**Speed experiment (experiment 02)**

This experiment is a little bit more complicated to understand for the stim, randomization, code… So this document is there to help understanding some detail. Some additional details can be found in the method of the file called “SFB\_B05\_Exp2\_young\_paper04022020.docx”.

The rationale of the experiment is having the participants perform a PWI in two blocks, these blocks containing fillers. In one condition (the constant condition) the fillers are displayed for a constant duration (1200 ms), while in the other condition the filler are displayed for a varying shorter duration than (400 ms to 600 ms).

So there are several things to consider:

* The filler are discarded, they are only there to create a condition in which their duration is shorter and varying, at the end we do not keep these trials;
* We reused the same item as test items (i.e. not the fillers items, not the familiarization items…) than the one used in the first experiment;
* We added in total 44 targets items (that were combined with the condition baseline, phonological related, phonological unrelated, semantical related, semantically unrelated);
* The randomization was not done for this experiment in Presentation but before the experiment we prepared csv files for every participant with the list of items to present in particular conditions… That is why maybe understanding the experiment is a more complicated that Experiment 01;
* In this experiment at the beginning we did not plan to have the reading and delayed naming procedure, so some participants (not a lot) might miss these values. It is also why contrary to the first experiment, these is a second presentation script only for the reading part and for the delayed naming part;
* Instead, in this experiment after the PWI procedure was over, and still in the same presentation script, we had a recall procedure where we presented the distractor that just appeared in the experiment (half of the trial) or completely new word (half of the trials) and asked participant to press a button if they were thinking that the distractor word was present on a picture during the PWI procedure.

After the PWI procedure, there was the recall task, and then the reading task and the delayed naming task. Under this there are the detail of what are the stimuli, and how the randomization was done.

**Stimuli**

Table 1 shows all the stimuli that were used in the experiment. There were two set we called A and B. The type in the table indicates if the stims were used as practice items (P), fillers items (F), or test items (T). The name of the distractor depending on the condition is given.

Table : All the stimuli used

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Name\_Picture** | **Set** | **Type** | **Baseline\_Distractor** | **Sem\_Rel\_Distractor** | **Sem\_UnRel\_Distractor** | **Phono\_Rel\_Distractor** | **Phono\_Unrel\_Distractor** |
| Aquarium | A | P | Xxxxxx | Kaefig | Reis | Aquarell | Liste |
| Drachen | A | P | Xxxxxx | Ballon | Kabel | Draht | Kehle |
| Kegel | A | P | Xxxxxx | Dart | Auge | Kehle | Mast |
| Lippen | A | P | Xxxxxx | Auge | Kaefig | Liste | Draht |
| Anker | A | F | Xxxxxx | Steuerrad | Hund | Ankunft | Skrotum |
| Auto | A | F | Xxxxxx | Bus | Gorilla | Aura | Kronleuchter |
| Avocado | A | F | Xxxxxx | Pflaume | Schwalbe | Avatar | Eulogie |
| Brille | A | F | Xxxxxx | Hut | Trommel | Brillianz | Kamera |
| Brokkoli | A | F | Xxxxxx | Kohl | Floete | Bronchitis | Stuck |
| Elefant | A | F | Xxxxxx | Zebra | Haengeschloss | Elend | Katana |
| Eule | A | F | Xxxxxx | Schwalbe | Gehstock | Eulogie | Apostel |
| Flugzeug | A | F | Xxxxxx | Hubschrauber | Tisch | Fluorid | Traktion |
| Guertel | A | F | Xxxxxx | Schnuersenkel | Bus | Guelle | Scherbe |
| Klavier | A | F | Xxxxxx | Akkordeon | Zug | Klausur | Pingpong |
| Loewe | A | F | Xxxxxx | Gorilla | Hose | Loewenzahn | Papyrus |
| Ohr | A | F | Xxxxxx | Fuss | Lama | Ohrring | Globus |
| Paprika | A | F | Xxxxxx | Aubergine | Hand | Papyrus | Fissur |
| Pferd | A | F | Xxxxxx | Bueffel | Karten | Pfeffer | Fahrstuhl |
| Pinguin | A | F | Xxxxxx | Robbe | Kohl | Pingpong | Bronchitis |
| Pyramide | A | F | Xxxxxx | Schloss | Schildkroete | Pyjama | Avatar |
| Schere | A | F | Xxxxxx | Tacker | Heuschrecke | Scherbe | Pyjama |
| Schluessel | A | F | Xxxxxx | Haengeschloss | Pflaume | Schluepfer | Aura |
| Skorpion | A | F | Xxxxxx | Heuschrecke | Hocker | Skrotum | Frost |
| Stuhl | A | F | Xxxxxx | Tisch | Robbe | Stuck | Nashorn |
| Tamburin | A | F | Xxxxxx | Floete | Bueffel | Tampon | Zunft |
| Zunge | A | F | Xxxxxx | Mund | Hubschrauber | Zunft | Erdbahn |
| Adler | A | T | Xxxxxx | Falke | Schrippe | Adel | Kino |
| Ananas | A | T | Xxxxxx | Melone | Fernglas | Analyse | Bluse |
| Antenne | A | T | Xxxxxx | Radar | Jalousie | Antike | Kardinal |
| Arm | A | T | Xxxxxx | Fuss | Wein | Armee | Fliese |
| Banane | A | T | Xxxxxx | Aprikose | Streichholz | Banjo | Schwager |
| Besen | A | T | Xxxxxx | Harke | Mandel | Beere | Geier |
| Bett | A | T | Xxxxxx | Sofa | Granate | Berg | Tuba |
| Bier | A | T | Xxxxxx | Wein | Kamm | Biene | Tante |
| Blume | A | T | Xxxxxx | Gras | Trophaee | Bluse | Pixel |
| Bombe | A | T | Xxxxxx | Granate | Wiesel | Borste | Filz |
| Boot | A | T | Xxxxxx | Floss | Maus | Bote | Schnur |
| Brief | A | T | Xxxxxx | Postkarte | Wal | Brigade | Taste |
| Bumerang | A | T | Xxxxxx | Frisbee | Aprikose | Bulle | Druide |
| Chamaeleon | A | T | Xxxxxx | Eidechse | Pfeffermuehle | Chaos | Olympia |
| Domino | A | T | Xxxxxx | Wuerfel | Papaya | Dominanz | Zeichen |
| Ellenbogen | A | T | Xxxxxx | Knie | Postkarte | Elfe | Feudalismus |
| Erdnuss | A | T | Xxxxxx | Mandel | Harke | Ehre | Pilot |
| Feuerzeug | A | T | Xxxxxx | Streichholz | Hummer | Feudalismus | Kapitaen |
| Fliege | A | T | Xxxxxx | Muecke | Scanner | Fliese | Dialekt |
| Geschenk | A | T | Xxxxxx | Paket | Sofa | Geschichte | Spitzel |
| Gitarre | A | T | Xxxxxx | Harfe | Libelle | Giraffe | Kreis |
| Hai | A | T | Xxxxxx | Wal | Buch | Hain | Berg |
| Hammer | A | T | Xxxxxx | Zange | Traube | Hamster | Bulle |
| Hirsch | A | T | Xxxxxx | Elch | Saege | Hirn | Akt |
| Kappe | A | T | Xxxxxx | Muetze | Wuerfel | Kapitaen | Troll |
| Karotte | A | T | Xxxxxx | Gurke | Eidechse | Kardinal | Monitor |
| Kerze | A | T | Xxxxxx | Fackel | Muskel | Kerbe | Hafen |
| Kiwi | A | T | Xxxxxx | Zitrone | Tasche | Kino | Armee |
| Kreide | A | T | Xxxxxx | Stift | Tulpe | Kreis | Mantra |
| Kruecke | A | T | Xxxxxx | Stock | Ameise | Kruste | Panther |
| Kuh | A | T | Xxxxxx | Ziege | Dose | Kuli | Fahne |
| Kuehlschrank | A | T | Xxxxxx | Herd | Saxophon | Kuebel | Zwiesel |
| Mantel | A | T | Xxxxxx | Anorak | Bohne | Mantra | Buerde |
| Marionette | A | T | Xxxxxx | Puppe | Knoblauch | Marine | Koffein |
| Olive | A | T | Xxxxxx | Bohne | Lineal | Olympia | Zirkus |
| Parfuem | A | T | Xxxxxx | Deodorant | Hoehle | Park | Brigade |
| Pinsel | A | T | Xxxxxx | Fueller | Jacuzzi | Pickel | Bote |
| Pool | A | T | Xxxxxx | Jacuzzi | Gans | Pudel | Ehre |
| Regen | A | T | Xxxxxx | Schnee | Muetze | Regel | Mikado |
| Rose | A | T | Xxxxxx | Tulpe | Falke | Rosine | Fund |
| Schaufel | A | T | Xxxxxx | Hacke | Ziege | Schau | Kerbe |
| Schmetterling | A | T | Xxxxxx | Libelle | Marmelade | Schmerz | Dominanz |
| Schwan | A | T | Xxxxxx | Gans | Zitrone | Schwager | Borste |
| Tasse | A | T | Xxxxxx | Dose | Elch | Taste | Schmerz |
| Vorhang | A | T | Xxxxxx | Jalousie | Mammut | Vorort | Kredit |
| Kartoffel | B | P | Xxxxxx | Reis | Augenbinde | Karton | Schlaufe |
| Maske | B | P | Xxxxxx | Augenbinde | Kralle | Mast | Schnaps |
| Schlauch | B | P | Xxxxxx | Kabel | Dart | Schlaufe | Karton |
| Schnabel | B | P | Xxxxxx | Kralle | Ballon | Schnaps | Aquarell |
| Apfel | B | F | Xxxxxx | Birne | Schloss | Apostel | Schlagader |
| Bank | B | F | Xxxxxx | Hocker | Aubergine | Bandit | Fluorid |
| Bein | B | F | Xxxxxx | Schulter | Pfanne | Beispiel | Schablone |
| Bruecke | B | F | Xxxxxx | Mauer | Schlange | Bruehe | Regenbogen |
| Erdbeere | B | F | Xxxxxx | Traube | Schnuersenkel | Erdbahn | Guelle |
| Fahrrad | B | F | Xxxxxx | Roller | Mauer | Fahrstuhl | Orangutan |
| Fisch | B | F | Xxxxxx | Schlange | Akkordeon | Fissur | Tampon |
| Frosch | B | F | Xxxxxx | Schildkroete | Diadem | Frost | Beispiel |
| Glocke | B | F | Xxxxxx | Klingel | Mund | Globus | Elend |
| Kamel | B | F | Xxxxxx | Lama | Olive | Kamera | Tomographie |
| Katze | B | F | Xxxxxx | Hund | Tacker | Katana | Paparazzi |
| Krone | B | F | Xxxxxx | Diadem | Limette | Kronleuchter | Schluepfer |
| Nase | B | F | Xxxxxx | Hand | Klingel | Nashorn | Klausur |
| Orange | B | F | Xxxxxx | Limette | Steuerrad | Orangutan | Sockel |
| Papagei | B | F | Xxxxxx | Tukan | Fuss | Paparazzi | Brillianz |
| Regenschirm | B | F | Xxxxxx | Gehstock | Tukan | Regenbogen | Ohrring |
| Schachbrett | B | F | Xxxxxx | Karten | Birne | Schablone | Bruehe |
| Schlagzeug | B | F | Xxxxxx | Trommel | Hut | Schlagader | Torf |
| Socke | B | F | Xxxxxx | Hose | Traube | Sockel | Loewenzahn |
| Tomate | B | F | Xxxxxx | Olive | Zebra | Tomographie | Ankunft |
| Topf | B | F | Xxxxxx | Pfanne | Roller | Torf | Bandit |
| Traktor | B | F | Xxxxxx | Zug | Schulter | Traktion | Pfeffer |
| Axt | B | T | Xxxxxx | Saege | Jeep | Akt | Lehm |
| Baguette | B | T | Xxxxxx | Schrippe | Fuss | Bagger | Hain |
| Bogen | B | T | Xxxxxx | Speer | Wolle | Boden | Giraffe |
| Buerste | B | T | Xxxxxx | Kamm | Rubin | Buerde | Chaos |
| Diamant | B | T | Xxxxxx | Rubin | Muecke | Dialekt | Kruste |
| Dinosaurier | B | T | Xxxxxx | Mammut | Badewanne | Dimension | Mediation |
| Drucker | B | T | Xxxxxx | Scanner | Zombie | Druide | Hotel |
| Dusche | B | T | Xxxxxx | Badewanne | Frisbee | Duell | Banjo |
| Faden | B | T | Xxxxxx | Wolle | Gurke | Fahne | Kirche |
| Finger | B | T | Xxxxxx | Zeh | Puppe | Filz | Elfe |
| Fuchs | B | T | Xxxxxx | Wolf | Zeh | Fund | Gabe |
| Gabel | B | T | Xxxxxx | Messer | Tiger | Gabe | Knospe |
| Geist | B | T | Xxxxxx | Zombie | Floss | Geier | Konsum |
| Handschuh | B | T | Xxxxxx | Strumpf | Fichte | Hantel | Rosine |
| Hase | B | T | Xxxxxx | Wiesel | Schilf | Hafen | Rost |
| Honig | B | T | Xxxxxx | Marmelade | Speer | Hotel | Park |
| Kanone | B | T | Xxxxxx | Pistole | Tablette | Kanister | Vorort |
| Kirsche | B | T | Xxxxxx | Traube | Paket | Kirche | Bagger |
| Kleeblatt | B | T | Xxxxxx | Schilf | Zange | Klerus | Hamster |
| Knochen | B | T | Xxxxxx | Muskel | Radar | Knospe | Salbe |
| Koffer | B | T | Xxxxxx | Tasche | Stift | Koffein | Adel |
| Kokosnuss | B | T | Xxxxxx | Papaya | Deodorant | Kokain | Analyse |
| Kompass | B | T | Xxxxxx | Uhr | Melone | Konsum | Beere |
| Krebs | B | T | Xxxxxx | Hummer | Uhr | Kredit | Schau |
| Leopard | B | T | Xxxxxx | Tiger | Kuchen | Lehm | Dimension |
| Medaille | B | T | Xxxxxx | Trophaee | Anorak | Mediation | Kuli |
| Mikroskop | B | T | Xxxxxx | Fernglas | Strumpf | Mikado | Geschichte |
| Mond | B | T | Xxxxxx | Sonne | Huhn | Monitor | Biene |
| Panzer | B | T | Xxxxxx | Jeep | Sonne | Panther | Boden |
| Pille | B | T | Xxxxxx | Tablette | Wolf | Pilot | Strauch |
| Pizza | B | T | Xxxxxx | Kuchen | Hacke | Pixel | Hantel |
| Ratte | B | T | Xxxxxx | Maus | Fueller | Raster | Pickel |
| Rock | B | T | Xxxxxx | Hemd | Gras | Rost | Hirn |
| Salzstreuer | B | T | Xxxxxx | Pfeffermuehle | Pistole | Salbe | Pudel |
| Schnuller | B | T | Xxxxxx | Flasche | Sessel | Schnur | Marine |
| Seife | B | T | Xxxxxx | Duschgel | Fackel | Seide | Klerus |
| Spinne | B | T | Xxxxxx | Ameise | Duschgel | Spitzel | Duell |
| Strauss | B | T | Xxxxxx | Huhn | Knie | Strauch | Kuebel |
| Tanne | B | T | Xxxxxx | Fichte | Messer | Tante | Regel |
| Thron | B | T | Xxxxxx | Sessel | Hemd | Trost | Raster |
| Trompete | B | T | Xxxxxx | Saxophon | Schnee | Troll | Kokain |
| Tunnel | B | T | Xxxxxx | Hoehle | Harfe | Tuba | Kanister |
| Zeitung | B | T | Xxxxxx | Buch | Herd | Zeichen | Trost |
| Zirkel | B | T | Xxxxxx | Lineal | Flasche | Zirkus | Seide |
| Zwiebel | B | T | Xxxxxx | Knoblauch | Stock | Zwiesel | Antike |

We used to set of items (A and B) in order to combine them with the speed of the fillers (constant or fast) in the block (there were two blocks). So a single participant could be in the condition described in Table 2.

Table : Set and speed by block

|  |  |  |
| --- | --- | --- |
|  | Block 1 of the experiment | Block 2 of the experiment |
| 4001 | Set A in the constant speed | Set B in the fast speed |
| 4002 | Set A in the fast speed | Set B in the constant speed |
| 4003 | Set B in the constant speed | Set A in the fast speed |
| 4004 | Set B in the fast speed | Set A in the constant speed |

So every participant was either in the condition 4001, 4002, 4003, or 4004. We tested 48 participants in order to get these conditions balanced.

In the results files, there are several columns corresponding to these kind of information:

* In the column “Set\_Nbr”: 5001 correspond to Set A and 5002 to Set B;
* In the column “Type\_Presentation”: the number 4001, 4002, 4003 and 4004 we described (set and speed by block type)
* In the column “Type\_Speed”: 3001 corresponds to items in a block where fillers have a constant duration, 3002 corresponds to items in blocks where fillers have a fast speed;
* In the column “Order\_Presentation”: it is going from 7001 to 7010. Here it is indicating, for a particular target, how the conditions of presentation (baseline, phono related…) are ordered along the experience. I give more details below (so it doesn’t change for a particular target);
* In the column “Picture\_ID”: every target has an ID in number;
* In the column “Distractor\_ID”: every distractor has an ID in number;
* In the column “Repetition\_Item”: the number of the repetition of a target in the experiment;
* In the column “Trial\_Nbr”: it was supposed to be the number of the trial in the experiment but at the end it didn’t work so do not take into account this column. The other way to get this info would be with the hour of recording in the name of wav file but I haven’t done it;
* In the column “Duration\_Stim”: it is always at 1195 ms because the column only keep the test items (with duration not changing at 1200 ms) so it is not useful;

**Generating and randomizing stimuli**

For easiness the randomization of stimuli was not done in Presentation but by generating lists of stimuli with matlab and python. These lists defined the order of onset and properties (set, speed, condition, nature of the items such as fillers, tests…).

These scripts can be found in the Presentation folder with the experiment. It is to note that they are just there but do not interact with Presentation directly. What we do is first these scripts are launched, they generate list of stimuli for every participant, and then Presentation use the appropriate list of stim when we indicate at the beginning of procedure the number of the participant.

The first thing concerns the timing of the filler trials. In the constant condition, the filler appear for a duration of 1195 ms, like the test items. In the fast condition, the filler appear with a shorter duration ranging from 391 ms to 591 ms. It is to note here that these durations cannot be directly displayed by the monitor because of the refresh rate of it, so this duration is actually approximated to the superior refresh that is used (see Table 3). So very short durations are less probable than longer duration in the fast condition for the fillers. In matlab there is the script “random\_fillers.m” doing this function. It is associated to the vector “vecteur\_duration\_filler.mat”, and to the csv file “duration\_filler\_fast.csv”.

Table : Duration of the fillers in the fast condition

|  |  |
| --- | --- |
| **Duration** | **Number of filler trials with this duration during an experiment (110 trials)** |
| 391 | 1 |
| 408 | 1 |
| 425 | 2 |
| 441 | 3 |
| 458 | 5 |
| 475 | 6 |
| 491 | 8 |
| 508 | 10 |
| 525 | 11 |
| 541 | 13 |
| 558 | 15 |
| 575 | 17 |
| 591 | 18 |

Then we generate a vector indicating where, in a vector representing trials during a block, the filler trials are. It is done with the matlab script “random\_speeded2.m”. This script is generating a matrix with as many row as wanted (10 rows by participants are going to be used, and 67 columns). Figure 1

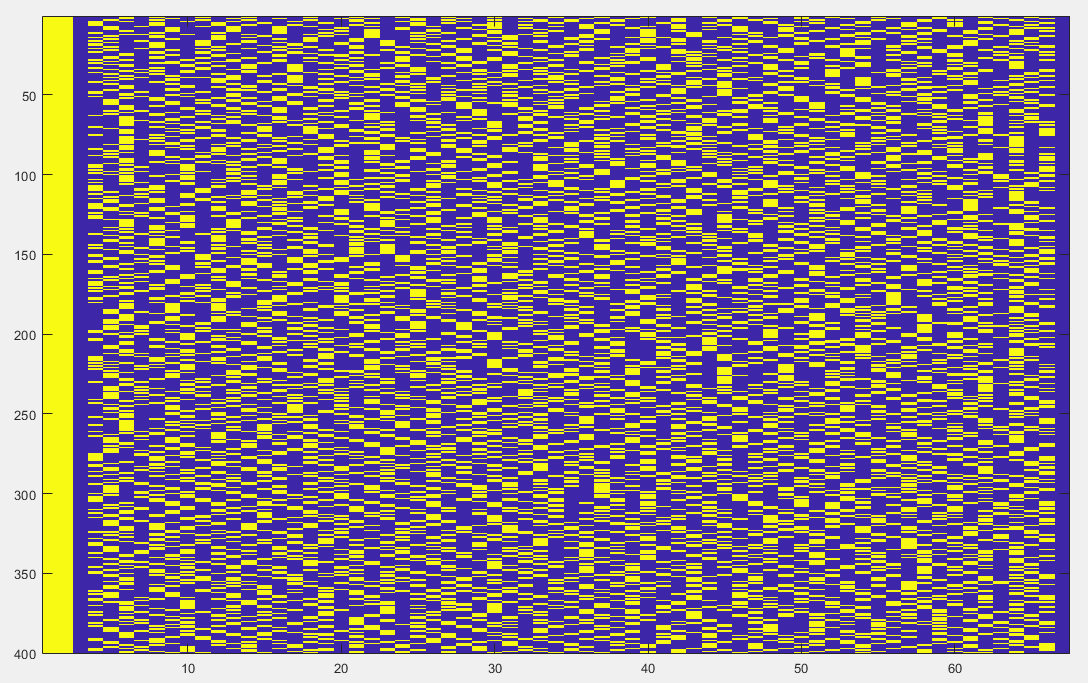


Figure : Position of test trials (blue) and filler trials (yellow) for 67 trials, the procedure of 1 participant is using 10 rows

The thing to take into account here is that we have block of 335 trials. We divide these blocks in 5 parts of 67 trials. In each of these part, there 45 target test items associated to a single experimental condition (phono related…) and 22 target filler items associated to a single experimental condition (phono related…). So we divided each block such as every serie of 67 items, every item (filler or test items) is presented once.

So we need to define the position of where the fillers are appearing over the 67 items. We defined it this way:

* The first two trials of a part of 67 trials are always filler items;
* The last trials of a part of 67 trials is always a test item;
* Then we put the rest of the fillers inside the rest of the position.

To position the filler inside we do in the script “random\_speeded2.m”:

* At the beginning, every position has a probability of being selected (100% for the position where there is nothing, (0% for a position where there is already something). Then we randomly selected a first position for being a filler, for example the position n. The probability for being selected for being a filler at the next iteration become 0% for the position n, while this probability become respectively 60% for the items at the positions n-2 and n+2, and 10% for the items at the position n-1 and n+1;
* the we calculate the distance between fillers in number of slot (if they are close the distance is 0, if 1 slot separate two fillers with a test item it is 1…) over the 22 fillers in the 67 slots. If there is a single time where two fillers items are separated by more than 4 test items, we do not consider this particular randomization and run the randomization again.

So at the that we have a matrix called “sim.mat” and the same thing in csv called “Filler\_Order.csv”. Every participant need 10 rows (because 5 are used for each block) so it needs to be run and create a new files for more participants with a multiple of 10 in the script “random\_speeded2.m”.

Once it is done we have for randomizing the stim for presentation itself:

* a script in python called “random\_stim7.py”;
* this script is using the csv files with the stim “Set\_A\_Familiarisation\_header.csv.csv”, “Set\_A\_Practice\_header.csv”, “Set\_A\_Test\_no\_header.csv”, “Set\_B\_Familiarisation\_no\_header.csv”, “Set\_B\_Practice\_no\_header.csv”, “Set\_B\_Test\_no\_header.csv”
* and the csv files used for randomization “duration\_filler\_fast.csv” and “Filler\_Order.csv”.

The script is generating several csv files with the stim (run in sequence in Presentation) for every participant. Presentation will not work with the csv files this script generates.

Without giving every details of the scripts but what it is doing is depending on the ID of the participant entered creating csv files indicating the conditions for this participant (4001, 4002, 4003, 4004, 4005) of the Table 2. Then for every target picture it is giving an order of presentation of the condition (for example baseline condition as the first condition in which a target picture is presented…).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Code | First condition | Second condition | Third condition | Four condition | Five condition |
| 7001 | Baseline (9001) | Semantic related (9004) | Semantic unrelated (9005) | Phono related (9002) | Phono unrelated (9003) |
| 7002 | Semantic related (9004) | Semantic unrelated (9005) | Phono related (9002) | Phono unrelated (9003) | Baseline (9001) |
| 7003 | Semantic unrelated (9005) | Phono related (9002) | Phono unrelated (9003) | Baseline (9001) | Semantic related (9004) |
| 7004 | Phono related (9002) | Phono unrelated (9003) | Baseline (9001) | Semantic related (9004) | Semantic unrelated (9005) |
| 7005 | Phono unrelated (9003) | Baseline (9001) | Semantic related (9004) | Semantic unrelated (9005) | Phono related (9002) |
| 7006 | Phono unrelated (9003) | Phono related (9002) | Semantic unrelated (9005) | Semantic related (9004) | Baseline (9001) |
| 7007 | Baseline (9001) | Phono unrelated (9003) | Phono related (9002) | Semantic unrelated (9005) | Semantic related (9004) |
| 7008 | Semantic related (9004) | Baseline (9001) | Phono unrelated (9003) | Phono related (9002) | Semantic unrelated (9005) |
| 7009 | Semantic unrelated (9005) | Semantic related (9004) | Baseline (9001) | Phono unrelated (9003) | Phono related (9002) |
| 7010 | Phono related (9002) | Semantic unrelated (9005) | Semantic related (9004) | Baseline (9001) | Phono unrelated (9003) |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Condition just before | | | | |
|  |  | 9001 | 9002 | 9003 | 9004 | 9005 |
| Condition just after | 9001 |  |  | 4 | 4 |  |
| 9002 |  |  | 4 |  | 4 |
| 9003 | 4 | 4 |  |  |  |
| 9004 | 4 |  |  |  | 4 |
| 9005 |  | 4 |  | 4 |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Condition before along the 5 presentation | | | | |
|  |  | 9001 | 9002 | 9003 | 9004 | 9005 |
| Condition after along the 5 presentations | 9001 |  |  |  |  |  |
| 9002 |  |  | 5 |  |  |
| 9003 |  | 5 |  |  |  |
| 9004 |  |  |  |  | 5 |
| 9005 |  |  |  | 5 |  |

We did these order of presentation to be sure that the order at which the condition related and unrelated appeared (for the phonologic and semantic difference) were the same.

However, we had in a single 45 test items and 22 fillers item. So what we did is that if the number of the participant was odd, the participant had:

* 2 filler items associated to the condition 7001… 7010 (so 20 items), and for the 2 remaining associated to 7001 and 7006 (2 items, so 22 in total);
* 4 test items associated to the condition 7001… 7010 (so 40 items), and for the 5 remaining, 3 associated to 7001 and 2 associated to 7006 (for 2 of them).

If the number of the participant was even, it was:

* 2 filler items associated to the condition 7001… 7010 (so 20 items), and for the 2 remaining associated to 7001 and 7006 (2 items, so 22 in total);
* 4 test items associated to the condition 7001… 7010 (so 40 items), and for the 5 remaining, 2 associated to 7001 and 3 associated to 7006.

The script “random\_stim7.py” generated for each participant (for exemple the participant 01):

* 01\_Familiarisation\_1.csv : the sequence of trials for the first familiarization trials;
* 01\_Familiarisation\_2.csv: the sequence of trials for the second familiarization trials;
* 01\_Practice\_1.csv: the sequence of trials for the first practice trials;
* 01\_Practice\_2.csv: the sequence of trials for the second practice trials;
* 01\_Test\_1.csv: the sequence of trials for the first test trials (it is called test but it means inside there are the test and filler items);
* 01\_Test\_2.csv: the sequence of trials for the second test trials (it is called test but it means inside there are the test and filler items).

Figure 2 indicates when each of these csv is used

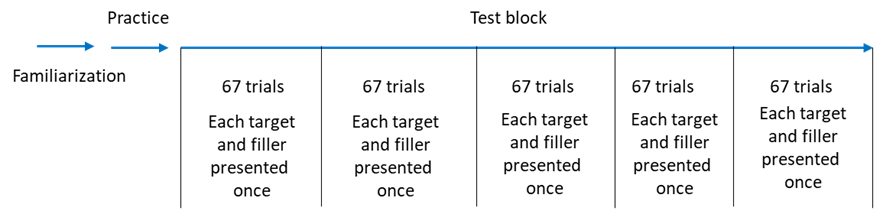


Figure : A block in the experimental procedure (there are two)

**Recall task**

In the recall task, participants had to indicate if a word presented was used as a distractor during the experiment. They just had to push one of two buttons to answer either yes or no. Half of the words used were distractors words (179 words instead of 180 because of one word we forgot, 89 for the semantic contrast and 90 for the phonological contrast, the distractor that was not included is muetze with ID 1051), the other half were words not used in the experiment. In the Table 4 there are the distractors we used, they have an ID (they start by 9 if they were words not used during the PWI exerpiment). There is also the correspondence between the distractor and set number they were in (5001 and 5002 or set A or B for the words used during the experiment, or 5009 for the words that were not used during the experiment). There is also a code for the condition indicating the condition the distractors were used (90049005 for the semantic contrast and 90029003 for the phonological contrast). There is also the expected response (4 corresponds to yes and 3 to no in Presentation, and 3 and 4 corresponds to button on the keyboard defined in Presentation in the responses).

Table 4: Words used in the recall task

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Word | ID | Set Nbr | Condition | Expected Response |
| Falke | 1027 | 5001 | 90049005 | 4 |
| Melone | 1028 | 5001 | 90049005 | 4 |
| Radar | 1029 | 5001 | 90049005 | 4 |
| Aprikose | 1031 | 5001 | 90049005 | 4 |
| Harke | 1032 | 5001 | 90049005 | 4 |
| Sofa | 1033 | 5001 | 90049005 | 4 |
| Wein | 1034 | 5001 | 90049005 | 4 |
| Gras | 1035 | 5001 | 90049005 | 4 |
| Granate | 1036 | 5001 | 90049005 | 4 |
| Postkarte | 1038 | 5001 | 90049005 | 4 |
| Frisbee | 1039 | 5001 | 90049005 | 4 |
| Eidechse | 1040 | 5001 | 90049005 | 4 |
| Knie | 1042 | 5001 | 90049005 | 4 |
| Mandel | 1043 | 5001 | 90049005 | 4 |
| Streichholz | 1044 | 5001 | 90049005 | 4 |
| Paket | 1046 | 5001 | 90049005 | 4 |
| Harfe | 1047 | 5001 | 90049005 | 4 |
| Wal | 1048 | 5001 | 90049005 | 4 |
| Zange | 1049 | 5001 | 90049005 | 4 |
| Elch | 1050 | 5001 | 90049005 | 4 |
| Gurke | 1052 | 5001 | 90049005 | 4 |
| Fackel | 1053 | 5001 | 90049005 | 4 |
| Zitrone | 1054 | 5001 | 90049005 | 4 |
| Stift | 1055 | 5001 | 90049005 | 4 |
| Stock | 1056 | 5001 | 90049005 | 4 |
| Ziege | 1058 | 5001 | 90049005 | 4 |
| Herd | 1057 | 5001 | 90049005 | 4 |
| Anorak | 1059 | 5001 | 90049005 | 4 |
| Puppe | 1060 | 5001 | 90049005 | 4 |
| Bohne | 1061 | 5001 | 90049005 | 4 |
| Deodorant | 1062 | 5001 | 90049005 | 4 |
| Jacuzzi | 1064 | 5001 | 90049005 | 4 |
| Schnee | 1065 | 5001 | 90049005 | 4 |
| Tulpe | 1066 | 5001 | 90049005 | 4 |
| Hacke | 1067 | 5001 | 90049005 | 4 |
| Libelle | 1068 | 5001 | 90049005 | 4 |
| Gans | 1069 | 5001 | 90049005 | 4 |
| Dose | 1070 | 5001 | 90049005 | 4 |
| Jalousie | 1071 | 5001 | 90049005 | 4 |
| Schrippe | 1099 | 5002 | 90049005 | 4 |
| Speer | 1100 | 5002 | 90049005 | 4 |
| Kamm | 1101 | 5002 | 90049005 | 4 |
| Rubin | 1102 | 5002 | 90049005 | 4 |
| Mammut | 1103 | 5002 | 90049005 | 4 |
| Scanner | 1104 | 5002 | 90049005 | 4 |
| Badewanne | 1105 | 5002 | 90049005 | 4 |
| Wolle | 1106 | 5002 | 90049005 | 4 |
| Zeh | 1107 | 5002 | 90049005 | 4 |
| Wolf | 1108 | 5002 | 90049005 | 4 |
| Messer | 1109 | 5002 | 90049005 | 4 |
| Zombie | 1110 | 5002 | 90049005 | 4 |
| Strumpf | 1111 | 5002 | 90049005 | 4 |
| Wiesel | 1112 | 5002 | 90049005 | 4 |
| Marmelade | 1113 | 5002 | 90049005 | 4 |
| Pistole | 1114 | 5002 | 90049005 | 4 |
| Traube | 1080 | 5002 | 90049005 | 4 |
| Schilf | 1116 | 5002 | 90049005 | 4 |
| Muskel | 1117 | 5002 | 90049005 | 4 |
| Tasche | 1118 | 5002 | 90049005 | 4 |
| Papaya | 1119 | 5002 | 90049005 | 4 |
| Uhr | 1120 | 5002 | 90049005 | 4 |
| Hummer | 1121 | 5002 | 90049005 | 4 |
| Tiger | 1122 | 5002 | 90049005 | 4 |
| Fernglas | 1124 | 5002 | 90049005 | 4 |
| Sonne | 1125 | 5002 | 90049005 | 4 |
| Jeep | 1126 | 5002 | 90049005 | 4 |
| Tablette | 1127 | 5002 | 90049005 | 4 |
| Kuchen | 1128 | 5002 | 90049005 | 4 |
| Maus | 1129 | 5002 | 90049005 | 4 |
| Hemd | 1130 | 5002 | 90049005 | 4 |
| Flasche | 1132 | 5002 | 90049005 | 4 |
| Duschgel | 1133 | 5002 | 90049005 | 4 |
| Ameise | 1134 | 5002 | 90049005 | 4 |
| Huhn | 1135 | 5002 | 90049005 | 4 |
| Fichte | 1136 | 5002 | 90049005 | 4 |
| Sessel | 1137 | 5002 | 90049005 | 4 |
| Saxophon | 1138 | 5002 | 90049005 | 4 |
| Buch | 1140 | 5002 | 90049005 | 4 |
| Lineal | 1141 | 5002 | 90049005 | 4 |
| Knoblauch | 1142 | 5002 | 90049005 | 4 |
| Adel | 1169 | 5001 | 90029003 | 4 |
| Analyse | 1170 | 5001 | 90029003 | 4 |
| Antike | 1171 | 5001 | 90029003 | 4 |
| Armee | 1172 | 5001 | 90029003 | 4 |
| Banjo | 1173 | 5001 | 90029003 | 4 |
| Beere | 1174 | 5001 | 90029003 | 4 |
| Berg | 1175 | 5001 | 90029003 | 4 |
| Biene | 1176 | 5001 | 90029003 | 4 |
| Bluse | 1177 | 5001 | 90029003 | 4 |
| Borste | 1178 | 5001 | 90029003 | 4 |
| Bote | 1179 | 5001 | 90029003 | 4 |
| Brigade | 1180 | 5001 | 90029003 | 4 |
| Bulle | 1181 | 5001 | 90029003 | 4 |
| Chaos | 1182 | 5001 | 90029003 | 4 |
| Dominanz | 1183 | 5001 | 90029003 | 4 |
| Elfe | 1184 | 5001 | 90029003 | 4 |
| Ehre | 1185 | 5001 | 90029003 | 4 |
| Feudalismus | 1186 | 5001 | 90029003 | 4 |
| Fliese | 1187 | 5001 | 90029003 | 4 |
| Geschichte | 1188 | 5001 | 90029003 | 4 |
| Giraffe | 1189 | 5001 | 90029003 | 4 |
| Hain | 1190 | 5001 | 90029003 | 4 |
| Hamster | 1191 | 5001 | 90029003 | 4 |
| Hirn | 1192 | 5001 | 90029003 | 4 |
| Kardinal | 1194 | 5001 | 90029003 | 4 |
| Kerbe | 1195 | 5001 | 90029003 | 4 |
| Kino | 1196 | 5001 | 90029003 | 4 |
| Kreis | 1197 | 5001 | 90029003 | 4 |
| Kruste | 1198 | 5001 | 90029003 | 4 |
| Kuli | 1200 | 5001 | 90029003 | 4 |
| Mantra | 1201 | 5001 | 90029003 | 4 |
| Marine | 1202 | 5001 | 90029003 | 4 |
| Olympia | 1203 | 5001 | 90029003 | 4 |
| Park | 1204 | 5001 | 90029003 | 4 |
| Pickel | 1205 | 5001 | 90029003 | 4 |
| Pudel | 1206 | 5001 | 90029003 | 4 |
| Regel | 1207 | 5001 | 90029003 | 4 |
| Rosine | 1208 | 5001 | 90029003 | 4 |
| Schau | 1209 | 5001 | 90029003 | 4 |
| Schmerz | 1210 | 5001 | 90029003 | 4 |
| Schwager | 1211 | 5001 | 90029003 | 4 |
| Taste | 1212 | 5001 | 90029003 | 4 |
| Vorort | 1213 | 5001 | 90029003 | 4 |
| Akt | 1240 | 5002 | 90029003 | 4 |
| Bagger | 1241 | 5002 | 90029003 | 4 |
| Boden | 1242 | 5002 | 90029003 | 4 |
| Dialekt | 1244 | 5002 | 90029003 | 4 |
| Dimension | 1245 | 5002 | 90029003 | 4 |
| Druide | 1246 | 5002 | 90029003 | 4 |
| Duell | 1247 | 5002 | 90029003 | 4 |
| Fahne | 1248 | 5002 | 90029003 | 4 |
| Filz | 1249 | 5002 | 90029003 | 4 |
| Fund | 1250 | 5002 | 90029003 | 4 |
| Gabe | 1251 | 5002 | 90029003 | 4 |
| Geier | 1252 | 5002 | 90029003 | 4 |
| Hantel | 1253 | 5002 | 90029003 | 4 |
| Hafen | 1254 | 5002 | 90029003 | 4 |
| Hotel | 1255 | 5002 | 90029003 | 4 |
| Kanister | 1256 | 5002 | 90029003 | 4 |
| Kirche | 1257 | 5002 | 90029003 | 4 |
| Klerus | 1258 | 5002 | 90029003 | 4 |
| Knospe | 1259 | 5002 | 90029003 | 4 |
| Koffein | 1260 | 5002 | 90029003 | 4 |
| Kokain | 1261 | 5002 | 90029003 | 4 |
| Konsum | 1262 | 5002 | 90029003 | 4 |
| Kredit | 1263 | 5002 | 90029003 | 4 |
| Lehm | 1264 | 5002 | 90029003 | 4 |
| Mediation | 1265 | 5002 | 90029003 | 4 |
| Mikado | 1266 | 5002 | 90029003 | 4 |
| Monitor | 1267 | 5002 | 90029003 | 4 |
| Panther | 1268 | 5002 | 90029003 | 4 |
| Pilot | 1269 | 5002 | 90029003 | 4 |
| Pixel | 1270 | 5002 | 90029003 | 4 |
| Raster | 1271 | 5002 | 90029003 | 4 |
| Rost | 1272 | 5002 | 90029003 | 4 |
| Salbe | 1273 | 5002 | 90029003 | 4 |
| Schnur | 1274 | 5002 | 90029003 | 4 |
| Seide | 1275 | 5002 | 90029003 | 4 |
| Spitzel | 1276 | 5002 | 90029003 | 4 |
| Strauch | 1277 | 5002 | 90029003 | 4 |
| Tante | 1278 | 5002 | 90029003 | 4 |
| Trost | 1279 | 5002 | 90029003 | 4 |
| Troll | 1280 | 5002 | 90029003 | 4 |
| Tuba | 1281 | 5002 | 90029003 | 4 |
| Zeichen | 1282 | 5002 | 90029003 | 4 |
| Zirkus | 1283 | 5002 | 90029003 | 4 |
| Zwiesel | 1284 | 5002 | 90029003 | 4 |
| Fuß | 1030 | 5001 | 90049005 | 4 |
| Floß | 1037 | 5001 | 90049005 | 4 |
| Würfel | 1041 | 5001 | 90049005 | 4 |
| Mücke | 1045 | 5001 | 90049005 | 4 |
| Füller | 1063 | 5001 | 90049005 | 4 |
| Säge | 1098 | 5002 | 90049005 | 4 |
| Trophäe | 1123 | 5002 | 90049005 | 4 |
| Pfeffermühle | 1131 | 5002 | 90049005 | 4 |
| Höhle | 1139 | 5002 | 90049005 | 4 |
| Kapitän | 1193 | 5001 | 90029003 | 4 |
| Kübel | 1199 | 5001 | 90029003 | 4 |
| Bürde | 1243 | 5002 | 90029003 | 4 |
| Kinn | 9001 | 5009 | 99999999 | 3 |
| Steak | 9002 | 5009 | 99999999 | 3 |
| Bademantel | 9003 | 5009 | 99999999 | 3 |
| Truthahn | 9004 | 5009 | 99999999 | 3 |
| Kette | 9005 | 5009 | 99999999 | 3 |
| Wespe | 9006 | 5009 | 99999999 | 3 |
| Knopf | 9007 | 5009 | 99999999 | 3 |
| Pokal | 9008 | 5009 | 99999999 | 3 |
| Welle | 9009 | 5009 | 99999999 | 3 |
| Luftballon | 9010 | 5009 | 99999999 | 3 |
| Herz | 9011 | 5009 | 99999999 | 3 |
| Fluss | 9012 | 5009 | 99999999 | 3 |
| Roboter | 9013 | 5009 | 99999999 | 3 |
| Milch | 9014 | 5009 | 99999999 | 3 |
| Feder | 9015 | 5009 | 99999999 | 3 |
| Nilpferd | 9016 | 5009 | 99999999 | 3 |
| Walnuss | 9017 | 5009 | 99999999 | 3 |
| Fallschirm | 9018 | 5009 | 99999999 | 3 |
| Weste | 9019 | 5009 | 99999999 | 3 |
| Anzug | 9020 | 5009 | 99999999 | 3 |
| Pfeife | 9021 | 5009 | 99999999 | 3 |
| Schnecke | 9022 | 5009 | 99999999 | 3 |
| Bart | 9023 | 5009 | 99999999 | 3 |
| Krawatte | 9024 | 5009 | 99999999 | 3 |
| Fussball | 9025 | 5009 | 99999999 | 3 |
| Motor | 9026 | 5009 | 99999999 | 3 |
| Krokodil | 9027 | 5009 | 99999999 | 3 |
| Salat | 9028 | 5009 | 99999999 | 3 |
| Computer | 9029 | 5009 | 99999999 | 3 |
| Mikrofon | 9030 | 5009 | 99999999 | 3 |
| Schuh | 9031 | 5009 | 99999999 | 3 |
| Brust | 9032 | 5009 | 99999999 | 3 |
| Teller | 9033 | 5009 | 99999999 | 3 |
| Nadel | 9034 | 5009 | 99999999 | 3 |
| Puzzle | 9035 | 5009 | 99999999 | 3 |
| Gehirn | 9036 | 5009 | 99999999 | 3 |
| Karren | 9037 | 5009 | 99999999 | 3 |
| Urkunde | 9038 | 5009 | 99999999 | 3 |
| Pylone | 9039 | 5009 | 99999999 | 3 |
| Insel | 9040 | 5009 | 99999999 | 3 |
| Laterne | 9041 | 5009 | 99999999 | 3 |
| Knoten | 9042 | 5009 | 99999999 | 3 |
| Pfeil | 9043 | 5009 | 99999999 | 3 |
| Sichel | 9044 | 5009 | 99999999 | 3 |
| Cello | 9045 | 5009 | 90049005 | 3 |
| Hals | 9046 | 5009 | 99999999 | 3 |
| Granatapfel | 9047 | 5009 | 99999999 | 3 |
| Flagge | 9048 | 5009 | 99999999 | 3 |
| Schwert | 9049 | 5009 | 99999999 | 3 |
| Taxi | 9050 | 5009 | 99999999 | 3 |
| Dreirad | 9051 | 5009 | 99999999 | 3 |
| Fernseher | 9052 | 5009 | 99999999 | 3 |
| Storch | 9053 | 5009 | 99999999 | 3 |
| Rucksack | 9054 | 5009 | 99999999 | 3 |
| Spiegel | 9055 | 5009 | 99999999 | 3 |
| Brunnen | 9056 | 5009 | 99999999 | 3 |
| Netz | 9057 | 5009 | 99999999 | 3 |
| Reh | 9058 | 5009 | 99999999 | 3 |
| Delfin | 9059 | 5009 | 99999999 | 3 |
| Igel | 9060 | 5009 | 99999999 | 3 |
| Turban | 9061 | 5009 | 99999999 | 3 |
| Luchs | 9062 | 5009 | 99999999 | 3 |
| Feige | 9063 | 5009 | 99999999 | 3 |
| Ente | 9064 | 5009 | 99999999 | 3 |
| Korken | 9065 | 5009 | 99999999 | 3 |
| Pistazie | 9066 | 5009 | 99999999 | 3 |
| Lampe | 9067 | 5009 | 99999999 | 3 |
| Korb | 9068 | 5009 | 99999999 | 3 |
| Teppich | 9069 | 5009 | 99999999 | 3 |
| Stinktier | 9070 | 5009 | 99999999 | 3 |
| Telefon | 9071 | 5009 | 99999999 | 3 |
| Seil | 9072 | 5009 | 99999999 | 3 |
| Fledermaus | 9073 | 5009 | 99999999 | 3 |
| Geige | 9074 | 5009 | 99999999 | 3 |
| Magnet | 9075 | 5009 | 99999999 | 3 |
| Spargel | 9076 | 5009 | 99999999 | 3 |
| Schiff | 9077 | 5009 | 99999999 | 3 |
| Mais | 9078 | 5009 | 99999999 | 3 |
| Spritze | 9079 | 5009 | 99999999 | 3 |
| Koala | 9080 | 5009 | 99999999 | 3 |
| Pullover | 9081 | 5009 | 99999999 | 3 |
| Schlitten | 9082 | 5009 | 99999999 | 3 |
| Advent | 9083 | 5009 | 99999999 | 3 |
| Aktion | 9084 | 5009 | 99999999 | 3 |
| Amt | 9085 | 5009 | 99999999 | 3 |
| Antilope | 9086 | 5009 | 99999999 | 3 |
| Arktis | 9087 | 5009 | 99999999 | 3 |
| Ballade | 9088 | 5009 | 99999999 | 3 |
| Bastei | 9089 | 5009 | 99999999 | 3 |
| Beet | 9090 | 5009 | 99999999 | 3 |
| Beruf | 9091 | 5009 | 99999999 | 3 |
| Biest | 9092 | 5009 | 99999999 | 3 |
| Blut | 9093 | 5009 | 99999999 | 3 |
| Bonbon | 9094 | 5009 | 99999999 | 3 |
| Bonus | 9095 | 5009 | 99999999 | 3 |
| Borke | 9096 | 5009 | 99999999 | 3 |
| Brauerei | 9097 | 5009 | 99999999 | 3 |
| Bunker | 9098 | 5009 | 99999999 | 3 |
| Chlor | 9099 | 5009 | 99999999 | 3 |
| Dialyse | 9100 | 5009 | 99999999 | 3 |
| Dissonanz | 9101 | 5009 | 99999999 | 3 |
| Dokument | 9102 | 5009 | 99999999 | 3 |
| Droge | 9103 | 5009 | 99999999 | 3 |
| Duft | 9104 | 5009 | 99999999 | 3 |
| Erbe | 9105 | 5009 | 99999999 | 3 |
| Elster | 9106 | 5009 | 99999999 | 3 |
| Fantasie | 9107 | 5009 | 99999999 | 3 |
| Feuer | 9108 | 5009 | 99999999 | 3 |
| Film | 9109 | 5009 | 99999999 | 3 |
| Furcht | 9110 | 5009 | 99999999 | 3 |
| Galaxie | 9111 | 5009 | 99999999 | 3 |
| Gecko | 9112 | 5009 | 99999999 | 3 |
| Gesetz | 9113 | 5009 | 99999999 | 3 |
| Gipfel | 9114 | 5009 | 99999999 | 3 |
| Habicht | 9115 | 5009 | 99999999 | 3 |
| Hanf | 9116 | 5009 | 99999999 | 3 |
| Harmonika | 9117 | 5009 | 99999999 | 3 |
| Hagel | 9118 | 5009 | 99999999 | 3 |
| Himmel | 9119 | 5009 | 99999999 | 3 |
| Hobby | 9120 | 5009 | 99999999 | 3 |
| Kaffee | 9121 | 5009 | 99999999 | 3 |
| Kaliber | 9122 | 5009 | 99999999 | 3 |
| Karavane | 9123 | 5009 | 99999999 | 3 |
| Keule | 9124 | 5009 | 99999999 | 3 |
| Kiosk | 9125 | 5009 | 99999999 | 3 |
| Kissen | 9126 | 5009 | 99999999 | 3 |
| Klima | 9127 | 5009 | 99999999 | 3 |
| Knorpel | 9128 | 5009 | 99999999 | 3 |
| Kohlrabi | 9129 | 5009 | 99999999 | 3 |
| Kokon | 9130 | 5009 | 99999999 | 3 |
| Konzert | 9131 | 5009 | 99999999 | 3 |
| Krieg | 9132 | 5009 | 99999999 | 3 |
| Kristall | 9133 | 5009 | 99999999 | 3 |
| Krug | 9134 | 5009 | 99999999 | 3 |
| Kurier | 9135 | 5009 | 99999999 | 3 |
| Lehrer | 9136 | 5009 | 99999999 | 3 |
| Manuskript | 9137 | 5009 | 99999999 | 3 |
| Marmor | 9138 | 5009 | 99999999 | 3 |
| Medium | 9139 | 5009 | 99999999 | 3 |
| Minotaur | 9140 | 5009 | 99999999 | 3 |
| Moral | 9141 | 5009 | 99999999 | 3 |
| Ozean | 9142 | 5009 | 99999999 | 3 |
| Panda | 9143 | 5009 | 99999999 | 3 |
| Panik | 9144 | 5009 | 99999999 | 3 |
| Pilz | 9145 | 5009 | 99999999 | 3 |
| Pirat | 9146 | 5009 | 99999999 | 3 |
| Pier | 9147 | 5009 | 99999999 | 3 |
| Puls | 9148 | 5009 | 99999999 | 3 |
| Radio | 9149 | 5009 | 99999999 | 3 |
| Reflex | 9150 | 5009 | 99999999 | 3 |
| Roman | 9151 | 5009 | 99999999 | 3 |
| Rohr | 9152 | 5009 | 99999999 | 3 |
| Salon | 9153 | 5009 | 99999999 | 3 |
| Schaf | 9154 | 5009 | 99999999 | 3 |
| Scherz | 9155 | 5009 | 99999999 | 3 |
| Schiene | 9156 | 5009 | 99999999 | 3 |
| Schmied | 9157 | 5009 | 99999999 | 3 |
| Sekt | 9158 | 5009 | 99999999 | 3 |
| Sport | 9159 | 5009 | 99999999 | 3 |
| Strand | 9160 | 5009 | 99999999 | 3 |
| Talent | 9161 | 5009 | 99999999 | 3 |
| Tatort | 9162 | 5009 | 99999999 | 3 |
| Trottel | 9163 | 5009 | 99999999 | 3 |
| Trauma | 9164 | 5009 | 99999999 | 3 |
| Turnier | 9165 | 5009 | 99999999 | 3 |
| Vorbild | 9166 | 5009 | 99999999 | 3 |
| Zentaur | 9167 | 5009 | 99999999 | 3 |
| Zipfel | 9168 | 5009 | 99999999 | 3 |
| Zwilling | 9169 | 5009 | 99999999 | 3 |
| Tüte | 9170 | 5009 | 99999999 | 3 |
| Käse | 9171 | 5009 | 99999999 | 3 |
| Rücken | 9172 | 5009 | 99999999 | 3 |
| Möwe | 9173 | 5009 | 99999999 | 3 |
| Glühbirne | 9174 | 5009 | 99999999 | 3 |
| Perücke | 9175 | 5009 | 99999999 | 3 |
| Fächer | 9176 | 5009 | 99999999 | 3 |
| Kürbis | 9177 | 5009 | 99999999 | 3 |
| Flügel | 9178 | 5009 | 99999999 | 3 |
| Küche | 9179 | 5009 | 99999999 | 3 |
| Büro | 9180 | 5009 | 99999999 | 3 |
| Cello | 9181 | 5009 | 99999999 | 3 |