

Visualizing and understanding $\hat{\beta}$ s

Between: $\hat{\beta}_B$ (also called "compositional effect")

Within: $\hat{\beta}_W$

Contextual effect: $\hat{\beta}_C = \hat{\beta}_B - \hat{\beta}_W$

See Lab 1.R

Search for: "Visualizing the fitted model"

```
fit2 <- lme( mathach ~ (ses + cvar(ses,id)) * Sector, dd, random = ~ 1 + ses | id,  
           na.action = na.exclude,  
           control = list(msMaxIter=200, msVerbose=T))
```

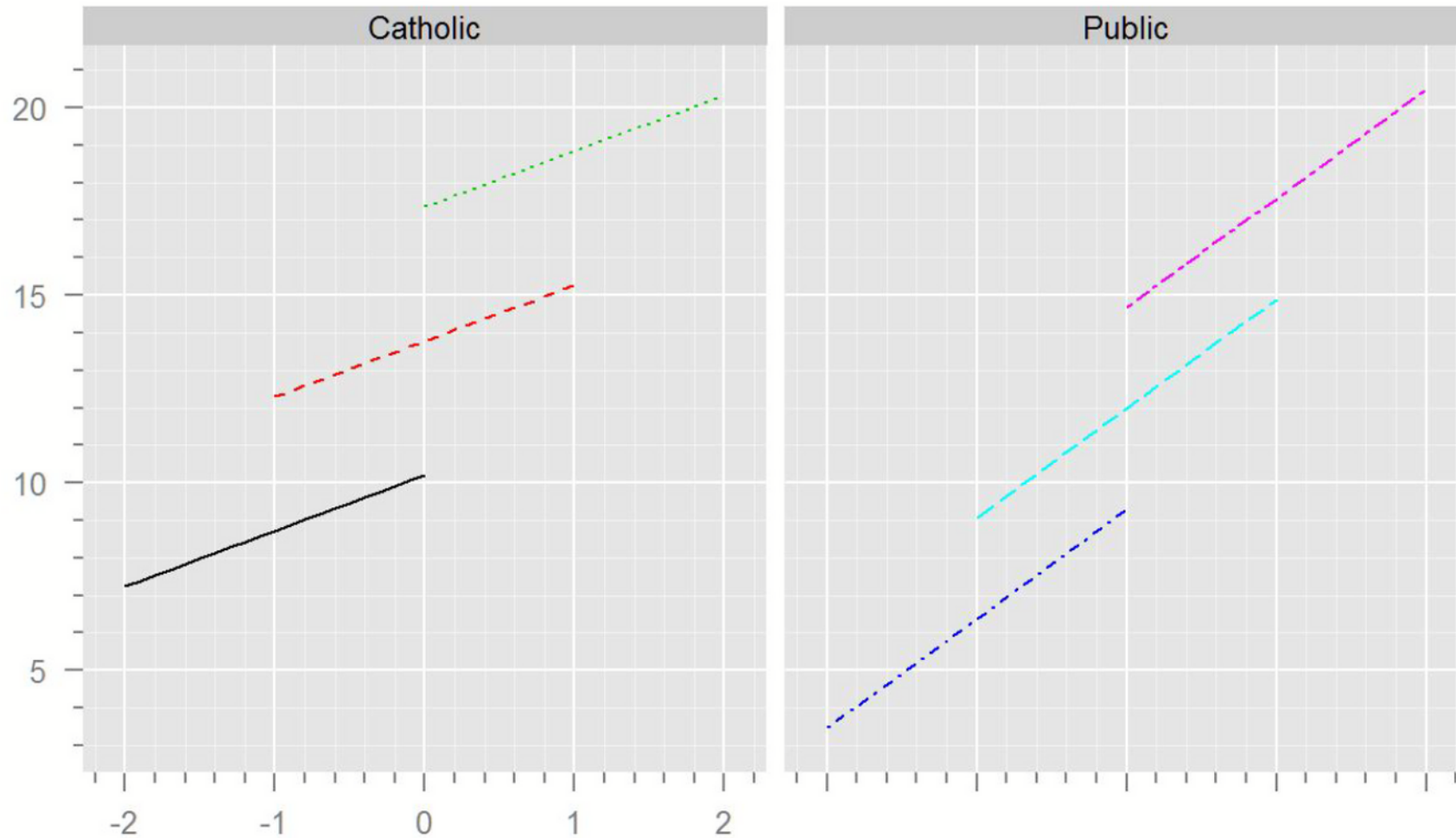
Fixed effects: mathach ~ (ses + cvar(ses, id)) * Sector

	Value	Std.Error	DF	t-value	p-value
(Intercept)	13.781114	0.3337547	3602	41.29114	0.0000
ses	1.484475	0.2353295	3602	6.30807	0.0000
cvar(ses, id)	3.576249	0.8620263	76	4.14865	0.0001
SectorPublic	-1.802916	0.4645965	76	-3.88061	0.0002
ses:SectorPublic	1.423739	0.3162117	3602	4.50249	0.0000
cvar(ses, id):SectorPublic	-0.884471	1.1846992	76	-0.74658	0.4576

Fixed effects: mathach ~ (ses + cvar(ses, id)) * Sector

	Value	Std.Error	DF	t-value	p-value
(Intercept)	13.781114	0.3337547	3602	41.29114	0.0000
ses	1.484475	0.2353295	3602	6.30807	0.0000
cvar(ses, id)	3.576249	0.8620263	76	4.14865	0.0001
SectorPublic	-1.802916	0.4645965	76	-3.88061	0.0002
ses:SectorPublic	1.423739	0.3162117	3602	4.50249	0.0000
cvar(ses, id):SectorPublic	-0.884471	1.1846992	76	-0.74658	0.4576

-2 -1 0 1 2



Fixed effects: mathach ~ (ses + cvar(ses, id)) * Sector

	Value	Std.Error	DF	t-value	p-value
(Intercept)	13.781114	0.3337547	3602	41.29114	0.0000
ses	1.484475	0.2353295	3602	6.30807	0.0000
cvar(ses, id)	3.576249	0.8620263	76	4.14865	0.0001
SectorPublic	-1.802916	0.4645965	76	-3.88061	0.0002
ses:SectorPublic	1.423739	0.3162117	3602	4.50249	0.0000
cvar(ses, id):SectorPublic	-0.884471	1.1846992	76	-0.74658	0.4576

