平成21年度実施(上期)
東北大学大学院情報科学研究科
博士課程前期2年の課程・後期3年の課程入学試験問題

専門試験科目
第６群（心理・哲学群）

注意

○専門科目試験問題は、全部で１２問あります。
○前期２年の課程の受験者は、４問を選んでそれぞれ答案用紙に解答しなさい。
○前期２年の課程外国人留学生受験者は、２問を選んでそれぞれ答案用紙に解答しなさい。
○後期３年の課程の受験者は、２問を選んでそれぞれ答案用紙に解答し、さらに学習心理情報学または認知心理情報学（人間社会科学専攻）及び認知情報学（応用情報科学専攻）に配属を希望する者は小論文を作成しなさい。
○各答案用紙上の 問題番号 の空欄に、解答する問題番号を、
さらに、 受験番号： には受験番号を、それぞれ記入しなさい。
○試験時間： 10:00 － 13:00

平成21年８月25日

専門科目試験問題　第６群　（心理・哲学群）

1. ある特徴で定義された目標刺激を複数の対象の中から探し出す認知過程は、一般に視覚探索と呼ばれる。視覚探索における空間的注意のはたらきについて、A．トリーズマンの提唱した特徴統合理論との関連を中心に、具体的な例を挙げながらくわしく説明しなさい
2. 視野反転眼鏡の着用実験や鏡映描写実験などから知覚と運動の協応関係を調べることの心理学的な意義について論じなさい
3. 数値データの標準化について、平均、標準偏差、標準得点（Z得点）という用語を用いて、多面的かつ詳細に説明しなさい
4. 言語と思考の関係について論じなさい
5. メタファー(隠喩）やアイロニー(皮肉）など、字義通りでない意味を理解する際の心理機制について説明しなさい
6. 古典的条件づけとオペラント条件づけについて説明しなさい
7. 「プラトニズム」について簡単に説明した上で、各自の意見を展開しなさい
8. アリストテレスの「四原因論」の考え方を説明しなさい
9. 「背理法」の論理構成について具体例を挙げながら説明しなさい
10. カントの「定言命法」について説明しなさい
11. フッサールの「本質直観」について説明しなさい
12. デリダの「脱構築」について説明しなさい

平成21年度実施(上期)

東北大学大学院情報科学研究科

博士課程前期2年の課程・後期3年の課程入学試験問題

外国語 (英語)

第6群 (心理・哲学群)

注意

○解答は答案用紙に書きなさい。

○試験時間： 14:30 - 15:30

1)以下の英文を読んで、magical thoughtに関して左右の半球の違いを答えなさい。
2)下線分1]と2]を日本語に訳しなさい。

Magical thought

'Don't be superstitious: it brings bad luck,' goes the proverb. Have you ever been tempted by magical thought? For example, 'If you sing out of tune, it will rain'? Some societies perform ritual dances to summon rain. Magical thought creates powerful causal associations between unconnected things or whose connections are very weak. For instance, some people equate cause and correlation. 1] How many mothers use the word 'premonition[注1]' in describing the dream they had the night before their child had an accident or was killed in war? How many gurus[注2] make a fortune out of exploiting these so-called causes! Everybody knows that before making a decision, many people -- even heads of companies and other elite -- consult their astrologer[注3].

Some people are more susceptible to magical thought than others. They believe in their horoscope and the magical properties of numbers. The neural basis of this predilection is perhaps close to being elucidated thanks to the work of Peter Brugger's group. Recently, the role of the right cerebral cortex in magical thinking was demonstrated. People strongly inclined to magical thinking tend to remember the left side of a complex shape, which is processed by the right cortex, whereas subjects indifferent to such thinking tend to recall the right side. The right cortex may be affected by weak associations. For example, if I say to you, 'castle and king', you find the association a strong one, just as if I say 'bread and butter'. One day, the neurologist Theodor Landis observed a patient with a lesion of the left cortex (which, remember, is involved in processing language). He asked the patient to give him a word associated with 'bread'. The patient answered, 'God'. This association between bread and God is very distant (weak), although everyone raised in a Christian culture would readily understand it. But making this association involves performing a symbolic mental act, a process different than that of simple language association. The right cortex of these patients, who had language disturbances, could make this association very well. Indeed, the right cortex appears to favor weak associations, which require processing that is more global, more general, one might even say more abstract.

2] This idea relates to several observations, first that emotion particularly involves the right cortex, second that psychoses frequently occur in patients with deficits of the right cortex (although psychoses that accompany epilepsy often appear together with left focal seizures[注4]), and finally that the right cortex is involved in spatial and global aspects of shapes, objects, and scenes, whereas the left cortex may be more involved in the sequential aspects of the part of the world that surrounds us. So much so that when the left cortex, said to be 'dominant' by neurologists, is weakened, the right cortex is freer to create 'weak' associations. But this may also be the key to creativity, which consists precisely in drawing associations between non-obviously related concepts, objects, or ideas. 'The earth is blue like an orange', wrote Paul Eluard, and Rimbaud invented 'correspondences' between vowels and colors.

注１:予兆　　注２：導師　　注３：占星術師　　注４：発作