<table>
<thead>
<tr>
<th>Internship</th>
<th>Research Institute</th>
<th>Description + tasks</th>
<th>Period</th>
<th>Application deadline</th>
<th>Additional Requirements</th>
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<tr>
<td>Precious Phones: The Reward Value Associated with Smartphone Applications</td>
<td>Behavioural Science Institute</td>
<td>Most people these days are constantly online and check their smartphones countless times throughout the day. Smartphones also distract users even if they try to ignore their phones. Surprisingly, we know very little why smartphones are so distracting. In this project we investigate the underlying mechanisms of repetitive smartphone checking behavior. More specifically, we test whether this checking behavior is elicited by the high social reward that we associate with our devices. <strong>Tasks:</strong> Your task will be to test participants, analyze the data, and write up the results (or a selection of these tasks, depending on your availability). You will gain valuable experience in running a psychological study, learn about advanced data analysis procedures such as mixed modelling, and learn how to write up a scientific article.</td>
<td>Negotiable, starting as soon as possible.</td>
<td>1 November</td>
<td>Necessary: - Background in Psychology/Communication Science. Preferred but not required: - Experience with running experimental studies; - Experience with analyzing data and programming (Python, Presentation, or something similar).</td>
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<td>Predicting smartphone use from experiences of fatigue</td>
<td>Behavioural Science Institute</td>
<td>Recently, the idea that we experience fatigue when we are “depleted” has been challenged. As an alternative, it is proposed that the experience of fatigue is not meant to inform us about past effort expenditure, but to motivate us for short-term future behavior. This theory predicts that fatigue is experienced when the cost/reward ratio of the current activity is less favorable than the cost/reward ratio of the best alternative. Fatigue then leads to task disengagement and eventually task switching. In the real world, we still do not know why we use our smartphone so much. In this study, we try to predict smartphone use from fatigue at work, since smartphone use often should have a more favorable cost/reward ratio than working. Also, this bears the question whether fatigue changes as a result of smartphone use. <strong>Tasks:</strong> Your task will be to recruit participants, collect data, analyze the data, and write up the results (or a selection of these tasks, depending on your availability). You will get help and advice from the responsible researcher and will be able to learn something about advanced statistics (mixed modelling). You will also be given the opportunity to attend research meetings of a research group within the BSI, where you can</td>
<td>Negotiable, at least 2 months.</td>
<td>1 September</td>
<td>Since one of your tasks will be to recruit participants, you should be open and enjoy approaching people.</td>
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<td>Project Title</td>
<td>Institution</td>
<td>Description</td>
<td>Timeframe</td>
<td>Additional Requirements</td>
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<td><strong>The role of attention in speech-in-noise perception</strong></td>
<td>Max Planck Institute for Psycho-linguistics</td>
<td>Design, run, and analyze a behavioral speech perception experiment. <em>Tasks</em>: stimulus design (speech manipulation in Praat), building an experiment (in Presentation), testing participants (at the MPI), data analysis (in R), and writing up results (or a selection from these tasks, depending on the student’s availability).</td>
<td>Negotiable. Preference: at least 2 months, around summer 2017.</td>
<td>- Include prior research experience and experimental skills in CV; - Include your course grades; - Familiarity with Praat, Presentation and/or R is advantageous.</td>
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<td><strong>Foreign language attrition</strong></td>
<td>Donders Centre for Cognition</td>
<td>While mechanisms of foreign language acquisition are currently intensively investigated, little is known about the opposite process: the forgetting of words from a foreign language when you no longer use it regularly. One possible reason for this very frustrating phenomenon is the frequent use of (and thus interference from) other languages, such as your mother tongue or a newly learnt other foreign language. This project asks whether this type of language interference can indeed (at least partially) explain foreign language attrition. The specifics of the project are still to be determined and will depend on the outcomes of preliminary work in our lab. <em>Tasks</em>: gain hands-on experience with all stages of the experimental process: from setting up the experiment, conducting it to analyzing it. You will get help and advice from the responsible researcher, but you will also be expected to work independently.</td>
<td>Negotiable, at least 2 months</td>
<td>- Basic statistics knowledge (t-test, ANOVA, regression, correlation); - Ideally some prior experience conducting experiments; - Proficiency in either Dutch or English (at least C1 level); - Optional: experience with R or Matlab; - Optional: some knowledge of Spanish (most likely the target language in the study).</td>
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<td><strong>Effects of Iconicity and Age of Acquisition on Spatial Cognition: Insights from Signed languages</strong></td>
<td>Max Planck Institute for Psycho-linguistics</td>
<td>Signed languages, natural languages of deaf communities, use space and iconic structures in the form of the linguistic expressions to depict space. For example to describe a pen next to paper, a signer can use one hand to represent the shape of the paper and the other for the pen, placing them next to each other on the sign space matching his view of the event. In spoken languages, the speech does not allow such iconic mappings. The main question of the</td>
<td>Anytime between 1 June and 1 October.</td>
<td>No additional requirements.</td>
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### Eye-tracking and Memory Research

- **Tasks:** Interns will gain hands on experience in implementing eye tracking experiments and memory tasks, data collection, coding linguistic and eye gaze data, and data analysis. Interns will have opportunity to learn working with SMI Red 250 Eye Tracker and BEGAZE program to process eye data. Moreover, interns will learn to work with ELAN program to process speech and sign language production data. Interns will also have the opportunity to attend discussion meetings, reading groups and workshops that will be organized within Max Planck Institute for Psycholinguistics. More information: dilay.karadoller@mpi.nl

Please visit the website of the Multimodal Language and Cognition Lab to find more information: [http://www.ru.nl/mlc/](http://www.ru.nl/mlc/)

### Global Sound Symbolic Patterns in the Orthography of the World's Languages

- **Max Planck Institute for Psycho-linguistics**

This project focuses on exploring whether there are patterns to how sounds are represented in the orthography of the world’s writing systems, and whether these patterns are similar to those observed in crossmodal associations like the Bouba-Kiki effect (we might predict, for example, that for a sound like /k/ the orthographic representations would more often be jagged and complex, rather than curvy and simple). We’re taking a multi-pronged approach on this project, which is still in its very early stages- This means that there will be opportunities for a student who is very keen to learn about computational modelling and deep learning algorithms, as well as more traditional psychology opportunities for students who are interested in designing and running perception and learning experiments both locally at the MPI and online via crowdflower.

*Negotiable.*  *At least 2 months prior to start date.*

**Necessary:**
- Background in the cognitive sciences (Psychology, Linguistics, Cognitive Science, etc.).

**Desirable:**
- Experience with computer programming (Python ideal, other negotiable);
- Experience with data collection.
The mediation of crossmodal correspondences

Max Planck Institute for Psycho-linguistics

The theory portion of this project requires completion of a thorough literature review on the crossmodal correspondence literature, with the aim of summarising and bringing that literature together in a single place where evidence for all known crossmodal correspondences is laid out. Thus, an ideal student would be one who is interested in getting their hands dirty very deeply into the literature: this is a position that would require a great deal of reading and synthesis, but one which would offer the student an opportunity to become an expert on a topic under my guidance and the guidance of several collaborators who are prominent in the crossmodal correspondence literature.

The experimentation portion of this project is a project subsequent to the main literature review, and involves testing for crossmodal correspondences that have not been previously observed but that are predicted based on the distribution of attested crossmodal biases. For example, the literature review might demonstrate an association between pitch and brightness (high pitch = bright color) and between pitch and shape (high pitch = jagged shape), but no attested association between shape and brightness. This project would identify those crossmodal "empty slots" and attempt to determine their psychological reality. Thus, this position would require a student who was keen on being involved in experimental design, and who would themselves need to become expert in the crossmodal correspondence literature.

Negotiable. At least 2 months prior to start date. Necessary:
- Background in the cognitive sciences (Psychology, Linguistics, Cognitive Science, etc.).
- Experience with computer programming (Python ideal, other negotiable);
- Experience with data collection.

The neural mechanisms of resource scarcity (Project 1)

Donders Centre for Cognitive Neuro-imaging

One of the research interests in our Decision Neuroscience Lab (Alan Sanfey) is investigating the neural mechanisms of resource scarcity: What happens to decisions when people have the feeling resources are low? In the current two projects, we want to focus on the underlying psychological processes that are affected by scarcity and how they relate to stress. In the first project we will investigate how resource scarcity and stress affect motivational tendencies. With joystick task we ask participants to approach and avoid pleasant and

Spring 2018, at least 2 months. At least 2 months prior to start date. Preferred but not required:
- Background in psychology and/or neuroscience;
- Experience with programming (eg. Matlab, Python, Presentation or similar);
| The neural mechanisms of resource scarcity (Project 2) | Donders Centre for Cognitive Neuro-imaging | One of the research interests in our Decision Neuroscience Lab (Alan Sanfey) is investigating the neural mechanisms of resource scarcity: What happens to decisions when people have the feeling resources are low? In the current two projects, we want to focus on the underlying psychological processes that are affected by scarcity and how they relate to stress. In the second project we will investigate how resource scarcity affects basic visual perception. Processing of visual spatial frequencies is known to be affected by stress. We will ask participants to rate very specific images and will see how this is affected by scarcity. **Tasks:** Since the time of the internships is limited we will focus on collecting and analyzing behavioral data. Preferably, you will have finished data analysis before going back home. For questions do not hesitate to contact i.huijsmans@donders.ru.nl. | Spring 2018, at least 2 months prior to start date. | Preferred but not required: - Research experience: Bachelor’s level of statistics. - Motivation is more important than grades! |
| Open vacancy | Various | Depending on your CV, letter of motivation and proficiency in English (see above: How to apply) we may be able to offer you an interesting internship at one of our research institutes. Please also indicate in which topics and research institutes (BSI, DCC, MPI, etc.) you are most interested. This possibility holds in particular for research internships during summer. | At least 2 months. | No additional requirements. |