



## How can I control whether *Sherpa* or S–Lang interprets a command?

*Sherpa* can interpret both native *Sherpa/ChIPS* commands and S–Lang statements. Although differences in syntax are generally sufficient to distinguish the two, ambiguous input is possible.

In the example below, the user tries to define a source model *and* a S–Lang variable "src", using the syntax `src = ...` in both cases. The syntactic ambiguity causes problems:

```
sherpa> src = constld[c] # Define a source model
sherpa> show src
c
constld[c] (integrate: on)
  Param  Type      Value      Min      Max      Units
  -----
  1      c0 thawed      1         0 3.4028e+38
sherpa> src = "NGC 1068" # Define the S-Lang variable "src"
sherpa> print(src)
NGC 1068
sherpa> show src
Model not defined.
sherpa> # S-Lang assignment erased the source model definition
```

Clearly, the best solution in this case is to choose a different name for the S–Lang variable. However, it is possible to force an input line to be interpreted as *only* a *Sherpa* command by using the sherpa eval function or *only* a S–Lang statement by using the eval function.

The above example can be corrected by using eval to create the "src" variable:

```
sherpa> src = constld[c]
sherpa> eval("variable src = \"NGC 1068\"")
sherpa> show src
c
constld[c] (integrate: on)
  Param  Type      Value      Min      Max      Units
  -----
  1      c0 thawed      1         0 3.4028e+38
sherpa> print(src)
NGC 1068
```

