Introduction

You have been invited to take part in a research study to learn more about how people see by measuring responses to visual stimuli using magnetoencephalography (MEG).

This study will be conducted by Jonathan Winawer of the Department of Psychology in the Faculty of Arts and Sciences at New York University, or by a designated member of his research staff working under the supervision of Professor Winawer.

You must be 18 years or older to participate in this study. If you are under the care of an epileptologist, you must have doctor's consent in writing in order to participate.

Procedure

If you agree to take part in the study, you will be asked to do the following:

1. In preparation for MEG, you will be asked to remove any metal jewelry and clothing containing metal. If you have a removable denture or retainer, you may also be asked to temporarily remove this for the study.
2. Three to five very small marker coils will be attached to your head.
3. EEG/EOG may be recorded simultaneously with MEG. If so, between 3 and 23 electrodes will be placed on your head prior to the experiment. These electrodes will either be taped to the skin or held to the scalp in a fitted cap. In order to optimize signal detection, the skin underneath each electrode will be cleaned and gel will be applied. Electrical signals collected by the electrodes will be recorded for the duration of the MEG scan. Once the scan is over, the areas where the electrodes were placed will be thoroughly cleaned with water and shampoo and the cap and electrodes will be disinfected.
4. You will be asked to sit very still with your head supported while a 3-D spatial digitizing machine records the positions of these marker coils and certain landmarks on your head. A computer stylus will be moved around your head to digitize and record the shape of your head. The entire setup time will last up to 60 minutes.
5. You will be asked to enter a special magnetically shielded room that contains the MEG instrument. This room allows for free communication with the experimenters, who generally remain outside the room during the actual scanning. Your brain activity will be recorded while you lie on your back. Your head will rest on a thermos containing liquid helium and magnetic sensor electronics. These sensors will measure the magnetic field that is created by the electrical activity in your brain during the experiment. Visual stimuli will be projected onto a screen above your head and auditory stimuli will be played through earphones which you will be asked to wear. You will be asked to rest your fingers on a set of response buttons.

6. You will be presented with simple visual images and/or sounds.

7. You will be asked to make simple decisions about these visual images and/or sounds.

8. You will be asked to allow a special video camera to record your eye movements and blinking during the scan.

Participation in this study will take about 2 hours.

**Risks**

There are no known health risks associated with MEG or EEG recording. These procedures do not involve injections or radiation exposure. The EEG electrodes and MEG channels only record activity and do not produce any sensation. You may, however, experience feelings of claustrophobia or other discomfort during the procedure. Marker coils, and possibly EEG electrodes, will be attached to your head using surgical tape, and you may need to wear an EEG cap with gel between the cap and your scalp; these procedures may cause discomfort for some participants. There may be other side effects that are not known and have not been anticipated by the experimenters. In the event of a severe earthquake, the Dewar flask filled with liquid helium that contains the MEG sensor electronics has a risk of shattering.

**Benefits**

You will receive no direct benefits from participation in this study. However, this research may contribute to our understanding of how visual stimuli are encoded in the human brain, and how this encoding supports visual perception.

**Cost and Compensation**

You will be paid $30/hr for the MEG scanning sessions and $12/hr for any practice sessions. Should you withdraw before the end of the study, partial payment of $12/hr will be given. There will be no cost to you associated with participation in this study.

If you earn (or if you are compensated) in excess of $600 from New York University, within any calendar year, for participation as a research subject, you will need to report the earnings/payments as income on your taxes, as NYU will be required to report the payments to the IRS as other income and will issue you a 1099 form.
Right

Participation in this study is voluntary. You may refuse to participate or withdraw at any time without penalty.

If there is anything about the study or your participation that is unclear or that you do not understand, or if you have questions or wish to report a research-related problem, you may contact Jonathan Winawer at

Department of Psychology and Center for Neural Science
New York University
6 Washington Place, 9th floor
New York, NY 10003-6634
Phone: (212) 998-7922
Email: jonathan.winawer@nyu.edu

For more information or questions about your rights as a research participant, or if you are not satisfied with the manner in which this study is being carried out, you may contact the University Committee on Activities Involving Human Subjects (UCAIHS), 665 Broadway, Suite 804, New York University, (212) 998-4808 or ask.humansubjects@nyu.edu.

Confidentiality

Confidentiality of your research records will be strictly maintained. Information will be stored in the investigator’s file and will be identified by a code number. The code key connecting your name to specific information about you will be kept in a separate, secure location.

The results of this study may be published in a book or journal or used for teaching purposes. However, your name or other identifiers which could identify you will not be used in any publication or teaching materials without your specific permission, which will be requested in writing. However, the MEG images of your brain may be shared anonymously (that is, without any way of identifying who the scan is of) for research or teaching purposes, or displayed at scientific conferences or in publications.

Agreement to Participate

YOUR SIGNATURE INDICATES THAT YOU HAVE READ THE ABOVE INFORMATION, THAT YOU HAVE DISCUSSED THIS STUDY WITH THE PERSON OBTAINING CONSENT, THAT YOU HAVE DECIDED TO PARTICIPATE BASED ON THE INFORMATION PROVIDED, THAT YOU ARE 18 YEARS OF AGE OR OLDER, AND THAT A COPY OF THIS FORM HAS BEEN GIVEN TO YOU.

__________________________________________  __________________________
Participant’s Signature                      Date

__________________________________________
Participant's Printed Name

I certify that I have presented the above information to the subject and secured his or her consent.

__________________________________________  __________________________
Experimenter’s Signature                    Date
Have you ever had an MRI (Magnetic Resonance Imaging) scan taken during a study at NYU’s Center for Brain Imaging (CBI)? You are free to leave this section blanks.

☐ NO

☐ YES

If yes, please indicate whether you consent to releasing your MRI data to the researchers of this lab. If you release your MRI data, it will be used to create a cortical reconstruction of your brain surface. An identifying code will be used to link your MEG and MRI data. Protection of your privacy will be maintained throughout.

I DO NOT grant the researchers of this lab permission to access my MRI data

______________________________  ______________________________
Participant’s Signature            Date

or

I DO grant the researchers of this lab permission to access my MRI data

______________________________  ______________________________
Participant’s Signature            Date