Initial state: Three drawer categories, fixed starting block already on canvas
Ideally, there should be only one drawer for both arms, so that blocks are universal

Hand Movement

Arm Movement

Synchronization

When ▷ is pressed:

Hand movement drawer expanded
The "puzzle tab" of the blocks on the canvas has a different offset depending on which arm they are assigned to.
While in the drawer, the tap should ideally be "neutral", but it is probably easier to default to either left or right.

| Hand Movement |
| Arm Movement |
| Synchronization |

Open Hand.

Close Hand.

When ▷ is pressed:

Arm movement drawer expanded
The blocks here are pretty wide, but Blockly also comes with some wide blocks and seems to support that just fine.
It is important that the two-armed blocks have two puzzle tabs to show that they attach on both sides simultaneously.

Hand Movement

Arm Movement

Synchronization

Move to [Position... ▼].

Move to [Position... ▼].   Follow movement.

Move to [Position... ▼].   Mirror movement.

When ▷ is pressed:

Synchronization drawer expanded.
Very similar to the two-armed movements. Blocks (not just here but in all drawers) should probably have "puzzle tab gaps" at the top too like in default Blockly.

| Hand Movement |
| Arm Movement |
| **Synchronization** |

Wait for each other.

When ▷ is pressed:

When blocks are dragged into position, they should still have the typical "glowy" snap animation of blockly to show where they could attach.

Hand Movement

Arm Movement

Synchronization

When ▷ is pressed:

Wait for each other.

For single-armed blocks this is slightly tricky, since the puzzle tab offsets need to change based on which arm they are attached to.

Hand Movement

Arm Movement

Synchronization

When ▷ is pressed:

Open Hand.

One idea we had was to have the tab position noticeably switch when the block is dragged across the vertical center of the canvas.
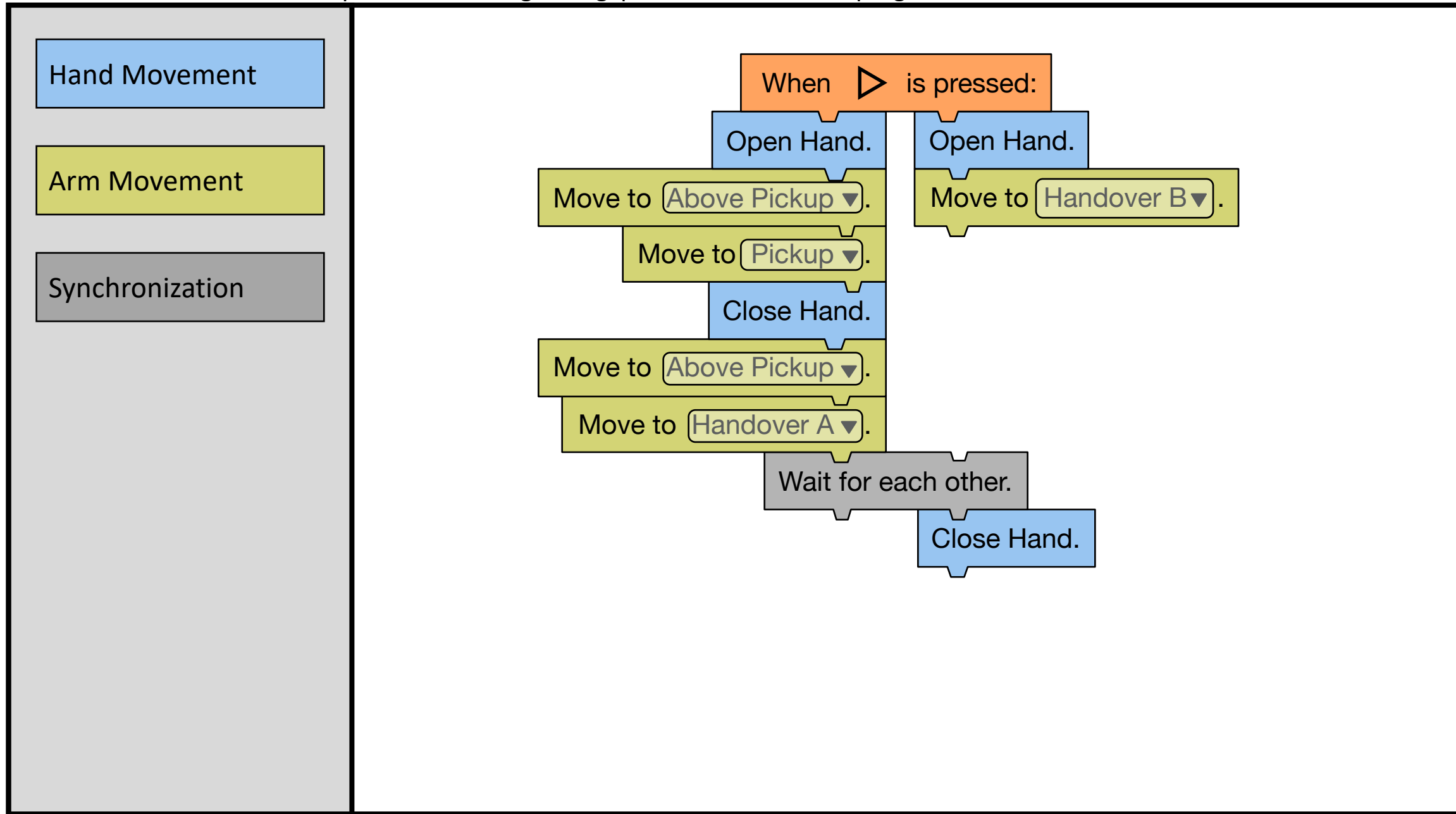
For arm movement blocks, a target location can be selected via a drop-down menu. This is not super relevant for us right now, and the menu might just contain a few dummy location names.
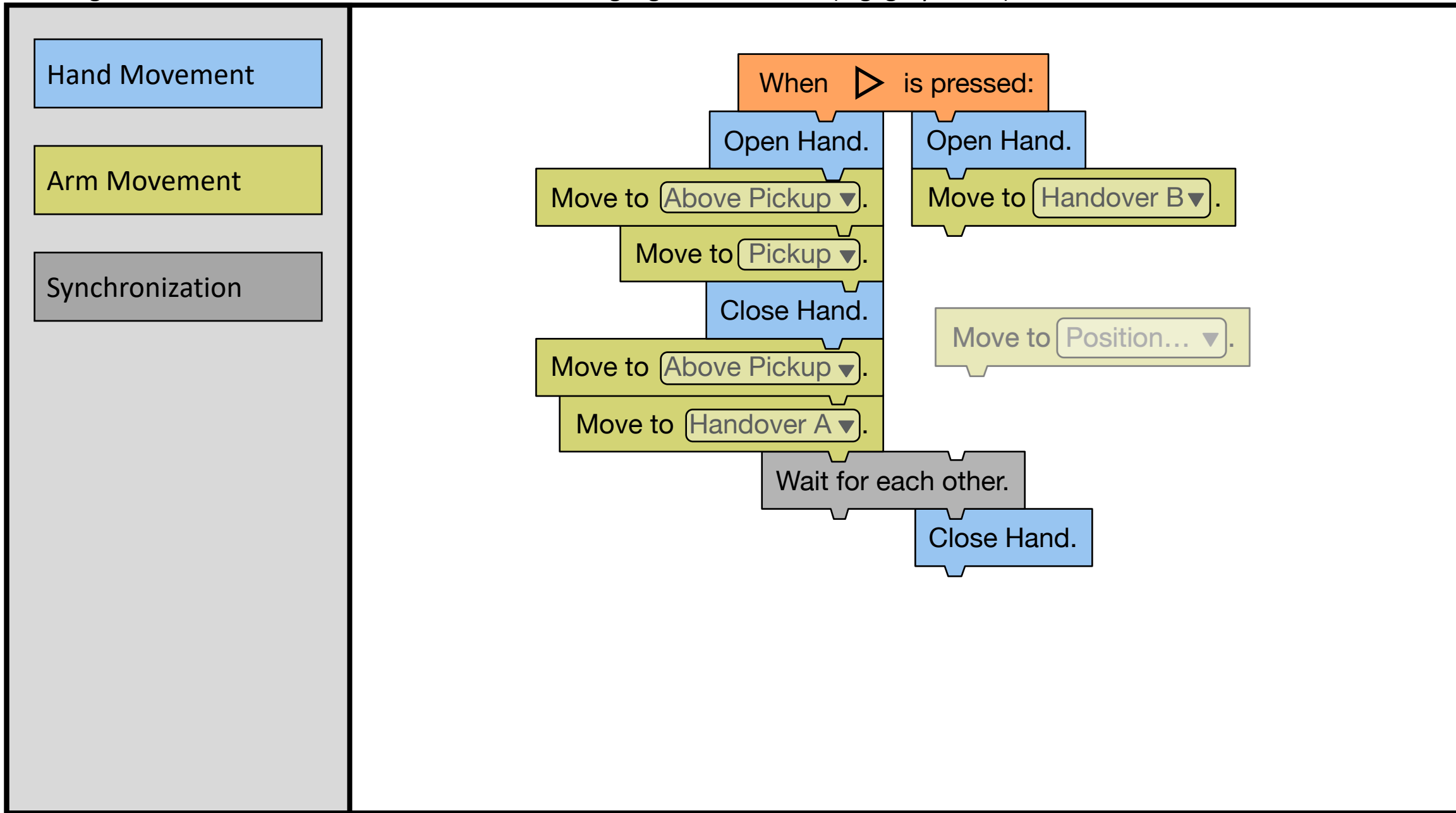Note that as more blocks are placed, there might be gaps on one side of the program. This indicates idle time for this arm.

Hand Movement

Arm Movement ▼

Synchronization

When ▷ is pressed:

Open Hand.

Open Hand.

Move to Above Pickup ▼.

Move to Handover B ▼.

Move to Pickup ▼.

Close Hand.

Move to Above Pickup ▼.

Move to Handover A ▼.
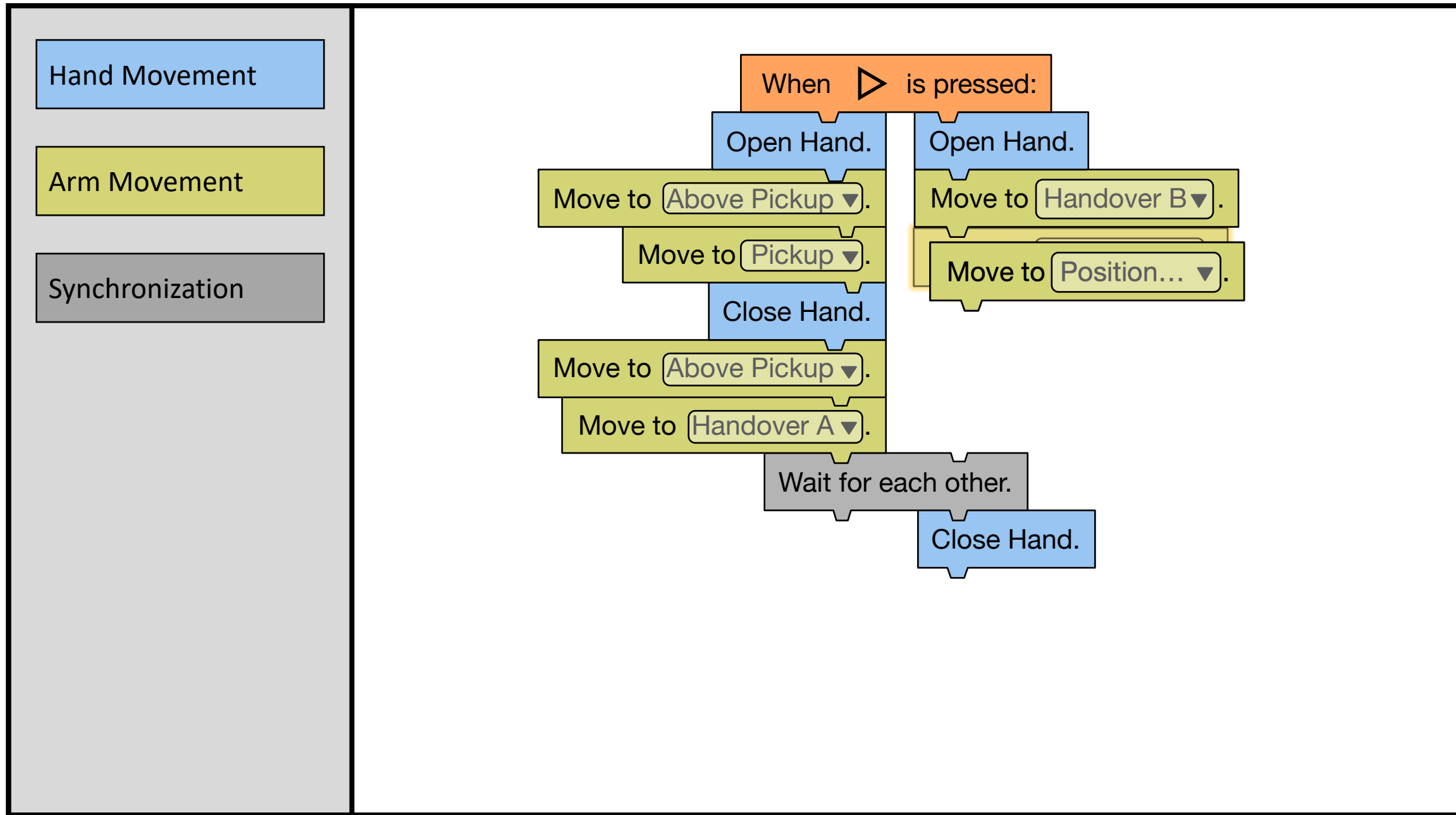
Wait for each other.

Close Hand.

All blocks that belong to a working should be connected to the starter block in some way.
Blockly allows the canvas to contain blocks that are disconnected from the main program (which are the equivalent to dead code).
We might allow this too, but these blocks should be highlighted somehow (e.g. greyed out).

Hand Movement

Arm Movement

Synchronization

When ▷ is pressed:

Open Hand.

Open Hand.

Move to Above Pickup ▼.

Move to Handover B ▼.

Move to Pickup ▼.

Close Hand.

Move to Position… ▼.

Move to Above Pickup ▼.

Move to Handover A ▼.

Wait for each other.

Close Hand.

New blocks can be attached to any other block with an open tab in the program.
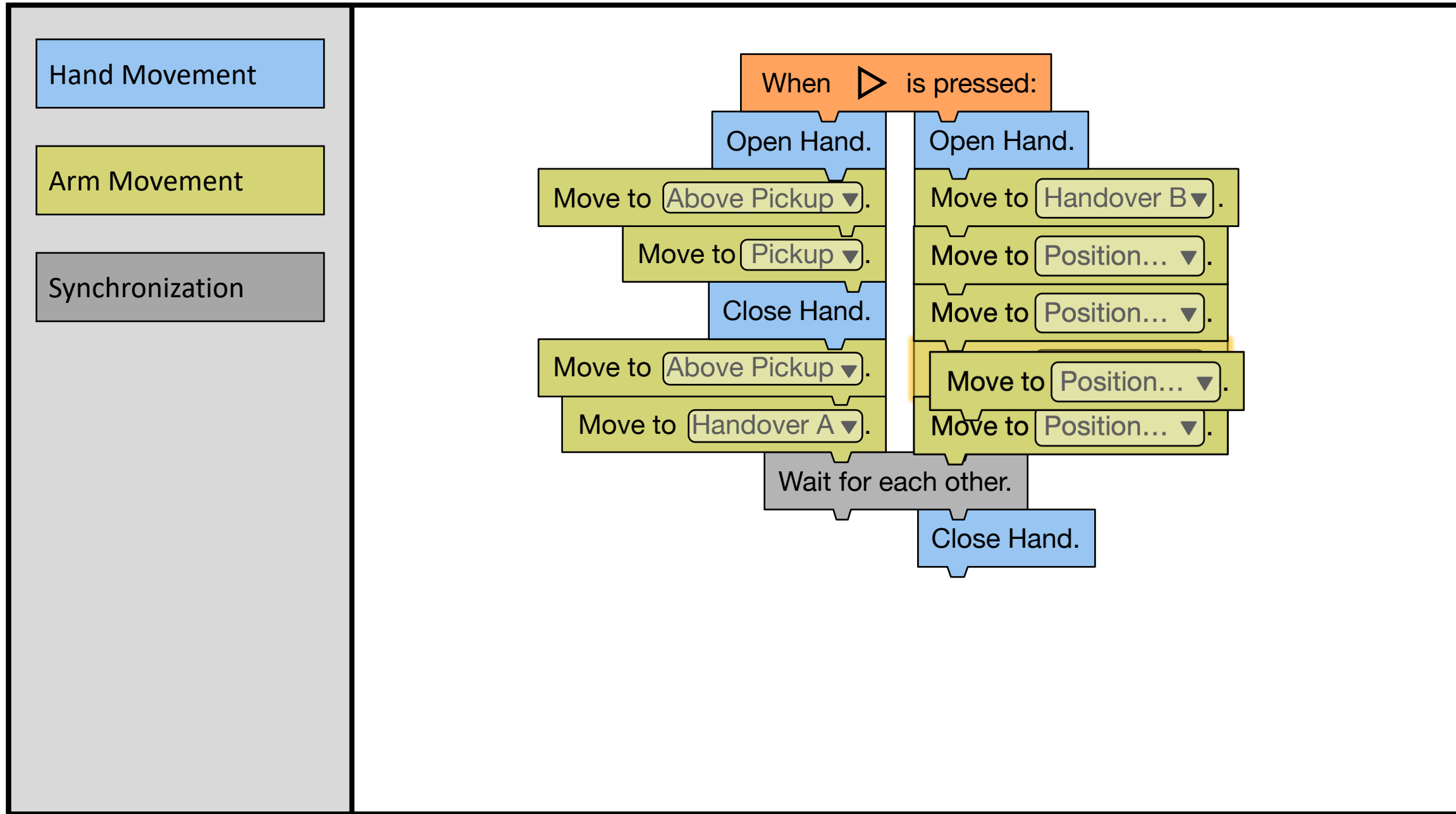
This might result in slightly weird looking scenarios, all of which are fine:
Attaching as a predecessor of an existing block
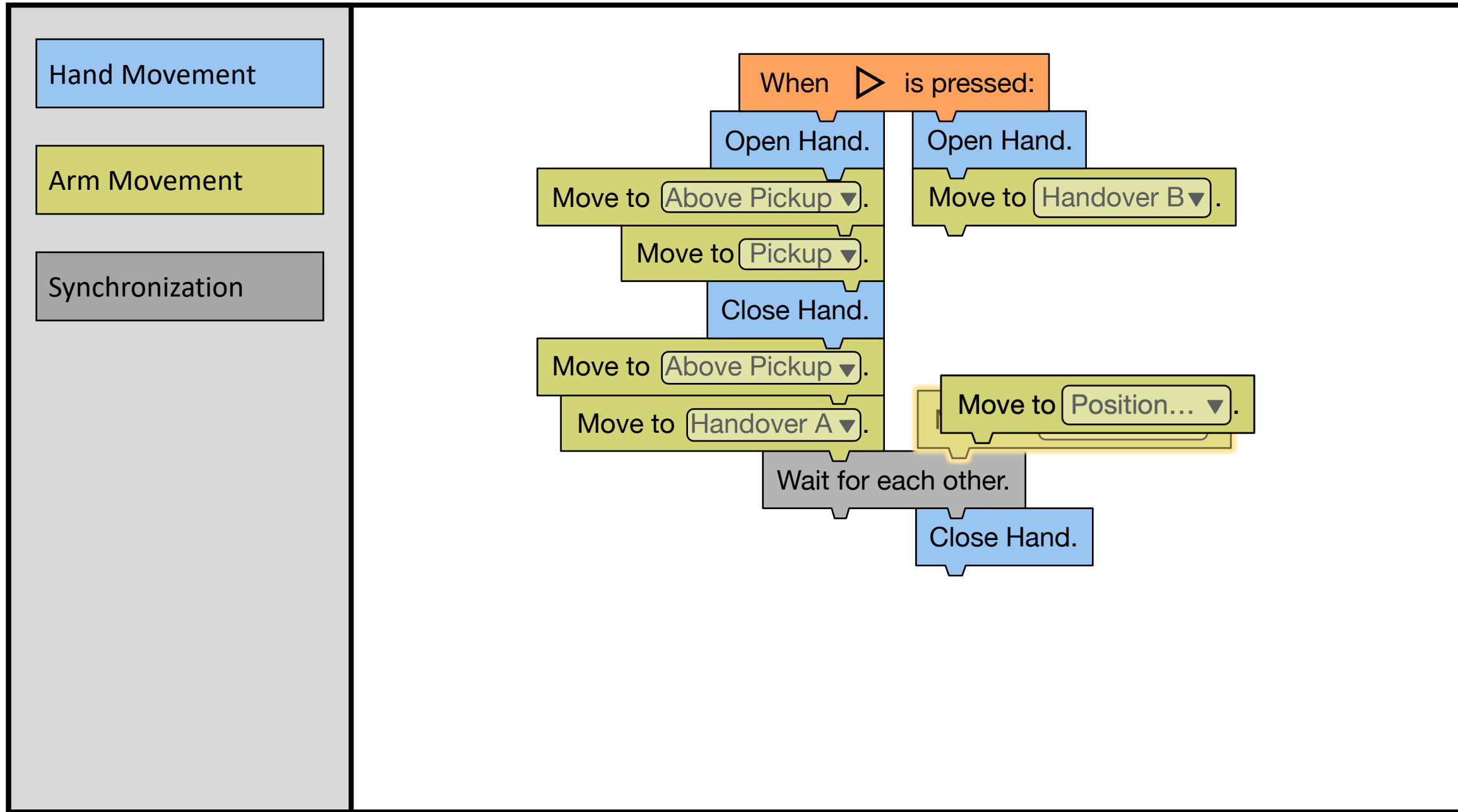
This might result in slightly weird looking scenarios, all of which should be supported:
Filling a gap between blocks

Hand Movement

Arm Movement

Synchronization

When ▷ is pressed:

Open Hand.
Move to [Above Pickup ▼].
Move to [Pickup ▼].
Close Hand.
Move to [Above Pickup ▼].
Move to [Handover A ▼].

Open Hand.
Move to [Handover B ▼].
Move to [Position... ▼].
Move to [Position... ▼].
Move to [Position... ▼].
Move to [Position... ▼].

Wait for each other.

Close Hand.

This might result in slightly weird looking scenarios, all of which should be supported:
Adding a block between two existing blocks, pushing the bottom ones down.
Note: If blocks need to be broken up like here, it should always be right before the next two-armed block.