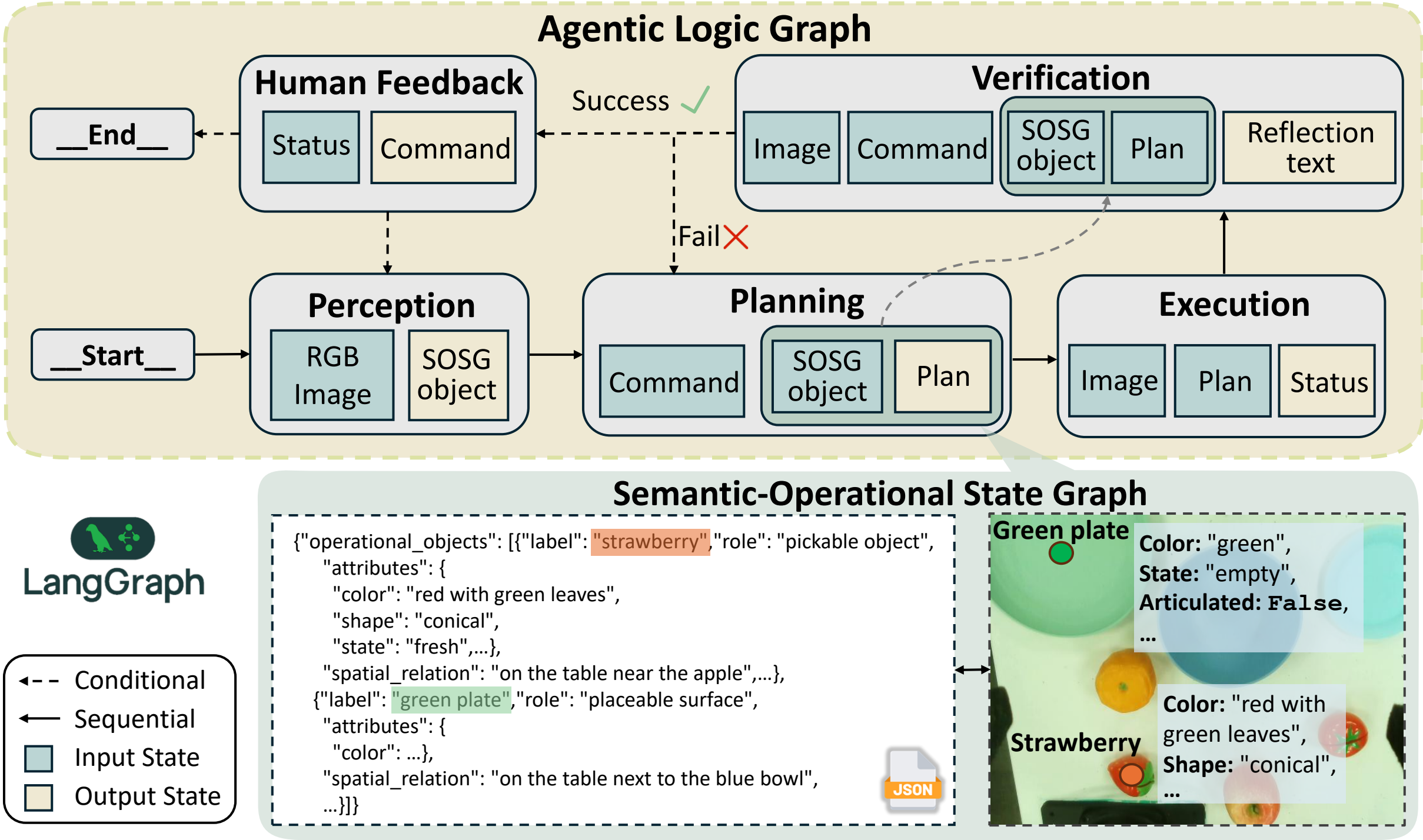

Agentic Logic Graph
Human Feedback
Status
Command
__End__
Success
Verification
Image
Command
SOSG object
Plan
Reflection text
Fail
__Start__
Perception
RGB Image
SOSG object
Planning
Command
SOSG object
Plan
Execution
Image
Plan
Status
LangGraph
Conditional
Sequential
Input State
Output State
Semantic-Operational State Graph
{"operational_objects": [{"label": "strawberry","role": "pickable object",
"attributes": {
"color": "red with green leaves",
"shape": "conical",
"state": "fresh",...},
"spatial_relation": "on the table near the apple",...},
{"label": "green plate","role": "placeable surface",
"attributes": {
"color": ...},
"spatial_relation": "on the table next to the blue bowl",
...}]}
JSON
Green plate
Color: "green",
State: "empty",
Articulated: False,
...
Strawberry
Color: "red with green leaves",
Shape: "conical",
...