

# Book View and SGF Kifu Extensions

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## Overview

SmartGo Kifu for the iPad pioneered a new way of presenting annotated SGF. Instead of forcing users to replay the game move by move, its book view breaks the game into diagrams and shows comments next to diagrams. Readers are used to such diagrams from Go books, and can often grasp a diagram at a glance. Unlike Go books, readers can replay the moves inside the diagram to explore the sequence in detail, and zoom a diagram to see it in the context of the whole board.

SGF has always had the ability to associate comments with moves. The **SGF Kifu** extensions add richer comments and more sophisticated flow of diagrams and text. SGF Kifu is still SGF that can be read and edited by any client program that supports SGF comments and diagrams. The rich comments are human-readable, and the comments still make sense when replaying the game move by move.

The book view in SmartGo Kifu has two goals: (1) present existing annotated SGF games well, and (2) provide a great experience with specially designed game commentaries. This takes one step in the direction of fully interactive Go books.

SmartGo Kifu and SmartGo Books are currently the only programs implementing the SGF Kifu extensions. (SmartGo Pro on the iPhone implements a subset with limited layout options.) While the definition of SGF Kifu will evolve, I expect the part described here to remain reasonably stable.

## Book view

SmartGo Kifu goes through the following steps to create the text and diagrams shown in book view:

1. Convert simple text in comments into rich text.
2. Generate additional diagram properties to split the game.
3. Sequence diagrams and comments into a linear flow.
4. Create the page layout for the sequence of diagrams and text.

After describing these steps, this document provides clues on how to create game commentaries that will work well in SmartGo Kifu.

## Rich text in comments

Text in comments can include markup and abbreviations that will be displayed in a richer way. The comment text can also provide clues on where to insert diagrams.

### Style

**\*\*bold text\*\***: Any text surrounded by double asterisks will be shown in **bold**.

*italic text*: Any text surrounded by double underlines will be shown in *italic*.

**italic** **\*bold\***: A single underline or asterisk can be used around a single word.

Styles can't span multiple paragraphs. TEMPORARY: Bold and italic can't be nested, there's no support for ***bold italic*** yet.

### Symbols

Go books often use special symbols, some of which are not in Unicode. SGF Kifu allows those symbols to be inserted into the text.

- ^T → triangle: △ (TR property).
- ^D → diamond: ◇ (RG property).
- ^S → square: □ (SQ property).

Each of these can be followed by a lowercase b or w to more specifically refer to a black or white stone with such a mark. When possible, these should be shown that way in the text, e.g. ^Tb should be shown as a black circle with a triangle on it.

- ^X or X → cross mark: × (MA property).

### Coordinates

A1 to T19 refer to coordinates on the board, using the standard coordinate system (A1 lower left, letter 'I' skipped). These may be replaced by characters, numbers, or symbols shown at that point in the associated diagram. For example, “invade at F8” may be changed to “invade at A”, with F8 on the board marked as A. (This is known as Comment Cleanup in SmartGo on Windows.)

As some annotated games use B1, W2, B3 to refer to a sequence of moves, B1 to B19 are not interpreted as coordinates. To refer to coordinates in the B-column, use ^B1 to ^B19.

### Typography

Text in comments can use simple typography to be more compatible with existing programs. SmartGo Kifu improves the typography to make it easier to read and more like a high-quality book:

- Straight quotation marks (single & double) → curly quotation marks. (These may vary by user language.)

- Double hyphens → en dash.
- Triple hyphens → em dash.
- Triple periods → ellipsis.
- Double spaces → single space. (Triple spaces are not changed.)
- Hyphen between two digits → en dash.
- Hyphen between two spaces or at end of paragraph → en dash.
- (c) → ©.
- (R) → ®.
- (TM) → ™.

### **Diagram range**

Comments starting with N-M (a number followed by a dash and another number) indicate that they apply to the given range of move numbers. For example, a comment starting with “41-44: Sample” applies to moves 41 to 44. The range will be removed from the text in book view, so this would be shown as “Sample”.

The range must include the full number. For example, it needs to be specified as “118-121” even though the diagram will show the moves as 18 to 21.

The range specified at move N can start at move N-1. For example, at move 22, “21-24” will show moves 21 to 24, thereby repeating move 21 from a previous diagram.

TEMPORARY: Current implementation restricts this to be placed at the first move in the sequence. However, when replaying move by move, it might make more sense to put the comment at the end of that sequence. Plan to lift this restriction so that this comment can be placed at either N or M.

### **Diagram references**

A line containing just a diagram name in double quotes (e.g. "Diagram 12") will be replaced by that diagram and its associated comment. Such explicit diagram references override mere mentions of the diagram name, so that the diagram can be included exactly where needed.

As a special case, an empty diagram reference (a line containing just "") refers to the current diagram. This way, a comment or other diagrams can be placed in front of the current diagram.

Explicit diagram references can also refer to diagrams in other games, or to a whole game included in the book, using a slash to separate the game name from the diagram name. For example, "Game 2/Dia. 4" will include Dia. 4 from the game named “Game 2”, while "Reference Diagram/" will include the whole game named “Reference Diagram”.

## Image references

An image can be placed into the flow using a line containing an image reference of the form:

```
(image.jpg "caption")
```

The image referenced needs to be part of the book. Current implementation restricts the image name to end in jpg or png. It can also include external references:

```
(http://www.smartgo.com/img/kifu3\_tn.png "Test")
```

**[... Removed sections on other SGF properties and sequencing of diagrams for now, still too much in flux. ...]**

## Feedback welcome

This is work in progress. Please send your thoughts to [anders@smartgo.com](mailto:anders@smartgo.com).

## SGF definition

<http://www.red-bean.com/sgf/>