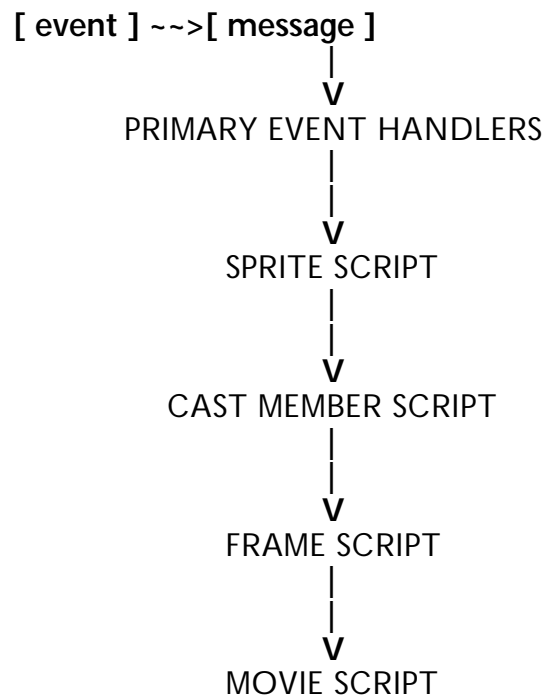


## Lingo Event Hierarchy



Events occur during the movie, causing messages to be sent to scripts in the order shown above.

### Four script types:

1. Movie scripts - largest in scope. Any events or messages not handled by scripts higher up in the hierarchy will be handled by movie scripts. Not attached to any object, and may be called by any other handler in any type of script.
- 2a. Score Frame scripts (behaviors) - assigned to the Script channel in a particular frame of the Score. Similar to movie scripts, but control only the frame(s) they're in. Typical use is an "on exitFrame" handler.
- 2b. Score Sprite scripts (behaviors) - assigned to the a particular Sprite channel in a particular frame or set of frames in the Score. Control only the sprite(s) they're attached to and deal with events specific to that sprite, such as "on mouseUp" or "on mouseEnter".
3. Cast member scripts - attached to specific cast members. Can respond to sprite events or member events that occur to the cast members they are stored in.
4. Parent scripts - used for creating script objects in Parent-Child scripting (object-oriented programming, or OOP). They do nothing until a "new" command is issued, which generates an object which is then controlled by the parent script's handlers.

## Primary Event Handlers:

You can globally intercept Lingo's "primary events" by assigning your own handlers to these events. They all have "script" in their names:

```
the keyUpScript
the keyDownScript
the mouseUpScript
the mouseDownScript
the timeoutScript
```

For example:

```
set the mouseDownScript to "myMouseDown"
```

From then on, any "mouseDown" events will be first handled by myMouseDown.

Keep events from proceeding down the hierarchy with `stopEvent` or `dontPassEvent`.

## Events to know:

startMovie/stopMovie	occur when a Director movie starts/stops - before/after the first/last frame is processed.
prepareMovie	occurs just before startMovie.
enterFrame/exitFrame	occur when the movie enters/exits a frame.
prepareFrame	prepare to leave the frame - occurs just before exitFrame.
beginSprite/endSprite	occur on first/last frame of a sprite.
idle	occurs when no other event occurs during a frame cycle - don't put processing-intensive Lingo in an <code>on idle</code> handler since it will be executed very often.
mouseDown/mouseUp	occur when the mouse is pressed/released.
mouseEnter/mouseLeave	occur when the cursor enters/leaves the boundaries of a sprite to which these scripts are attached.
mouseWithin	occurs repeatedly while the mouse is within the boundaries of a sprite. Avoid processing-intensive Lingo in an <code>on mouseWithin</code> handler since it will be executed very often.
mouseUpOutside	occurs when the mouse is released outside the boundaries of a sprite.
keyDown/keyUp	occur when a key on the keyboard is pressed/released.
timeOut	occurs after a period of inaction by the user. This period may be adjusted by setting the <code>timeoutLength</code> property. Events which reset the <code>timeOut</code> clock are user events - mouseclicks, keystrokes, or mouse movement. The elapsed time since each of these specific events may be checked by using the functions: <code>lastEvent</code> (any user event), <code>lastKey</code> (keystroke), <code>lastRoll</code> (mouse movement), and <code>lastClick</code> (mouse click).