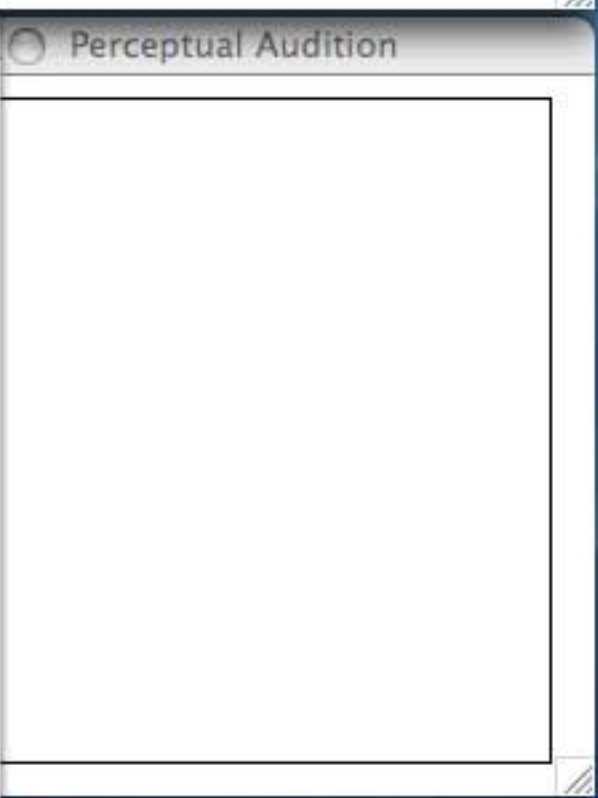


Normal Output

```

1200:Cycle 23:
Goal
  (Goal Monitor Situation)
Step
  (Step Find Undesignated_blip)
Visual
  (Visual Cursor Color Black)
  (Visual Cursor Eccentricity Periphery)
  (Visual Cursor Shape Cursor_Arrow)
  (Visual Cursor Status Visible)
  (Visual Vpsychobj1 Color Gray)
  (Visual Vpsychobj1 Eccentricity Periphery)
  (Visual Vpsychobj1 Shape Empty_Rectangle)
  (Visual Vpsychobj1 Status Visible)
  (Visual Vpsychobj2 Color Gray)
  (Visual Vpsychobj2 Eccentricity Periphery)
  (Visual Vpsychobj2 Shape Empty_Rectangle)
  (Visual Vpsychobj2 Status Visible)
  (Visual Vpsychobj3 Eccentricity Periphery)
  (Visual Vpsychobj3 Status Visible)
  (Visual Vpsychobj4 Eccentricity Periphery)
  (Visual Vpsychobj4 Status Visible)
  (Visual Vpsychobj5 Color Yellow)
  (Visual Vpsychobj5 Eccentricity Periphery)
  (Visual Vpsychobj5 Shape Circle)
  (Visual Vpsychobj5 Status Visible)
Motor
  (Motor Manual Execution Free)
  (Motor Manual Modality Free)
  (Motor Manual Preparation Free)
  (Motor Manual Processor Free)
  (Motor Ocular Execution Free)
  (Motor Ocular Modality Free)
  (Motor Ocular Preparation Free)
  (Motor Ocular Processor Free)
  (Motor Vocal Execution Free)
  (Motor Vocal Modality Free)
  (Motor Vocal Preparation Free)
  (Motor Vocal Processor Free)
*** Rules fired:
*** Fire: Top_Find_Undesignated_blip
  Bindings: ((?blip:Vpsychobj5))
  Add: (Tag Vpsychobj5 Current_track)
*** Fire: Top_Find_Undesignated_blip_control
  
```



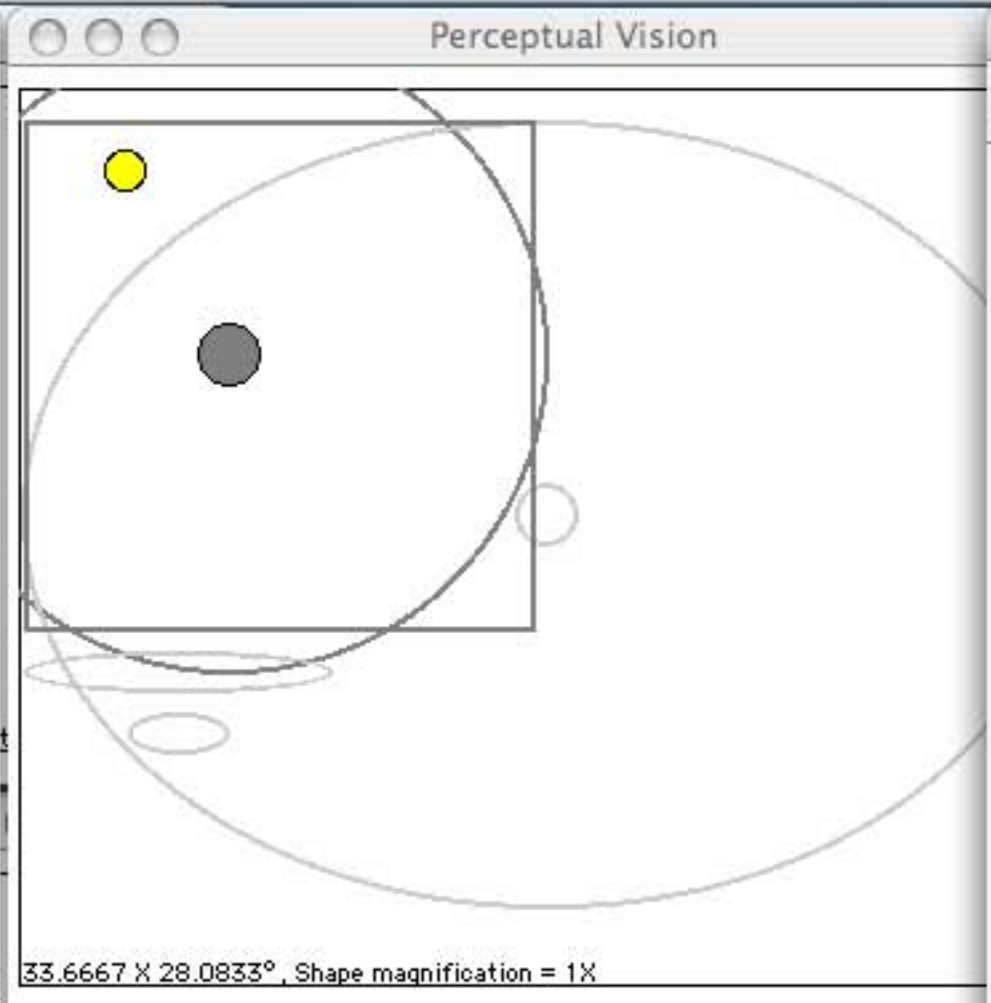
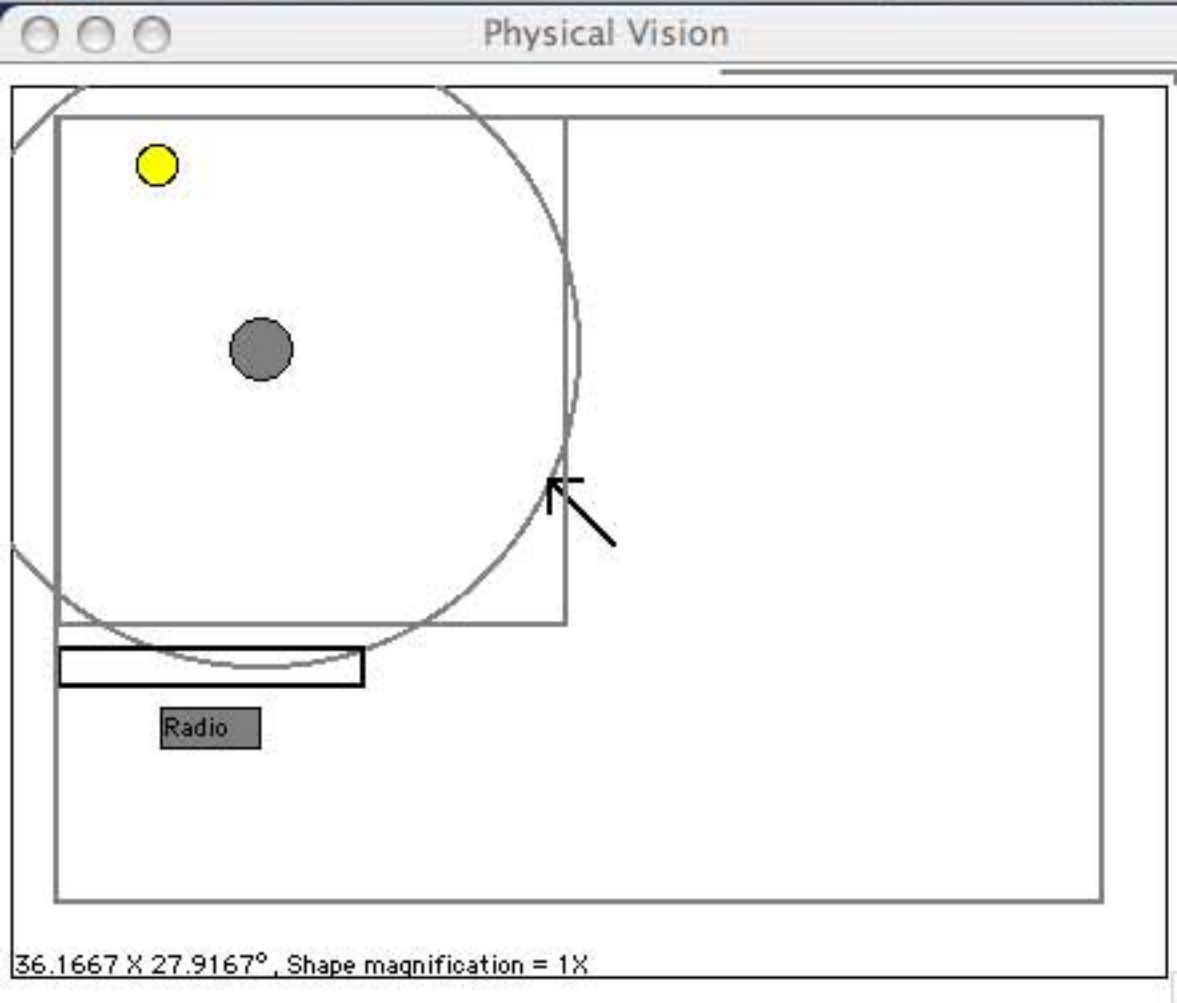
Demo.prs

```

(Path: /Users/kieras/D...odel/Demo.prs)
(Top_Find_Undesignated_blip_control
If
  (
    (Goal Monitor Situation)
    (Step Find Undesignated_blip)
    (Motor Ocular Modality Free)
  )
Then
  (
    (Delete (Step Find Undesignated_blip))
    (Add (Step Check_for Undesignated_blip_chosen))
  )
)
(Top_Find_Undesignated_blip
If
  (
    (Goal Monitor Situation)
    (Step Find Undesignated_blip)
    (Visual ?blip Shape Circle)
    (Visual ?blip Color Yellow)
    (Randomly_choose_one)
  )
Then
  (
    (Add (Tag ?blip Current_track)) // blip we are now working on
  )
)
(Top_Find_Undesignated_success
If
  (
    (Goal Monitor Situation)
    (Step Check_for Undesignated_blip_chosen)
    (Tag ?blip Current_track)
  )
Then
  (
    (Delete (Step Check_for Undesignated_blip_chosen))
    (Add (Step Select Blip))
  )
)
(Top_Find_Undesignated_fail
If
  (
    (Goal Monitor Situation)
    (Step Check_for Undesignated_blip_chosen)
    (Not (Tag ?blip Current_track))
  )
Then
  (
    (Delete (Step Check_for Undesignated_blip_chosen))
    (Add (Step Find Hostile_blip))
  )
)
(Top_Find_Hostile_blip_control
If
  (
    (Goal Monitor Situation)
    (Step Find Hostile_blip)
  )
)

```

Line 1129 Col 5



Normal Output

```

(motor manual processor free)
*** Rules fired:
*** Fire: Select_Track_Point_to_Track
Bindings: ((?object:Vpsychobj5))
Add: (Step Select_Track Click Mouse)
Delete: (Tag Select_Track Vpsychobj5 Object)
Delete: (Step Select_Track Point_to Track)
Motor command: (Ocular Perform Move Vpsychobj5)
Motor command: (Manual Perform Point Vpsychobj5)
1450:Cycle 28:
Goal
(Goal Monitor Situation)
(Goal Select Track)
Step
(Step Select_Track Click Mouse)
(Step Waitfor Select_done)
Tag
(Tag Vpsychobj5 Current_track)
Visual
(Visual Cursor Eccentricity Periphery)
(Visual Cursor Status Visible)
(Visual Vpsychobj1 Eccentricity Periphery)
(Visual Vpsychobj1 Status Visible)
(Visual Vpsychobj2 Color Gray)
(Visual Vpsychobj2 Eccentricity Periphery)
(Visual Vpsychobj2 Shape Empty_Rectangle)
(Visual Vpsychobj2 Status Visible)
(Visual Vpsychobj3 Eccentricity Periphery)
(Visual Vpsychobj3 Status Visible)
(Visual Vpsychobj4 Eccentricity Periphery)
(Visual Vpsychobj4 Status Visible)
(Visual Vpsychobj5 Color Yellow)
(Visual Vpsychobj5 Eccentricity Periphery)
(Visual Vpsychobj5 Shape Circle)

```

```

Demo.prs
Path: /Users/kieras/D...odel/Demo.prs

(Select_Track_Point_to_Track
If
(
(Goal Select Track)
(Step Select_Track Point_to Track)
(Tag Select_Track ?object Object)
(Motor Ocular Modality Free)
(Motor Manual Processor Free)
)
Then
(
(Delete (Tag Select_Track ?object Object))
(Send_to_motor Ocular Perform Move ?object)
(Send_to_motor Manual Perform Point ?object)
(Delete (Step Select_Track Point_to Track))
(Add (Step Select_Track Click Mouse))
))

(Select_Track_Click_Mouse
If
(
(Goal Select Track)
(Step Select_Track Click Mouse)
// (Motor Ocular Modality Free) // wait for the eye to ar
(Motor Manual Processor Free)
)
Then
(
(Send_to_motor Manual Perform Punch B1 Right Index)
(Delete (Step Select_Track Click Mouse))
(Add (Step Select_Track Return_with Goal_accomplished))
))

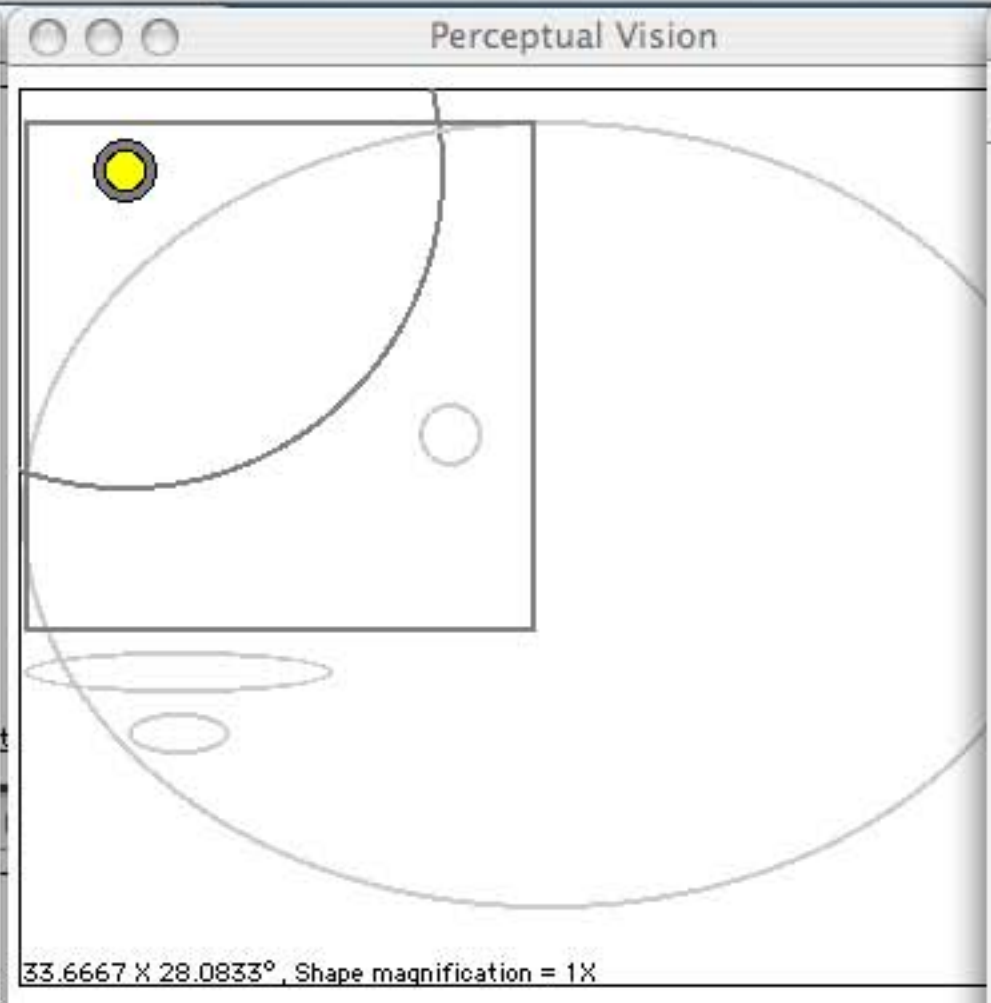
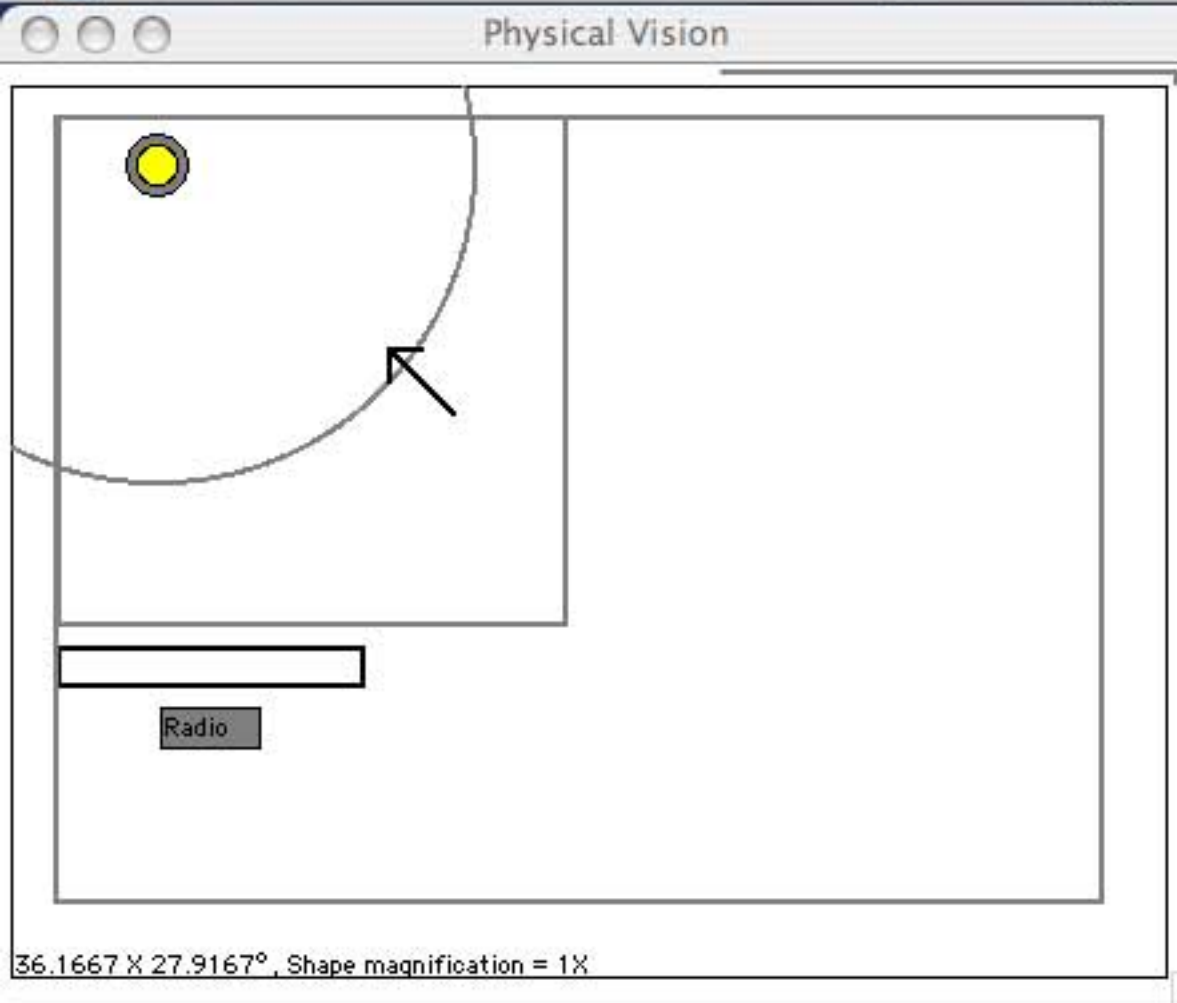
(Select_Track_rga
If
(
(Goal Select Track)
(Step Select_Track Return_with Goal_accomplished)
)
Then
(
(Delete (Step Select_Track Return_with Goal_accomplished))
(Delete (Goal Select Track))
))

// Method for Clicking on a button
// inputs:
// button color (Tag Click_on_Button <color> Color)
// button label (Tag Click_on_Button <label> Label)

(Click_on_button_mfg
If
(
(Goal Click_on Button)
(Not (Step Click_on_Button ??? ???))
)
)

```





Normal Output

```

(Vvisual Vpsychobj1 Status Visible)
(Vvisual Vpsychobj2 Color Gray)
(Vvisual Vpsychobj2 Eccentricity Periphery)
(Vvisual Vpsychobj2 Shape Empty_Rectangle)
(Vvisual Vpsychobj2 Status Visible)
(Vvisual Vpsychobj3 Eccentricity Periphery)
(Vvisual Vpsychobj3 Status Visible)
(Vvisual Vpsychobj4 Eccentricity Periphery)
(Vvisual Vpsychobj4 Status Visible)
(Vvisual Vpsychobj5 Color Yellow)
(Vvisual Vpsychobj5 Eccentricity Fovea)
(Vvisual Vpsychobj5 Shape Circle)
(Vvisual Vpsychobj5 Status Visible)
Motor
(Motor Manual Execution Busy)
(Motor Manual Modality Busy)
(Motor Manual Preparation Busy)
(Motor Manual Processor Busy)
(Motor Ocular Execution Free)
(Motor Ocular Modality Free)
(Motor Ocular Preparation Free)
(Motor Ocular Processor Free)
(Motor Vocal Execution Free)
(Motor Vocal Modality Free)
(Motor Vocal Preparation Free)
(Motor Vocal Processor Free)
*** Rules fired:
*** Fire: Assess_track_srs_unknown
Bindings: (?blip:Vpsychobj5)
Add: (Goal Analyze Unknown_track)
Add: (Step Assess_Track Waitfor Track_done)

```

```

Demo.prs
Path: /Users/kieras/D...odel/Demo.prs

(Assess_track_srs_unknown
If
(
(Goal Assess Track)
(Not (Step Assess_Track ??? ???))
(Tag ?blip Current_track)
(Visual ?blip Color Yellow)
)
)
Then
(
(Add (Goal Analyze Unknown_track))
(Add (Step Assess_Track Waitfor Track_done))
)
)

(Assess_track_srs_hostile
If
(
(Goal Assess Track)
(Not (Step Assess_Track ??? ???))
(Tag ?blip Current_track)
(Visual ?blip Color Red)
)
)
Then
(
(Add (Goal Analyze Hostile_track))
(Add (Step Assess_Track Waitfor Track_done))
)
)

(Assess_track_srs_rga
If
(
(Goal Assess Track)
(Step Assess_Track Waitfor Track_done)
(Not (Goal Analyze ???))
)
)
Then
(
(Delete (Goal Assess Track))
(Delete (Step Assess_Track Waitfor Track_done))
)
)

// Analyze Unknown_Track:
// Select the track, examine its IFF value in the table, and
// corresponding button.
// If it is hostile, assess the threat.

(Analyze_Unknown_track_mfg
If
(
(Goal Analyze Unknown_track)
(Not (Step Analyze_Unknown_track ??? ???))
)
)
Then
(
(Add (Step Analyze_Unknown_track Examine IFF))
)
)

```

Physical Vision

Track Data

TRK	4U
IDB	Inbound
RNG	50
IFF	Hostile
ESM	None

Hostile Warn Engage Close

Radio

36.1667 X 27.9167°, Shape magnification = 1X

Perceptual Vision

33.6667 X 28.0833°, Shape magnification = 1X

Demo.prs

Path: /Users/kieras/D...odel/Demo.prs

```
// object label (Tag Find_Labeled ?label Label) removed when
// outputs:
// object identity (Tag Find_Labeled ?object Object)
// eye moved to object

<Find_Labeled_mfg
If
(
(Goal Find Labeled)
(Not (Step Find_Labeled ??? ???))
)
Then
(
(Add (Step Find_Labeled Lookfor Label))
)
)

<Find_Labeled_Lookfor_Label
If
(
(Goal Find Labeled)
(Step Find_Labeled Lookfor Label)
(Tag Find_Labeled ?label Label)
(Visual ?object Text ?label)
(Visual ?object Shape Empty_Rectangle)
(Motor Ocular Modality Free)
(Randomly_choose_one)
)
Then
(
(Add (Tag Find_Labeled ?object Object)) //result
(Send_to_motor Ocular Perform Move ?object)
(Delete (Step Find_Labeled Lookfor Label))
(Add (Step Find_Labeled Return_with Goal_accomplished))
))

<Find_Labeled_rga
If
(
(Goal Find Labeled)
(Step Find_Labeled Return_with Goal_accomplished)
(Tag Find_Labeled ?label Label)
)
Then
(
(Delete (Tag Find_Labeled ?label Label))
(Delete (Step Find_Labeled Return_with Goal_accomplished))
(Delete (Goal Find Labeled))
)
)

// Method for selecting a track object
// inputs:
// object label (Tag Select_Track ?object Object) removed wh
// outputs:
// eye is on object
// cursor is on object, mouse button has been clicked
```

Line 952 Col 18

Normal Output

```
*** Rules fired:
*** Fire: Find_Labeled_mfg
Add: (Step Find_Labeled Lookfor Label)
2099:CIC Demo device: Time: 0:0:2.099: Eyemovement start: Track_data_area
2100:Cycle 41:
Goal
(Goal Analyze Unknown_track)
(Goal Assess Track)
(Goal Find Field)
(Goal Find Labeled)
(Goal Monitor Situation)
Step
(Step Analyze_Unknown_track Waitfor IFF)
(Step Assess_Track Waitfor Track_done)
(Step Find_Field Waitfor Object)
(Step Find_Labeled Lookfor Label)
(Step Waitfor Assess_done)
Tag
(Tag Find_Labeled IFF Label)
(Tag Vpsychobj5 Current_track)
Visual
(Visual Cursor Color Black)
(Visual Cursor Eccentricity Periphery)
(Visual Cursor Shape Cursor_Arrow)
(Visual Cursor Status Visible)
(Visual Vpsychobj1 Eccentricity Periphery)
(Visual Vpsychobj1 Status Visible)
(Visual Vpsychobj2 Color Gray)
(Visual Vpsychobj2 Eccentricity Periphery)
(Visual Vpsychobj2 Shape Empty_Rectangle)
(Visual Vpsychobj2 Status Visible)
(Visual Vpsychobj3 Eccentricity Periphery)
(Visual Vpsychobj3 Status Visible)
```

resume.pdf

GLEAN Diagram 11 10/98.pict

Grab

Physical Vision

Track Data

TRK 40

IOB Inbound

RNG 50

IFF Hostile

ESM None

Hostile Search Close

Warn Engage

Radio

36.1667 X 27.9167°, Shape magnification = 1X

Perceptual Vision

33.6667 X 28.0833°, Shape magnification = 1X

Demo.prs

Path: /Users/kieras/D...odel/Demo.prs

```
// object label (Tag Find_Labeled ?label Label) removed when
// outputs:
// object identity (Tag Find_Labeled ?object Object)
// eye moved to object

<Find_Labeled_mfg
If
(
(Goal Find Labeled)
(Not (Step Find_Labeled ??? ???))
)
Then
(
(Add (Step Find_Labeled Lookfor Label))
)
)

<Find_Labeled_Lookfor_Label
If
(
(Goal Find Labeled)
(Step Find_Labeled Lookfor Label)
(Tag Find_Labeled ?label Label)
(Visual ?object Text ?label)
(Visual ?object Shape Empty_Rectangle)
(Motor Ocular Modality Free)
(Randomly_choose_one)
)
Then
(
(Add (Tag Find_Labeled ?object Object)) //result
(Send_to_motor Ocular Perform Move ?object)
(Delete (Step Find_Labeled Lookfor Label))
(Add (Step Find_Labeled Return_with Goal_accomplished))
))

<Find_Labeled_rga
If
(
(Goal Find Labeled)
(Step Find_Labeled Return_with Goal_accomplished)
(Tag Find_Labeled ?label Label)
)
Then
(
(Delete (Tag Find_Labeled ?label Label))
(Delete (Step Find_Labeled Return_with Goal_accomplished))
(Delete (Goal Find Labeled))
)
)

// Method for selecting a track object
// inputs:
// object label (Tag Select_Track ?object Object) removed wh
// outputs:
// eye is on object
// cursor is on object, mouse button has been clicked
```

Line 952 Col 18

Normal Output

```
(Visual Vpsychobj5 Color yellow)
(Visual Vpsychobj5 Eccentricity Periphery)
(Visual Vpsychobj5 Shape Circle)
(Visual Vpsychobj5 Status Visible)
(Visual Vpsychobj6 Eccentricity Periphery)
(Visual Vpsychobj6 Left_of Vpsychobj7)
(Visual Vpsychobj6 Shape Empty_Rectangle)
(Visual Vpsychobj6 Status Visible)
(Visual Vpsychobj7 Eccentricity Periphery)
(Visual Vpsychobj7 Right_of Vpsychobj6)
(Visual Vpsychobj7 Shape Empty_Rectangle)
(Visual Vpsychobj7 Status Visible)
(Visual Vpsychobj8 Eccentricity Fovea)
(Visual Vpsychobj8 Left_of Vpsychobj9)
(Visual Vpsychobj8 Shape Empty_Rectangle)
(Visual Vpsychobj8 Status Visible)
(Visual Vpsychobj9 Eccentricity Periphery)
(Visual Vpsychobj9 Right_of Vpsychobj8)
(Visual Vpsychobj9 Shape Empty_Rectangle)
(Visual Vpsychobj9 Status Visible)

Motor
(Motor Manual Execution Free)
(Motor Manual Modality Free)
(Motor Manual Preparation Free)
(Motor Manual Processor Free)
(Motor Ocular Execution Free)
(Motor Ocular Modality Free)
(Motor Ocular Preparation Free)
(Motor Ocular Processor Free)
(Motor Vocal Execution Free)
(Motor Vocal Modality Free)
(Motor Vocal Preparation Free)
(Motor Vocal Processor Free)

No rules fired
```



Physical Vision

Track Data

TRK 4U

IOB Inbound

RNG 50

IFF Hostile

ESM None

Hostile Search Close

Warn Engage

Radio

36.1667 X 27.9167°, Shape magnification = 1X

Perceptual Vision

TRK

IOB

RNG

IFF

ESM

Red Yellow Blue Purple

33.6667 X 28.0833°, Shape magnification = 1X

Demo.prs

Path: /Users/kieras/D...odel/Demo.prs

```

// object label (Tag Find_Labeled ?label Label) removed when
// outputs:
// object identity (Tag Find_Labeled ?object Object)
// eye moved to object

<Find_Labeled_mfg
If
(
(Goal Find Labeled)
(Not (Step Find_Labeled ??? ???))
)
Then
(
(Add (Step Find_Labeled Lookfor Label))
)
)

<Find_Labeled_Lookfor_Label
If
(
(Goal Find Labeled)
(Step Find_Labeled Lookfor Label)
(Tag Find_Labeled ?label Label)
(Visual ?object Text ?label)
(Visual ?object Shape Empty_Rectangle)
(Motor Ocular Modality Free)
(Randomly_choose_one)
)
Then
(
(Add (Tag Find_Labeled ?object Object)) //result
(Send_to_motor Ocular Perform Move ?object)
>Delete (Step Find_Labeled Lookfor Label)
>Add (Step Find_Labeled Return_with Goal_accomplished)
))

<Find_Labeled_rga
If
(
(Goal Find Labeled)
(Step Find_Labeled Return_with Goal_accomplished)
(Tag Find_Labeled ?label Label)
)
Then
(
>Delete (Tag Find_Labeled ?label Label)
>Delete (Step Find_Labeled Return_with Goal_accomplished)
>Delete (Goal Find Labeled)
))

// Method for selecting a track object
// inputs:
// object label (Tag Select_Track ?object Object) removed wh
// outputs:
// eye is on object
// cursor is on object, mouse button has been clicked

```

Line 952 Col 18

Normal Output

```

(Visual Vpsychobj7 Eccentricity Periphery)
(Visual Vpsychobj7 Right_of Vpsychobj6)
(Visual Vpsychobj7 Shape Empty_Rectangle)
(Visual Vpsychobj7 Status Visible)
(Visual Vpsychobj8 Eccentricity Fovea)
(Visual Vpsychobj8 Left_of Vpsychobj9)
(Visual Vpsychobj8 Shape Empty_Rectangle)
(Visual Vpsychobj8 Status Visible)
(Visual Vpsychobj8 Text IOB)
(Visual Vpsychobj9 Eccentricity Periphery)
(Visual Vpsychobj9 Right_of Vpsychobj8)
(Visual Vpsychobj9 Shape Empty_Rectangle)
(Visual Vpsychobj9 Status Visible)

Motor
(Motor Manual Execution Free)
(Motor Manual Modality Free)
(Motor Manual Preparation Free)
(Motor Manual Processor Free)
(Motor Ocular Execution Free)
(Motor Ocular Modality Free)
(Motor Ocular Preparation Free)
(Motor Ocular Processor Free)
(Motor Vocal Execution Free)
(Motor Vocal Modality Free)
(Motor Vocal Preparation Free)
(Motor Vocal Processor Free)

*** Rules fired:
*** Fire: Find_Field_Waitfor_Object
Bindings: ((?field:Vpsychobj13) (?object:Vpsychobj12))
Add: (Tag Find_Field Vpsychobj13 Field)
Add: (Step Find_Field Return_with Goal_accomplished)
Delete: (Tag Find_Labeled Vpsychobj12 Object)
Delete: (Step Find_Field Waitfor Object)
Motor command: (Ocular Perform Move Vpsychobj13)

```



Physical Vision

Track Data

TRK	40
IOB	Inbound
RNG	50
IFF	Hostile
ESM	None

Hostile Friendly Close
Warn Engage

36.1667 X 27.9167°, Shape magnification = 1X

Perceptual Vision

Track Data

TRK	40
IOB	Inbound
RNG	50
IFF	Hostile
ESM	None

Hostile Friendly Close
Warn Engage

33.6667 X 28.0833°, Shape magnification = 1X

Demo.prs

Path: /Users/kieras/D...odel/Demo.prs

```

(Add (Tag Click_on_Button Blue Color))
(Add (Tag Click_on_Button Friendly Label))
(Add (Goal Click_on Button))
(Delete (Step Analyze_Unknown_track Choose Designation))
(Add (Step Analyze_Unknown_track Waitfor Friendly_Designa
))
(Analyze_Unknown_track_Waitfor_Friendly_Designation_done
If
(
(Goal Analyze_Unknown_track)
(Step Analyze_Unknown_track Waitfor Friendly_Designation_
(Not (Goal Click_on Button))
)
Then
(
(Add (Tag Click_on_Button Gray Color))
(Add (Tag Click_on_Button Close Label))
(Add (Goal Click_on Button))
(Delete (Step Analyze_Unknown_track Waitfor Friendly_Desi_
(Add (Step Analyze_Unknown_track Waitfor Close_done))
))
)
)
(Analyze_Unknown_track_Choose_Designation_Hostile
If
(
(Goal Analyze_Unknown_track)
(Step Analyze_Unknown_track Choose Designation)
(Tag Analyze_Unknown_track Hostile IFF )
)
Then
(
(Delete (Tag Analyze_Unknown_track Hostile IFF ))
(Add (Tag Click_on_Button Red Color))
(Add (Tag Click_on_Button Hostile Label))
(Add (Goal Click_on Button))
(Delete (Step Analyze_Unknown_track Choose Designation))
(Add (Step Analyze_Unknown_track Waitfor Hostile_Designat
))
)
)
(Analyze_Unknown_track_Waitfor_Hostile_Designation_done
If
(
(Goal Analyze_Unknown_track)
(Step Analyze_Unknown_track Waitfor Hostile_Designation_d
(Not (Goal Click_on Button))
)
Then
(
// assess whether a threat is present
(Add (Goal Assess Threat))
(Delete (Step Analyze_Unknown_track Waitfor Hostile_Designi
(Add (Step Analyze_Unknown_track Waitfor Assess_Threat_doi
))
)
)
(Analyze_Unknown_track_Waitfor_Assess_Threat_done
If
(

```

Line 287 Col 1

Normal Output

```

(visual vpsychobj7 shape empty_rectangle)
(Visual Vpsychobj7 Status Visible)
(Visual Vpsychobj7 Text 40)
(Visual Vpsychobj8 Eccentricity Periphery)
(Visual Vpsychobj8 Left_of Vpsychobj9)
(Visual Vpsychobj8 Shape Empty_Rectangle)
(Visual Vpsychobj8 Status Visible)
(Visual Vpsychobj8 Text IOB)
(Visual Vpsychobj9 Eccentricity Periphery)
(Visual Vpsychobj9 Right_of Vpsychobj8)
(Visual Vpsychobj9 Shape Empty_Rectangle)
(Visual Vpsychobj9 Status Visible)
(Visual Vpsychobj9 Text Inbound)
Motor
(Motor Manual Execution Free)
(Motor Manual Modality Free)
(Motor Manual Preparation Free)
(Motor Manual Processor Free)
(Motor Ocular Execution Free)
(Motor Ocular Modality Free)
(Motor Ocular Preparation Free)
(Motor Ocular Processor Free)
(Motor Vocal Execution Free)
(Motor Vocal Modality Free)
(Motor Vocal Preparation Free)
(Motor Vocal Processor Free)
*** Rules fired:
*** Fire: Analyze_Unknown_track_Choose_Designation_Hostile
Add: (Tag Click_on_Button Red Color)
Add: (Tag Click_on_Button Hostile Label)
Add: (Goal Click_on Button)
Add: (Step Analyze_Unknown_track Waitfor Hostile_Designation_done)
Delete: (Tag Analyze_Unknown_track Hostile IFF)
Delete: (Step Analyze_Unknown_track Choose Designation)

```

Physical Vision

Track-Data

TRK	40
IOB	Inbound
RNG	50
IFF	Hostile
ESM	None

Hostile Warn Engage Close

Radio

36.1667 X 27.9167°, Shape magnification = 1X

Perceptual Vision

	40
	Inbound
RNG	50
IFF	Hostile
ESM	None

Hostile Warn Engage Close

33.6667 X 28.0833°, Shape magnification = 1X

Demo.prs

Path: /Users/kieras/D...odel/Demo.prs

```

)
// find a button by color first
(Click_on_button_find_button
If
(
  (Goal Click_on Button)
  (Step Click_on_Button Find Button)
  (Tag Click_on_Button ?color Color)
  (Visual ?button Color ?color)
  (Visual ?button Shape Filled_Rectangle)
  (Motor Ocular Modality Free)
  (Motor Manual Processor Free)
  (Randomly_choose_one)
)
Then
(
  (Add (Tag Click_on_Button ?button Button))
  (Send_to_motor Ocular Perform Move ?button)
  (Send_to_motor Manual Perform Point ?button)
  (Delete (Step Click_on_Button Find Button))
  (Add (Step Click_on_Button Check_and_click Button))
))
(Click_on_button_check_and_click
If
(
  (Goal Click_on Button)
  (Step Click_on_Button Check_and_click Button)
  (Tag Click_on_Button ?button Button)
  (Tag Click_on_Button ?label Label)
  (Visual ?button Text ?label)
  (Motor Manual Processor Free)
)
Then
(
  (Send_to_motor Manual Perform Punch B1 Right Index)
  (Delete (Step Click_on_Button Check_and_click Button))
  (Add (Step Click_on_Button Return_with Goal_accomplished))
))
(Click_on_button_RGR
If
(
  (Goal Click_on Button)
  (Step Click_on_Button Return_with Goal_accomplished)
  (Tag Click_on_Button ?color Color)
  (Tag Click_on_Button ?button Button)
  (Tag Click_on_Button ?label Label)
)
Then
(
  (Delete (Tag Click_on_Button ?color Color))
  (Delete (Tag Click_on_Button ?label Label))
  (Delete (Tag Click_on_Button ?button Button))
  (Delete (Step Click_on_Button Return_with Goal_accomplish
  (Delete (Goal Click_on Button)
)
)
)

```

Line 287 Col 1

Normal Output

```

(Motor Ocular Preparation Free)
(Motor Ocular Processor Free)
(Motor Vocal Execution Free)
(Motor Vocal Modality Free)
(Motor Vocal Preparation Free)
(Motor Vocal Processor Free)
*** Rules fired:
*** Fire: Click_on_button_check_and_click
Bindings: ((?button:Vpsychobj18) (?label:Hostile))
Add: (Step Click_on_Button Return_with Goal_accomplished)
Delete: (Step Click_on_Button Check_and_click Button)
Motor command: (Manual Perform Punch B1 Right Index)
3550:Cycle 70:
Goal
(Goal Analyze Unknown_track)
(Goal Assess Track)
(Goal Click_on Button)
(Goal Monitor Situation)
Step
(Step Analyze_Unknown_track Waitfor Hostile_Designation_done)
(Step Assess_Track Waitfor Track_done)
(Step Click_on_Button Return_with Goal_accomplished)
(Step Waitfor Assess_done)
Tag
(Tag Click_on_Button Hostile Label)
(Tag Click_on_Button Red Color)
(Tag Click_on_Button Vpsychobj18 Button)
(Tag Vpsychobj5 Current_track)
Visual
(Visual Cursor Eccentricity Periphery)
(Visual Cursor Status Visible)
(Visual Vpsychobj1 Color Gray)
(Visual Vpsychobj1 Eccentricity Periphery)

```



Physical Vision

Track Data

TRK	40
IOB	Inbound
RNG	50
IFF	Hostile
ESM	None

Hostile Warn Close

Engage

Radio

36.1667 X 27.9167°, Shape magnification = 1X

Perceptual Vision

Track Data

TRK	40
IOB	Inbound
RNG	50
IFF	Hostile
ESM	None

33.6667 X 28.0833°, Shape magnification = 1X

Demo.prs

Path: /Users/kieras/D...odel/Demo.prs

```

// (Add (Tag Assess_Threat 20 Warn_range))
))

// Move eye to the track data area
(Assess_Threat_Examine_IOB
If
(
(Goal Assess Threat)
(Step Assess_Threat Examine IOB)
(Motor Ocular Modality Free)
)
)
Then
(
(Send_to_motor Ocular Perform Move Track_data_area)
(Add (Tag Find_Field IOB Label))
(Add (Goal Find Field))
(Delete (Step Assess_Threat Examine IOB))
(Add (Step Assess_Threat Waitfor IOB))
))

(Assess_Threat_Waitfor_IOB
If
(
(Goal Assess Threat)
(Step Assess_Threat Waitfor IOB)
(Not (Goal Find Field))
(Tag Find_Field ?field Field)
(Visual ?field Text ?IOB)
)
)
Then
(
(Delete (Tag Find_Field ?field Field))
(Add (Tag Assess_Threat ?IOB IOB))
(Delete (Step Assess_Threat Waitfor IOB))
(Add (Step Assess_Threat Decide_for IOB))
))

(Assess_Threat_Decide_for_IOB_no_threat
If
(
(Goal Assess Threat)
(Step Assess_Threat Decide_for IOB)
(Tag Assess_Threat Outbound IOB)
)
)
Then
(
(Delete (Tag Assess_Threat Outbound IOB))
(Delete (Step Assess_Threat Decide_for IOB))
(Add (Step Assess_Threat Return_with Goal_accomplished))
))

(Assess_Threat_Decide_for_IOB_Check_IFF
If
(
(Goal Assess Threat)
(Step Assess_Threat Decide_for IOB)
(Tag Assess_Threat Inbound IOB)
)
)

```

Line 528 Col 5

Normal Output

```

(Visual Vpsychobj7 Right_of Vpsychobj7)
(Visual Vpsychobj7 Shape Empty_Rectangle)
(Visual Vpsychobj7 Status Visible)
(Visual Vpsychobj7 Text 40)
(Visual Vpsychobj8 Eccentricity Periphery)
(Visual Vpsychobj8 Left_of Vpsychobj9)
(Visual Vpsychobj8 Shape Empty_Rectangle)
(Visual Vpsychobj8 Status Visible)
(Visual Vpsychobj8 Text IOB)
(Visual Vpsychobj9 Eccentricity Fovea)
(Visual Vpsychobj9 Right_of Vpsychobj8)
(Visual Vpsychobj9 Shape Empty_Rectangle)
(Visual Vpsychobj9 Status Visible)
(Visual Vpsychobj9 Text Inbound)
Motor
(Motor Manual Execution Free)
(Motor Manual Modality Free)
(Motor Manual Preparation Free)
(Motor Manual Processor Free)
(Motor Ocular Execution Free)
(Motor Ocular Modality Free)
(Motor Ocular Preparation Free)
(Motor Ocular Processor Free)
(Motor Vocal Execution Free)
(Motor Vocal Modality Free)
(Motor Vocal Preparation Free)
(Motor Vocal Processor Free)
*** Rules fired:
*** Fire: Assess_Threat_Waitfor_IOB
Bindings: ((?IOB:Inbound) (?field:Vpsychobj9))
Add: (Tag Assess_Threat Inbound IOB)
Add: (Step Assess_Threat Decide_for IOB)
Delete: (Tag Find_Field Vpsychobj9 Field)
Delete: (Step Assess_Threat Waitfor IOB)

```

Physical Vision

Track Data

TRK	40
IOB	Inbound
RNG	50
IFF	Hostile
ESM	None

Hostile Warn Engage Close

Radio

36.1667 X 27.9167°, Shape magnification = 1X

Perceptual Vision

Track Data

TRK	40
IOB	Inbound
RNG	50
IFF	Hostile
ESM	None

Hostile Warn Engage Close

33.6667 X 28.0833°, Shape magnification = 1X

Demo.prs

```

// (Add (Tag Assess_Threat 20 Warn_range))
))

// Move eye to the track data area
(Assess_Threat_Examine_IOB
If
(
(Goal Assess Threat)
(Step Assess_Threat Examine IOB)
(Motor Ocular Modality Free)
)
)
Then
(
(Send_to_motor Ocular Perform Move Track_data_area)
(Add (Tag Find_Field IOB Label))
(Add (Goal Find Field))
(Delete (Step Assess_Threat Examine IOB))
(Add (Step Assess_Threat Waitfor IOB))
))

(Assess_Threat_Waitfor_IOB
If
(
(Goal Assess Threat)
(Step Assess_Threat Waitfor IOB)
(Not (Goal Find Field))
(Tag Find_Field ?field Field)
(Visual ?field Text ?IOB)
)
)
Then
(
(Delete (Tag Find_Field ?field Field))
(Add (Tag Assess_Threat ?IOB IOB))
(Delete (Step Assess_Threat Waitfor IOB))
(Add (Step Assess_Threat Decide_for IOB))
))

(Assess_Threat_Decide_for_IOB_no_threat
If
(
(Goal Assess Threat)
(Step Assess_Threat Decide_for IOB)
(Tag Assess_Threat Outbound IOB)
)
)
Then
(
(Delete (Tag Assess_Threat Outbound IOB))
(Delete (Step Assess_Threat Decide_for IOB))
(Add (Step Assess_Threat Return_with Goal_accomplished))
))

(Assess_Threat_Decide_for_IOB_Check_IFF
If
(
(Goal Assess Threat)
(Step Assess_Threat Decide_for IOB)
(Tag Assess_Threat Inbound IOB)
)
)

```

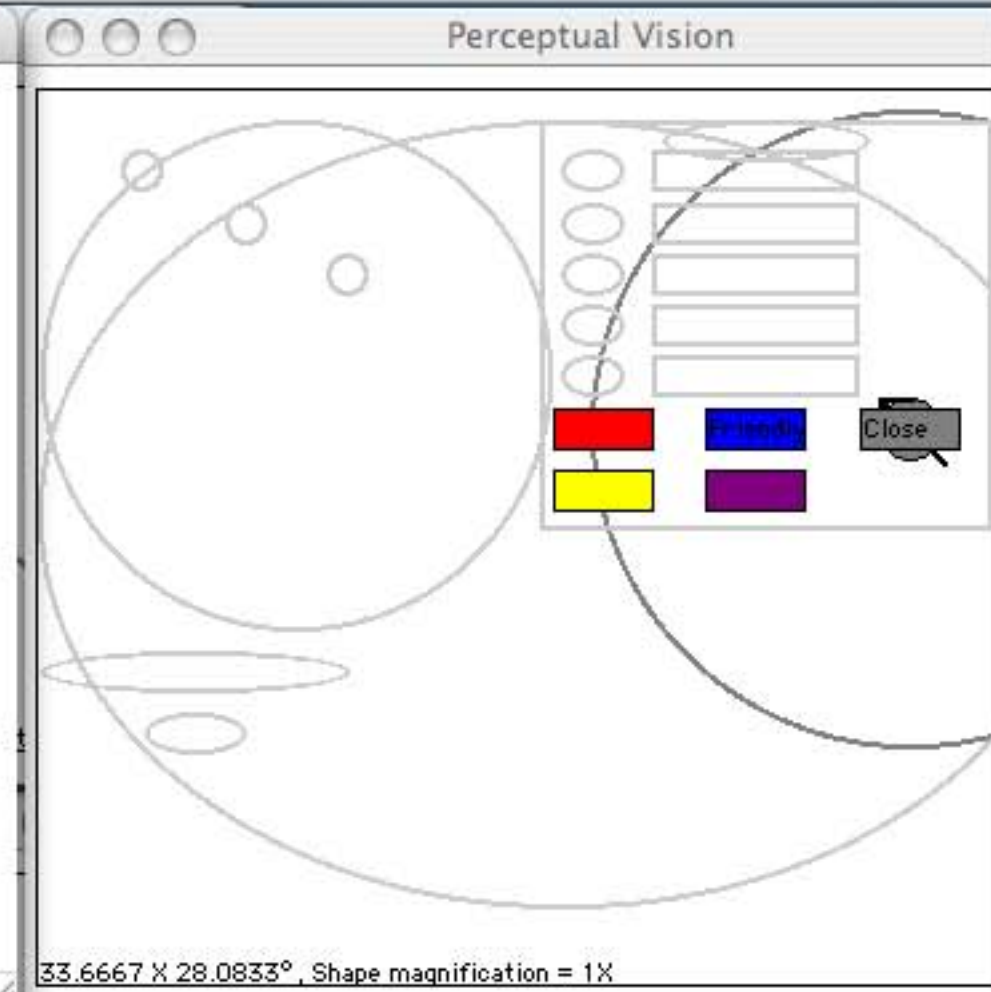
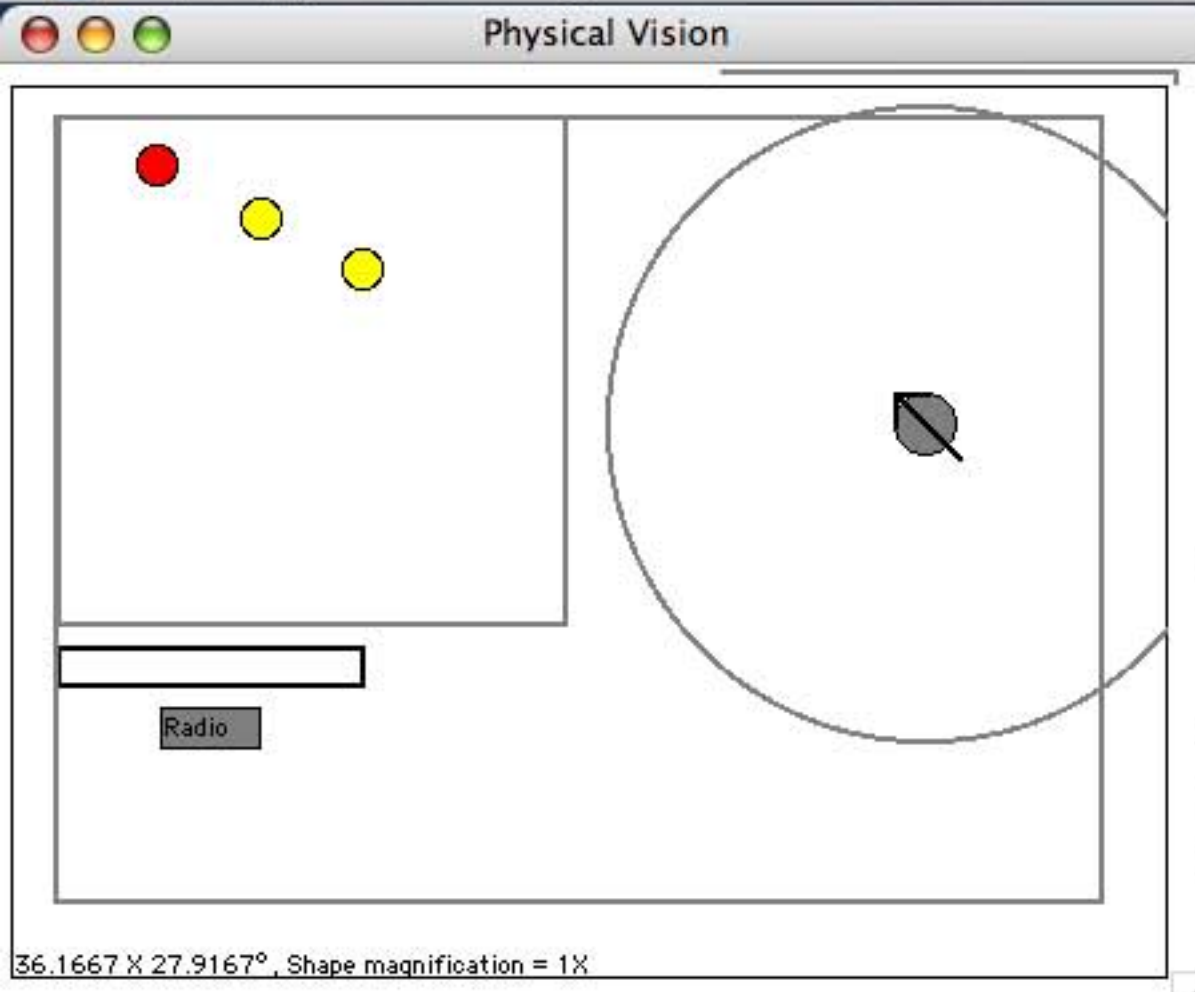
Line 528 Col 5

Normal Output

```

(Visual Vpsychobj7 Eccentricity Periphery)
(Visual Vpsychobj7 Right_of Vpsychobj5)
(Visual Vpsychobj7 Shape Empty_Rectangle)
(Visual Vpsychobj7 Status Visible)
(Visual Vpsychobj7 Text 40)
(Visual Vpsychobj8 Eccentricity Periphery)
(Visual Vpsychobj8 Left_of Vpsychobj9)
(Visual Vpsychobj8 Shape Empty_Rectangle)
(Visual Vpsychobj8 Status Visible)
(Visual Vpsychobj8 Text IOB)
(Visual Vpsychobj9 Eccentricity Periphery)
(Visual Vpsychobj9 Right_of Vpsychobj8)
(Visual Vpsychobj9 Shape Empty_Rectangle)
(Visual Vpsychobj9 Status Visible)
(Visual Vpsychobj9 Text Inbound)
Motor
(Motor Manual Execution Busy)
(Motor Manual Modality Busy)
(Motor Manual Preparation Free)
(Motor Manual Processor Free)
(Motor Ocular Execution Free)
(Motor Ocular Modality Free)
(Motor Ocular Preparation Free)
(Motor Ocular Processor Free)
(Motor Vocal Execution Free)
(Motor Vocal Modality Free)
(Motor Vocal Preparation Free)
(Motor Vocal Processor Free)
*** Rules fired:
*** Fire: Click_on_button_check_and_click
Bindings: ((?button:Vpsychobj20) (?label:Close))
Add: (Step Click_on_Button Return_with Goal_accomplished)
Delete: (Step Click_on_Button Check_and_click Button)
Motor command: (Manual Perform Punch B1 Right Index)

```



Demo.prs

Path: /Users/kieras/D...odel/Demo.prs

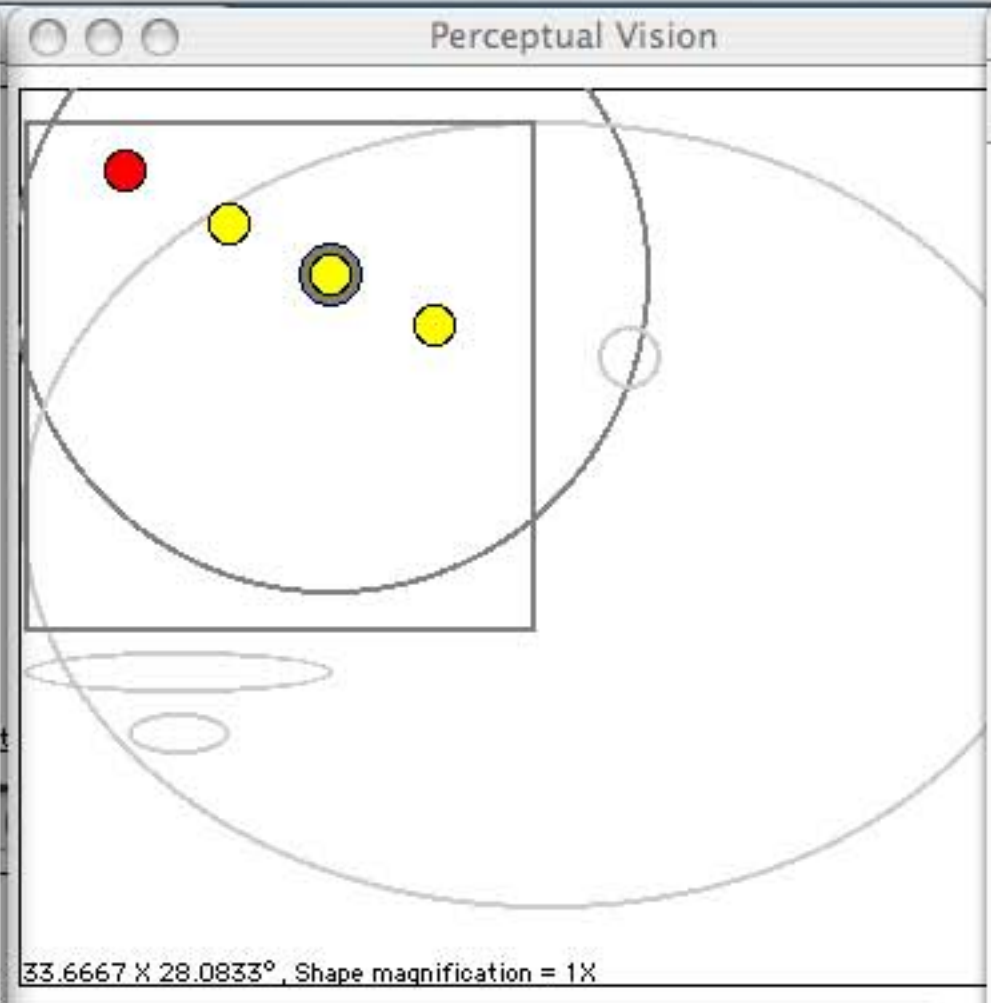
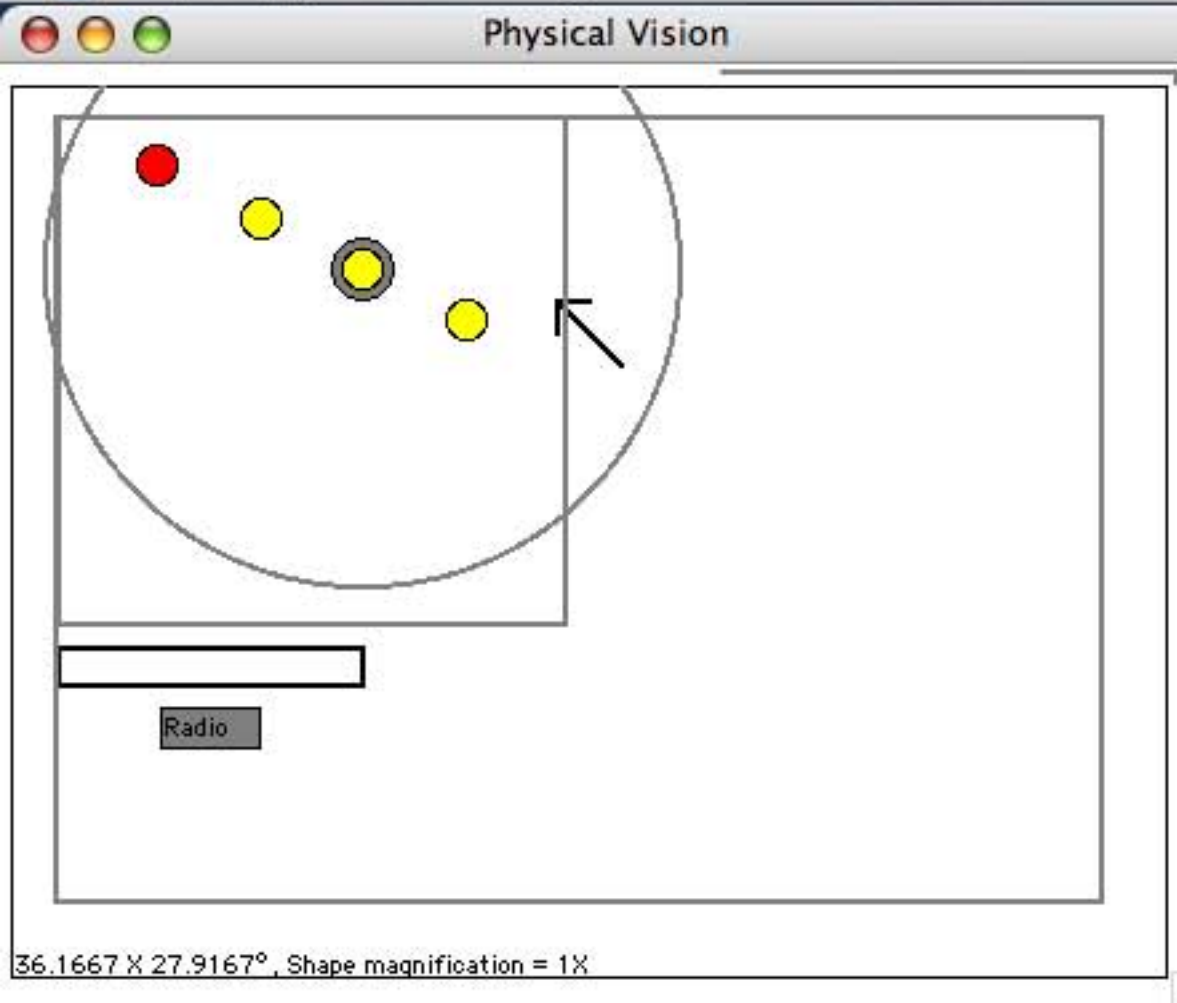
```
// (Add (Tag Assess_Threat 20 Warn_range))
//
// Move eye to the track data area
(Assess_Threat_Examine_10B
If
(
(Goal Assess Threat)
(Step Assess_Threat Examine 10B)
(Motor Ocular Modality Free)
)
Then
(
(Send_to_motor Ocular Perform Move Track_data_area)
(Add (Tag Find_Field 10B Label))
(Add (Goal Find Field))
(Delete (Step Assess_Threat Examine 10B))
(Add (Step Assess_Threat Waitfor 10B))
)
)
(Assess_Threat_Waitfor_10B
If
(
(Goal Assess Threat)
(Step Assess_Threat Waitfor 10B)
(Not (Goal Find Field))
(Tag Find_Field ?field Field)
(Visual ?field Text ?10B)
)
Then
(
(Delete (Tag Find_Field ?field Field))
(Add (Tag Assess_Threat ?10B 10B))
(Delete (Step Assess_Threat Waitfor 10B))
(Add (Step Assess_Threat Decide_for 10B))
)
)
(Assess_Threat_Decide_for_10B_no_threat
If
(
(Goal Assess Threat)
(Step Assess_Threat Decide_for 10B)
(Tag Assess_Threat Outbound 10B)
)
Then
(
(Delete (Tag Assess_Threat Outbound 10B))
(Delete (Step Assess_Threat Decide_for 10B))
(Add (Step Assess_Threat Return_with Goal_accomplished))
)
)
)
(Assess_Threat_Decide_for_10B_Check_1FF
If
(
(Goal Assess Threat)
(Step Assess_Threat Decide_for 10B)
(Tag Assess_Threat Inbound 10B)
)

```

Line 528 Col 5

Normal Output

```
(Visual Vpsychobj4 Status Visible)
(Visual Vpsychobj5 Eccentricity Periphery)
(Visual Vpsychobj5 Status Visible)
(Visual Vpsychobj6 Eccentricity Periphery)
(Visual Vpsychobj6 Status Visible)
(Visual Vpsychobj7 Eccentricity Periphery)
(Visual Vpsychobj7 Right_of Vpsychobj6)
(Visual Vpsychobj7 Shape Empty_Rectangle)
(Visual Vpsychobj7 Status Visible)
(Visual Vpsychobj7 Text 40)
(Visual Vpsychobj8 Eccentricity Periphery)
(Visual Vpsychobj8 Status Visible)
(Visual Vpsychobj9 Eccentricity Periphery)
(Visual Vpsychobj9 Right_of Vpsychobj8)
(Visual Vpsychobj9 Shape Empty_Rectangle)
(Visual Vpsychobj9 Status Visible)
(Visual Vpsychobj9 Text Inbound)
Motor
(Motor Manual Execution Free)
(Motor Manual Modality Free)
(Motor Manual Preparation Free)
(Motor Manual Processor Free)
(Motor Ocular Execution Busy)
(Motor Ocular Modality Busy)
(Motor Ocular Preparation Free)
(Motor Ocular Processor Free)
(Motor Vocal Execution Free)
(Motor Vocal Modality Free)
(Motor Vocal Preparation Free)
(Motor Vocal Processor Free)
No rules fired
6349:CIC Demo device: Time: 0:0:6.349: Eyemovement start: Tacsit_area
6350:Cycle 126: No rules fired
6400:Cycle 127: No rules fired
```



Demo.prs

Path: /Users/kieras/D...odel/Demo.prs

```
// Move eye to the track data area
<Analyze_Unknown_track_Examine_IFF
If
<
  (Goal Analyze_Unknown_track)
  (Step Analyze_Unknown_track Examine IFF)
  (Motor Ocular Modality Free)
)
Then
<
  (Send_to_motor Ocular Perform Move Track_data_area)
  (Add (Tag Find_Field IFF Label))
  (Add (Goal Find Field))
  (Delete (Step Analyze_Unknown_track Examine IFF))
  (Add (Step Analyze_Unknown_track Waitfor IFF))
))
<Analyze_Unknown_track_Waitfor_IFF
If
<
  (Goal Analyze_Unknown_track)
  (Step Analyze_Unknown_track Waitfor IFF)
  (Not (Goal Find Field))
  (Tag Find_Field ?field Field)
  (Visual ?field Text ?IFF)
)
Then
<
  (Delete (Tag Find_Field ?field Field))
  (Add (Tag Analyze_Unknown_track ?IFF IFF))
  (Delete (Step Analyze_Unknown_track Waitfor IFF))
  (Add (Step Analyze_Unknown_track Choose Designation))
))
<Analyze_Unknown_track_Choose_Designation_Friendly
If
<
  (Goal Analyze_Unknown_track)
  (Step Analyze_Unknown_track Choose Designation)
  (Tag Analyze_Unknown_track Friendly IFF)
)
Then
<
  (Delete (Tag Analyze_Unknown_track Friendly IFF))
  (Add (Tag Click_on_Button Blue Color))
  (Add (Tag Click_on_Button Friendly Label))
  (Add (Goal Click_on Button))
  (Delete (Step Analyze_Unknown_track Choose Designation))
  (Add (Step Analyze_Unknown_track Waitfor Friendly_Designa
))
<Analyze_Unknown_track_Waitfor_Friendly_Designation_done
If
<
  (Goal Analyze_Unknown_track)
  (Step Analyze_Unknown_track Waitfor Friendly_Designation_
  (Not (Goal Click_on Button))
```

Line 528 Col 5

Normal Output

```
(Visual Vpsychobj24 Shape Circle)
(Visual Vpsychobj24 Status Visible)
(Visual Vpsychobj25 Color Yellow)
(Visual Vpsychobj25 Eccentricity Periphery)
(Visual Vpsychobj25 Shape Circle)
(Visual Vpsychobj25 Status Visible)
(Visual Vpsychobj3 Eccentricity Periphery)
(Visual Vpsychobj3 Status Visible)
(Visual Vpsychobj4 Eccentricity Periphery)
(Visual Vpsychobj4 Status Visible)
(Visual Vpsychobj5 Color Red)
(Visual Vpsychobj5 Eccentricity Periphery)
(Visual Vpsychobj5 Shape Circle)
(Visual Vpsychobj5 Status Visible)
Motor
(Motor Manual Execution Busy)
(Motor Manual Modality Busy)
(Motor Manual Preparation Free)
(Motor Manual Processor Busy)
(Motor Ocular Execution Free)
(Motor Ocular Modality Free)
(Motor Ocular Preparation Free)
(Motor Ocular Processor Free)
(Motor Vocal Execution Free)
(Motor Vocal Modality Free)
(Motor Vocal Preparation Free)
(Motor Vocal Processor Free)
*** Rules fired:
*** Fire: Analyze_Unknown_track_Examine_IFF
Add: (Tag Find_Field IFF Label)
Add: (Goal Find Field)
Add: (Step Analyze_Unknown_track Waitfor IFF)
Delete: (Step Analyze_Unknown_track Examine IFF)
Motor command: (Ocular Perform Move Track_data_area)
```