

Condition	Sub-Condition	Effect (+: Penalty, -: Discount)
Apply scale changes with different domain dimensions while not changing the corresponding encodings, e.g., new "temperature" scale applied on the old encoding to "precipitation" data field.		1.0
Change the x(/y) scale of the mark and x(/y)-axis together.	The scale of domain dimension changes.	-1.0
	The scale of domain dimension does not change.	-0.5
	The x(/y) encoding of the mark and the x(/y) axis are added/removed together	-0.7
Change the non-spatial scale (color, size, shape, opacity) of the mark and the corresponding legend together.		-0.5
Change x and y scales of marks together but do not change their domain dimensions.		-0.2
Change non-spatial scales of marks together.		-0.1

Component	Change	Cost
mark	marktype	0.30
	data	0.50
	x scale with no dimension change	0.40
	y scale with no dimension change	0.40
	color scale with no dimension change	0.40
	shape scale with no dimension change	0.40
	size scale with no dimension change	0.40
	x scale with dimension change	0.65
	y scale with dimension change	0.65
	color scale with dimension change	0.65
	shape scale with dimension change	0.65
	size scale with dimension change	0.65
	x encoding	0.30
	y encoding	0.30
	color encoding	0.30
	shape encoding	0.30
	size encoding	0.30
	opacity encoding	0.20
axis	encode	0.30
	scale with no dimension change	0.50
	scale with dimension change	1.00
	add	0.70
	remove	0.70
legend	encode	0.30
	scale with no dimension change	0.50
	scale with dimension change	1.00
	add	0.70
	remove	0.70