

Formal Definition			Type	Example / Meaning	%
<b>Turn (</b>			action	<i>used to change body/view orientation</i>	0.41
t	direction = [		list[1]		0.67
	Left		value	<i>turn <u>left</u></i>	
	Right		value	<i>turn <u>right</u></i>	
	Front		value	<i>turn <u>front</u> == go straight (inherited)</i>	
	Back		value	<i>turn <u>back</u></i>	
	]				
t	face =				0.32
	Face()		action	<i><u>turn to face the red carpet</u></i>	
wt	location =				0.14
	Travel()		action	<i><u>at the stone floor, turn right</u></i>	
	view =		enum		0.06
	True (omit for False)		value	<i><u>turn only the view to verify something</u></i>	
t/wt	precond =		action		0.04
tt	Face()		action	<i><u>with your back to the wall, turn right</u></i>	
wt	Travel()		action	<i><u>when the hall ends, turn right</u></i>	
tw	postcond =				0.01
	Travel()		action	<i><u>go right onto the pink hallway</u></i>	
)					
<b>Travel (</b>			action	<i>used to move the agent in the environment</i>	0.64
w	until =				0.62
	Verify()		action	<i><u>go to the yellow-tiled hall</u></i>	
w	distance = [		list[1]		0.42
	Distance()		description	<i><u>go forward two segments</u></i>	
	]				
tw	face =				0.24
	Face()		action	<i><u>go down the grassy hallway</u></i>	
w	past =				0.05
	Verify()		action	<i><u>go forward, passing the chair</u></i>	
w	follow =				0.04
	Follow()		sub-task	<i><u>follow the yellow path</u></i>	
ww	location =				0.01
	Travel()		action	<i><u>at the lamp, go straight</u></i>	
)					
<b>Distance (</b>			description	<i>used to represent distances</i>	
	count =				0.88
	[0-9]+		integer	<i>walk forward <u>twice</u></i>	
	distUnit =				0.08
	Verify()		action	<i>move one <u>block</u></i>	
)					

<b>Verify (</b>			action	<i>used to compare descriptions and observations</i>	0.97
v	desc = [		list[N]		0.92
		Thing()	description	<i>when you come to <u>a red brick path</u></i>	
	]				
w	goal =				0.06
		DeclareGoal()	sub-task	<i><u>that is your destination</u></i>	
w	dist =				0.01
		Distance()	description	<i><u>one segment before the chair</u></i>	
)					
<b>Face (</b>			action	<i>used to orient the agent wrt the environment</i>	0.34
t	faced =				1.00
		Verify()	action	<i>go <u>towards</u> the easel</i>	
t	direction = [		list[1]		0.28
		Left	value	<i>go straight, <u>towards</u> the chair</i>	
		Right	value	<i><u>face</u> the hallway on your <u>right</u></i>	
		Front	value	<i><u>face</u> the hallway on your <u>left</u></i>	
		Back	value	<i><u>face</u> the hallway <u>behind</u> you</i>	
	]				
)					
<b>Find (</b>			action	<i>used to give non-localized instructions</i>	0.01
	until =				1.00
		Verify()	action	<i><u>at the intersection</u> between two pink hallways</i>	
)					
<b>Follow (</b>			sub-task	<i>used to trace a path through the environment</i>	
	until =				0.63
		Verify()	action	<i><u>follow</u> the brown floored hallway to the chair</i>	
)					
<b>DeclareGoal (</b>			sub-task	<i>used to confirm the destination</i>	
	cond =				0.94
		Travel()	action	<i>the office 254 is <u>down this hallway</u></i>	
	goal = [		list[1]		0.88
		String	text	<i>the destination identifier, i.e. 'office 254'</i>	
	]				
)					
<b>Thing (</b>			description	<i>used to represent entities in the environment</i>	
	type =		enum		1.00
		TypeObj	value	<i>the <u>chair</u></i>	
		TypePath	value	<i>the pink <u>floor</u></i>	
		TypeStruct	value	<i>this <u>hallway</u></i>	
		TypeRegion	value	<i>the <u>flowered floored area</u></i>	

	value =		enum		1.00
		LinearStructure			
	P	Path	value	<i>the black hallway</i>	
	S	End	value	<i>the end of the blue carpet</i>	
	O	Wall	value	<i>the wall on your left</i>	
		Object			
	O	GenChair	value	<i>the <u>chair</u></i>	
	O	Hatrack	value	<i>the <u>hatrack</u></i>	
	O	Lamp	value	<i>the <u>lamp</u></i>	
	O	Easel	value	<i>the <u>easel</u></i>	
	O	Sofa	value	<i>the <u>bench</u></i>	
	O	Barstool	value	<i>the <u>stool</u></i>	
	O	Furniture	value	<i>between the two pieces of <u>furniture</u></i>	
		AreaStructure			
	S	Intersection	value	<i>the <u>intersection</u> containing the easel</i>	
	S	Corner	value	<i>move to the <u>corner</u></i>	
	S	DeadEnd	value	<i>make the first right into a <u>dead end</u></i>	
	S	Block	value	<i>turn right and move one <u>block</u></i>	
		Picture			
	O	Butterfly	value	<i>towards the <u>butterflies</u> on the wall</i>	
	O	Eiffel	value	<i><u>the towers</u> on both sides of the walls</i>	
	O	Fish	value	<i>the yellow halls with <u>fish</u> on the walls</i>	
	O	Pic	value	<i>generic picture</i>	
		Texture			
	O	Rose	value		
	O	Wood	value		
	O	Grass	value		
	O	Cement	value		
	O	BlueTile	value		
	O	Brick	value		
	O	Stone	value		
	O	Honeycomb	value		
	O	Gray	value	<i>alias for [Cement, Stone]</i>	
	O	Greenish	value	<i>alias for [Grass, Honeycomb]</i>	
	O	Brown	value	<i>alias for [Brick, Wood]</i>	
	O	Dark	value	<i>alias for [Stone, BlueTile, Wood, Brick]</i>	
	O	Flooring	value	<i>generic flooring pattern</i>	
	dist =				0.82
		Immediate	value		
		Near	value		
		Far	value		
	side = [		list[1]		0.67
		Left	value	<i>the chair on your <u>left</u></i>	
		Right	value	<i>the chair on your <u>right</u></i>	

		Front	value	<i>the chair <u>in front</u> of you</i>	
		Back	value	<i>the chair <u>behind</u> you</i>	
		At	value	<i>go past the lamp (no side)</i>	
		Sides	value	<i>there should be butterfly <u>images</u> on the walls</i>	
	]				
	Appear = [		list[N]		0.33
		Rose	value		
		Wood	value		
		Grass	value		
		Cement	value		
		BlueTile	value		
		Brick	value		
		Stone	value		
		Honeycomb	value		
		Gray	value	<i>alias for [Cement, Stone]</i>	
		Greenish	value	<i>alias for [Grass, Honeycomb]</i>	
		Brown	value	<i>alias for [Brick, Wood]</i>	
		Dark	value	<i>alias for [Stone, BlueTile, Wood, Brick]</i>	
		Flooring	value	<i>generic flooring pattern</i>	
	]				
	Part = [		list[N]		0.14
		Thing()	description	<i>the intersection <u>with a</u> bare concrete hall</i>	
	]				
	Detail = [		list[N]		0.07
		Thing()	description	<i>the intersection <u>containing</u> the hatrack</i>	
	]				
	Structural = [		list[1]		0.02
		T_Int	value	<i>you will reach <u>a</u> 'T' intersection</i>	
		Long	value	<i>the <u>longer</u> end of the hallway</i>	
		Short	value	<i>the <u>shorter</u> end of the hall</i>	
	]				
	Order_adj = [		list[1]		0.02
		[0-9]+	integer	<i>move to the <u>second</u> alley</i>	
	]				
	On = [		list[N]		0.02
		Thing()	description	<i>the picture <u>on</u> the wall</i>	
	]				
	Count = [		list[1]		0.02
		[0-9]+	integer	<i>there will be <u>two</u> chairs</i>	
	]				
	Past = [		list[N]		0.01
		Thing()	description	<i>the lamp <u>past</u> the chair</i>	
	]				
)					