Multiverse Go

1 Rules

Multiverse go is a variant similar but distinct from 3D go. Like 3D go, it is played on a 3D goban. However, the rules concerning stone liberties are different. The game is played on a 3D goban; in this document we will use the $5 \times 5 \times 5$ grid as an example. Rather than seeing it as a single $5 \times 5 \times$ game of go, it should be seen as 15 separate (but connected) 5×5 games. Each 2D "slice" of the 3D goban represents a separate "flat" game. In practice, when each move in the $5 \times 5 \times 5$ goban corresponds to 3 moves and 12 passes in the 5×5 "slice" gobans.

Each intersection can be identified by using 3D coordinates which range from `A1do` to `E5so` (see fig. 1), where

- the first axis uses `A`, `B`, `C`, `D`, `E`, etc.;
- the second axis uses `1`, `2`, `3`, `4`, `5`, etc.; and
- the third axis uses `do`, `re`, `mi`, `fa`, `so`, etc.

These 3D coordinates uniquely identify both the 2D "slice" gobans in which the moves are being played, and the coordinates within those "slice" gobans. Each 2D board has a unique name; in $5 \times 5 \times 5$ multiverse go, the names are `A`, `B`, `C`, `D`, `E`, `1`, `2`, `3`, `4`, `5`, `do`, `re`, `mi`, `fa`, and `so`. As an example, move `B4mi` represents the following "flat" coordinates:

- Move `4mi` on board `B`;
- Move `Bmi` on board `4`; and
- Move `B4` on board `mi`.

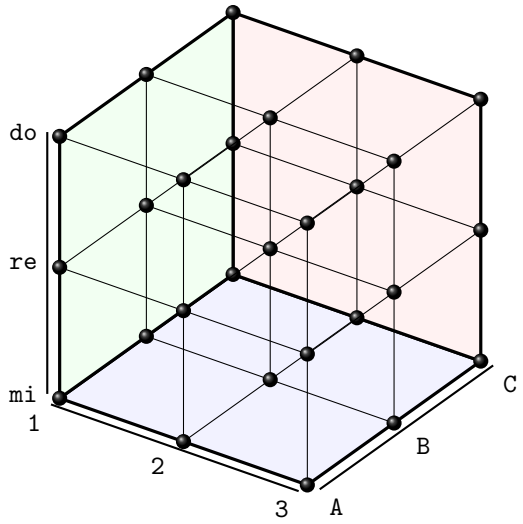
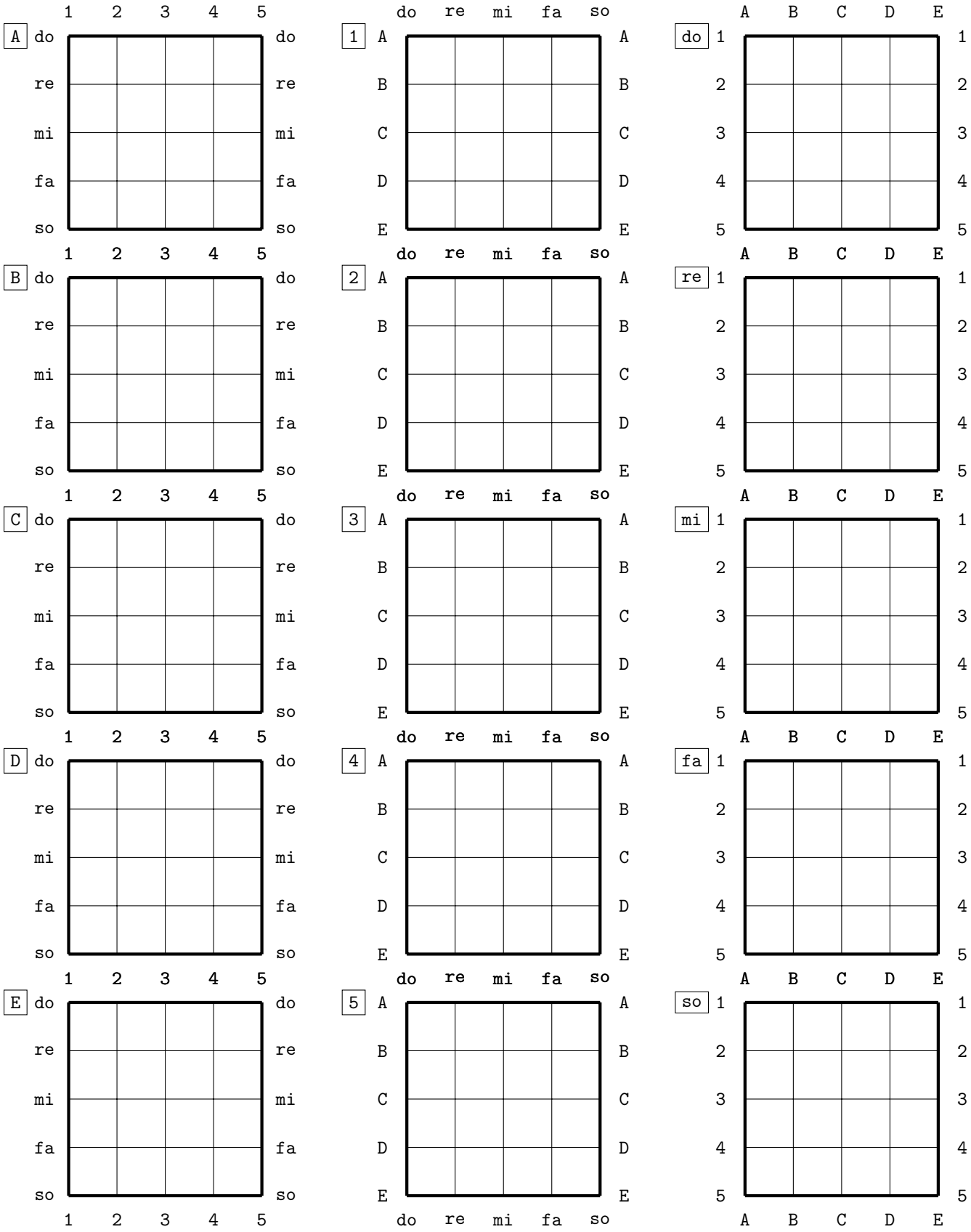
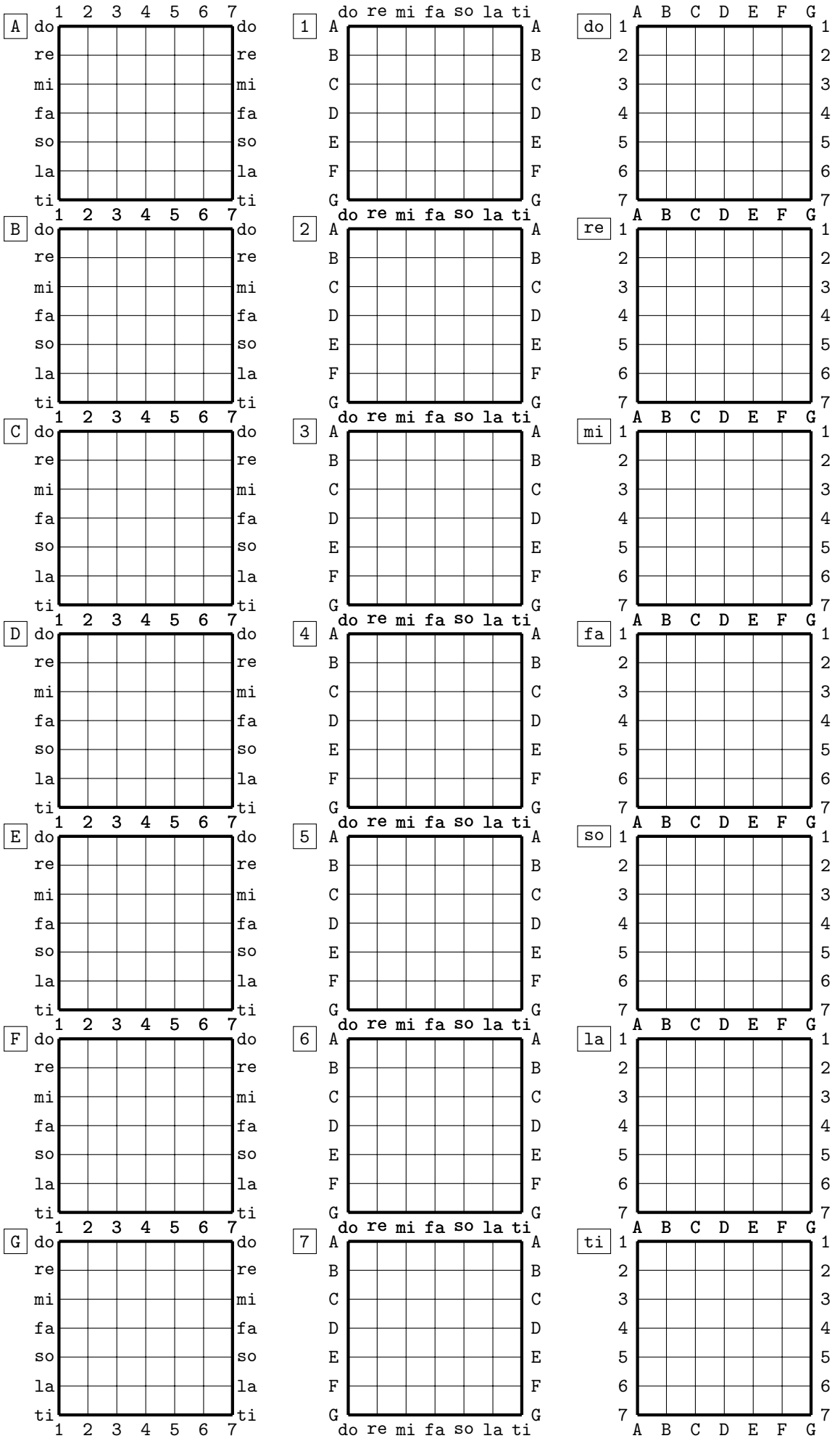


Figure 1: A $3 \times 3 \times 3$ goban and the 3D coordinate system.


1 2 3 4 5
A do re mi fa so do re mi fa so
1 2 3 4 5
B do re mi fa so do re mi fa so
1 2 3 4 5
C do re mi fa so do re mi fa so
1 2 3 4 5
D do re mi fa so do re mi fa so
1 2 3 4 5
E do re mi fa so do re mi fa so
1 2 3 4 5
do re mi fa so
1 A B C D E A B C D E
do re mi fa so
2 A B C D E A B C D E
do re mi fa so
3 A B C D E A B C D E
do re mi fa so
4 A B C D E A B C D E
do re mi fa so
5 A B C D E A B C D E
do re mi fa so
A B C D E
do 1 2 3 4 5 1 2 3 4 5
A B C D E
re 1 2 3 4 5 1 2 3 4 5
A B C D E
mi 1 2 3 4 5 1 2 3 4 5
A B C D E
fa 1 2 3 4 5 1 2 3 4 5
A B C D E
so 1 2 3 4 5 1 2 3 4 5


A
B
C
D
E
F
G
1
2
3
4
5
6
7
do
re
mi
fa
so
la
ti