# State Diagram for Module persistentSelection

#### **Notation**

- **\$w** is a text or entryPlus window on which **<<Selection>>** events are bound to the handler ::persistentSelection::report.
- The diagram shows the different states of the system, with respect to ownership of the PRIMARY selection, and the contents of the sel tag of \$w.
- Other elements of the system state, and << Selection>> events on windows other than \$w, are not represented here.

### **KEY** to states

- a. States in which \$w owns the PRIMARY selection are in the top row.
- **b**. States in which **PS** (the "persistent store") owns the PRIMARY selection are in the bottom row.
- c. States in which other (another window in this process, or another process) owns the PRIMARY selection are in the middle row.
- **d**. States in which the **sel** tag of **\$w** is non-empty are shaded.
- **e**. The states labeled "**PS** owns ..." could be merged with the corresponding states "**other** owns ...", but when debugging *persistentSelection* it is convenient to consider these states separately.

### **KEY** to event numbers and edges

- 1. sel in \$w changes from non-empty string to a different non-empty string
- 2. sel in \$w changes from non-empty string to empty string
- 3. sel in \$w changes from empty string to non-empty string
- 4. "other" widget claims the PRIMARY selection

Solid edges represent << Selection>> events on window \$w. No such events occur for dashed edges.

# Row indicates the owner of the **PRIMARY selection** \$w, a widget that 2 \$w owns selection \$w owns selection uses module \$w sel is non-empty \$w sel is empty persistentSelection: **TRANSIENT** "other" owns selection "other" owns selection "other" - neither \$w sel is non-empty \$w sel is empty \$w nor PS: **TRANSIENT** PS, the PS owns selection PS owns selection "persistent selection" \$w sel is non-empty \$w sel is empty store: **TRANSIENT**