1 Examples of test-materials.

(1) **Adjunct *fordi* 'because'-clauses**

a. No island, short

Kritikerne	*roser*	***musikeren***	*som*	__	*håper*	*at*	*alle*	*vil*
critics.DEF	praise	musician.DEF	who	__	hopes	that	everyone	will
like	*det*	*nye*	*albumet.*					
like	the	new	album.DEF					

'The critics praise the musician who hopes that everyone will like the new album'.

b. No island, long

Kritikerne	*roser*	***albumet***	*som*	*musikeren*	*håper*	*at*	*alle*
critics.DEF	praise	album.DEF	that	musician.DEF	hopes	that	everyone
vil	*like*	__.					
will	like	__.					

'The critics praise the album that the musician hopes everyone will like'.

c. Island, short

Kritikerne	*roser*	***musikeren***	*som*	__	*blir*	*fornøyd*
critics.DEF	praise	musician.DEF	who	__	becomes	pleased
fordi	*alle*	*liker*	*det*	*nye*	*albumet.*	
because	everyone	likes	the	new	album.DEF	

'The critics praise the musician who is pleased because everyone likes the new album'.

d. Island, long

Kritikerne	*roser*	***albumet***	*som*	*musikeren*	*blir*	*fornøyd*
critics.DEF	praise	album.DEF	that	musician.DEF	becomes	pleased
fordi	*alle*	*liker*	__.			
because	everyone	likes	__.			

'The critics praise the album that the musician is pleased because everyone likes'.

(2) **Adjunct *når* 'when'-clauses**

a. No island, short

Hun	*kjøper*	*øl*	*til*	***vennen***	*som*	__	*sier*	*at*	*han*
she	buys	beer	to	friend.DEF	who	__	says	that	he
blir		*dårlig*	*av*	*å*	*drikke*	*whisky.*			
becomes		bad	of	to	drink	whisky.			

'She buys beer for the friend who says he gets sick from drinking whisky'.

b. No island, long

Hun	*kjøper*	***whiskyen***	*som*	*vennen*	*sier*	*at*	*han*	*blir*
she	buys	whisky.DEF	that	friend.DEF	says	that	he	becomes
dårlig	*av*	__.						
bad	of	__.						

'She buys the whisky that the friend says he gets sick from'.

c. Island, short

Hun	*kjøper*	*øl*	*til*	***vennen***	*som*	__	*blir*	*dårlig*	*når*
she	buys	beer	to	friend.DEF	who	__	becomes	bad	when
han	*drikker*		*whisky.*						
he	drinks		whisky.						

'She buys beer for the friend who gets sick when he drinks whisky'.

d. Island, long

Hun	*kjøper*	***whiskyen***	*som*	*vennen*	*blir*	*dårlig*	*når*	*han*
she	buys	whisky.DEF	that	friend.DEF	becomes	bad	when	he
drikker		__.						
drinks		__.						

'She buys the whisky that the friend says he gets sick when he drinks'.

(3) **Adjunct *om* 'if'-clauses**

a. No island, short

De	*erter*	***fotballspilleren***	*som*	__	*misliker*	*at*	*de*
they	tease	football-player.DEF	who	__	dislikes	that	they
nevner	*selvmålet.*						
mention	own-goal.DEF						

'They tease the football player who dislikes that they mention the own goal'.

b. No island, long

De	*diskuterer*	***selvmålet***	*som*	*fotballspilleren*	*misliker*	*at*
they	discuss	own-goal.DEF	that	football-player.DEF	dislikes	that
de	*nevner*	__.				
they	mention	__.				

'They discuss the own goal that the football player dislikes that they mention'.

c. Island, short

De	*erter*	***fotballspilleren***	*som*	__	*blir*	*flau*	*om*	*de*
they	tease	football-player.DEF	who	__	gets	embarrassed	if	they
nevner	*selvmålet.*							
mention	own-goal.DEF.							

'They tease the football player who gets embarrassed if they mention the own goal'.

d. Island, long

De	*diskuterer*	***selvmålet***	*som*	*fotballspilleren*	*blir*	*flau*	
they	discuss	own-goal.DEF	that	football-player.DEF	gets	embarrassed	
om	*de*	*nevner*	__.				
if	they	mention	__.				

'They discuss the own goal that the football player will be embarrassed if they mention'.

(4) **(Control) Complement *om* 'whether'-clauses**

a. No island, short

Gjestene	*roser*	***kokken***	*som*	__	*er*	*sikker*	*på*	*at*	*de*
guests.DEF	praise	chef.DEF	who	__	is	certain	on	that	they
vil	*like*	*geitosten.*							
will	like	goat-cheese.DEF							

'The guests praise the chef who is certain that they will like the goat cheese'.

b. No island, long

Gjestene	*roser*	***geitosten***	*som*	*kokken*	*er*	*sikker*	*på*
guests.DEF	praise	goat-cheese.DEF	who	cheese.DEF	is	certain	on
at	*de*	*vil*	*like*	__ .			
that	they	will	like	__			

'The guests praise the goat cheese that the chef is certain that they will like'.

c. Island, short

Gjestene	*roser*	***kokken***	*som*	__	*lurer*	*på*	*om*
guests.DEF	praise	chef.DEF	who	__	wonders	on	whether
de	*liker*	*geitosten.*					
they	like	goat-cheese.DEF					

'The guests praise the chef who wonders whether they like the goat cheese'.

d. Island, long

Gjestene	*roser*	***geitosten***	*som*	*kokken*	*lurer*	*på*
guests.DEF	praise	goat-cheese.DEF	who	cheese.DEF	wonders	on
om	*de*	*liker*	__ .			
whether	they	like	__			

'The guests praise the goat cheese that the chef wonders whether they will like'.

(5) **(Control) Subject-island clauses**

a. No island, short

Hans	*intervjuer*	***arkeologen***	*som*	__	*tror*	*utgravingen*
Hans	interviews	archeologist.DEF	who	__	thinks	excavation.DEF
kan	*være*	*av*	*betydning.*			
can	be	of	importance.			

'Hans interviews the archeologist who thinks the excavation could be of importance'.

b. No island, long

Hans	*skriver*	*om*	***utgravingen***	*som*	*arkeologen*	*tror*	__
Hans	writes	about	excavation.DEF	who	archeologist.DEF	thinks	__
kan	*være*	*av*	*betydning.*				
can	be	of	importance.				

'Hans writes about the excavation that the archeologist thinks could be of importance'.

c. Island, short

Hans	*intervjuer*	***arkeologen***	*som*	__	*tror*	*utgravingen*
Hans	interviews	archeologist.DEF	who	__	thinks	excavation.DEF
av	*kirka*	*kan*	*være*	*av*	*betydning.*	
of	church.DEF	can	be	of	importance.	

'Hans interviews the archeologist who thinks the excavation of the church could be of importance'.

d. Island, long

Hans	*skriver*	*om*	***kirka***	*som*	*arkeologen*		*tror*
Hans	writes	about	church.DEF	who	archeologist.DEF		thinks
utgravingen		*av*	__	*kan*	*være*	*av*	*betydning.*
excavation. DEF		of	__	can	be	of	importance.

'Hans writes about the church that the archeologist thinks the excavation of could be of importance'.

2 Model outputs

Table (i): Output of omnibus linear mixed effects model, Experiment 1. Linear model crossing island type, distance and structure.[1]

		z_score		
Predictors	*Estimates*	*std. Error*	*Statistic*	*p*
(Intercept)	0.278	0.046	6.085	**<0.001**
island [Når]	0.109	0.062	1.756	0.079
island [Om]	0.209	0.062	3.360	**0.001**
island [Subject]	0.103	0.076	1.356	0.175
island [Whether]	0.326	0.076	4.290	**<0.001**
distance1	-0.353	0.036	-9.766	**<0.001**
structure1	-0.247	0.032	-7.604	**<0.001**
*island [Når] * distance1*	0.060	0.049	1.220	0.222
*island [Om] * distance1*	0.243	0.049	4.927	**<0.001**
*island [Subject] *distance1*	0.028	0.061	0.455	0.649
*island [Whether] *distance1*	0.239	0.061	3.943	**<0.001**
*island [Når] * structure1*	0.030	0.045	0.675	0.500
*island [Om] * structure1*	0.063	0.045	1.412	0.158
*island [Subject] *structure1*	-0.101	0.055	-1.843	0.065
*island [Whether] *structure1*	0.207	0.055	3.778	**<0.001**
*distance1 * structure1*	-0.251	0.022	-11.218	**<0.001**
*island [Når] * distance1* structure1*	0.031	0.032	0.991	0.322
*island [Om] * distance1 *structure1*	0.131	0.032	4.152	**<0.001**
*island [Subject] *distance1 * structure1*	-0.058	0.039	-1.486	0.137
*island [Whether] *distance1 * structure1*	0.263	0.039	6.763	**<0.001**
$N_{subject}$	76			
N_{id}	64			

[1] Three-way interaction with island * distance * structure for Experiment 1. Final model's syntax: mdl2_opt <- lmer(z_score ~ island*distance*structure + (1+distance+structure|subject) + (1+distance *structure|id), data = df, REML = FALSE, control = lmerControl(optimizer = 'bobyqa'))

Table (ii): Output of linear mixed effects model on partial data set (only including the first two responses – block 1), Experiment 1. Linear model's output crossing island type, distance and structure, Block 1 Experiment 1.[2]

		z_score		
Predictors	*Estimates*	*std. Error*	*Statistic*	*p*
(Intercept)	0.246	0.052	4.762	**<0.001**
island [Når]	0.104	0.070	1.482	0.138
island [Om]	0.191	0.070	2.712	**0.007**
island [Subject]	0.136	0.083	1.645	0.100
island [Whether]	0.364	0.083	4.376	**<0.001**
distance1	-0.410	0.043	-9.583	**<0.001**
structure1	-0.289	0.038	-7.523	**<0.001**
*island [Når] * distance1*	0.056	0.059	0.946	0.344
*island [Om] * distance1*	0.305	0.059	5.172	**<0.001**
*island [Subject] *distance1*	0.083	0.068	1.216	0.224
*island [Whether] *distance1*	0.295	0.068	4.317	**<0.001**
*island [Når] * structure1*	0.077	0.053	1.438	0.150
*island [Om] * structure1*	0.080	0.053	1.499	0.134
*island [Subject] *structure1*	-0.058	0.061	-0.958	0.338
*island [Whether] *structure1*	0.245	0.061	4.001	**<0.001**
*distance1 * structure1*	-0.258	0.024	-10.836	**<0.001**
*island [Når] * distance1* structure1*	0.057	0.034	1.703	0.089
*island [Om] * distance1 *structure1*	0.142	0.034	4.221	**<0.001**
*island [Subject] *distance1 * structure1*	-0.051	0.033	-1.517	0.129
*island [Whether] *distance1 * structure1*	0.268	0.034	7.859	**<0.001**
$N_{subject}$	76			
N_{id}	64			

[2] Three-way interaction with island * distance * structure for Block 1 Experiment 1. Final model's syntax: mdl3_b1 <- lmer(z_score ~ island*distance*structure + (1+distance+structure|subject) + (1+distance+structure|id), data = df_b1, REML = FALSE)

Table (iii): Output of linear model by item, Experiment 2. Linear model crossing item, distance and structure.[3]

	z_score			
Predictors	***Estimates***	***std. Error***	***Statistic***	***p***
(Intercept)	0.75	0.04	19.01	**<0.001**
id [10]	0.00	0.05	0.02	0.982
id [11]	-0.57	0.05	-10.65	**<0.001**
id [12]	-0.06	0.05	-1.06	0.288
id [13]	-0.40	0.05	-7.50	**<0.001**
id [14]	-0.23	0.05	-4.20	**<0.001**
id [15]	-0.10	0.05	-1.79	0.074
id [16]	-0.49	0.05	-9.06	**<0.001**
id [2]	-0.24	0.05	-4.45	**<0.001**
id [3]	-0.35	0.05	-6.51	**<0.001**
id [4]	-0.33	0.05	-6.22	**<0.001**
id [5]	-0.18	0.05	-3.33	**0.001**
id [6]	-0.24	0.05	-4.40	**<0.001**
id [7]	-0.46	0.05	-8.63	**<0.001**
id [8]	-0.12	0.05	-2.30	**0.022**
id [9]	-0.58	0.05	-10.82	**<0.001**
distance1	-0.05	0.04	-1.21	0.228
structure1	-0.10	0.04	-2.47	**0.013**
*id [10] * distance1*	-0.17	0.05	-3.13	**0.002**
*id [11] * distance1*	-0.19	0.05	-3.48	**0.001**
*id [12] * distance1*	-0.07	0.05	-1.34	0.182
*id [13] * distance1*	-0.21	0.05	-3.95	**<0.001**
*id [14] * distance1*	0.31	0.05	5.72	**<0.001**
*id [15] * distance1*	-0.04	0.05	-0.69	0.488
*id [16] * distance1*	-0.48	0.05	-8.86	**<0.001**
*id [2] * distance1*	-0.23	0.05	-4.22	**<0.001**
*id [3] * distance1*	-0.02	0.05	-0.42	0.673
*id [4] * distance1*	-0.06	0.05	-1.04	0.298
*id [5] * distance1*	-0.12	0.05	-2.23	**0.026**
*id [6] * distance1*	0.00	0.05	0.03	0.977
*id [7] * distance1*	-0.03	0.05	-0.64	0.525
*id [8] * distance1*	-0.09	0.05	-1.64	0.100
*id [9] * distance1*	0.08	0.05	1.54	0.125
*id [10] * structure1*	0.03	0.05	0.56	0.574
*id [11] * structure1*	-0.17	0.05	-3.24	**0.001**
*id [12] * structure1*	-0.11	0.05	-2.07	**0.038**
*id [13] * structure1*	-0.22	0.05	-4.01	**<0.001**
*id [14] * structure1*	-0.06	0.05	-1.09	0.274
*id [15] * structure1*	-0.01	0.05	-0.15	0.879
*id [16] * structure1*	-0.09	0.05	-1.74	0.082
*id [2] * structure1*	-0.04	0.05	-0.78	0.433
*id [3] * structure1*	-0.28	0.05	-5.14	**<0.001**

[3] Three-way interaction with item * distance * structure for Experiment 2. Final model's syntax: mdl2_id <- lmer(z_score ~ id*distance*structure + (1+distance+structure|subject), data = df, REML = FALSE)

*id [4] * structure1*	-0.29	0.05	-5.35	**<0.001**
*id [5] * structure1*	-0.03	0.05	-0.51	0.612
*id [6] * structure1*	-0.28	0.05	-5.19	**<0.001**
*id [7] * structure1*	-0.21	0.05	-3.95	**<0.001**
*id [8] * structure1*	-0.08	0.05	-1.46	0.144
*id [9] * structure1*	-0.19	0.05	-3.47	**0.001**
*distance1 * structure1*	0.02	0.04	0.60	0.551
*id [10] * distance1 *structure1*	-0.03	0.05	-0.63	0.527
*id [11] * distance1 *structure1*	-0.00	0.05	-0.08	0.940
*id [12] * distance1 *structure1*	-0.11	0.05	-2.09	**0.037**
*id [13] * distance1 *structure1*	-0.17	0.05	-3.12	**0.002**
*id [14] * distance1 *structure1*	-0.09	0.05	-1.63	0.103
*id [15] * distance1 *structure1*	-0.02	0.05	-0.45	0.653
*id [16] * distance1 *structure1*	-0.26	0.05	-4.84	**<0.001**
*id [2] * distance1 *structure1*	-0.26	0.05	-4.88	**<0.001**
*id [3] * distance1 *structure1*	-0.14	0.05	-2.67	**0.008**
*id [4] * distance1 *structure1*	-0.09	0.05	-1.60	0.110
*id [5] * distance1 *structure1*	-0.02	0.05	-0.41	0.683
*id [6] * distance1 *structure1*	-0.05	0.05	-0.95	0.344
*id [7] * distance1 *structure1*	-0.13	0.05	-2.42	**0.016**
*id [8] * distance1 *structure1*	-0.15	0.05	-2.83	**0.005**
*id [9] * distance1 *structure1*	-0.40	0.05	-7.42	**<0.001**
$N_{subject}$	56			

Table (iv): Model output, ordinal regression, Experiment 2.[4]

	response			
Predictors	*Odds Ratios*	*std. Error*	*Statistic*	*p*
1|2	0.03	0.00	-37.34	**<0.001**
2|3	0.07	0.00	-41.14	**<0.001**
3|4	0.16	0.01	-38.06	**<0.001**
4|5	0.33	0.01	-27.71	**<0.001**
5|6	0.77	0.03	-7.30	**<0.001**
6|7	1.73	0.06	15.36	**<0.001**
structure [1]	0.57	0.02	-17.83	**<0.001**
distance [1]	0.74	0.02	-9.68	**<0.001**
*structure [1] * distance [1]*	0.81	0.02	-6.95	**<0.001**

Table (v): Predictions for each response level by condition based on ordinal regression, Experiment 2.

structure	**distance**	**response level**	**predicted**	**conf.low**	**conf.high**
Island	*long*	1	0.0704	0.056	0.087
Island	*long*	2	0.102	0.086	0.122
Island	*long*	3	0.141	0.123	0.162
Island	*long*	4	0.177	0.159	0.197
Island	*long*	5	0.201	0.184	0.219
Island	*long*	6	0.142	0.128	0.158
Island	*long*	7	0.165	0.145	0.188
Island	*short*	1	0.026	0.021	0.034
Island	*short*	2	0.043	0.035	0.053
Island	*short*	3	0.072	0.061	0.084
Island	*short*	4	0.116	0.103	0.132
Island	*short*	5	0.189	0.173	0.207
Island	*short*	6	0.197	0.182	0.214
Island	*short*	7	0.355	0.324	0.388
noIsland	*long*	1	0.016	0.012	0.020
noIsland	*long*	2	0.027	0.021	0.033
noIsland	*long*	3	0.046	0.039	0.055
noIsland	*long*	4	0.082	0.071	0.094
noIsland	*long*	5	0.153	0.138	0.170
noIsland	*long*	6	0.194	0.179	0.210
noIsland	*long*	7	0.483	0.448	0.518
noIsland	*short*	1	0.013	0.010	0.017
noIsland	*short*	2	0.023	0.018	0.028

[4] Final model's syntax: ols4 = clm(response~structure * distance,data = df, link = "logit")

noIsland	*short*	3	0.039	0.033	0.048
noIsland	*short*	4	0.072	0.062	0.084
noIsland	*short*	5	0.140	0.126	0.156
noIsland	*short*	6	0.188	0.172	0.204
noIsland	*short*	7	0.524	0.488	0.559