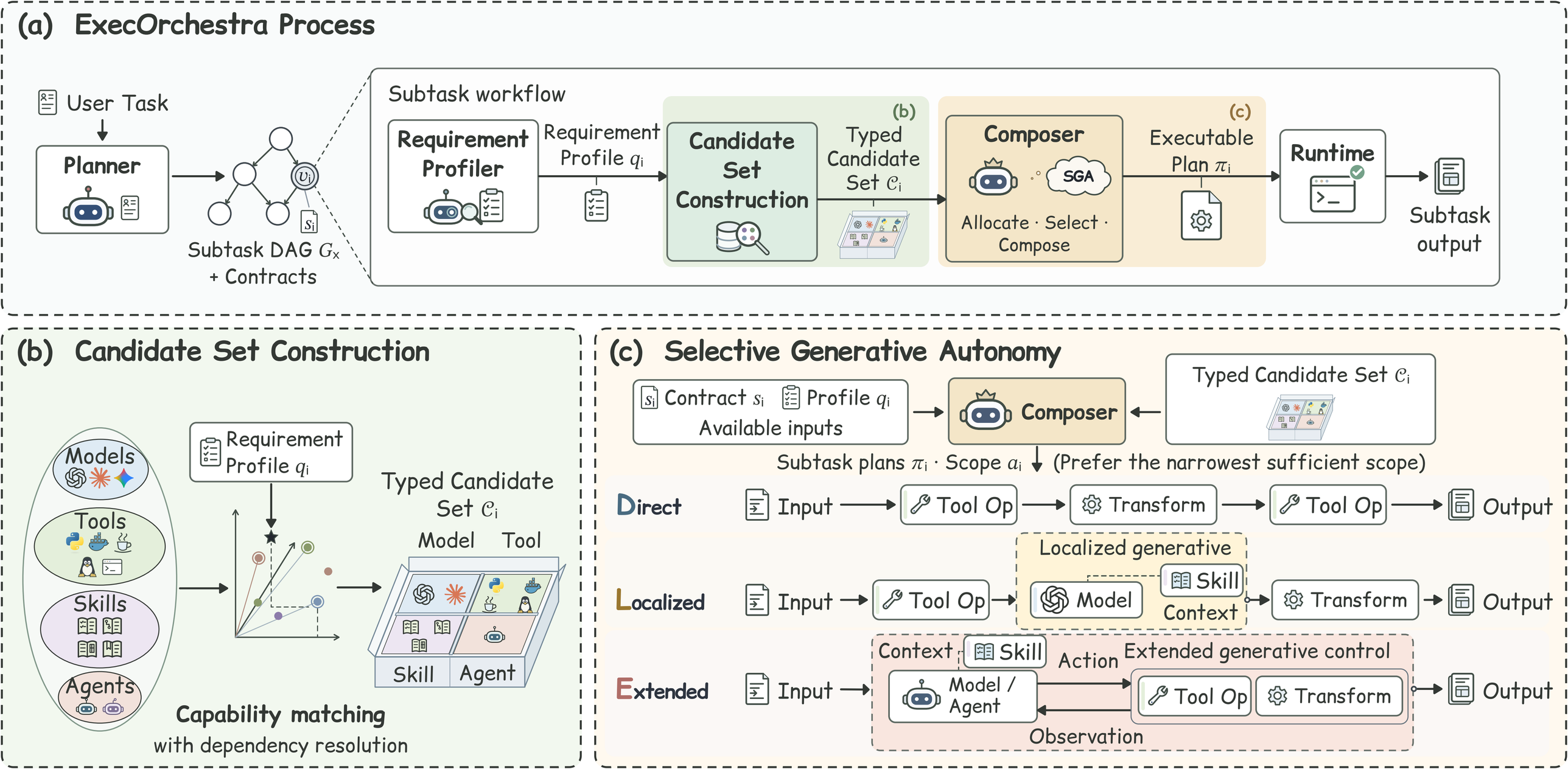

(a) ExecOrchestra Process
User Task
Planner
Subtask DAG G_x + Contracts
Subtask workflow
Requirement Profiler
Requirement Profile q_i
Candidate Set Construction
(b)
Typed Candidate Set $\mathcal{C}_i$
Composer
SGA
Allocate · Select · Compose
(c)
Executable Plan π_i
Runtime
Subtask output
(b) Candidate Set Construction
Models
Tools
Skills
Agents
Requirement Profile q_i
Typed Candidate Set $\mathcal{C}_i$
Model
Tool
Skill
Agent
Capability matching
with dependency resolution
(c) Selective Generative Autonomy
Contract s_i
Profile q_i
Available inputs
Composer
Typed Candidate Set $\mathcal{C}_i$
Subtask plans π_i · Scope a_i
(Prefer the narrowest sufficient scope)
Direct
Input
Tool Op
Transform
Tool Op
Output
Localized
Input
Tool Op
Localized generative
Model
Skill
Context
Transform
Output
Extended
Input
Context
Skill
Action
Extended generative control
Model / Agent
Tool Op
Transform
Observation
Output