be used as both a verb and a noun. It refers either to the process of selecting text or image from a document, color-coding it, and turning it into a mindmap card, or to the text/image itself. Here it refers specifically to excerpts from a document. Texts dragged form anywhere else, e.g. browser, are considered as comments.

- Note. Excerpts are actually notes. Each excerpt is assigned a `noteid`, which is also the URL of the card.

- Card/Node. Node is used in the context of mindmaps, and it can also refer to the card itself. A card can contain excerpts, comments, tags, links, and many other components. One card can only have one excerpt in principle.

- Comment. In fact, the tags and links described above are essentially comments. The characteristic of a comment is that it is not associated with a document. An excerpt, on the other hand, will have some properties related to the original document. One card can only have one excerpt in principle. However, when you merge two cards, the merged excerpt will become a comment in disguise. In OhMyMN, the merged excerpt is still considered as an excerpt. One thing about comments is that you can't edit them directly. You can only delete and re-add them. A lot of the processings for excerpts in OhMyMN are not compatible with comments.

Card/Node, Parent/Child Card, Ancestor Card, Descendant Card

As mentioned before, cards are nodes and nodes are cards. In this documentation, the same concept may be referred to in one or the other form. If you have learned about data structures, you would know that one of a data structure is a tree. MarginNote's mindmap is essentially a tree.
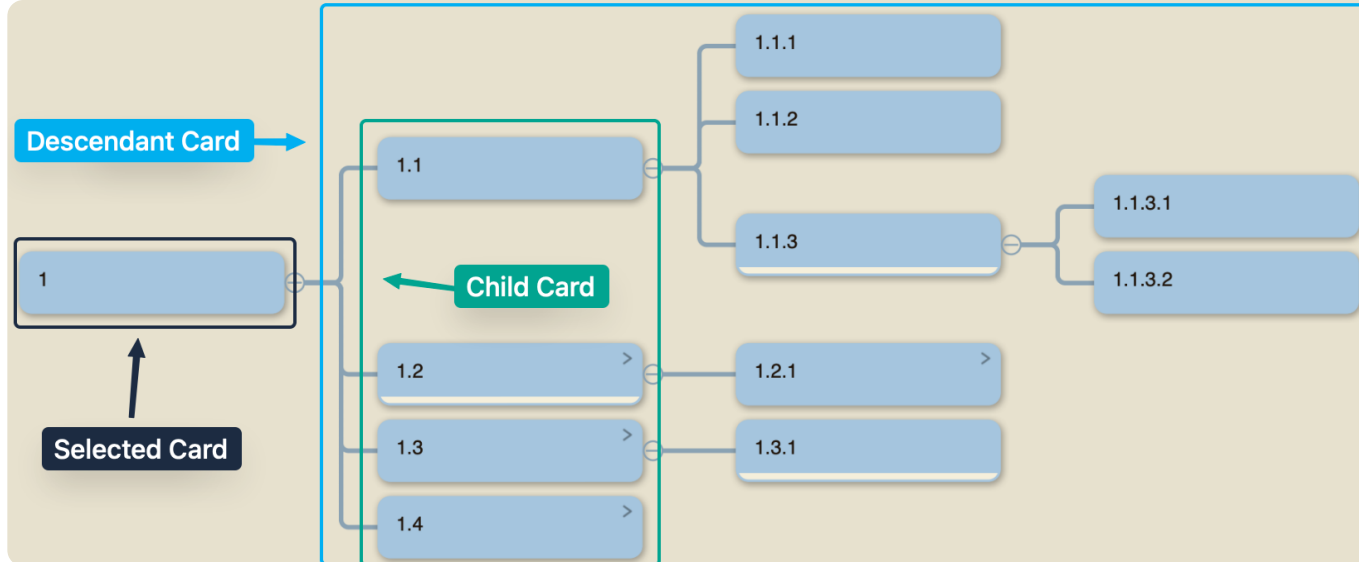
The parent node is easy to understand. A parent node is the node directly before the current node. One node can only have one parent node and can have multiple child nodes.

Ancestor nodes are all the nodes before the current node, whether connected to it directly or indirectly, which includes the parent node of parent node, etc.

Descendant nodes are all the nodes behind the current node, whether connected to it directly or indirectly, which includes the child nodes of child nodes, etc.

Hand Tool, Text Tool, Rectangular Tool & Lasso Tool

Just like PhotoShop's selection tools, MarginNote has a number of selection tools that let you select and excerpt an area or text in a document. Except for the hand tools, other tools will automatically excerpt contents after selection.

I usually use the hand tool. Dragging a selection area into the mindmap will automatically excerpt and create the card. This also allows you to control the position of the card.

When using the other three selection tools, the `Auto Add to MindMap` function is enabled. The automatic insertion position is set to `Auto Insertion Position` so that you can quickly make batch excerpts and create a mindmap.

Title link, Merge titles

Title links are great for highlighting the title of a card in the document, and linking it back to the card. A card can have multiple titles via `;` or `;` . Each title will link to the card. One of the creative breakthroughs of OhMyMN is the automation of the process of generating titles and merging existing ones.

Drag selection to MindMap

In the Home Screen of MarginNote, there is an entry of `Drag selection to MindMap` . When you drag the selected area A into the mindmap and drop it onto an existing card B, there are 2 options:

1. Card A will become a child node of card B.
2. Card A will be merged into card B.

There are pros and cons for each of the options. `Add as Child` is convenient for excerpting and managing mindmap structures. Use AutoStyle to automatically set the same color for cards at the same level. `Merge into` is more important in OhMyMN. Together with AutoTitle, AutoDef, and other modules that can generate titles, it is also possible to turn new excerpts into titles and continue merging them, which utilizes the title links.

You may wonder if it is possible to do both. Actually, there is. When you drag and drop a selection onto a selection that has already been excerpted from the document, it will merge them directly even if you set it to `Add as Child` .

Profile Management

> **Profile**
>
> I like to call the configuration/setting as the profile, also like to call the plugin as the addon.

Profile Structure

> **TIP**
>
> The notebook profile and the doc profile are annotated with instructions. Those without instructions are global profiles.
>
> - [Only Current Notebook]
> - [Only Current Document]

- Global Profile x 4: Different global profiles can be selected for different notebooks. Multiple global profiles are used for several different learning scenarios. For example, if you have 4 subjects, then you can use exactly 4 sets of profiles. If you feel that 4 sets are not enough, then I think you should make them as compatible as possible. Try to find the greatest common factor among different learning scenarios and balance flexibility and convenience.
- Doc Profile: different for each document.
- Notebook Profile: different for each notebook.

Initialize

If you think the initial profile doesn't suit your needs and it's too tedious to modify different notebooks or documents one by one. Don't worry, I've already thought of it. You may have noticed that the last item in `OhMyMN-Select Global Profile` is called `Initialize`. When you make changes to this profile, it will be synchronized to all documents and notebooks. However, note that the options `OhMyMN-Select Global Profile` and `OhMyMN-Module Quick Switch` will not participate in the synchronization.

> **Update**

~~For document profiles and notebook profiles, the initialization will only work on documents or notebooks that have already been opened.~~

Export & Import

You can also export all your profiles to mindmap cards so that they can be synchronized with MarginNote using iCloud. You can also share profiles by exporting your notebook. For more information, you can continue reading MagicAction for Card —— Manage Profile.

Reset & Sync Multi-window Profiles

OhMyMN profile changes in the case of multiple windows will not be synchronized immediately. You can force the synchronization with MagicAction for Card —— Manage Profile —— Sync Profile With Other Windows.

Use MagicAction for Card-Manage Profile —— Reset Profile to reset the profile. The option to reset the configuration is also provided when deactivating or uninstalling the plugin.

Write Custom Input Content to Mindmap Cards

Based on MarginNote's mindmap, OhMyMN can also write custom input content into the mindmap cards for easy arrangement. For more information, you can continue reading Custom Input Format.

Regular Expression

Regular expressions are ubiquitous in OhMyMN. A regular expression is simply an expression that is used to match a particular formatted string.

The general search just like, if you type the word `baby` , it will search for all `baby` , including `angelababy` , but I only want to search for individual `baby` , so what should I do? Between the word and the word must be non-word characters, so we can use the regular expression `\bbaby\b` , `\b` means that one side of the location for the word characters, the other side for non-word characters.

Additional but Important

1. Regular expression support varies by programming language and by browser. MarginNote uses Safari JavaScriptCore engine, which does not support many features, such as the lookbehind assertion `(?<=y)x` , the negative lookbehind assertion `(?<!y)x` .

2. In JavaScript, there is a fixed way to write a regular expression , such as `/\bbaby\b/g` , wrapped with two `/` . After the second slash, you can add flags to change the matching pattern, the following 5 are commonly used.

   - `/xxx/g` Global search. In the <u>Replace() Method</u>, all matching strings will be replaced, otherwise only the first one will be replaced.
   - `/xxx/i` Case-insensitive search.
   - `/xxx/s` Allows `.` to match newline characters.
   - `/xxx/m` Allows `^` and `$` to match newline characters.
   - `/xxx/u` "Unicode"; treat a pattern as a sequence of Unicode code points.

3. You can use <u>Regex-Vis</u> or <u>iHateRegex</u> to test and visualize。

4. You can use <u>Regex Learn</u> to get started with regular expressions by answering questions, I believe it will help you.

TIP

元字符

元字符是在正则表达式中具有特殊含义的符号或字符，正则表达式本质上就是通过元字符实现字符串精准匹配的。接下来，我讲的所有符号都是元字符，下面这些是简单常用的元字符。

符号	说明
.	匹配除换行符以外的任意字符
\w	匹配字母或数字或下划线
\s	匹配任意的空白符
\d	匹配数字
\b	匹配单词的开始或结束
^	匹配字符串的开始
$	匹配字符串的结束

^ 说清楚点就是匹配每一行的开始位置，$ 匹配的是每一行的结尾位置。只要有了 ^ ，那就只会匹配每一行开头的字符串，而不会匹配每一行中间的，而 $ 就是匹配每一行结尾的字符串，两个结合到一起，常用于单行字符串的匹配。

反义

反义一般用上面元字符的大写表示，比如 \d 匹配任意数字，而 \D 匹配除数字外的所有字符，其他的也一样。使用 ^ 来匹配除方框里给出的字符之外的所有字符。

符号/语法	说明
\W	匹配任意不是字母，数字，下划线，汉字的字符
\S	匹配任意不是空白符的字符
\D	匹配任意非数字的字符
\B	匹配不是单词开头或结束的位置
[^x]	匹配除了 x 以外的任意字符

符号/语法	说明
`[^aeiou]`	匹配除了 aeiou 这几个字母以外的任意字符

限定符

限定符是跟在其他元字符后面的，用于限定元字符匹配字符的重复次数。

符号/语法	说明
`*`	重复零次或更多次
`+`	重复一次或更多次
`?`	重复零次或一次
`{n}`	重复n次
`{n,}`	重复n次或更多次
`{n,m}`	重复n到m次

这部分可能不太好理解，我来举几个例子

- `\d+` ：作用是匹配由数字构成的字符串 `\d` 是匹配数字， `+` 相当于无数个 `\d` ，数量取决于什么时候遇到非数字，必须连续。
- `\d{1,}` ：作用和上面一毛一样，也是匹配由数字构成的字符串，只是可以自定义最少有几位，比如 `\d{3,}` 表示这个数字至少有三位。
- `*` 相当于 `{0,}` ， `+` 相当于 `{1,}` ， `?` 相当于 `{0,1}` ，后三个只是自定义程度更高，前三个使用更方便。

字符转义

当你想搜索元字符本身怎么办，那就在前面加一个 `\` ，比如说想搜索 `.` ，就需要用 `\.` 。之前说了正则表达式里所有的特殊符号都是元字符，都需要转义。

字符类

之前说的 `\w` ， `\d` ， `\s` 这些只能匹配任意的字母数字，而不能匹配特定的几个字母或者数字，只需要把你想匹配的装到方括号里，就像 `[12345]` 这样，你就能匹配到 12345 中任意一个

数字了，同时你也可以用 `[1-5]` 表示。

除了数字，其他的字符，字母都可以这样，并且在方括号里不用担心字符转义的问题，`[.*+?$]` 这些都可以直接匹配。但是用于反义的 `^`，我们如果想要匹配它就需要使用 `[\^]`。

字符、数字、字母都可以放在一起，比如 `[0-9A-Za-z]`，直接连在一起就行，相当于 `\w` 的效果。

举一个稍微复杂的例子，`^[a-zA-Z]\w{5,17}$`，用正则可视化我们可以看出这是一个校验密码的表达式，以字母开头，长度为6到18位。下面写的意思是再重复4到16次。用 `^$` 包在一起就表示是单独的一行。
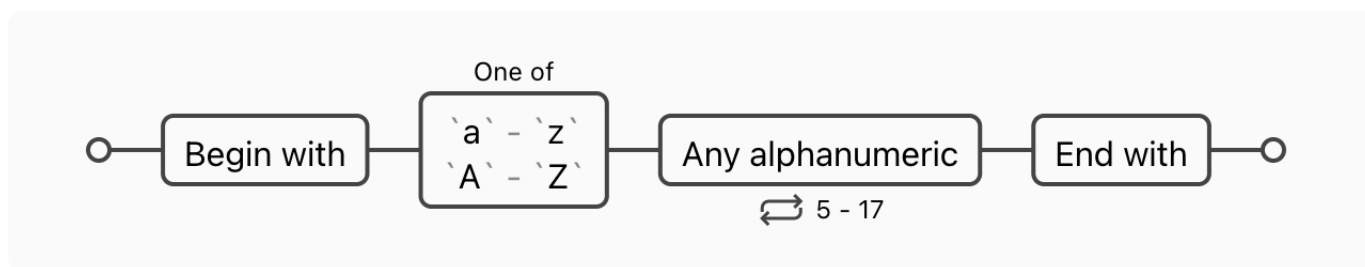
再举一个复杂点的例子，`\(?0\d{2}[) -]?\d{8}`，他其实能匹配四种格式的电话号码，比如 `(010)88886666` 或 `022-22334455` 或 `029 12345678` 或 `02912345678`，他们的特点在于前三位数字，有的是括号包围，有的后面跟着短横，有的后面跟着空格，有的什么都没有，这就用到了字符类，`[) -]` 这里面有是三种字符，包括一个空格。`?` 表示匹配0次或1次，所以一共四种情况。
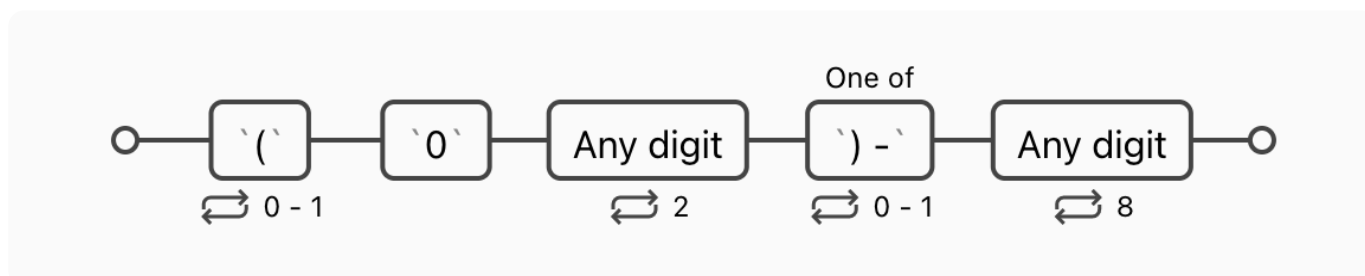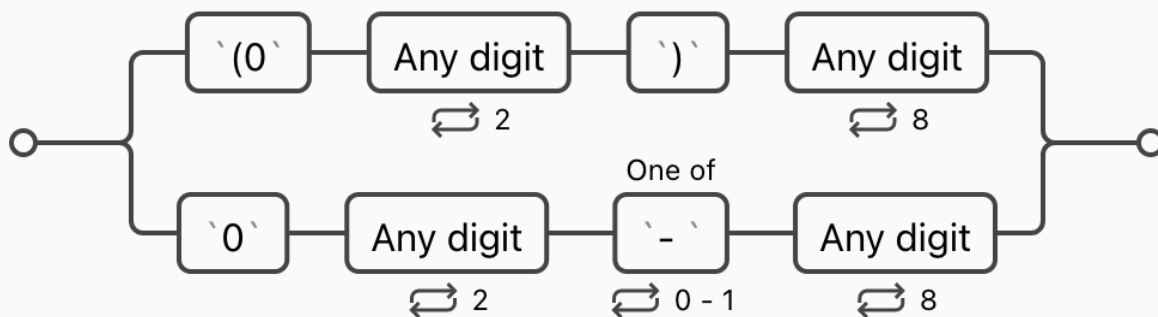

分支条件

刚才举的第二个例子，可以匹配三种格式的电话号码，但你认真思考一下就会发现，它还会匹配 `010)12345678` 或者 `(022-87654321` 这些错误的格式。因为 `?` 不会进行判断，前面的字符存不存在都可以。但是我们更多的时候需要进行判断，不存在是什么格式，存在是什么格式。

拿这个例子来说，如果存在 `(`，那后面也必须是 `)`，要实现这个我们需要要用分支条件 `|`，这个符号就相当于取并集，两个条件满足一个即可。改写上面的表达式 `\(0\d{2}\)\d{8}|0\d{2}[- ]?\d{8}`。
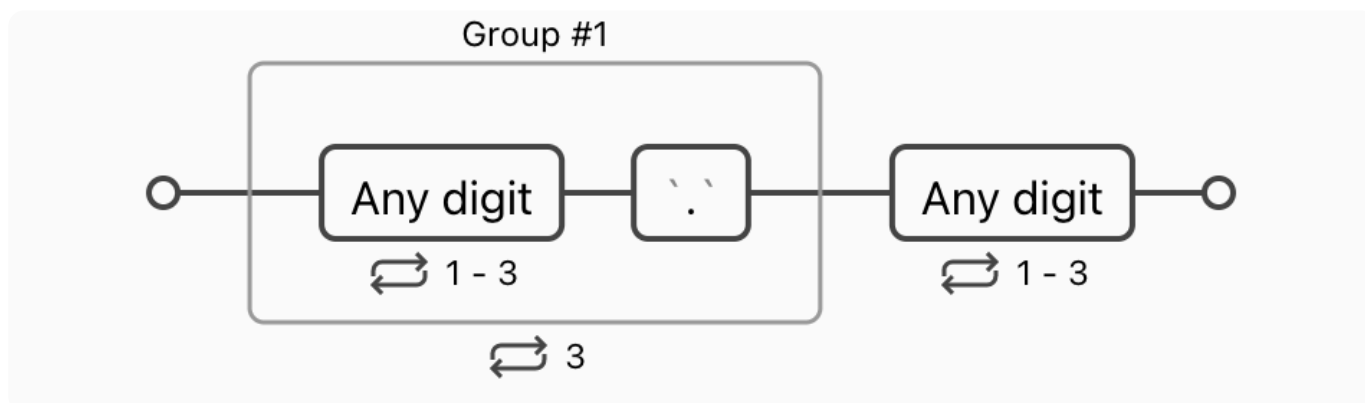
分成了两个分支，一个是有括号的，一个是没括号的。而没有括号的中间可以有一条短横，也可以没有。值得注意的是，分支条件优先匹配左边的条件，只要满足左边的条件，就不会看右边的条件了。

分组

之前说的在元字符后面加重复限定符就可以重复匹配这个字符，但是如果想重复匹配一个比较复杂的表达式呢，就需要把这个表达式放在括号 `()` 里面。

比如常用的 IP 地址匹配的表达式 `(\d{1,3}\.){3}\d{1,3}`，每 3 个数字（最多 3 个）一段，共四段，中间用 `.` 连接。可以看做三段 3 个数字（最多 3 个）加 1 个点，最后一段为 3 个数字（最多 3 个）。
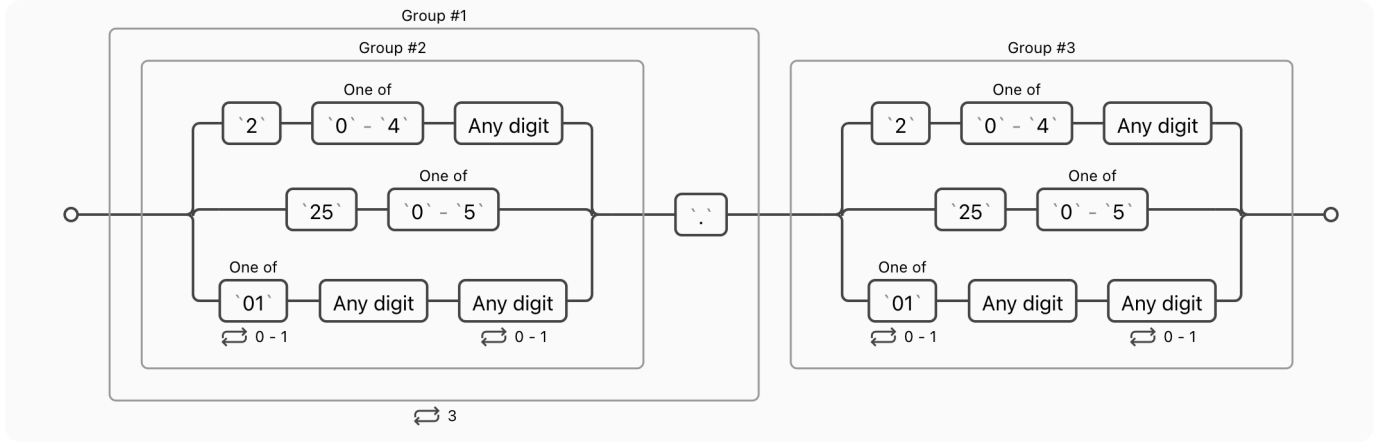

当然，这个表达式只是匹配个形式，IP 每一段有大小限制，不能大于 255，很遗憾正则表达式不能判断数字大小，所以我们只能把 3 个数字单独分开看，分为 3 个分支。

- 第一位为 `2`，第二位为 `0-4`，第三位为 `任意数字`。
- 前两位为 `25`，第三位 `0-5`。
- 第一位为 `0或1或者为空`，第二位为 `任意数字`，第三位为 `空或任意数字`。

然后将这3个数字的表达式分为一组即可。IP 地址完整匹配表达式

`((2[0-4]\d|25[0-5]|[01]?\d\d?)\.){3}(2[0-4]\d|25[0-5]|[01]?\d\d?)`

Group #1
Group #2
Group #3

One of `2` `0` - `4` Any digit
One of `25` `0` - `5`
One of `01` Any digit Any digit
🔁 0 - 1 🔁 0 - 1

`.`

One of `2` `0` - `4` Any digit
One of `25` `0` - `5`
One of `01` Any digit Any digit
🔁 0 - 1 🔁 0 - 1

🔁 3

1. 捕获组

默认 `()` 就是捕获组，会将括号里匹配到的内容保存到内存中，你可以使用 `\1` 来引用它，当然，只能在括号后引用，这就是 后向引用 。

捕获组在 Replace() Method 中非常有用。可以使用 `$1` 来引用捕获的内容。

2. 非捕获组

如果只是想分组，其实不需要用捕获组，可以使用 `(?:)` 来分组。

在 Split() Method 中，如果使用捕获组，捕获的内容包括在结果中，会增加不确定性，一般就是用的非捕获组。

贪婪与懒惰

这其实是很多人不太明白，但却非常重要的知识点。

什么是贪婪，举个例子，如果一个字符串 `1010000000001` ，我们需要匹配 `101` 一般人就会使用 `1\d+1` ，但是这样你会匹配到 `1010000000001` 这整个字符串，这就是贪婪匹配，他会尽可能多的匹配字符。

而如果想匹配到 `101` ，我们就需要使用 `1\d+?1` ，在重复限定符后加一个 `?` ，就变成了懒惰匹配，会尽可能少的匹配。尽可能少重复，遇到第一个满足条件的就停止匹配。`?` 本身就是重复限定符，表示重复 0 次或 1 次，所以也有 `.??` 这种形式，至于这有什么作用，我也不知道。

零宽断言

可谓是正则里面最厉害的，可惜的是 MarginNote 的 JS 引擎对它的支持度不高。它不匹配任何字符串，只匹配一个位置，比如 `\b` `^` `$` 这些都是断言。

零宽好理解，匹配的只是一个位置，本身是没有宽度的。而断言，在调试代码中很常用，表示我断定这个条件是满足的，如果不满足就是出 bug 了。至于在这里嘛，可能就是断定这个位置的意思。

零宽断言有很多中别名，比如 `环视`，分为了 `肯定逆序环视`、`否定逆序环视`、`肯定顺序环视`、`否定顺序环视`。

这里我一般常用：

- 向前断言 `x(?=y)`，给出了一个位置，表示 y 的前面，所以我们匹配的就是在 y 前面的 x。也就说匹配的 x 必须有 y 跟在后面。注意断言只是一个位置，他不会被包含着匹配结果中。
- 向前否定断言 `x(?!y)` 顾名思义，给出的位置是一个字符的前面，但不是 y，匹配的是没有 y 跟在后面的 x。
- ~~向后断言 `(?<=y)x` 匹配的是有 y 在前面的 x。~~ `不支持`
- ~~向后否定断言 `(?<!y)x` 匹配的是没有 y 在前面的 x。~~ `不支持`

参考

1. [正则表达式30分钟入门教程](#)
2. [正则表达式——MDN](#)

Replace() Method

In order to make OhMyMN more free and powerful, many customizations in OhMyMN use replace() method as drivers. This allows you to do almost anything with the excerpt text, but to avoid more of the ambiguity of crashing the plugin, OhMyMN restricts functions as arguments and supports only regular expressions.

Replace

Replace() method is used to replace the matched content with the given string, and then return all the replaced content.

> **Input format**
>
> ```js
> 1        (/regex/, "newSubStr")
> ```

- `regex` is Regular Expression, used to match content which you want.
- `newSubStr` is a norma string, used to replace matched content.

In the `newSubStr`, you can use some variables to refer to the matched content or other content.

1. `$&` matched substring.
2. `$\`` the portion of the string that precedes the matched substring.
3. `$'` the portion of the string that follows the matched substrng.
4. `$n` the nth (1-indexed) capturing group where n is a positive integer less than 100.
5. In the OhMyMN v4, templates variables are also available in some cases, click to view Template Syntax。

Extract

All extraction operations in OhMyMN return `newSubStr` directly as a value. This is equivalent to returning `newSubStr` whenever a regular match is found, and using the capture group, you can also capture it and return it. To achieve this effect, you need to use the match() method. Of course, you don't need to know this. Just use the same

syntax as for the previous substitution, except that `newSubStr` will be returned at the end instead of the whole replaced string.

Split() Method

Split() method is currently only used in Another AutoDef to split the excerpt text into two parts: the title and the excerpt.

Just provide a Regular Expression as the split point to split the string in two parts.

if you use a capture group in your regular expression, it puts the captured content in the split result, resulting in a split into three parts. If you have to group, you can use a non-capture group.

There is actually a benefit to capture groups, which is when you can't find a clear split, such as a multiple-choice question where you want to use the question as the title and the options as excerpts. That's when you have to use the capture group and the capture is all the options.

[definiendum, definiens] ⇒ [definiendum, capture group]

In addition, the capture group allows you to restrict the definiendum or definiens.

Template Syntax

OhMyMN has added the Mustache template engine in v4. If you're familiar with Anki templates, you'll see that Anki actually uses the same one. The logo is the two bearded `{{}}` . Compared to the previous AutoComplete or CopySearch template engines I implemented myself, Mustache is more powerful and brings support for arrays, objects, and functions.

Where It Can Be Used

1. AutoComplete
2. CopySearch
3. ~~Export to Anki~~
4. ~~Export to Flomo~~

Actually, not only that, OhMyMN v4 integrates templates with the Replace() Method, and you can use templates in `newSubStr` . It doesn't make sense to use it anywhere, though, so I've restricted the area of use.

1. Another AutoDef: Custom Title Extraction.
2. AutoTag: Custom
3. AutoReplace: Custom
4. AutoComment: Custom
5. MagicAction for Card
   - Rename Titles
   - Extract Titles
   - Add Comments
   - Add Tags
   - Replace Excerpt Content

Data from the current card or extracted notes are used everywhere except for AutoComplete where the data comes from the dictionary, see Template Variable for details.

Addtional but Important

1. Since Mustache is originally used for HTML templates, by default the parsed text will be HTML escaped. But we don't need it here, so I changed the source code to not escape by default, if you need to escape, you can use `{{{titles}}}` or `{{& titles}}`.

2. Use an array variable directly, the array elements will be merged into a string by `;`. This is not the same as Mustache.

> **TIP**
>
> The contentn below is just my notes on learning Mustache. It may not be helpful to you, but if you need learn Mustache in detail, just search for Mustache on Google.

Variable

所谓变量嘛, 就是 key-value。输入 key，解析出来就成了 value。

要使用一个变量，直接 即可，你就可以获取到这张卡片的标题。如果你变量名写错了，或者这个变量没有值，就整体为空。

Object

对象可以有很多变量, 比如

```
obj = {
  key1: "value1",
  key2: "value2",
}
```

你可以使用

```js
{{#obj}} {{key1}} {{key2}} {{/obj}}
> value1 value2
```

If/Else

可以把变量作为一个判断条件，像下面这样，包裹住一些文字或者变量，如果这个变量为空，那么整体就为空。有点类似 HTML 标签 `<a></a>`，以反斜杠结束。

```js
{{#titles}}有标题{{/titles}}
{{#titles}}有标题 {{id}}{{/titles}}
```

还可以当某个变量为空时才显示里面的内容，可以这样，把 `#` 换为 `^` 。

```js
{{^titles}}没有标题{{/titles}}
{{^titles}}没有标题 {{id}}{{/titles}}
```

这样其实也就实现了 `if-else` 的效果。 :::

List/Array

> **TIP**
>
> 在代码世界里，一个数组或者列表都是从 0 开始数的。

这是我换成 Mustache 的最大原因。数组也是变量，以前只能用 `title_1` ， `tag_1` 表示第一个标题，第一个标签，现在可以使用 `titles.0` ， `tags.0` 来表示。当然也可以 `titles.1` `titles.2` 。

默认情况下，一个数组 `{ titles: ["aaa", "bbb", "ccc", "ddd"] }` ，如果直接这样使用，输出的结果会用 `;` 隔开。

```js
{{titles}}
> aaa; bbb; ccc; ddd
```

通常是像下面这样给循环渲染出来，用 `{{ . }}` 来表示数组内的每一项：

```js
{{#titles}}{{.}}, {{/titles}}
> aaa, bbb, ccc, ddd,
```

其实这不是很智能，最后会多出一个 `,` 。这时候我们可以用自定义的 join 函数， `{{#join}} {{titles}}, {{/join}}`

更神奇的是如果一个数组是对象数组，比如 Template Variable 里的 `children` 变量，他是一个对象数组，每一个元素都有 `titles` 属性，类似

```js
{
  children: [
    {
```

```js
        titles: ["aaa", "bbb"]
      },
      {
        titles: ["ccc", "ddd"]
      }
    ]
  }
```

那么我们可以这样写：

```js
{{#children}}{{titles}}\n{{/children}}
>   aaa; bbb
    ccc; ddd
```

Function

函数也非常有用，在 Template Variable 中，提供了很多函数。就已 `nohl` 举例吧。

默认情况下，如果你在 MarginNote 中划了重点，插件获取的重点就会变成 **重点** ，这其实是 Markdown 里的语法。如果是直接在 Markdown 中粘贴就还好，但是粘贴到其他不支持 Markdown 的软件中，就比较不舒服了。

之前的解决办法是用两个变量，一个表示有 ** ，一个表示没有 ** 。现在你可以这样：

```js
{{#nohl}}{{excerpts}}{{/nohl}}
```

就可以把 `excerpts` 里的所有 ** 给删除。当然，你还可以用 `cloze` 将 **重点** 全部换成 `{{c1:重点}}` ，快去试试吧。

Template Variable

If you have already learned [Template Syntax](#), then you can use the following variables at your leisure.

> **TIP**
>
> `Metadata` addon could import data from Zotero. You can use the data in template. Not yet officially released, you can test it from [Github](#).

Variables

MindMap Cards

Variables Name	Type	Description
`id`	String	Note ID
`url.pure`	String	Note URL
`url.md`	String	Note URL, add `[]()`
`url.html`	String	Note URL, add `<a>`
`page.start`	String	Start page of notes in the document
`page.end`	String	End page of notes in the document
`page.real.start`	String	`Metadata Required` Calculate the start page number after the offset.
`page.real.end`	String	`Metadata Required` Calculate the end page number after the offset.
`time.creat`	String	Note created time
`time.modify`	String	Note Modified Time
`time.now`	String	Now
`allTextPic.text`	String	All text in the card, including the text in the Markdown addon.
`allTextPic.ocr`	String	All text in the card, picture excerpts will be automatically OCR, excluding picture comments.

Variables Name	Type	Description
`allTextPic.md`	String	All text and images in the card. Images are encoded in base64 and add `![]()`
`allTextPic.html`	String	All text and images in the card. Images are encoded in base64 and add `<img src>`
`tags`	String Array	All tags, no #
`titles`	String Array	All titles
`excerpts.text`	String Array	All text excerpt
`excerpts.ocr`	String Array	All excerpts. Image excerpts are OCR'd as text
`excerpts.html`	String Array	All excerpts. Image excerpts are OCR'd as text, and add `<img>`
`excerpts.md`	String Array	All excerpts. Image excerpts are OCR'd as text, and add `![]()`
`comments.text`	String Array	All text comments. Includes text from Markdown addon
`comments.html`	String Array	All comments. Images are encoded in base64 and add `<img>`
`comments.md`	String Array	All comments. Images are encoded in base64 and add `![]()`

Document

The document to which the current card belongs

Variables Name	Type	Description
`doc.title`	String	Document title
`doc.md5`	String	Document md5
`doc.path`	String	Document path
`doc.url.pure`	String	`Only in Notebook` Document URL, which jumps indirectly through the link of the last note in the document in the notebook.
`doc.url.md`	String	`Only in Notebook` Document URL, add `[]()`
`doc.url.html`	String	`Only in Notebook` Document URL, add `<a>`

Variables Name	Type	Description
`doc.reference`	String	`Metadata Required` Reference or Citation
`doc.citeKey`	String	`Metadata Required` Citation key
`doc.pageOffset`	String	`Metadata Required` Page offset
`doc.metadata`	Object	`Metadata Required` All metadata imported from Zotero

Notebook

The notebook to which the current card belongs

Variables Name	Type	Description
`notebook.title`	String	Notebook title
`notebook.id`	String	Notebook ID
`notebook.url.pure`	String	Notebook URL
`notebook.url.md`	String	Notebook URL, add `[]()`
`notebook.url.html`	String	Notebook URL, add `<a>`

Parent Card / Children Card

You can actually get all the above information about the current card's parent and child cards as well.

Variables Name	Type	Description
`parent`	Object	`parent.titles` is the parent's `titles`
`children`	Object Array	`children.0.titles` is the first child's `titles`

Functions

Function Name	Description
`nohl`	Remove `**` , it's highlight symbol
`blod`	Modify `**highlight**` to `<b>highlight</b>`
`cloze`	Modify `**highlight**` to `{{c1::highlight}}`

Function Name	Description
`clozeSync`	Modify `**highlight**` to `{{c1::highlight}}` , synchronous show answers
`upper`	Capital letters
`lower`	Lower case
`join`	Merge an array of strings into a new string using the specified prefix and suffix

The `join` function is a little more complicated, like `{{#join}} %["1"]. {{titles}}\n {{/join}}` . We know that `titles` is an array of strings, suppose its values are `["a" , "b", "c"]` . With this function, it will become

```
1. a
2. b
3. c
```

`%["1"]` is a magic variable that can be automatically numbered, see syntax for details.

> **TIP**
>
> The last element will not be suffixed

The join function allows us to add a before-and-after modifier to each string in the array, eventually merging them into a single string.

Custom Input Format

There are a lot of input field to customize in OhMyMN. They are mainly in three forms:

1. Regular Expression
2. Replace() Method
3. Template

Besides, since multiple regular expressions or Replace() Method can be set at the same time and there are also issues with the order of execution, it can be troublesome to enter in OhMyMN's input box, so I have creatively used MarginNote's mindmap card as a custom input box.

Of course, for all customization, I don't recommend that you type it directly in the OhMyMN input box, but write it elsewhere and paste it in, because OhMyMN doesn't save input in real-time, and you need to hit "enter" at the end to make sure it is saved.

Regular Expression

Regular Expression has two roles:

1. Determine if the conditions are met: for example, in Another AutoTitle it is used to determine whether something can be turned into a title
2. As a delimiter, splitting a paragraph into multiple parts: for example, in Another AutoDef you can customize the split between the definition and the defined term.

There are 6 types of input formats:

1. String `xxx` . This is not simply omitting `//` . Special characters in regular cannot be used here. It is usually used to match a word directly.
2. Regular Expression `/xxx/`
3. Regular expression arrays `[/xxx/, /yyy/]` . `,` is the delimiter for `and` operator
4. Multiple regular expressions `/xxx/; /yyy/` . `;` is the delimiter for `or` operator. If one regex is matched, then this is considered to be a successful match.
5. Multiple regular expression arrays `[/xxx/, /yyy/]; [/xxx/]` . `;` is the delimiter for `or` operator. It is recommended to use this writing style to avoid most parsing errors.
6. Regular expressions and regular expression arrays `[/xxx/, /yyy/]; /xxx/; /yyy/` . `;` is the delimiter for `or` operator.

If special circumstances arise, I will note them in the respective places.

Replace() Method

`replace()` function actually corresponds to an input format. `(regex, newSubStr)` is one regular expression and one string.

For example, `(/regex/, "newSubStr")`.

The first step is to make a pattern match to see if conditions are met. If so,

1. Replace replaces the matched part with `newSubStr` and returns the replaced content.
2. Extract returns `newSubStr`。

Actually, there is a third parameter in `(regex, newSubStr, fnKey)`. `fnKey` is an integer, such as in `(/xxx/, "yyy", 0)`. It is just that `FnKey` is defaulted to 0, which can be omitted. I will note this when it is used for special occasions.

You can write multiple functions separated by `;`. For example:

- `(/xxx/, "111"); (/yyy/, "222")`
- `(/xxx/, "111", 1); (/yyy/, "222")`

MNLink

An MNLink looks like this `marginnote3app://note/F20F324D-61B3-4CA9-A64C-0C92645A1E33`, also known as the note URL. It can be obtained here:
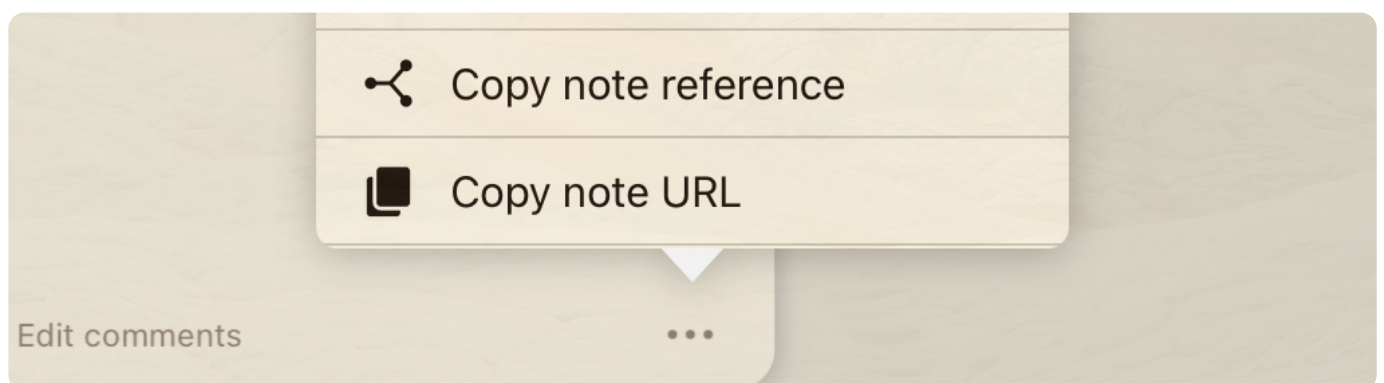
As mentioned above, either `/xxx/` or `(/xxx/, "yyyy")` can be multiple using `;` separations. I creatively used the mindmap cards as editors, so that each regular expression can be easily disabled or enabled. You modify their order of precedence with ease.

Simply create a card as an input field, copy its MNLink, and fill it into the corresponding input box (MNLink is supported for both formats above). The first comment of the child card will be read, and the comments of all child cards will be combined by `;` to construct the final input.

> **WARNING**
>
> If you change the content on the card, OhMyMN cannot read it automatically. You must manually hit "enter" where you fill in the customization to update the configuration, and OhMyMN will check if it was entered correctly.

> **The disabled color is**
>
> in the 4th row and 2nd column

In the current version, MagicAction also supports MNLink and does not even require that it conform to either of the 2 formats.

Template

There's not much to say about this one, it's just `{{variable}}`. Please refer to Template Syntax and Template Variable.

Auto Numbering

Automatic numbering is used everywhere in OhMyMN, such as numbering card titles and even hierarchical numbering. When merging text within a card, you can add a number to each comment, and when searching or copying the contents of multiple cards in CopySearch, you can also number the contents of each card.

Three different ways of writing will appear in use:

1. `%["1"]` : Used in Rename titles to numbering each card titles. also in Merge Text and CopySeach.
2. `$["1"]` : Essentially the same as `%["1"]` , will be used in Template Function —— join. As for why different prefixes are set, because both may be used in Rename titles.
3. `#["1"]` : Number the subcards of the selected card hierarchically in Rename Titles.

`%["1"]` & `$["1"]`

These two are used in exactly the same way, so let's take `%["1"]` as an example.

Starting Value and Symbol Type

First of all, the 1 in this `"1"` can be variable, it can be 2, it can be 100, it can even be `001` , giving the number the complementary 0 so that all numbers can reach the same width, which is the starting value.

Not only that, but also different numbering symbols:

- ①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮⑯⑰⑱⑲⑳㉑㉒㉓㉔㉕㉖㉗㉘㉙㉚㉛㉜㉝㉞㉟㊱㊲㊳㊴㊵㊶㊷㊸㊹㊺㊻㊼㊽㊾㊿
- ❶❷❸❹❺❻❼❽❾❿⓫⓬⓭⓮⓯⓰⓱⓲⓳⓴
- ABCDEFGHIJKLMNOPQRSTUVWXYZ
- abcdefghijklmnopqrstuvwxyz
- 壹贰叁肆伍陆柒捌玖拾
- 一二三四五六七八九十
- ⅠⅡⅢⅣⅤⅥⅦⅧⅨⅩ
- ⅰⅱⅲⅳⅴⅵⅶⅷⅸⅹ

So the `"1"` determines both the symbol type and the starting value of the number. Just copy and replace it when you use it. Note, however, that if the numbering is insufficient, it will start from the beginning.

Step Length

`%["1"]` written in full as `%["1",1]`, the last `1` is step lenght, which not wrapped by double quotes. The step is the interval, and step 1 is the default value, so it can be omitted.

If you want to numbering as `1 11 21 31`, you can use `%["1",10]`.

Custom Numbering Symbols

If you want to use a specified set of numbering symbols, then you can use the `%["aaa", "bbb", "ccc", "ddd", "eee", "fff"]`。

#["1"]

Only the rename titles -- hierarchical numbering is currently in use.

`#["1"]` written in full as `#["1","1","1","1",[".",4, false]]`

Indicates that the first layer starts from `1`, the second layer starts from `1`, and the third and fourth tiers also start from `1`. If there are layers after that, the default is to use the last starting value provided, which is `1`. You can set as many layers as your mindmap has here, which means you can set the numbering symbols for each layer individually. It supports all the numbering symbols mentioned above, but does not hold itself to set the step size and does not support custom numbering symbols.

Options Array

The last `[".", 4, false]` is options array. The three elements represent `Connection Symbol`, `Max Numbering Layer`, `Only Show Current Layer Number`. All can be omitted, no order is required. The default value is `[".",999,false]`.

- `Connection Symbol` is a string, wrapped by double quotes.
- `Max Numbering Layer` is a number. If the entire mindmap has 10 layers, you can use this setting to limit the numbering to 4 layers. Usually only three layers need to be numbered.

- `Only Show Current Layer Number` is a boolean `true/false`. By setting it to `true`, only one number will be displayed for each level, without adding the number of its parent card. `1.1.2` → `2`

OhMyMN

The options below are mainly for setting the properties of this panel and controlling other modules.

Select Global Profile

> **Only Current Document**
>
> Only switch global profile, not notebook and document profile.

[Profile Management](#) has mentioned the profile structure of OhMyMN, so I won't go over it here.

Module Quick Switch

If a module is disabled or enabled, its options menu is no longer displayed after disabling it. Actions belonging to this module are also not displayed in MagicAction.

Panel Position

- Document Inner Side: By default, the panel is displayed inside the document. Supports automatic following the document width adjustment.

- Document MindMap Middle: The panel is displayed in the middle between the document and the mindmap. Supports automatic following the document width adjustment.

- MindMap Inner Side: The panel is displayed inside the mindmap.

- Left

- Center

- Right

Panel Height

Usually, with 12.9 inch iPad, you can choose `Higher` and with 11 inch ipad, you can still choose `Standard` . This way the input box at the bottom will not be covered by the keyboard.

Panel Control

- Double-click the icon to open the panel: Double-click the smiley 😀 to open the panel so that you can avoid accidental touches.
- Close the panel after action execution: The panel will be automatically closed after the action in MagicAction is executed.

Drag Merge to Generate Title

Another AutoTitle, Another AutoDef, AutoComplete can be used to generate title.

By draging selection to merge into the card, there are several ways to handle it:

- Never Generate Title
- Generate Title When Conditions Are Met: Automatically generate titles through the above modules.
- Always Generate Title: Even if the above modules do not generate a title, they go straight to the title.

> Has Title

If a title is generated, but the card already has a title, there are several ways to handle it:

- Not Turn to Title
- Merge Title
- Override Title

> The Dragged Excerpt Will

When you turn an excerpt into a title, you have two choices for the excerpt that you drag in:

- Remove Immediately
- Remove Later: the next time you excerpt or you exit the notebook or MarginNote, or MarginNote enters the background. The reason for this is to have the opportunity to adjust the excerpt selection.

Lock Excerpt Text

Once enabled, if you change the excerpt selection in the document by accident while swiping through the document, OhMyMN will restore the text in the excerpt for you. When you create an excerpt, you can keep modifying it as long as the excerpt menu does not disappear. Once the menu disappears, the excerpt will be locked. This feature can also first excerpt a long paragraph and then shorten the selection to one word.

Auto Backup Profile

Input

Card URL, such as `marginnote3app://note/F20F324D-61B3-4CA9-A64C-0C92645A1E33`

Automatically saves the profile information to the MarginNote's mindmap card. Again make sure that the card has child cards, as the profile information is written on the child cards. The more child cards, the better the performance is, as this profile information will keep expanding and we want to avoid exceeding the maximum number of words for a single card.

MagicAction for Card

Some actions related to cards (which are essentially buttons) are executed manually by first selecting the card (multiple selections are possible) and then clicking on the button. Other modules will also have some actions that will be explained here. These actions are bound to modules, using the same configuration, and the corresponding actions will be displayed here only after the module is enabled.

Smart Selector

When you select a card with child nodes or select multiple cards at the same level that all have child nodes, OhMyMN will pop up a menu asking if the child or descendant nodes should be selected. This can be used for quick batch selection.

Related concepts of parent and child nodes.
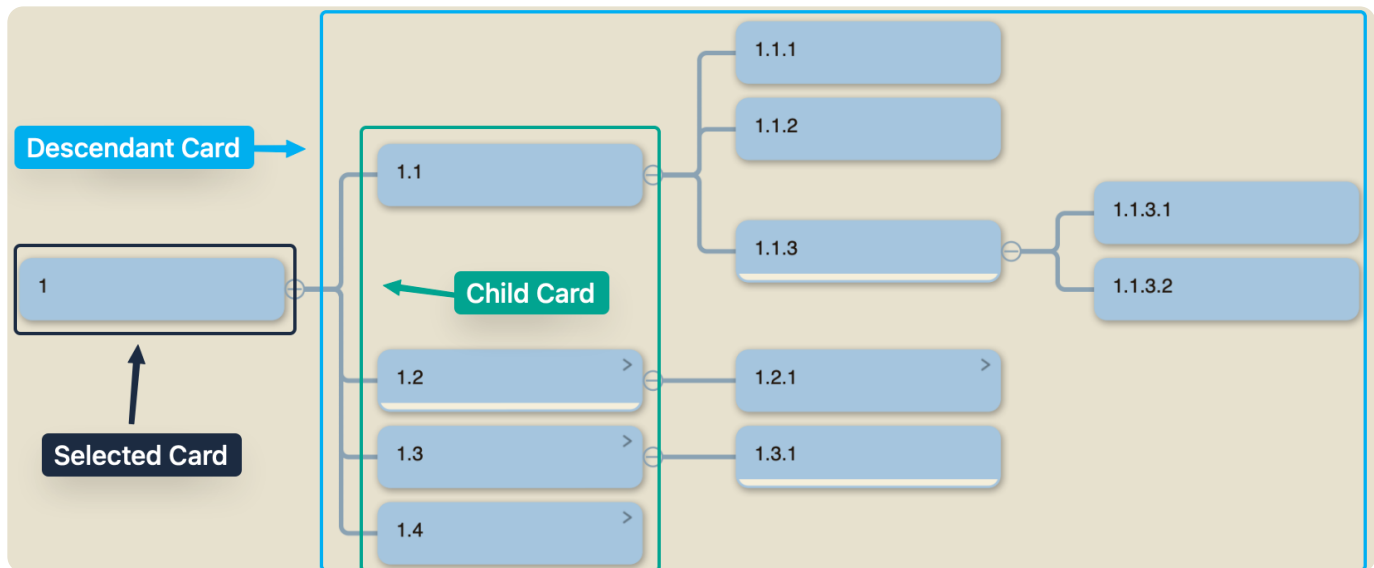
Actions

Manage Profile

> **Note**
>
> Please first read OhMyMN's Profile Structure.

1. Write profile: Write the profile to the child cards of the selected card. Please make sure that the selected card has child cards, the more child cards the better because this profile information will keep expanding to avoid exceeding the maximum number of words for one card.
   - All Profile
   - Global Profile 12345: The global profile can also continue to export the profile of a module separately.
   - Doc Profile
   - Notebook Profile
2. Read profile: Reads the profile from the card. It is possible to read the profile of only one module and write it to the specified global profile.
   - All Profile → Global Profile → Module Profile
3. Reset profile: Reset to the default profile.
4. Sync multi-window profile: OhMyMN does not synchronize the profile immediately in multi-window cases. You can force synchronization with this option.

Filter Card

Input Format

Regular Expression —— Match

You can filter titles, excerpts, comments, or tags separately. You can also continue to use other actions after filtering.

Although OhMyMN's selection is not the same as MarginNote's selection, you can't use the delete or cut function. However, there is always a way. You can add a special tag to the selected card and then filter it by the tag to quickly reselect it. Finally, you can delete this tag.

Similarly, OhMyMN cannot be filtered by color. You can add a special tag after filtering with MarginNote, then filter by OhMyMN and process it. Finally, just remove this tag.

Merge Multiple Card

MarginNote's merge feature is lacking. It cannot merge titles and it merges titles into cards as comments. This feature solves three problems:

1. Merge titles
2. Other card titles cannot be added as comments.
3. Merge tags

Rename Titles

This can be ranked in the top three most powerful features in OhMyMN, which is used for batch renaming, numbering, and hierarchical numbering of cards.

> **Input Format**
>
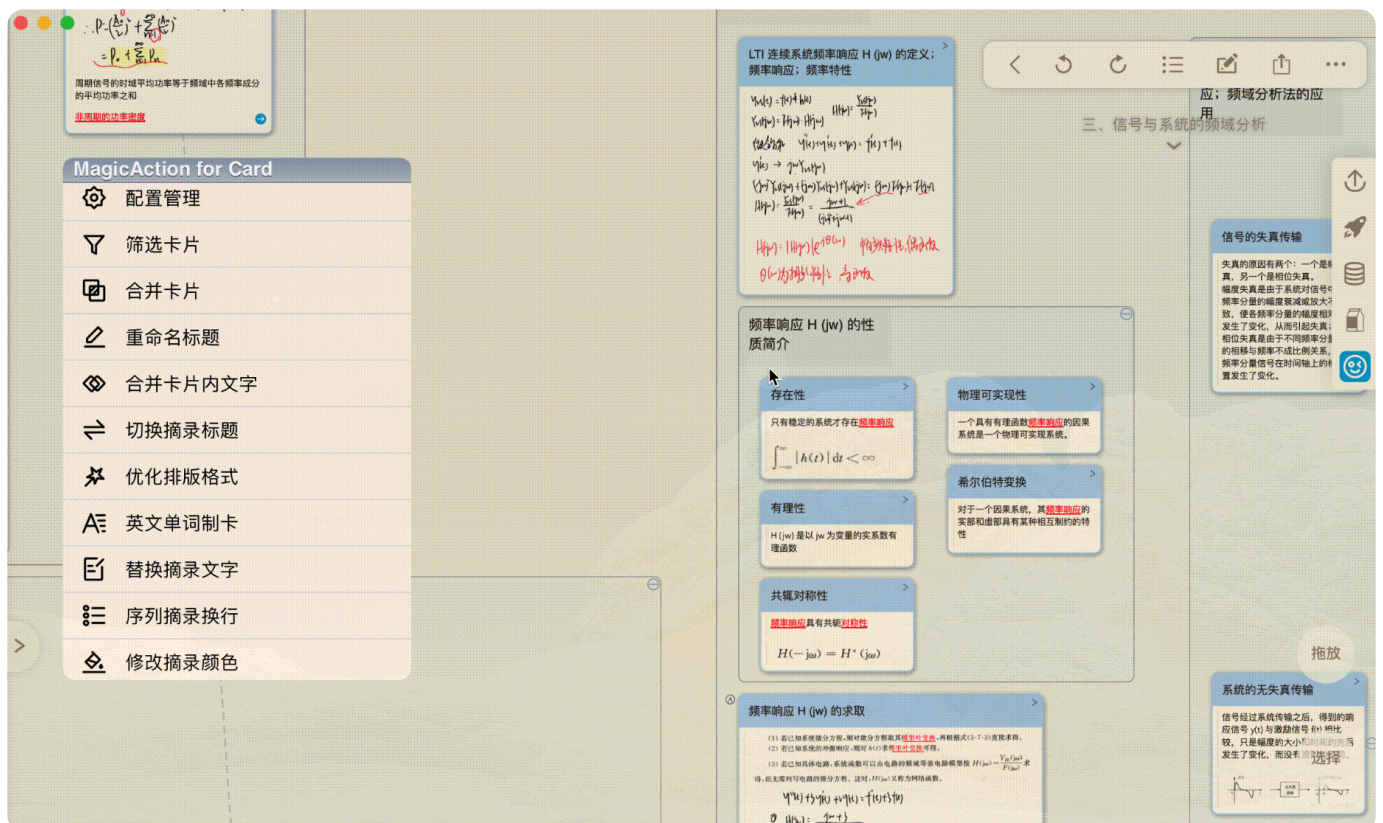> Replace() Method Format —— Replace

Since most of the time the entire title is matched, the default regex is `/^. *$/`. You just need to enter a new title, and you can also use `$&` to quote the current title.

1. Numbering

> **Input**
>
> `%["1"] $&`

Here a magic variable is used `%["1"]`, which will be incremented on each call. Please check syntax.

2. Hierarchical numbering

> **Input**
>
> `#["1"] $&`

The hierarchical numbering is for all its descendant nodes and will not be numbered itself. Please make sure the card has child nodes when using it.

`#["1"]` is also a magic variable. Please check syntax.
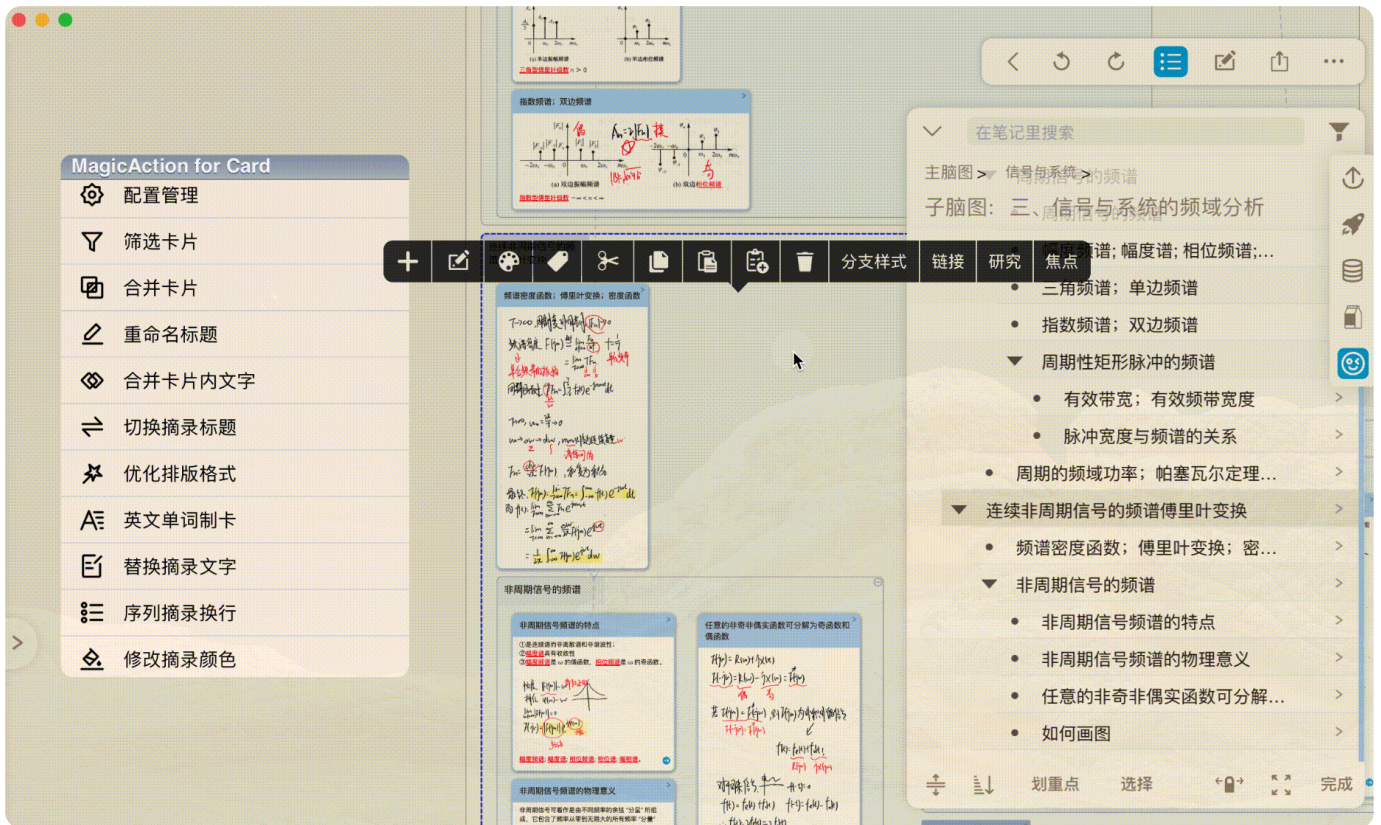
3. Use Tag as Title

Input

`{{tags}}`

The template is used here. Please check Template Syntax and Template Variable.
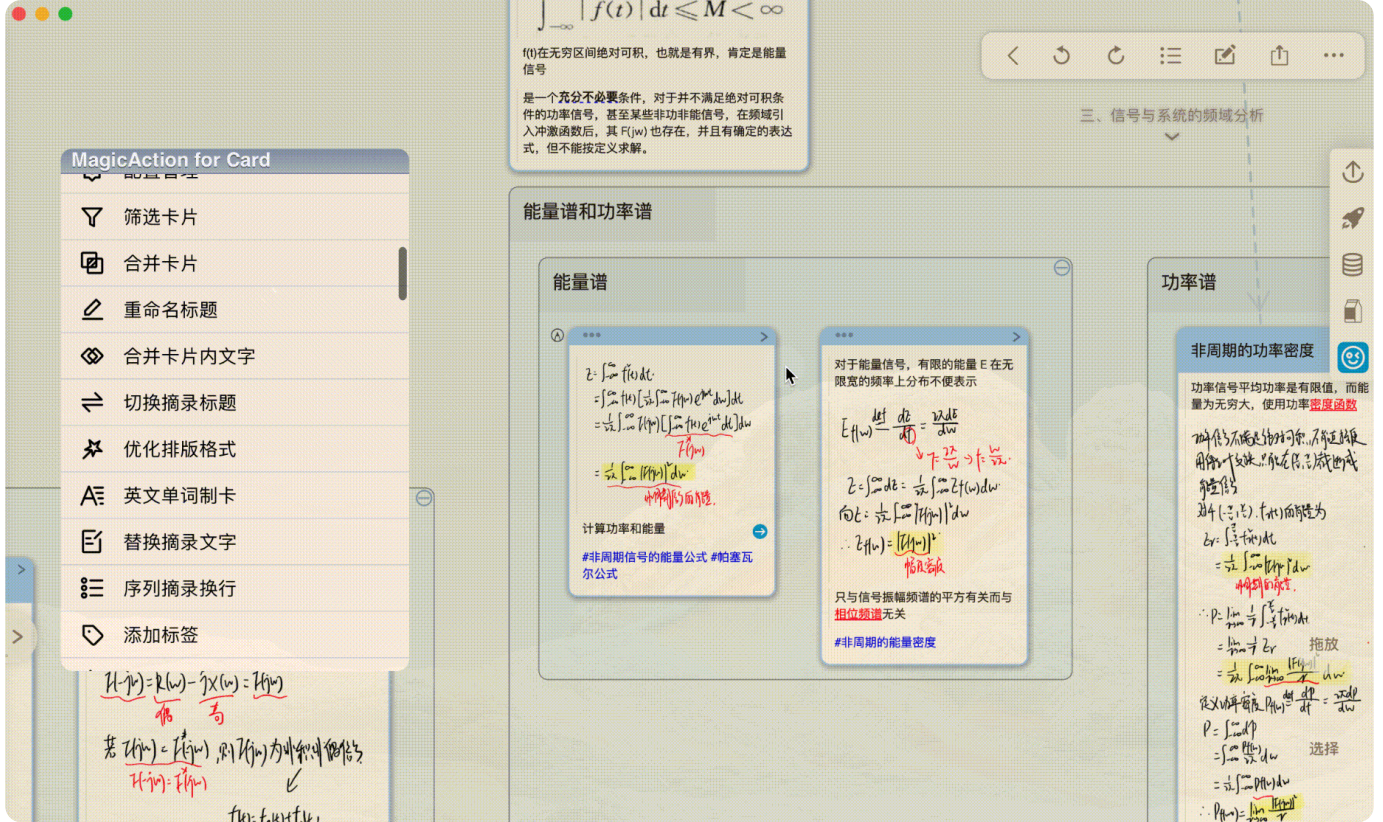
Merge Text

Only text excerpts and text comments will be merged. Images and HTML comments (Markdown) are automatically topped. Tags and links are automatically bottomed.

You can set the before and after modifications here, such as numbering at the beginning and a line break at the end.
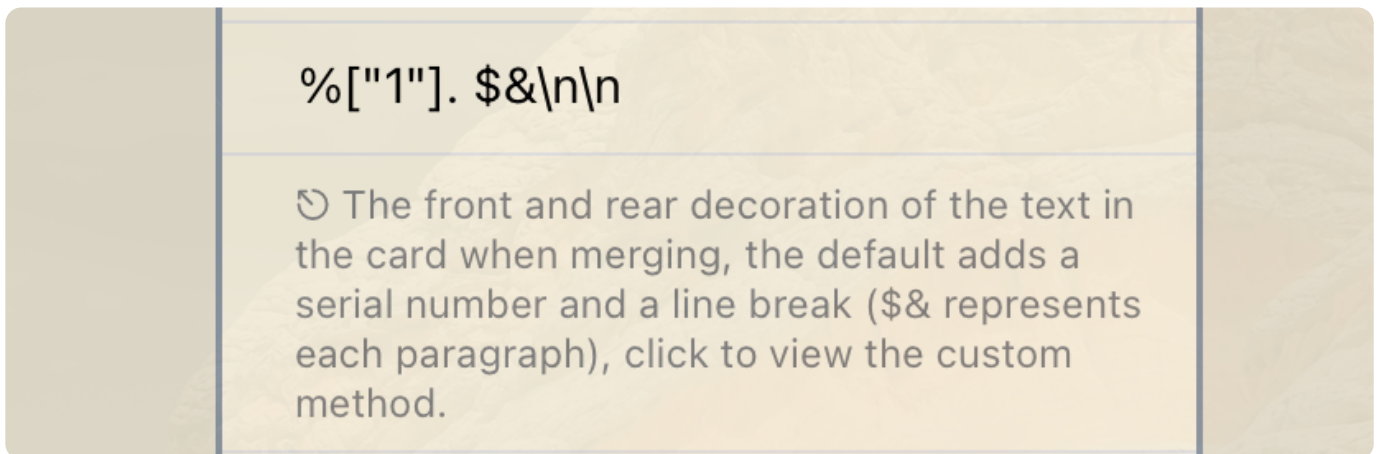
Default to `%["1"]. $&\n\n`

- `%["1"]` a magic variable, which will be incremented on each call. Please check syntax。
- `$&` indicates the current comment or excerpt.
- `\n` indicates a line break. This is used everywhere. in OhMyMN you use `\n` if you want a line break.

If you want to merge two paragraphs directly without gaps, just type `$&`.

Options:

- Excerpts can be further manipulated using other functions in MagicAction, while the emphasized content will be retained.
- Merge as comments.

Switch Excerpt / Title

- Switch to Non-Existent
- Swap Title and Excerpt: When only one title or excerpt is present, it is the same as `Switch to Non-Existent`. In the case of both title and excerpt, there will be the following processing:
  - Excerpt → Title
  - Excerpt ← Title
  - Excerpt ⇄ Title

Extract Title

From Another AutoDef

Split Excerpt Text

From Another AutoDef

Format Excerpt Text

From AutoFormat

Generate Word Card

From AutoComplete

Replace Excerpt Text

From AutoReplace

Add Line Break

From AutoList

Modify Excerpt Color

From AutoStyle

Modify Excerpt Style

From AutoStyle

Search Card Content

From CopySearch

Copy Card Content

From CopySearch

Add Tag

From AutoTag

Translate Excerpt Text

From AutoTranslate

Add Comment

From AutoComment

Covert to Simplified Chinese

From AutoSimplify

MagicAction for Text

The actions here are related to the selected text, which mostly just copy the result to the clipboard. After selecting the text, click the button to search or copy the selected text. Not only text, but also a selected area can be used, even for formula OCR.

Pre OCR

> **Only Current Document**
>
> The module needs to be enabled, but does not need to be turned on `Auto Run When Excerpting` .

Use AutoOCR for foreign language text recognition, thus facilitating the subsequent copying, searching, and translation operations.

Pre Format

> **Only Current Document**
>
> The module needs to be enabled, but does not need to be turned on `Auto Run When Excerpting` .

Use AutoFormat to format selected text.

Pre Simplify

> **Only Current Document**
>
> The module needs to be enabled, but does not need to be turned on `Auto Run When Excerpting` .

Use AutoSimplify to convert to Simplified Chinese.

Popup More Options

I do not know if you have noticed, when you select a piece of excerpt in the document, followed by the hand tool to select a paragraph of text, the menu will display `Set Title` , `Add as Comment` , and other options. This will allow you to select the text directly as the title or comments added to the previously selected excerpt.
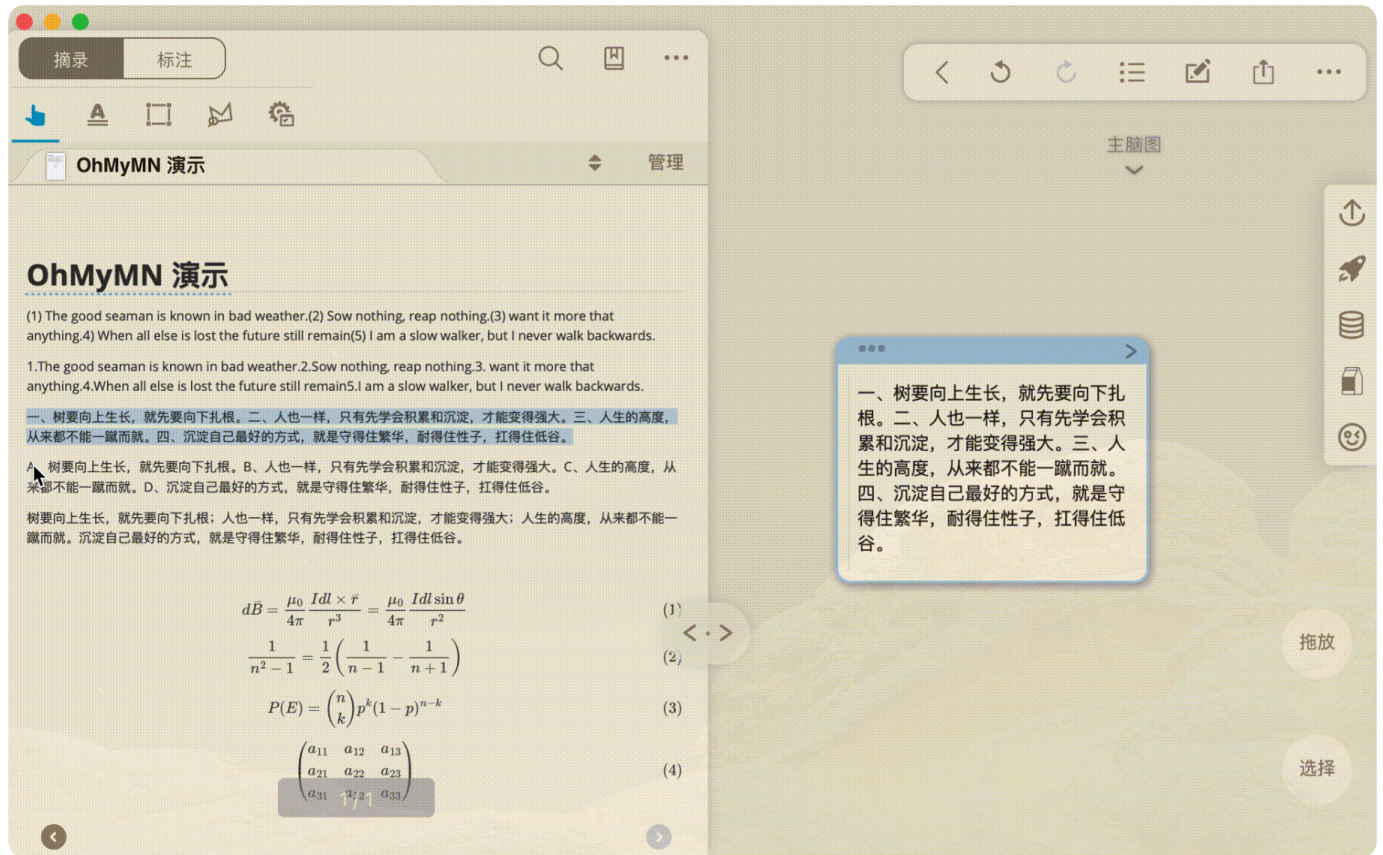
OhMyMN takes advantage of this feature. When you select a piece of excerpt in a document, immediately use the hand tool to select a piece of text, and then execute the action, certain actions that copy the result of the execution to the clipboard will pop up more options, such as "set title", "merge title", and "add as comment", etc.

Action

Copy Selected Text

This action may seem useless, but when you use it with `Popup More Options` , you will know how useful it is.

Search Selected Text

From CopySearch

Formula Recognition

From AutoOCR

Text Recognition

From AutoOCR

Handwriting Recognition

From AutoOCR

QR Code Recognition

From AutoOCR

Translate Selected Text

From AutoTranslate

Convert to Simplified Chinese

From AutoSimplify

Shortcut

Trigger actions in MagicAction via URL Scheme, and set shortcut keys to open URLs on Mac.

1. Open `marginnote3app://addon/ohmymn?type=card&shortcut=1` could trigger first card action.
2. Open `marginnote3app://addon/ohmymn?type=text&shortcut=2` could trigger second text action.

Custom Shortcuts

URLs can be set for each action as well as for any input value, and set them as shortcut keys. It is even possible to execute multiple actions at the same time, changing the order of execution by the order of selection.

Shortcut Generator

Find custom shortcuts shared by others

| Please Select A Action ⌄ | Generate |

Use shortcut keys to open url

iPad

1. Install a apple shortcut
   https://www.icloud.com/shortcuts/d9027fc514f04fc4add78ae506baba8d
2. Open Settings, then tap Accessibility.
3. Tap Keyboards.
4. Tap Full Keyboard Access and turn it on.

5. Tap Commands.

6. Tap a command, then press a custom key combination to assign to it.

Mac

There are many tools for the Mac, I usually use Karabiner-Elements, which also allows you to set shortcuts to MarginNote separately, for free. Raycast is also very suitable and even simpler.

Use gesture to open url

The Gesture module can be used on iPad to open URLs to use the power of shortcuts.

Gesture
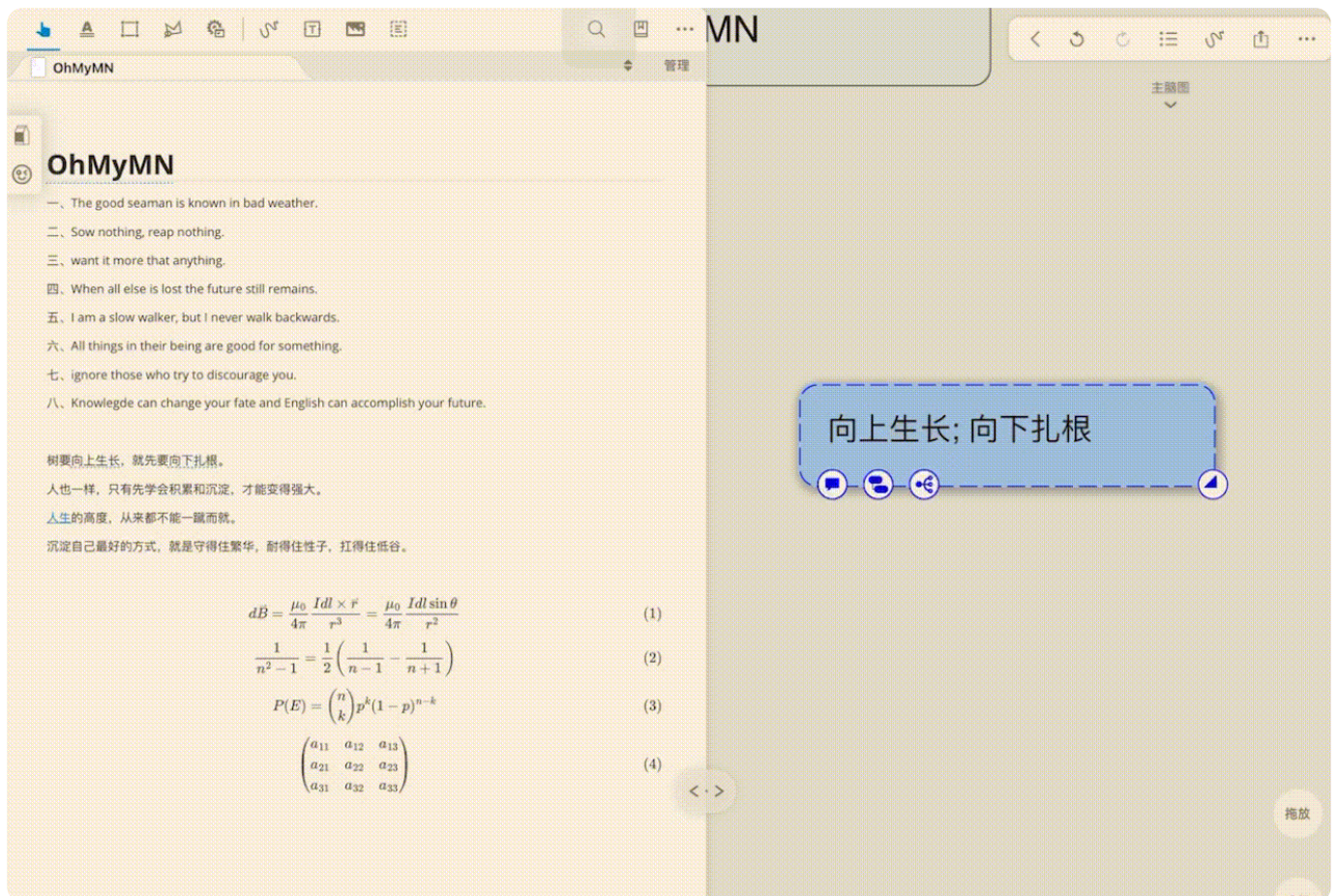
Use gestures to trigger actions in MagicAction.

Trigger actions on MagicAction directly by sliding `up, down, left, right` on different toolbars in one step, without opening the control panel.

Custom Shortcuts

You can trigger a custom shortcut with a gesture. You must enable the <u>Shortcut</u> module and turn on the `Custom Shortcuts` .

There are currently three areas with four directional gestures and two areas that are card-related and are used to trigger actions in MagicAction for Card.

Card Related Toolbar

`Card Selection Toolbar`
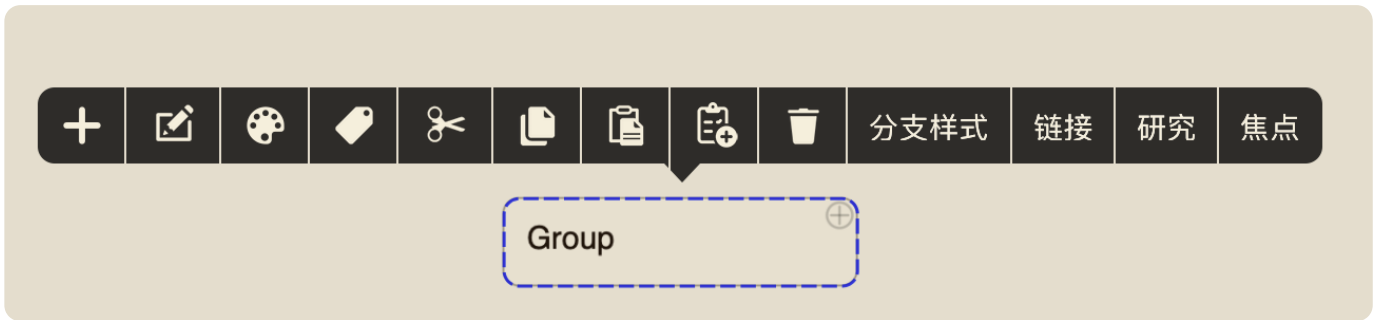
`Card Multi-Select Toolbar`

> **Note**
>
> If only a single card is selected but the multi-selection toolbar is manually enabled, the multi-selection toolbar gesture will not respond this time.

Text Selection Toolbar

This area is related to text selection and is used to trigger the action in MagicAction for Text. The same holds for selecting a region.
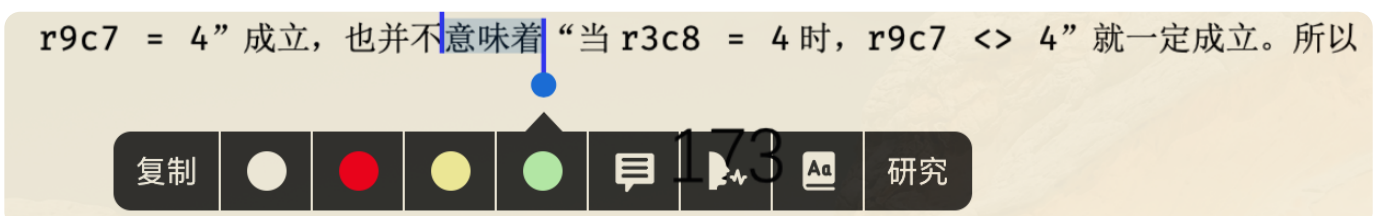
These two have different menu styles, but both are part of the text selection toolbar. The first one will show options such as `Set Title` and `Add as Comment` because you have selected an excerpted note before this text is selected.

This has been specially handled by [MagicAction for Text](#) and you can check it yourself. It is possible to add a formula directly to a card after OCR.

Adjust the text selection toolbar recognition area

Given that some people have never been able to successfully trigger the gesture on the text selection toolbar, I suspect that the device screen size is the cause, so it's open to customization. You can follow the steps below to adjust it. Note that you need to swipe sideways at the top of the toolbar to get the closest value. Since I fixed the toolbar height, you only need to adjust the coordinates at the top, but don't fill it in randomly.


Blocked Area

The gesture detection is added to the entire MarginNote interface, and in theory, OhMyMN will pick up information when swiped anywhere. It's just that I've blocked it so that it only reponses in a few specified areas.

However, these toolbar positions are not judged as accurately as they could be, so it could lead to actions being performed by OhMyMN without swiping on the toolbar. To avoid such situations, I have further restricted the recognition area. In particular, the `Card Single Select Toolbar` is the most restricted.

As shown in the figure, if the `Card Single Select Toolbar` appears in the red box and you swipe inside the red box area, it will not respond.
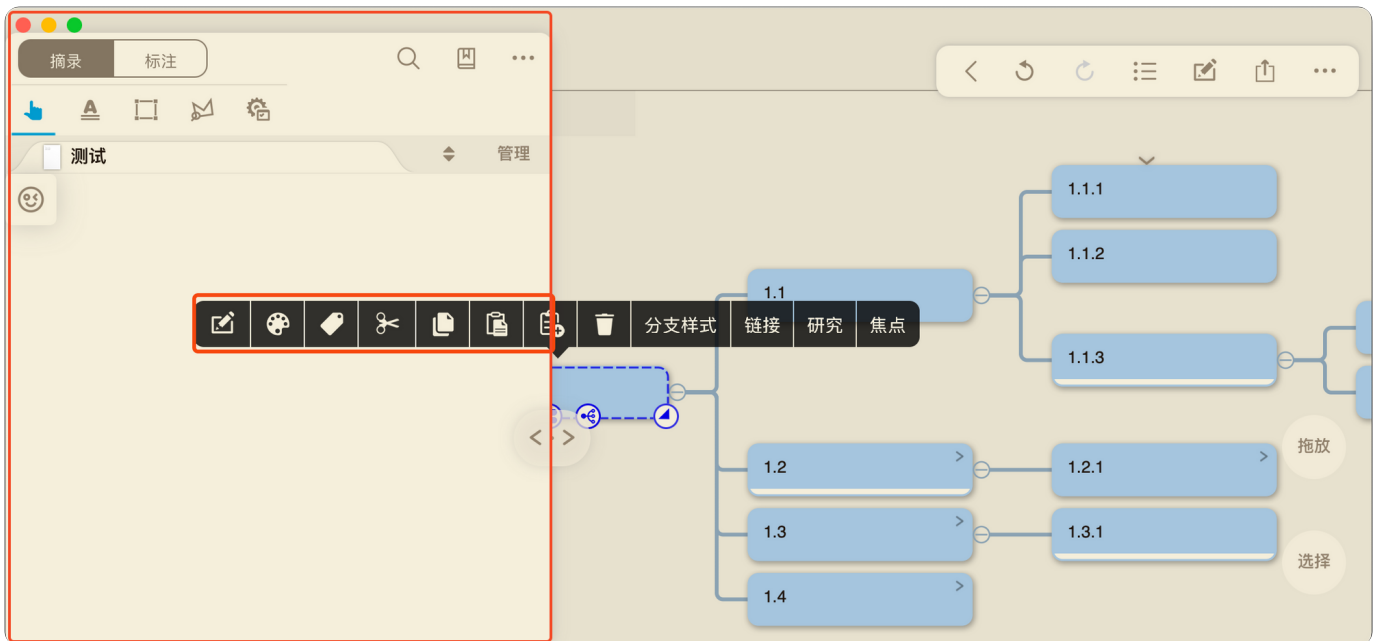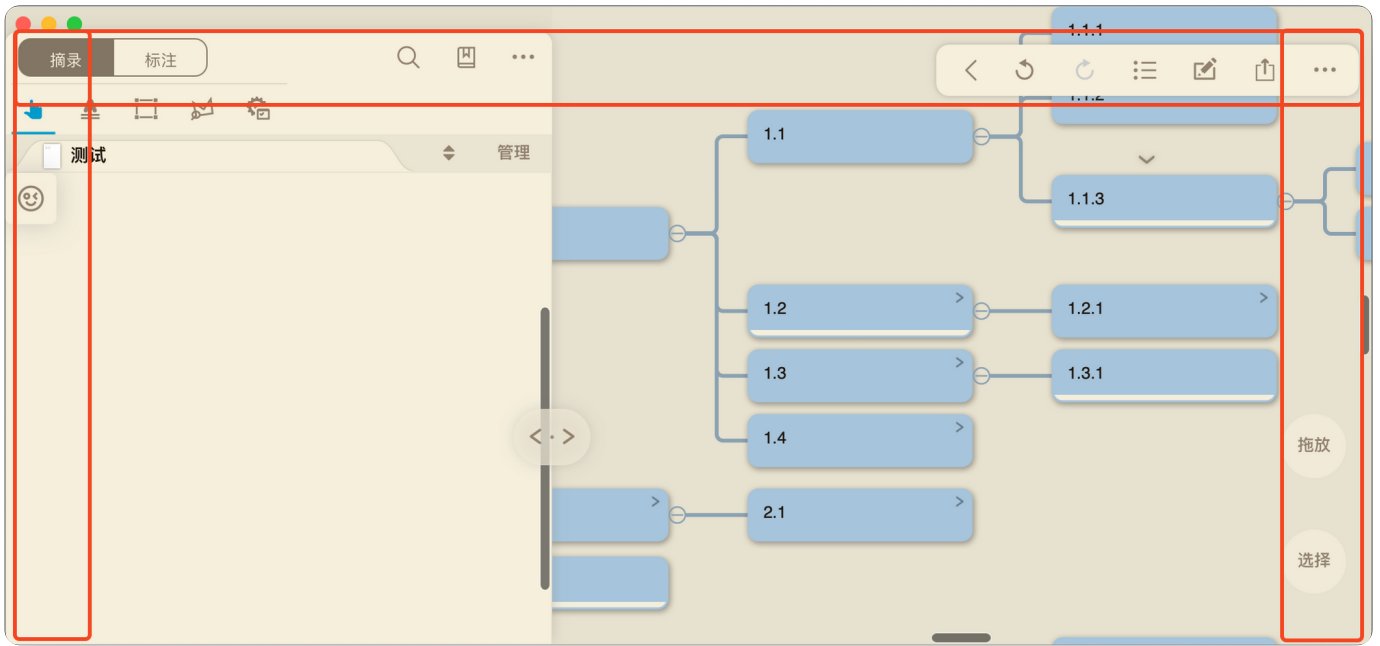
Another AutoTitle

What kind of excerpts should be set as titles?

Preset

> **TIP**
>
> Only needs to meet one of the presets to automatically turn it into a title

1. Word Count: This is the easiest criterion to think of. When you have only two words in an excerpt, you naturally want to use this excerpt as a title. As long as it does not exceed the set number of words, it will automatically be turned into a title. If there are numbers or words in a Chinese sentence, they are not counted separately. A word or number will also occupy a Chinese character-like word count.
   - Chinese-character-like word count: Anything that is not made up of letters is Chinese.
   - English-word-like word count: That is, the number of words. Here I consider the Arabic number as a word as well.
2. Not Contain Dot Symbols: Dot symbols are `。．、？?! !, ,; ;: :`. If there is no punctuation mark indicating a pause, the excerpt is highly likely to be converted into a title.

Custom

Use regular expressions to determine if the excerpted text meets the requirements, and turn it into a title if it does.

> **Input Format**
>
> Regular expressions - Judgment

Example

For example, if you want the excerpt to be automatically converted to a title if it is in full Chinese with no punctuation and contains no more than 10 characters, you can write `/^[\u4e00-\u9fa5]{0,10}$/`.

Another AutoDef

The difference between this function and <u>Another AutoTitle</u> is that Another AutoTitle is mainly used to convert excerpts to titles, while Another AutoDef uses part of the excerpt as the title and the remaining content as the excerpt, which plays a splitting and extracting role.

As for why it is called AutoDef, it is because this function is most often used for definition.

> **The definition of "definition"**
>
> The word or group of words that is to be defined is called the `definiendum`, and the word, group of words, or action that defines it is called the `definiens`. For example, in the definition "An elephant is a large gray animal native to Asia and Africa", the word "elephant" is the definiendum, and everything after the word "is" is the definiens. And "is" is called `definition connective`

This definition connective can either be used as a splitting point to divide content into two parts, the title and the excerpt, or it can be used to determine whether the excerpt is a definition or not, so that it can be processed automatically.

Preset

> **TIP**
>
> The current presets are for Chinese only. Welcome to submit your presets on Github.

I have set up a few commonly seen connectives. It will be restrained to avoid affecting the normal excerpting behavior. `xxx` is the definiendum and `yyy` is the definiens.

Note: some regex contain/are designed for Chinese text

- xxx：yyy `/[：:]/`
- xxx —— yyy `/[—\——]{1,2}/`
- xxx ，是(指) yyy `/[,，]\s*(?:通常|一般)*是指?/`
- xxx 是(指)， yyy `/(?:通常|一般)*是指?\s*[,，]/`
- xxx 是指 yyy `/(?:通常|一般)*是指/`
- yyy，___称(之)为 xxx `/[,，].*称之?为/y`
- yyy(被)称(之)为 xxx `/(?:通常|一般)?被?称之?为/y`

Custom Definition Connective

I've written the regular expressions behind the above presets clearly, and you can customize the connectives you need. Here's how it works: [split function](... /split.md), which uses the connective as a splitting point, and naturally divides the definition into the definiendum and the definiens.

As you may have noticed, the last two rules in the presets use a flag `y`, and they both belong to the case where the definiendum comes after it. `y` is rarely used in the regular, so I've included it as a parameter. Whenever you use `y`, AutoDef will automatically swap the definiendum and definiens.

Custom Titles Extraction

Extract the title directly from the excerpt.

The third parameter of this format `fnKey` is used here.

- The default is 0, which can be omitted, meaning that the excerpt content is retained. However, if you enter 1, the excerpt content will not be retained.

Custom Alias Separator

Defined items usually have alias in them, and if you turn on the `Convert Alias To Muilt Titles` option, AutoDef will automatically split them into multiple titles to be used for title links.

Default separator:

- Default: `/或者?|[简又]?称(?:之?为)?/`
- Punctuation Marks: `/[、。,，''""“『』()（）【】「」《》«»\/\[\]]/`

> **Custom Formats**
>
> Regular Expression —— Split
>
> Note: If you use regular expression arrays, such as `[/test1/, /test2/]`, the `/test1/` will be the main regex to split the content, and the `/test2/` will be used to restrict `/test1/` matched.

MagicAction for Card

Extract Title

> **Custom Formats**
>
> Replace() Method Format —— Extract

- `Use the Configuration of AutoDef`: uses the custom regex entered in `Custom Title Extraction`.

Split Excerpt Text

> **Custom Formats**
>
> Regular Expression —— Split

- `Use the Configuration of AutoDef`: Split using the presets in AutoDef, excluding `Custom Title Extraction`.

If the card already has a title, it will be automatically merged.

AutoFormat

Powered by Pangu.js

> **A study shows that**
>
> people who don't like to add spaces between Chinese characters and English words when typing tend to have a hard time with relationships, with 70% marrying someone they don't love at the age of 34, and the remaining 30% leaving their heritage to their cats. After all, love and writing both need to be left blank at the right time.

This module can add spaces between Chinese characters and English words and will modify the punctuation marks correctly, using Chinese punctuation marks for Chinese characters and English punctuation marks for English words. However, for quotation marks and brackets, automatic conversion is currently not possible. In addition, it will remove spaces between Chinese characters and duplicate spaces.

Preset

1. Remove all spaces: Sometimes after PDF OCR, there will be a large number of spaces. You can use this feature to remove all the spaces, but only if there are no English words, otherwise the English words will also be combined.

2. Half-width to Full-width: Use half-width symbols for English and full-width symbols for English.

3. Add spaces between Chinese characters and English words

4. Remove spaces between Chinese characters.

5. Remove duplicate spaces: change multiple consecutive spaces to only one space.

If enabled, the multiple presets will be executed sequentially from top to bottom.

Custom

Input Format

Replace() Method Format —— Replace

English Title Standardization

Powered by <u>to-title-case</u>

When this option is enabled, AutoFormat capitalizes the automatically generated titles according to the rules. Please note that they are automatically generated titles, i.e. titles generated by <u>Another AutoTitle</u>, <u>Another AutoDef</u> and <u>AutoComplete</u>.

> **WARNING**
>
> Only initials of words will be upper-cased, i.e. capitalized. However, if the title is all upper-cased, it means that the upper-case title setting in the MarginNote home page settings is enabled.

Rules:

1. By default, capitalize all words
2. Always capitalize the first and last word in titles and subtitles
3. Capitalize both parts of hyphenated words
4. Lowercase articles: a, an, the
5. Lowercase conjunctions: and, but, or, nor
6. Lowercase short prepositions: as, at, by, for, in, of, on, per, to, via
7. Lowercase versus: vs., vs, v., v
8. Lowercase NYT words*: en, if
9. Let intentional capitalization stand

MarginNote for Card

Format Excerpt Text

Optimize using presets as well as customizations. Only excerpts and titles can be optimized, but not comments, and the <u>differences</u> among them can be viewed by clicking the link.

- Title: If `English Title Standardization` is enabled, the optimized title will also be capitalized in English.
- Excerpt

AutoComplete

Powered by ECDICT & API

This feature is used to solve one of the issues of using MarginNote to learn English and extract English words. In an English article, words are often not in basic forms and thus cannot make good use of the title links. When you turn on the AutoComplete feature, it will automatically complete the third-person singular form, plural form, past tense, perfect tense, comparative form, and other forms.

What's even more powerful is that the feature can automatically determine whether your excerpt is in the basic form or not, and then complete all forms.
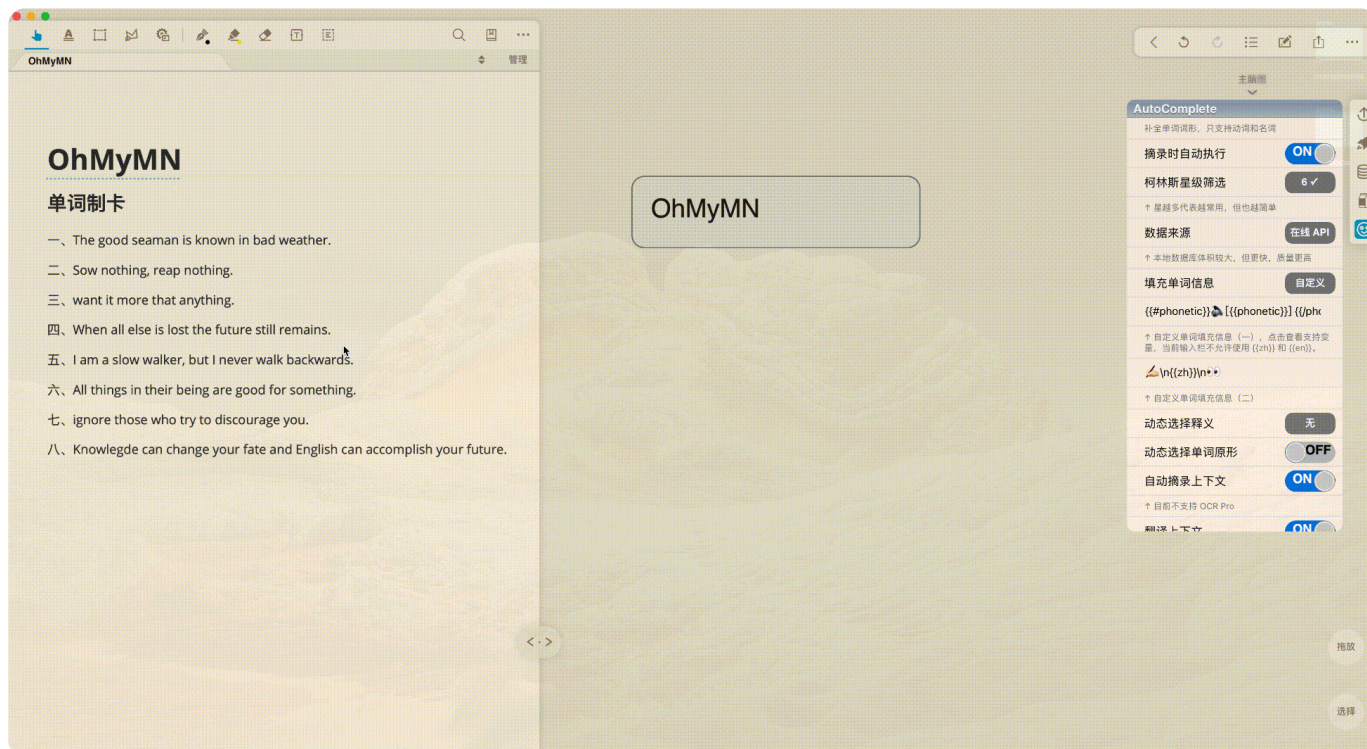
Collins Star Filtering

The more commonly used the word is in the Collins dictionary, the higher the star rating. There are 6 levels from 0 to 5 stars. Usually, words with 5 stars are relatively simple words and can be filtered.

Fill in Word Information

It is possible to add some information about the words as comments to create cards automatically.

Custom

> **Custom Format**
>
> **Template**

There are the following variables

Variable	Comments
`word`	the basic form of the excerpted word
`phonetic`	phonetic symbols (mostly in British IPA)
`zh`	Chinese interpretation
`en`	English interpretation
`tags`	tags such as college entrance exams, CET 4, CET 6, etc.
`collins`	word frequency according to Collins Dictionary

There are two input fields, which can generate two comments. Usually, the first field is filled with information such as phonetic symbols, labels, etc., and the second field is filled with the interpretation in Chinese or English. This makes it easy to put the comments on the back of the card separately in the Review Mode.

Default Placeholder 1: `{{#phonetic}}`🔊 `[{{phonetic}}] {{/phonetic}} {{collins}} {{#tags}}\n`🏷 `{{tags}}{{/tags}}`

Default Placeholder 2: `✍️\n{{zh}}\n`👀

Dynamic Interpretation Selection

When this option is turned on, a pop-up window will appear during the excerpt to select the meaning in the current text (up to 9). If you are not satisfied with the results, you can enter a custom one in the input box.

Multi-select Interpretation

Multi-select the interpretation by entering the specified variable in the input box.

- `[all]` : All interpretations.
- `[1-9]` : Interpretations #1-9.
- `[123789]` ： Interpretations #1, 2, 3, 7, 8, 9, and so on.
- `[adj]` : The interpretation of adjectives, and so on.

Multi-select Interpretation and Custom Interpretation can be used simultaneously, such as `[all] v. new interpretation`。

Dynamic Basic Form Selection

Some words, such as "lay", are both the past tense of "lie" and the basic form of "laid". This is where you need to make a choice.

Auto Excerpt Context

> **TIP**
>
> If you use AutoTranslate, the excerpt text will be translated automatically.

As the name suggests, it can automatically extract the sentence in which the current word is located, thus preserving the context and making it easy to review and memorize.

OCR Pro is not currently supported, and will not work if the PDF itself does not have a text layer. If you rely heavily on this feature, you can use Abbyy to OCR the entire book.

MagicAction for Card

Generate Word Card

> **TIP**
>
> When you selected more than one card, the `Dynamic Basic Form Selection` and `Dynamic Basic Form Selection` will be turn off automatically.

Using the same settings, the information generated by AutoComplete belongs to comments, which cannot be modified and can only be deleted and re-added.

- Append: add new comments
- Replace: First delete the old comment, and then add the new comment (Images may be moved to the top)

AutoReplace

Automatically replaces certain words or phrases in excerpts. This is the common use of the replace function, so there isn't much to say.

Custom

> **Input Format**
>
> Replace() Method Format —— Replace

OCR Pro Common Mistakes (to be added)

MagicAction for Card

Replace Excerpt Text

> **Input Format**
>
> Replace() Method Format —— Replace

AutoList

When excerpting lists, multiple choice questions, etc., it is often necessary to make separate line breaks, which is not possible with OCR.

Preset

Three presets are provided. Each preset includes customizations that must match two serial numbers before they are executed.

`(/\s*([A-Za-z][.、,，])/g, "\n$1")`

- Letter ABCD, including abcd
  - Valid when the letter is followed by `.、,，` and **only in Chinese**

`(/\s*([其第]?[一二三四五六七八九十]{1,2}[.、,，])|\s*([其第][一二三四五六七八九十]{1,2}是?[.、,，]?)/g, "\n$1$2")`

- "一二三四". Such a complex regexl is to avoid interfering with the normal excerpting as much as possible.
  - Valid when "一二三四" is precede by `其|第`.
  - Valid when "一二三四" is followed by `.、,，`.

`/\s*([\( （【\[]?\s*[0-9]{1,2}\s*[\)) \]】]?[.、,，]\D)|\s*([\( （【[]\s*[0-9]{1,2}\s*[\)) \]】][.、,，]?)/g`

- 1234
  - `(1)` `（1）` `[1]` `【1】` are valid.
  - 1 `.、,，` are valid.

Custom

> **Input Format**
>
> Replace() Method Format —— Replace

Add `\n` before or after the matched string, which is the EOL character.

To add a number to each line, the third parameter of the replace function, `fnKey`, is used here. The numbering is distinguished by setting a different number for it.

fnKey	Numbered List Type
1	1. 2. 3.
2	A. B. C.
3	a. b. c.
4	壹、贰、叁
5	一、二、三
6	① ② ③
7	❶ ❷ ❸

Example

- `(/[;；]/, "$&\n", 1)`
  - Denotes line break after `;` or `；`, and number each line with 1. 2. 3.

MarginNote for Card

Add Line Break

Same as customization.

AutoTag

Specified tags are automatically added if a regex is matched, and specific content can also be extracted from the excerpt as tags.

Custom

> **Input Format**
>
> Replace() Method Format —— Extract

Example

- `(/^.+$/gs, "This is an example")` and could add four tags each time, such as "#This #is #an #example".
- `(/@picture, "This is a picture")` and could add a tag for "This is a picture" when you excerpt a picture。

MagicAction for Card

Add Tag

> **Input Format**
>
> Replace() Method Format —— Extract

Since in most cases it's just to add tags without extracting them, you can just type in the tag content.

AutoStyle

AutoStyle allows you to set and fix the default colors and styles for text excerpts and image excerpts (Rect and Lasso) respectively. Colors and styles can also be set automatically based on various presets.

Preset

There are four presets. One on style and three on color.

1. The style is determined by the number of words or area: Once the number of words or the area is large, if you use fill, there will be a large area of color blocks, which is very distracting, so you should switch to the wireframe style at this time.

   - Input: `[Chinese character-like word count, English word-like word count, selection area]`
   - The word count here is the same concept as in Another AutoTitle.
   - The selection area can be obtained by turning on `Show Excerpt Area` .
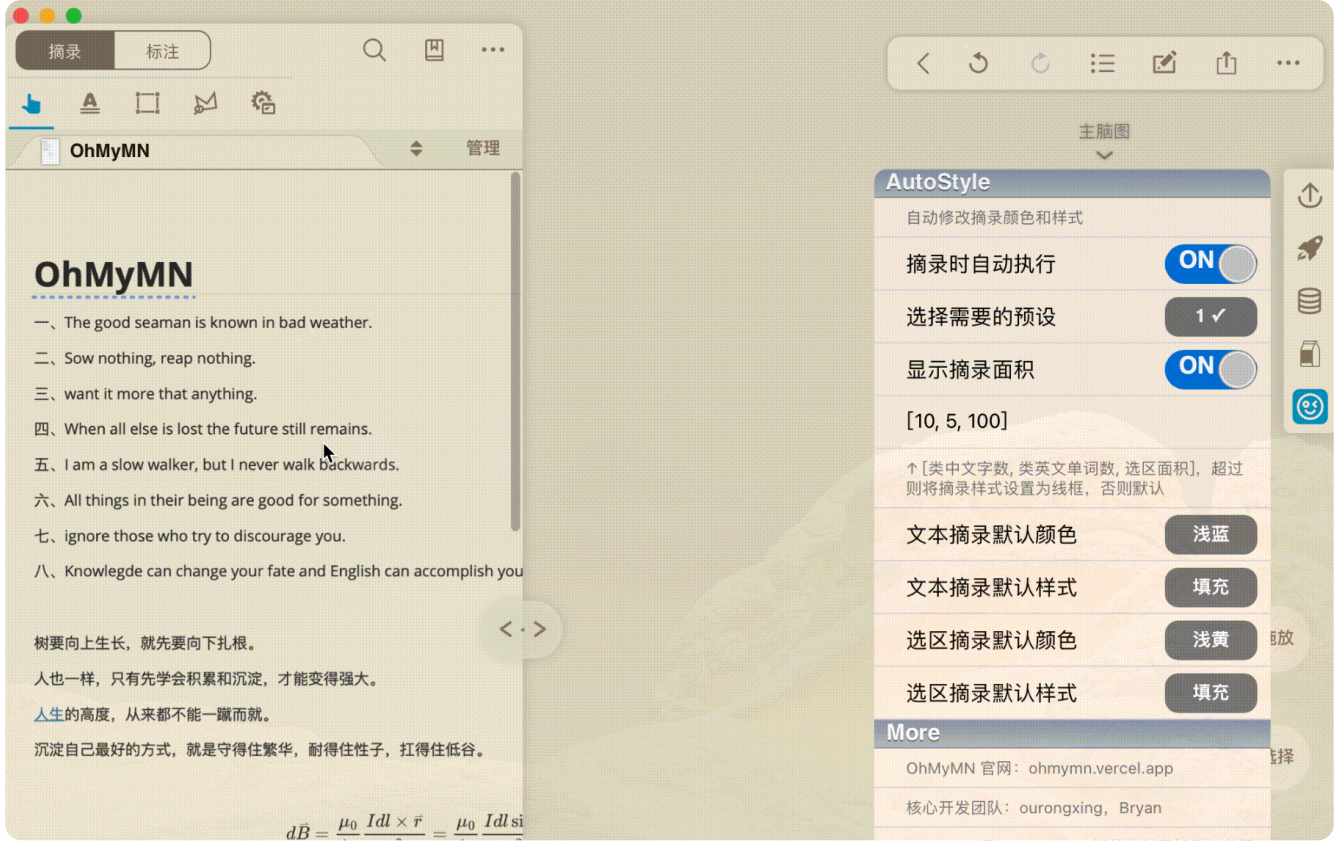
> **TIP**
>
> The color presets have priority. `Color Follows Card` ⇒ `Color Follows Sibling Card` ⇒ `Color Follows Parent Card` ⇒ `Default`
>
> When all three presets are enabled, if the excerpt is merged into a card, its color will follow the card. If it serves as a child node, and if it has any sibling card, it will follow the sibling card; if not, it will follow the parent card.

2. Color follows card: Set the option below (MarginNote Home Screen Settings) to `Merge In` to automatically change into color to the color of the card that the excerpt is drag-and-dropped and merged into when excerpting.
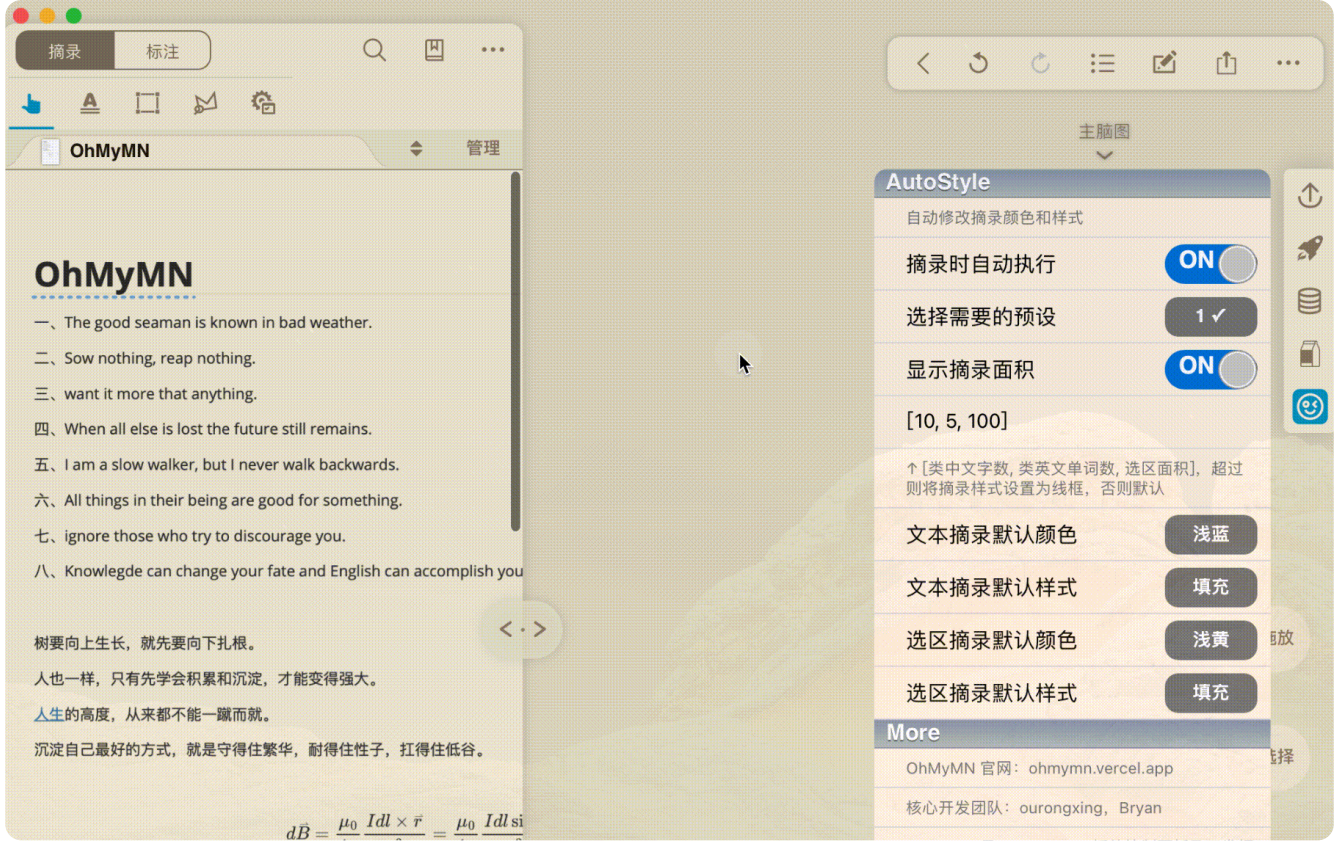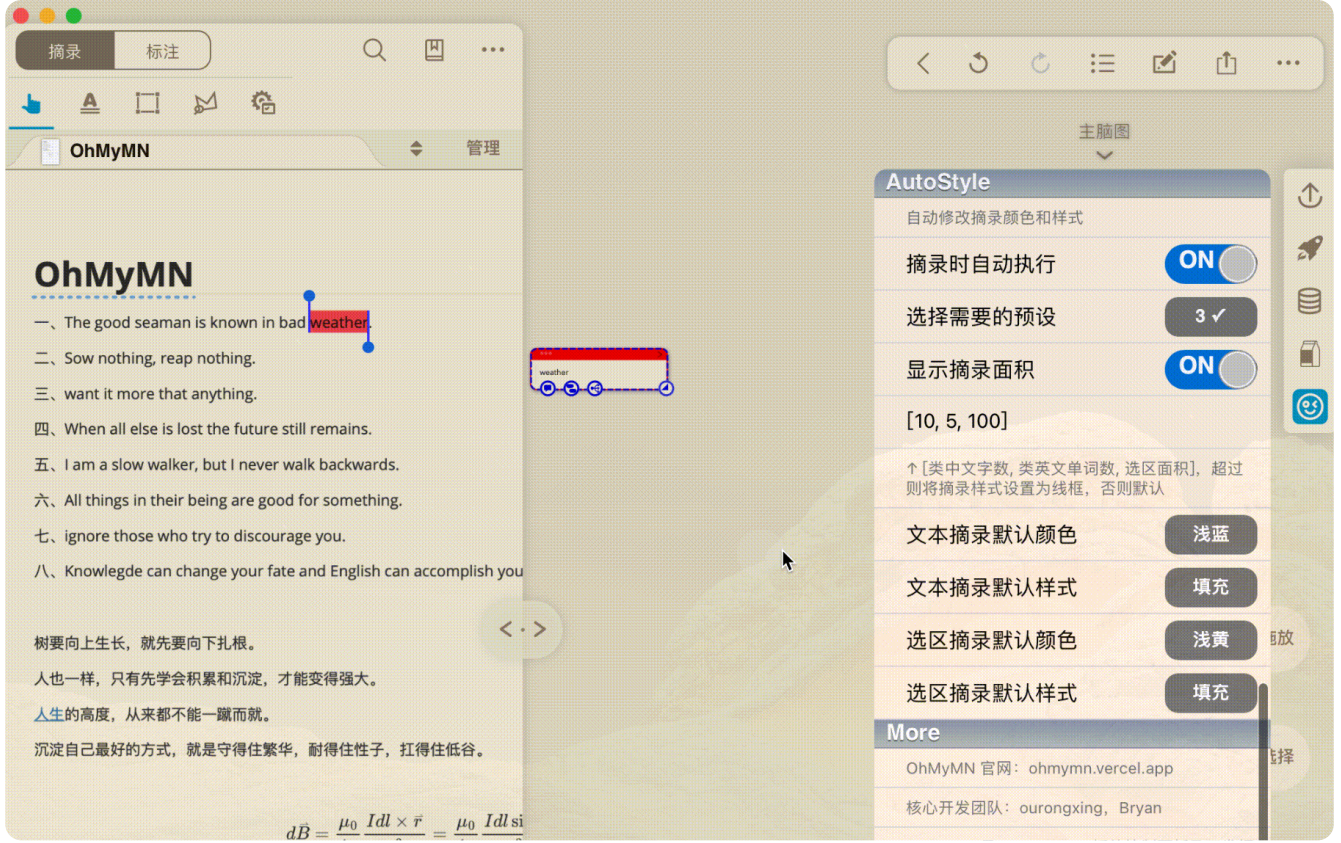
3. Color follows sibling cards: The so-called sibling cards are the cards of the same parent card. I set it to follow the first sibling card. The best way to use this preset is to set the top option to `Add as Child Node`.
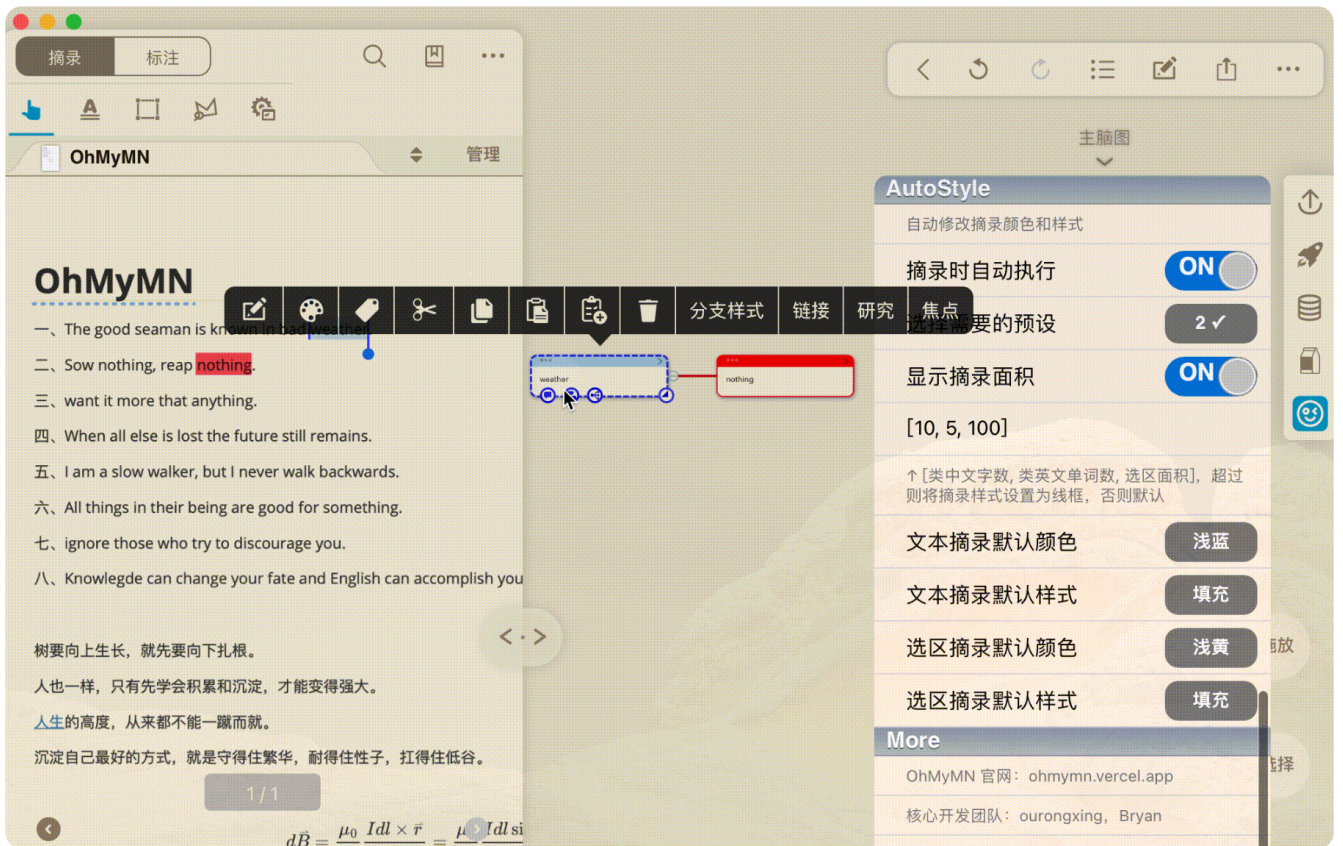
4. Color follows parent card: Set the above option to `Add as Child Node` to follow its parent card.

MagicAction for Card

Modify Excerpt Color

- Enter the color index, 1-16, which is the color palette from left to right, top to bottom.
- `Use AutoStyle Settings` : Use the presets to refresh the color.

Modify Excerpt Style

- `Use AutoStyle Settings` : Use the presets to refresh the color.

CopySearch

CopySearch allows you to search and copy everything on this card, whether it is a visible excerpt or title, the invisible URL, or the modification time. You can also freely combine various attributes. With custom URLs, pass this information into other software. Whether for export or searching, everything is possible.

Select Card Content

The composition of a card is very complex, and it may be that the card OhMyMN sees is different from the one you see. A card can have multiple titles, multiple excerpts, and multiple comments in it. When you search or copy, how to select precisely what you want?

The solution given by CopySearch is `Dynamic Selection`.

`Dynamic Selection` will give you all titles, all excerpts, and customizations for you to choose from when searching.

In addition, there are three options:

- Title First
- Excerpt First
- Custom

Why is it First? When the priority queue is empty, it will follow Title→Excerpt→Custom, recursively downwards until something that is not empty appears.

Custom

> **Custom Format**
>
> **Template**

- For example, the most commonly used MarkDown format MNLink: `[{{titles.0}}]({{url.pure}})`
- Or the first comment: `{{comments.text.0}}`

Multiple Cards

If multiple cards are selected, there is no way to dynamically select them, and it defaults to the first card. For multiple cards, whether searching or copying, the specified contents of all cards are combined, not individually.

Here it involves numbering or line breaks when merging. This is similar to MagicAction for Card - Merge Text It can be completely copied over, so I won't say much here.

Search URL

This can be a URL or a URL Scheme for other software.

1. URL Schemes Usage Explained - sspai

2. Getting Started with iOS Automation: Reading URL Schemes - sspai

3. URL Scheme Query Guide - sspai

Format: Replace the part of the URL search keyword with `{{keyword}}`

- Eurodictionary: `eudic://dict/{{keyword}}`
- Specify Edge browser to use Baidu search engine: `microsoft-edge-https://baidu.com/s?wd={{keyword}}`

AutoTranslate

The primary role of AutoTranslate is to auto translate during excerpting (the result of the translation is saved as a separate comment).

Get API key

First of all, you need to know that this service invokes a third-party translation service, so you need to get the key of this service by yourself and you cannot use it directly. I provide Baidu Translate and LingoCloud to choose from, Baidu Translate as well as LingoCloud have free trials, which are enough for you to use.

Baidu Translate

> **Notice**
>
> Search for **How to apply the Baidu Translate API** by yourself, the exact price and amount is subject to the official website, and any fees incurred are not related to OhMyMN.

Baidu translation seems to translate more accurately. It supports more languages and custom terminology database. You can customize the correspondences of professional terminologies, so as to translate accurately.

LingoCloud Translate

> **Notice**
>
> Search for **How to apply the LingoCloud Translate API** by yourself, the exact price and amount is subject to the official website, and any fees incurred are not related to OhMyMN.

LingoCloud only supports the translation among Chinese, English and Japanese. You can switch to LingoCloud after the free trials of Baidu translate is used up.

Restrictions on Triggering

I have only provided a word limit. Below a certain number of words it will not be executed. This is exactly the same as the word limit in **Another AutoTitle** which is further divided into Chinese-character-like or English-word-liken word count.

At the bottom I have added a layer of restriction, that is, if the excerpted language itself is not part of the input language you have chosen, it will not be executed. Of course, I can only determine this based on the presence of letters and whether they are half-width characters, which may not be too accurate, for example, to distinguish between English and French.

## MagicAction for Card

Translate Excerpt Text

Supports translating all excerpts in the card, and the translation results are added to the card as comments. Please do not translate too much content at the same time to avoid triggering API restrictions.

MagicAction for Text

Translate selected text

This makes the so-called "word-underscoring translation" possible.
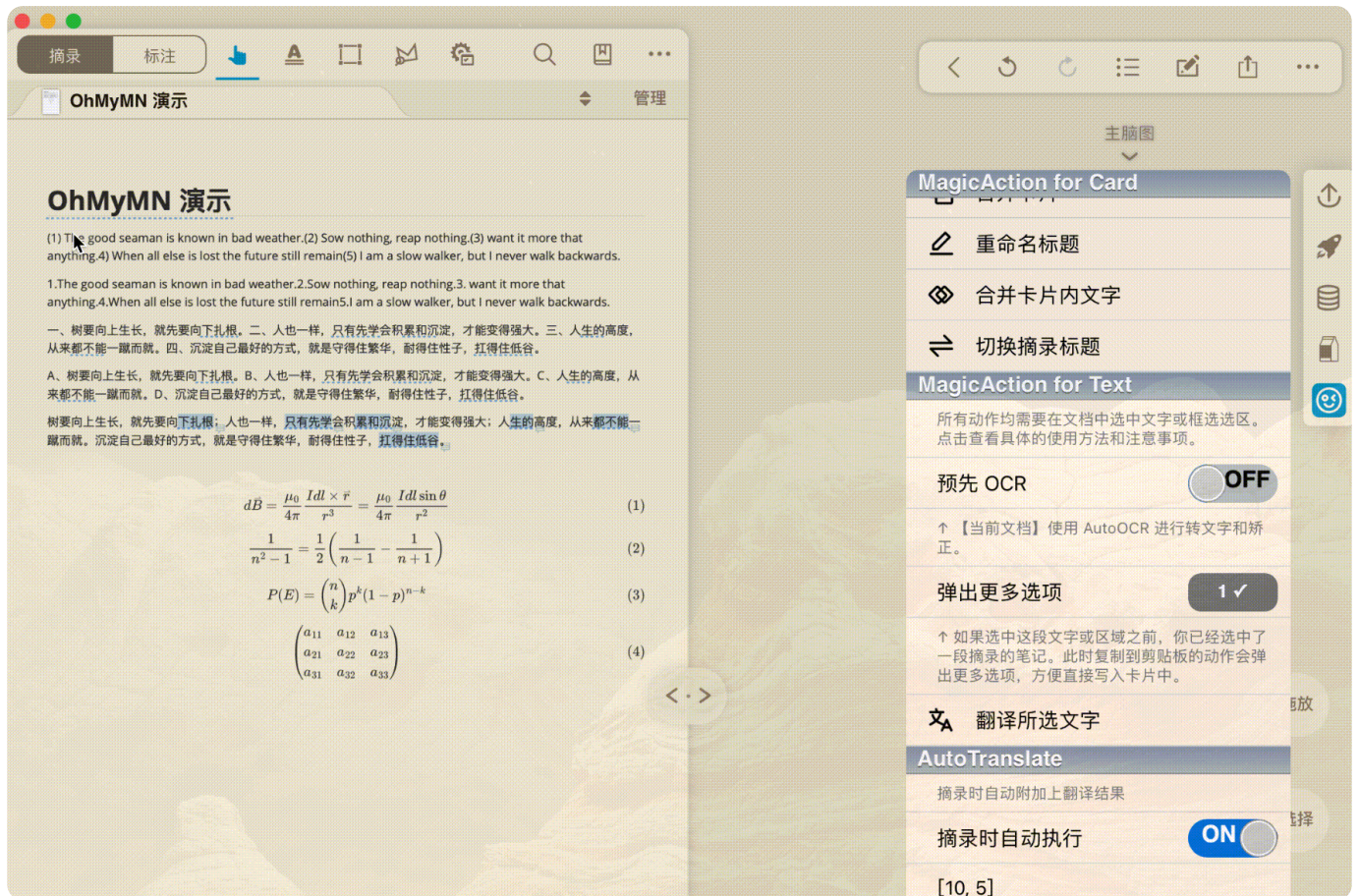
Use the Gesture module to add trigger gestures for word translation without worrying about accidental touches.

OhMyMN 演示

OhMyMN 演示

(1) The good seaman is known in bad weather.(2) Sow nothing, reap nothing.(3) want it more that anything.4) When all else is lost the future still remain(5) I am a slow walker, but I never walk backwards.

1.The good seaman is known in bad weather.2.Sow nothing, reap nothing.3. want it more that anything.4.When all else is lost the future still remain5.I am a slow walker, but I never walk backwards.

一、树要向上生长，就先要向下扎根。二、人也一样，只有先学会积累和沉淀，才能变得强大。三、人生的高度，从来都不能一蹴而就。四、沉淀自己最好的方式，就是守得住繁华，耐得住性子，扛得住低谷。

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$$d\vec{B} = \frac{\mu_0}{4\pi}\frac{Idl \times \vec{r}}{r^3} = \frac{\mu_0}{4\pi}\frac{Idl\sin\theta}{r^2} \tag{1}$$

$$\frac{1}{n^2-1} = \frac{1}{2}\left(\frac{1}{n-1} - \frac{1}{n+1}\right) \tag{2}$$

$$P(E) = \binom{n}{k}p^k(1-p)^{n-k} \tag{3}$$

$$\begin{pmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{pmatrix} \tag{4}$$

主脑图

Gesture
自定义手势触发动作

卡片单选工具栏 ↑	打开控...
卡片单选工具栏 ↓	无
卡片单选工具栏 ←	无
卡片单选工具栏 →	自定义
卡片多选工具栏 ↑	打开控...
卡片多选工具栏 ↓	无
卡片多选工具栏 ←	无
卡片多选工具栏 →	无
文本选择工具栏 ↑	打开控...
文本选择工具栏 ↓	无
文本选择工具栏 ←	无
文本选择工具栏 →	词典

CopySearch

拖放

选择

AutoOCR

AutoOCR's primary job is to perform online corrections for foreign languages, which are automatically performed when excerpting. Formula recognition can only be called manually using `MagicAction for Text` and cannot be executed automatically at the time of excerpting.

Get API key

Like AutoTranslate, AutoOCR also uses a third-party service and requires you to obtain the key yourself.

Baidu OCR

> **Notice**
>
> Search for **How to apply the Baidu OCR API** by yourself, the exact price and amount is subject to the official website, and any fees incurred are not related to OhMyMN.

AutoOCR uses a high-precision version with a low free credit. The service will be stopped automatically when the quota is used up.

MathPix

> **Notice**
>
> Search for **How to apply the Mathpix API** by yourself, the exact price and amount is subject to the official website, and any fees incurred are not related to OhMyMN.

It should be noted that MathPix prices change frequently and are not cheap.

Foreign Language Online Correction

> **TIP**

> Both `Auto Execution on Excerpt` and `Language Recognition` are valid for the current document so that they can be set separately for different documents.

MarginNote's OCR Pro does not support many foreign languages, making it impossible to excerpt properly, ~~such as Russian~~ (Supported now). AutoOCR uses Baidu's OCR service to correct excerpts online.
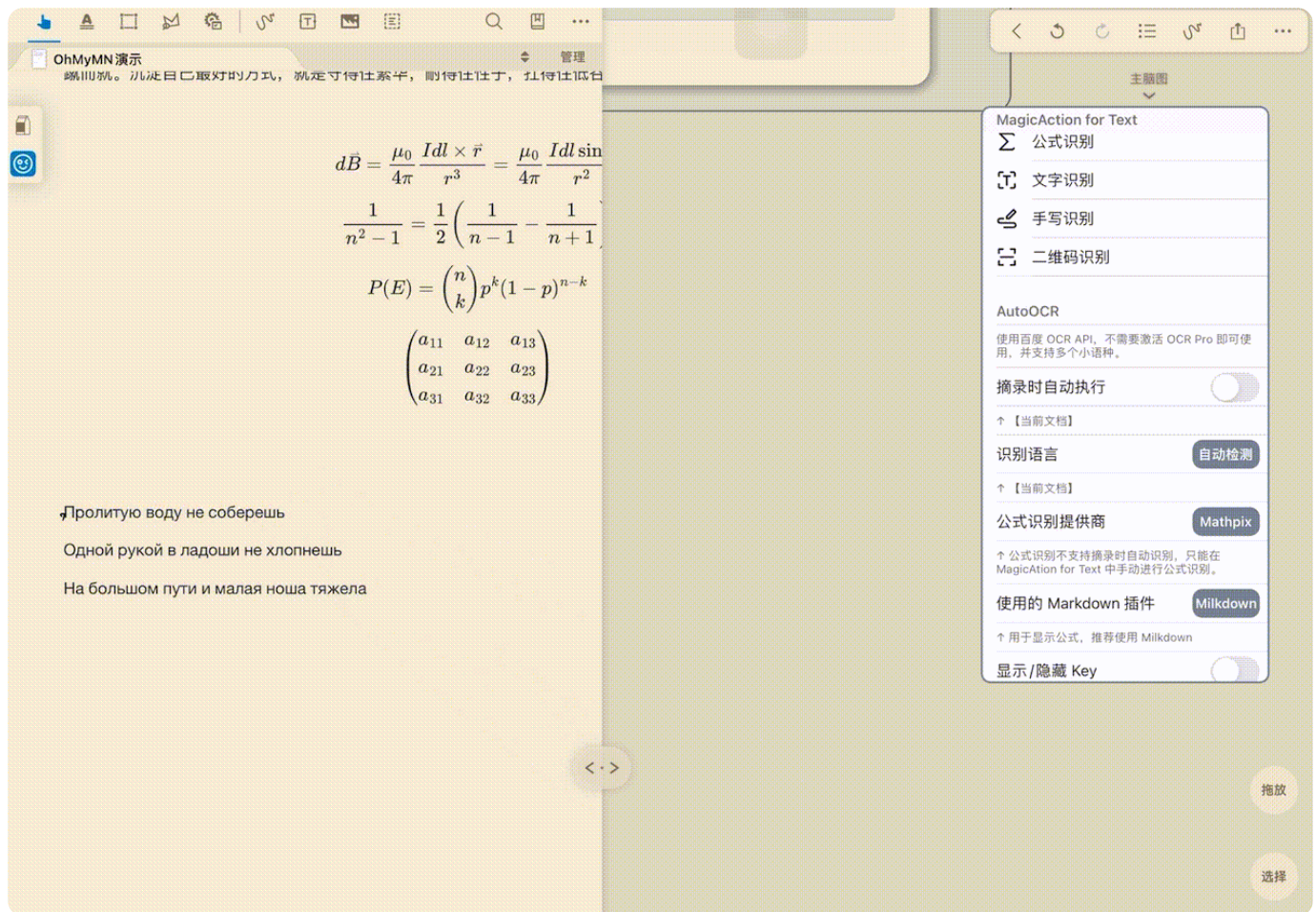
In combination with Autotranslate, auto-translation for foreign languages is also possible.

## MagicAction for Text

Formula Recognition

> **WARNING**
>
> Formula recognition can only be called manually using `MagicAction for Text` and cannot be executed automatically at the time of excerpting. Do not select more than two lines of text, which tends to fail and will not be displayed completely on the card.

You need to use Markdown plugins to display formulas, so you must install Markdown plugins in advance. Currently, there are 3 Markdown plugins and I recommend using

[Milkdown](#).

This feature has three options

- `pure latex` : [MarkDown](#) Please select this option for the plugins, including when Milkdown's MarkDown compatibility is enabled. Please note that the Milkdown and MarkDown plugins have different syntaxes for formulas. Please think carefully before choosing whether they are compatible.

- `$$latex$$` `$latex$` : [myMarkdown](#) and [Milkdown](#) are both viable options. You can check the differences between the two yourself if interested.
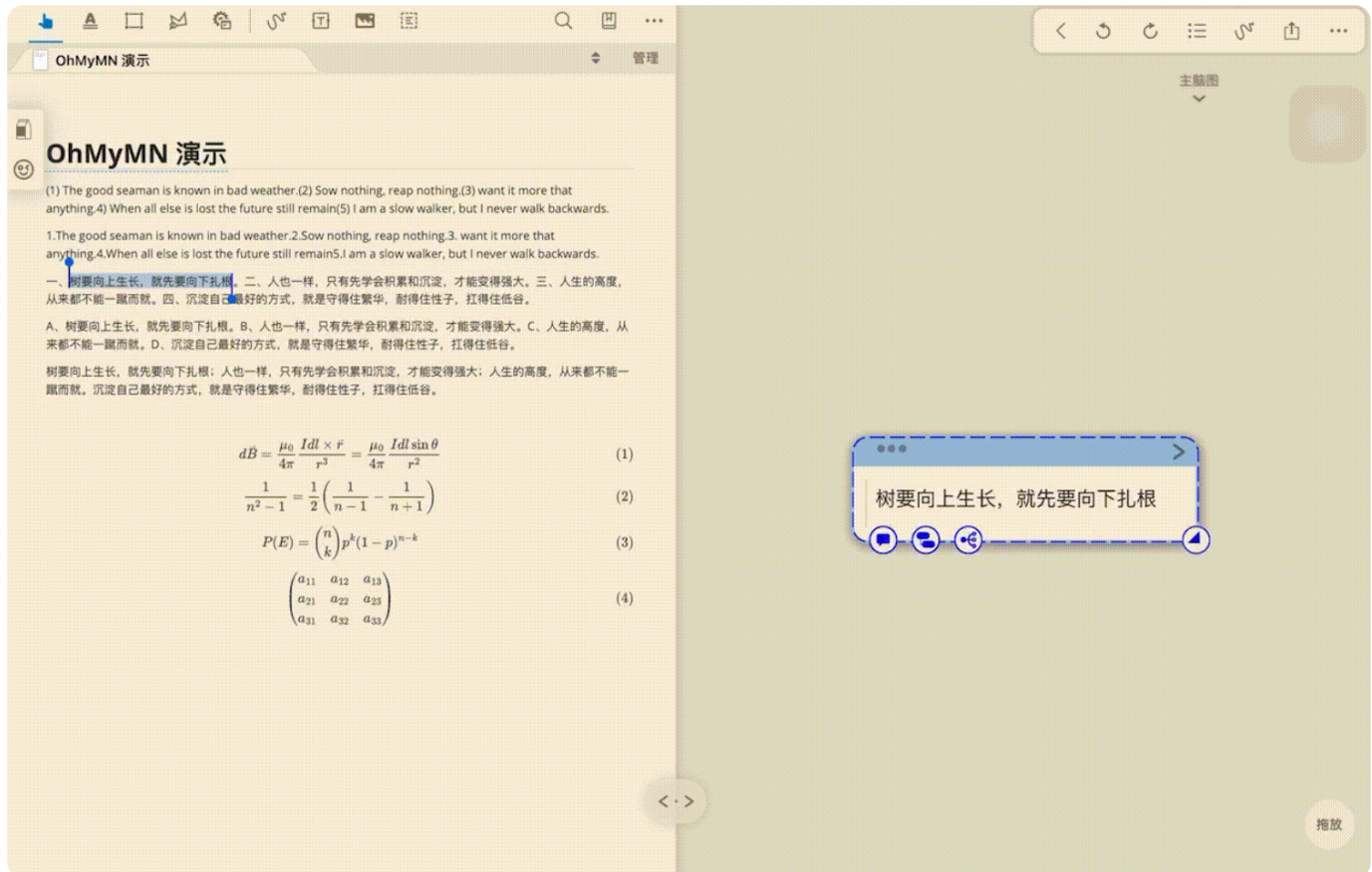
Please be prepared that although it looks cool, it is complicated to implement:

1. Apply for Baidu OCR or MathPix API key.

2. Fill it in AutoOCR and select the corresponding formula recognition service provider.

3. Install any Markdown plugin and select the corresponding Markdown plugin.

4. MagicAction for Text - in the pop-up menu for more options, turn on `Set as Commnet` .

5. **first select an excerpt or card** (otherwise you can only copy the result to the clipboard), then drag to select, and click `Formula Recognition` . The recognized Latex of the formula is automatically written to the previously selected card. Use the Gesture module to invoke the execution for a better experience.

Text Recognition

Perform text recognition on the selected text or area and copy the result to the clipboard.

Handwriting recognition

Use Baidu OCR service for handwriting recognition. Please note the free trial.

QR code recognition

Use Baidu OCR service for QR code recognition. Please note the free trial.

AutoComment

Automatically add specified comments if a regex is matched, or extract specific content from an excerpt as a comment.

Custom

> **Input Format**
>
> Replace() Method Format —— Extract

Example

- `(/./, "This is an example")` will add one comment as "This is an example" for each iteration.

MagicAction for Card

Add Comment

> **Input Format**
>
> Replace() Method Format —— Extract

Since in most cases it's just to add a comment without extracting it, so you can just type in the comment content and I will complete it as `(/./, "<comment>")`.

AutoSimplify

Powered by OpenCC

Automatic conversion of excerpts to Simplified Chinese.

Custom

Input Format

Replace() Method Format —— Replace

Variant Conversion

Taiwan and Hong Kong have different definitions of variant characters, so different variant characters may appear in Traditional Chinese in these two regions.