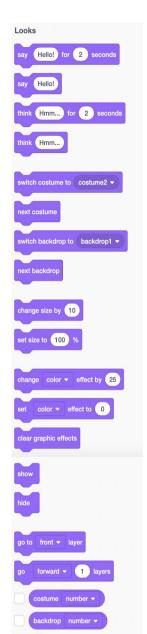
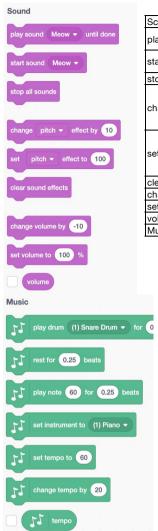


Scratch	Scratch Values	Go+	Go+ Values	Note
	N =	step N	N =	
move N steps	distance	move N	distance	step configurable walking animation
turnRight N degrees	N = degree	turn X changeHeading N	X = degree   Left   Right   *TurningInfo	turn configurable turn animation turn "TurningInfo can make the sprite rotate with another sprite, similar to the effect of a tortoise carrying a monkey
turnLeft N degrees	N = degree	turn -N changeHeading -N		, ,
go to O	O = random position   mouse-pointer   SpriteName	goto O	O = Random   Mouse   SpriteName   SpriteObj	
go to x: X, y: Y	X, Y = coordinate	setXYpos X, Y	X, Y = coordinate	
glide N secs to O	N = second O = random position   mouse-pointer   SpriteName	glide O, N	N = second O = Random   Mouse   SpriteName   SpriteObj	
glide N secs to x: X, y: Y	N = second X, Y = coordinate	glide X, Y, N	N = second X, Y = coordinate	
point in direction N	N = degree	turnTo N setHeading N	N = degree	turnTo configurable turn animation
point towards O	O = mouse-pointer   SpriteName	turnTo O	O = degree   Left   Right   Up   Down   Mouse   SpriteName   SpriteObj	turnTo configurable turn animation
change x by Dx	Dx = coordinate	changeXpos Dx	Dx = coordinate	
set x to X	X = coordinate	setXpos X	X = coordinate	
change y by Dy	Dy = coordinate	changeYpos Dy	Dy = coordinate	
set y to Y	Y = coordinate	setYpos Y	Y = coordinate	
-		changeXYpos Dx, Dy	Dx, Dy = coordinate	
if on edge, bounce		bounceOffEdge		
set rotation style S	S =  left-right    don't rotate    all round	setRotationStyle S	S = LeftRight   None   Normal	
x position		xpos		
y position		ypos		
direction		heading		
-		costumeWidth		
-		costumeHeight		
-		bounds		
	•			



size

Scratch	Scratch Values	Go+	Go+ Values	Note
	V = text   number		V = text   number	Note
say V for N seconds	N = second	say V, N	N = second	
say V	V = text   number	say V	V = text   number	
think V for N seconds	V = text   number	think V, N	V = text   number	
think V	N = second	think V	N = second V = text   number	
tnink v	V = text   number	tnink v	N = text   number	
	N =		CostumeName	
switch costume to N	CostumeName	setCostume N	CostumeIndex	
	CostumeIndex		Next	
			Prev	
next costume		nextCostume		
-		prevCostume		
-		animate Name		Animate can play a frame-animation
	N =		Wait = true   false	
	CostumeName	startScene N	N =	Devidence.
switch backdrop to N	CostumeIndex   next backdrop	startScene N. Wait	CostumeName   CostumeIndex	Random:
	previous backdrop	Startocerie IV, Wait	Next	* Scratch 3.0 added this parameter
	random backdrop		Prev	
the leduce-	random backdrop	nextScene		
next backdrop		nextScene Wait	Wait = true   false	
swich backdrop to N	N = previous backdrop	prevScene	Wait = true   false	
'	'	prevScene Wait Camera	'	Camera allow we create big scenes
	N =			
change size by N %	scale percent	changeSize N/100.0		Scratch uses percentages
set size to N %	N =	setSize N/100.0		Scratch uses percentages
	scale percent N = percent			- Communication processing of
change G effect by N	G = color   fisheye   whirl   pixelate   mosaic   brightness   ghost	changeEffect G, N	G = ColorEffect   BrightnessEffect	
set G effect to N	N = percent G = color   fisheye   whirl   pixelate   mosaic   brightness   ghost	setEffect G, N	G = ColorEffect   BrightnessEffect	
clear graphic effects		clearGraphEffects		
show hide		show hide		<u> </u>
go to front layer		gotoFront		
go to front layer go to back layer		gotoBack		
go forward N layers	N = integer	goBackLayers N	1	+
go backward N layers	N = integer	goBackLayers N		
costume number	ıv – III.egei	costumeIndex	1	+
	1			
costume name		costumeName		
costume name backdrop number		sceneIndex		
costume name				Scratch uses percentages



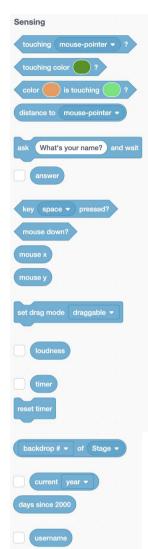
Scratch	Scratch Values	Go+	Go+ Values	Note
play sound S until done	S = SoundName	play S, true	S = SoundObj	
start sound S	S = SoundName	play S	S = SoundObj	
stop all sounds		stopAllSounds		
change S effect by N	N = percent S = pitch   pan left/right	changeEffect S, N		Not implemented
set S effect to N	N = percent S = pitch   pan left/right	setEffect S, N		Not implemented
clear sound effects		clearSoundEffect		Not implemented
change volume by N %		changeVolume N		
set volume to N %		setVolume N		
volume		volume		
Music related		-		Not implemented



Scratch	Scratch Values	Go+	Go+ Values	Note
when flag clicked:	Ociaton values	onStart =>	GO+ Values	14010
when any key pressed:		onAnyKey key =>	key Key	
when K key pressed:		onKey K, => onKey [K1, K2,], => onKey [K1, K2,], key =>	key Key	
when this sprite clicked: when stage clicked:		onClick =>		
when backdrop switches to Name	:	onScene name => onScene Name, =>	name string	
when loudness > N:		-		Not implemented
when timer > N:		_		Not implemented
when I receive Msg:		onMsg Msg, =>		
-		onMoving => onMoving mi =>	mi *MovingInfo	Triggered when the sprite is moving
-		onTurning => onTurning ti =>	ti *TurningInfo	Triggered when the sprite is turning
broadcast Msg		broadcast Msg		
broadcast Msg and wait		broadcast Msg, true		

Control		
wait 1 seconds		
repeat 10		
<i>J</i>		
forever		
<u> </u>		
if then		
if then		
else		
wait until		
repeat until		
Topolar annual		
9		
stop all ▼		
when I start as a clo	ne	
create clone of my	/self	
delete this clone		

0	0	0-	0- 1/-1	INI-4-
Scratch	Scratch Values	Go+	Go+ Values	Note
wait N seconds	N = second	wait N	N = second	
repeat N		for range :N {		
- <del></del>				
end		}		
forever		for {		
end		}		
if Cond then		if Cond {		
end		}		
if Cond then		if Cond {		
		•••		
else		} else {		
end		}		
wait until Cond		for !Cond {}		
repeat until Cond		for !Cond {		
end		}		
stop X	X = all   this script   other scripts in sprite	stop X	X = All   AllSprites   AllOtherScripts   ThisSprite   ThisScript OtherScriptsInSprite	The difference between the parameters All and AllSprites: 1) All contains the stage, 2) All will stop the current script (only All and ThisScript will stop the current script, others will not)
when I start as a clone		onCloned => onCloned param =>	param interface{}	
create clone of myself		clone clone Param		
create clone of Sprite		Sprite.clone Sprite.clone Param		
delete this clone		destroy		Note: For the sprite prototype
delete tille elette		4000)		(not cloned), destroy will fail
-		die		Configurable death animation; Will call setDying to set itself as dead, and execute the death animation (if any)
-		setDying		Setting the state of death is also effective for the sprite itself (this state is quite special, although it is still visible, it can also execute the death animation, but it has not been able to touch, similar to a qhost)
-		isCloned		Whether the sprite is cloned



Scratch	Scratch Values	Go+	Go+ Values	Note
			O =	
1	O =		Mouse	When the sprite detects that
	mouse-pointer		Edge	it has touched sprite O, the
touching O	edge	touching(O)		touched sprite O will trigger
			EdgeLeft   EdgeRight	
	SpriteName		EdgeTop   EdgeBottom	the onTouched event
		<b>-</b>	SpriteName   SpriteObj	
		onTouched =>		
		onTouched obj =>		N is the name of the sprite
_		onTouched N, =>	N = name	that met me, obj is the sprite
		onTouched N, obj =>	it = mamo	object that met me
		onTouched [N1, N2,], =>		object that met me
		onTouched [N1, N2,], obj =>		
touchingColor Color	Color = color	touchingColor(Color)	Color = color	
color C1 is touching C2?	C1, C2 = color	-		Not implemented
			O =	·
	O =			The distance between the
distance to O	mouse-pointer	distanceTo(O)	Random	
	SpriteName		Mouse	sprite and an object
			SpriteName   SpriteObj	Mattack
				Not implemented;
				Both Sprite and Stage have
				an ask function but with
ask Msg and wait	Msg = text   number	ask Msg	Msg = text   number	different functions (Sprite
ask ivisg and wait	IVISG = text   Humber	ask Wisg	wag – text   namber	uses say Msg, while Stage
				displays the prompt
				information in the input
				dialog box)
answer		answer		Not implemented
key K pressed?	K = key	keyPressed(K)	K = key	
mouse down?		mousePressed	,	
mouse x		mouseX		
mouse y		mouseY		
-		mouseHitItem		The sprite hit by mouse
	X =			
set drag mode X	draggable	-		Not implemented
	not draggable			
loudness		loudness		
timer		timer		Not implemented
reset timer		resetTimer		Not implemented
	O = Stage   SpriteName			
1	Prop(Stage) =			
1	backdrop #			
	backdrop name			
	volume			
	VarName			
	varivame			For Co. no or:-!
D	D (O . 21 . N )			For Go+, no special
Prop of O	Prop(SpriteName) =			mechanism is needed to
	x position			obtain these attributes.
	y position			
1	direction			
1	costume #			
	costume name			
1	size			
	volume			
	VarName			
	T =			
	year   month   date			Just use the Go standard
current T				Hibran/
current T	day of week			library
days since 2000	day of week			Just use the Go standard
	day of week	username		



Scratch	Scratch Values	Go+	Go+ Values	Note
set VarName to V		VarName = V		
		VarName += V		
change VarName by V show variable VarName		showVar VarName		
hide variable VarName		hideVar VarName		
ListName		ListName.string		List type
add V to ListName		ListName.append V		List type
add V to Lioti tairio		Liou tamolappona t	ldx =	
delete ldx of ListName	ldx = index	ListName.delete ldx	index	
doloto tax of Electricatio	idx iiiddx	Zioti tamoradioto tax	All   Last   Random	
delete all of ListName		ListName.delete All	/ iii   Edot   Flaridom	
			ldx =	
insert V at Idx of ListName	ldx = index	ListName.insert ldx, V	index	
			Last   Random	
			ldx =	
replace item Idx of ListName with V	ldx = index	ListName.set Idx, V	index	
		,	Last   Random	
			ldx =	
item Idx of ListName	ldx = index	ListName.at(ldx)	index	
			Last   Random	
item # of V in ListName		-		Not implemented
length of ListName		ListName.len		
ListName contains V?		ListName.contains(V)		
show list ListName		showList ListName		
hide list ListName		hideList ListName		



Scratch	Scratch Values	Go+	Go+ Values	Note
erase all		eraseAll		This command in Scratch 2.0 is called clear
stamp		stamp		
pen down		penDown		
pen up		penUp		
set pen color to C		setPenColor C		
change pen Prop by N	Prop = color   saturation   brightness   transparency	-		Not implemented
set pen Prop to N	Prop = color   saturation   brightness   transparency	-		Not implemented
change pen size by N		changePenSize N		
set pen size to N		setPenSize N		