## Description and choice data for the domain "Colours"

## Description of the choice domain 7, Colours

The prompt question and the universe of five response options in the choice domain Colours are as follows. The labels a, b, c, d and e were not displayed during the experiment and are indicated here to allow cross-referencing with data tables and visualizations below and results in the paper.

## % Colours

Which one of the following colours do you like best?

Red
Purple
Ink
Blue
Green

The following figure is a screenshot from the actual experiment, with one of the 26 possible menus for this domain.



Figure 1: Screenshot for domain Colours

	Choice counts					Choice proportions				
Menu ${\cal A}$	$N_A(a)$	$N_A(b)$	$N_A(c)$	$N_A(d)$	$N_A(e)$	$\hat{P}_A(a)$	$\hat{P}_A(b)$	$\hat{P}_A(c)$	$\hat{P}_A(d)$	$\hat{P}_A(e)$
$\{a,b\}$	21	19	-	-	-	0.525	0.475	-	-	-
$\{a,c\}$	28	-	12	-	-	0.700	-	0.300	-	-
$\{b,c\}$	-	37	3	-	-	-	0.925	0.075	-	-
$\{a,b,c\}$	19	15	6	-	-	0.475	0.375	0.150	-	-
$\{a,d\}$	8	-	-	32	-	0.200	-	-	0.800	-
$\{b,d\}$	-	15	-	25	-	-	0.375	-	0.625	-
$\{a,b,d\}$	7	8	-	25	-	0.175	0.200	-	0.625	-
$\{c,d\}$	-	-	6	34	-	-	-	0.150	0.850	-
$\{a,c,d\}$	10	-	3	27	-	0.250	-	0.075	0.675	-
$\{b,c,d\}$	-	5	7	29	-	-	0.122	0.171	0.707	-
$\{a,b,c,d\}$	6	4	3	27	-	0.150	0.100	0.075	0.675	-
$\{a,e\}$	22	-	-	-	18	0.550	-	-	-	0.450
$\{b,e\}$	-	16	-	-	24	-	0.400	-	-	0.600
$\{a,b,e\}$	16	12	-	-	12	0.400	0.300	-	-	0.300
$\{c,e\}$	-	-	11	-	29	-	-	0.275	-	0.725
$\{a,c,e\}$	12	-	9	-	19	0.300	-	0.225	-	0.475
$\{b,c,e\}$	-	16	8	-	16	-	0.400	0.200	-	0.400
$\{a,b,c,e\}$	14	11	3	-	12	0.350	0.275	0.075	-	0.300
$\{d,e\}$	-	-	-	33	7	-	-	-	0.825	0.175
$\{a,d,e\}$	6	-	-	31	3	0.150	-	-	0.775	0.075
$\{b,d,e\}$	-	10	-	20	10	-	0.250	-	0.500	0.250
$\{a,b,d,e\}$	4	9	-	24	4	0.098	0.220	-	0.585	0.098
$\{c,d,e\}$	-	-	4	30	6	-	-	0.100	0.750	0.150
$\{a,c,d,e\}$	7	-	1	21	11	0.175	-	0.025	0.525	0.275
$\{b,c,d,e\}$	-	11	2	21	6	-	0.275	0.050	0.525	0.150
$\{a,b,c,d,e\}$	3	11	3	17	6	0.075	0.275	0.075	0.425	0.150

Table 1: Observed choice counts and proportions.

## Choice data for domain 7, Colours

Table 1 shows choice counts and choice proportions for this choice domain. For each menu A and each object  $x \in \{a, b, c, d, e\}$ ,  $N_A(x)$  is the number of participants who chose object x from menu A and  $\hat{P}_A(x)$  is the corresponding proportion of participants who chose x from A. When  $x \notin A$ , a dash is displayed.

The following figure displays choice proportions for all doubleton and tripleton menus in Barycentric coordinates. See a full description of this graphical representation in the paper. Each panel shows choice proportions for all doubleton and tripleton menus of a different tripleton subset of  $\{a,b,c,d,e\}$ . The downward-pointed (blue) triangle shows the set of ternary choice proportions that are compatible with regularity and the three binary choice proportions, on the corresponding tripleton. The upward-pointed (red) triangle shows the set of ternary choice proportions compatible with the multiplicative inequality and the three binary choice proportions.

## Warning in tritrafo(x, y, z): negative components

