Data for Experiment 1

- Experiment1_DIVAL1_AllRawData.txt
    - All raw data, including practice and catch trials; please note that practice and catch trials were excluded from analysis (see paper)

- Experiment1_DIVAL1_ForAnalysis.txt
    - Data for analysis (i.e., without practice and catch trials; columns irrelevant for analysis were filtered out)
    - Column coding see below

- Experiment1_DIVAL1_Aggregated_50_1.5.txt
    - Aggregated data after applying cut-off criteria as reported in the paper
    - Column coding see below

Data for Experiment 2

- Experiment2_DIVAL2_AllRawData.txt
    - All raw data, including practice and catch trials; please note that practice and catch trials were excluded from analysis (see paper)

- Experiment2_DIVAL2_ForAnalysis.txt
    - Data for analysis (i.e., without practice and catch trials; columns irrelevant for analysis were filtered out)
    - Column coding see below

- Experiment2_DIVAL2_Aggregated_50_1.5.txt
    - Aggregated data after applying cut-off criteria as reported in the paper
    - Column coding see below

Column coding of Experiment1_DIVAL1_ForAnalysis.txt and Experiment2_DIVAL2_ForAnalysis.txt

For both tasks, the terminology of Response Relation/ Distractor Relation was used; this resembles Color Relation/ Location Relation.

Column coding of Experiment1_DIVAL1_ForAnalysis.txt:

Alter (Age):	numeric values, age in years
DI:	Prime distractor (Prime location): up (oben) or down (unten)
DistRel:	Distractor Relation: Distractor Repetition (DR) or Distractor Change (DC)
DO:	Probe distractor (Probe location): up (oben) or down (unten)
ExperimentName:	Detection task (DiVAL1_Det) or discrimination task (DiVAL1_Dis)
Handedness:	left (links) or right (rechts)
PPRel:	Prime-Probe Relation: Response Repetition, Distractor Repetition (RRDR); Response Repetition, Distractor Change (RRDC); Response Change, Distractor Repetition (RCDR); Response Change, Distractor Change (RCDC)
Prime.ACC:	Prime Accuracy: Correct (1) or Incorrect (0)
Prime.RT:	Prime Reaction Time in milliseconds (if Prime.ACC = 0 and Prime.RT = 0 --> participant missed to give a response in the timeframe, see paper)
Probe.ACC:	Probe Accuracy: Correct (1) or Incorrect (0)
Probe.RT:	Probe Reaction Time in milliseconds (if Probe.ACC = 0 and Probe.RT = 0 --> participant missed to give a response in the timeframe, see paper)
RespRel:	Response Relation: Response Repetition (RR) or Response Change (RC)
Sex:	female (weiblich) or male (männlich)
Subject:	numeric values
TI:	Prime target (Prime color): blue (Blau) or red (Rot)
TO:	Probe target (Probe color): blue (Blau) or red (Rot)
Trial:	numeric values (number of trial); trials start at 20 because the 19 practice trials were excluded from analysis; "missing" numbers are catch trials excluded from analysis

Column coding of Experiment2_DIVAL2_ForAnalysis.txt:

Same as above, except for the following:

Block:	equals "Trial" as above
ExperimentName:	Detection task (DIVAL2_Det) or discrimination task (DIVAL2_Dis)
Haendigkeit:	equals Handedness as above
Reihenfolge (order):	order of tasks: Detection task, followed by Discrimination task (DetDis); Discrimination task followed by Detection task (DisDet)

Column "order" for Experiment 1:

Column “order” is not in the data file; if subjectnumber is uneven = "DetDis", if subjectnumber is even = "DisDet"

Column coding of Experiment1_DIVAL1_Aggregated_50_1.5.txt and Experiment2_DIVAL2_Aggregated_50_1.5.txt

For both tasks, the terminology of Response Relation/ Distractor Relation was used; this resembles Color Relation/ Location Relation. For inclusion criteria of reaction times and error rates see paper.

Column coding of the aggregated data files:

subject:	numeric values (1-30)
age:	numeric values - age in years
sex:	coded as 0 (female) and 1 (male)*
order:	coded as 0 (DetectionDiscrimination) and 1 (DiscriminationDetection); for the datafile of Experiment 1, order column can be added by the accompanying Syntax available under "Code for: Detection versus Discrimination: The Limits of Binding Accounts in Action Control"
rrdr_dis_count:	Reaction times: Count of trials with Response Repetition, Distractor Repetition (Color Repetition, Location Repetition) in the discrimination task that meet the inclusion criteria for reaction times
rrdr_dis_sum:	Reaction times: Sum of reaction times that meet the inclusion criteria with Response Repetition, Distractor Repetition (Color Repetition, Location Repetition) in the discrimination task
rrdc_dis_count:	Reaction times: Count of trials with Response Repetition, Distractor Change (Color Repetition, Location Change) in the discrimination task that meet the inclusion criteria for reaction times
rrdc_dis_sum:	Reaction times: Sum of reaction times that meet the inclusion criteria with Response Repetition, Distractor Change (Color Repetition, Location Change) in the discrimination task
rcdr_dis_count:	Reaction times: Count of trials with Response Change, Distractor Repetition (Color Change, Location Repetition) in the discrimination task that meet the inclusion criteria for reaction times
rcdr_dis_sum:	Reaction times: Sum of reaction times that meet the inclusion criteria with Response Change, Distractor Repetition (Color Change, Location Repetition) in the discrimination task

rcdc_dis_count:	Reaction times: Count of trials with Response Change, Distractor Change (Color Change, Location Change) in the discrimination task that meet the inclusion criteria for reaction times
rcdc_dis_sum:	Reaction times: Sum of reaction times that meet the inclusion criteria with Response Change, Distractor Change (Color Change, Location Change) in the discrimination task
rrdr_det_count:	Reaction times: Count of trials with Response Repetition, Distractor Repetition (Color Repetition, Location Repetition) in the detection task that meet the inclusion criteria for reaction times
rrdr_det_sum:	Reaction times: Sum of reaction times that meet the inclusion criteria with Response Repetition, Distractor Repetition (Color Repetition, Location Repetition) in the detection task
rrdc_det_count:	Reaction times: Count of trials with Response Repetition, Distractor Change (Color Repetition, Location Change) in the detection task that meet the inclusion criteria for reaction times
rrdc_det_sum:	Reaction times: Sum of reaction times that meet the inclusion criteria with Response Repetition, Distractor Change in (Color Repetition, Location Change) the detection task
rcdr_det_count:	Reaction times: Count of trials with Response Change, Distractor Repetition (Color Change, Location Repetition) in the detection task that meet the inclusion criteria for reaction times
rcdr_det_sum:	Reaction times: Sum of reaction times that meet the inclusion criteria with Response Change, Distractor Repetition (Color Change, Location Repetition) in the detection task
rcdc_det_count:	Reaction times: Count of trials with Response Change, Distractor Change (Color Change, Location Change) in the detection task that meet the inclusion criteria for reaction times
rcdc_det_sum:	Reaction times: Sum of reaction times that meet the inclusion criteria with Response Change, Distractor Change (Color Change, Location Change) in the detection task
er_rrdr_dis:	Error Rates, Prime Correct, Probe Incorrect: Count of trials that meet the inclusion criteria with Response Repetition, Distractor Repetition (Color Repetition, Location Repetition) in the discrimination task

er_rrdc_dis:	Error Rates, Prime Correct, Probe Incorrect: Count of trials that meet the inclusion criteria with Response Repetition, Distractor Change (Color Repetition, Location Change) in the discrimination task
er_rcdr_dis:	Error Rates, Prime Correct, Probe Incorrect: Count of trials that meet the inclusion criteria with Response Change, Distractor Repetition (Color Change, Location Repetition) in the discrimination task
er_rcdc_dis:	Error Rates, Prime Correct, Probe Incorrect: Count of trials that meet the inclusion criteria with Response Change, Distractor Change (Color Change, Location Change) in the discrimination task
er_rrdr_det:	Error Rates, Prime Correct, Probe Incorrect: Count of trials that meet the inclusion criteria with Response Repetition, Distractor Repetition (Color Repetition, Location Repetition) in the detection task
er_rrdc_det:	Error Rates, Prime Correct, Probe Incorrect: Count of trials that meet the inclusion criteria with Response Repetition, Distractor Change (Color Repetition, Location Change) in the detection task
er_rcdr_det:	Error Rates, Prime Correct, Probe Incorrect: Count of trials that meet the inclusion criteria with Response Change, Distractor Repetition (Color Change, Location Repetition) in the detection task
er_rcdc_det:	Error Rates, Prime Correct, Probe Incorrect: Count of trials that meet the inclusion criteria with Response Change, Distractor Change (Color Change, Location Change) in the detection task
c_er_rrdr_dis:	Error Rates, Prime Correct: Count of trials that meet the inclusion criteria with Response Repetition, Distractor Repetition (Color Repetition, Location Repetition) in the discrimination task
c_er_rrdc_dis:	Error Rates, Prime Correct: Count of trials that meet the inclusion criteria with Response Repetition, Distractor Change (Color Repetition, Location Change) in the discrimination task
c_er_rcdr_dis:	Error Rates, Prime Correct: Count of trials that meet the inclusion criteria with Response Change, Distractor Repetition (Color Change, Location Repetition) in the discrimination task
c_er_rcdc_dis:	Error Rates, Prime Correct: Count of trials that meet the inclusion criteria with Response Change, Distractor Change (Color Change, Location Change) in the discrimination task
c_er_rrdr_det:	Error Rates, Prime Correct: Count of trials that meet the inclusion criteria with Response Repetition, Distractor Repetition (Color Repetition, Location Repetition) in the detection task

c_er_rrdc_det:	Error Rates, Prime Correct: Count of trials that meet the inclusion criteria with Response Repetition, Distractor Change (Color Repetition, Location Change) in the detection task
c_er_rcdr_det:	Error Rates, Prime Correct: Count of trials that meet the inclusion criteria with Response Change, Distractor Repetition (Color Change, Location Repetition) in the detection task
c_er_rcdc_det:	Error Rates, Prime Correct: Count of trials that meet the inclusion criteria with Response Change, Distractor Change (Color Change, Location Change) in the detection task

*In Experiment 2, one participant (subject 29) reported a different sex for both tasks (see paper); in the aggregated data file “Experiment2_DIVAL2_Aggregated_50_1.5.txt”, the reported sex of subject 29 is set to “1” due to the code used for aggregating data. Using the SPSS-Syntax “Experiment2_DIVAL2_Syntax.sps” available under “Code for: Detection versus Discrimination: The Limits of Binding Accounts in Action Control”, the sex of subject 29 can be set to “2” to avoid confusion with the coding for the column (female (0) and male (1)).