平成 27 年度実施
東北大学大学院情報科学研究科
博士課程前期入学試験問題
（2015 年 8 月 27 日）

専門試験科目　第 5 群

言語・メディア群

注意

○ 以下には、専門科目 8 問題が印刷されている。

○ 受験者は、そのなかから 3 問題を選んで、答案用紙に解答すること。

○ メディア系を志望する学生は，問題 2〜問題 4 のなかから，2 問題以上を選択すること。

○ 言語系を志望する学生は，問題 6〜問題 8 のなかから，2 問題以上を選択すること。

○ 問題 1 を選択した場合には、指定の解答用紙を使用すること。

○ 問題 5－1 あるいは問題 5－2 を選択した場合には、辞書を使用しても構わない。ただし、辞書は出題者が用意したものを使用するので、必要な場合には試験官に申し出ること。

○ 試験終了後、答案用紙に加えて、この問題冊子も回収する。

東北大学大学院情報科学研究科　平成 27 年度実施上期（8月）入学試験

専門試験科目第5群　言語・メディア群

問題　1

　「コミュニケーション」、「オリジナリティー」、「テクノロジー」の3語をキーワードとして、各自考えるところを600字以上800字以内の日本語でまとめなさい。その際、キーワードは3語とも用い、題名をつけて、首尾一貫した論理で記述しなさい。

※この問題を選択した場合には、指定された答案用紙に解答を記入すること。

問題　2

　以下の文章を読んだ上で、情報リテラシーに関する教育の不易と流行について、あなたの考えを答案用紙 1 枚程度で論じなさい。

　情報の生産、処理、伝達について、基礎的な訓練を、小学校・中学校の頃から、みっちりとしこんでおくべきである。ノートやカードのつけ方、整理法の理論と実際など、基本的なことは小さい時から教えた方がいいのではないか。

<div align="right">（梅棹忠夫『知的生産の技術』岩波新書，1969)</div>

問題　3

下記は、放送法第 2 章「放送番組の編集等に関する通則」の第 4 条に定める「国内放送等の放送番組の編集等」に関する文言の一部である。下記の一〜四の各号のうち、あなたが最も重要だと考えるものを 1 つ選び、放送文化の現状に照らして、事例を交え、答案用紙 1 枚程度で論じなさい。解答の際には、選んだ番号を明記しなさい。

放送事業者は、国内放送及び内外放送（以下「国内放送等」という。）の放送番組の編集に当たつては、次の各号の定めるところによらなければならない。

一　公安及び善良な風俗を害しないこと。

二　政治的に公平であること。

三　報道は事実をまげないですること。

四　意見が対立している問題については、できるだけ多くの角度から論点を明らかにすること。

問題　4

以下の文章の「概念的に構築された自然」と「物理的自然」の関係をふまえ、メディアのありかたについて、あなたの考えを答案用紙1枚程度にまとめなさい。

　「自然」や「環境」という言葉のとらえ方には大きく分けて二つある。ひとつは、私たちが「自然」という言葉で言い表そうとするものは、概念的に構築されたもの以外のなにものでもなく、したがって、自然という物理的世界などというものはない、という考え方。もうひとつは逆に、すべてを人間の概念的宇宙に回収しようという考えは傲慢も甚だしいとして、そのような構造主義的世界観を自然との身体的接触が希薄になった現代社会の反映ととらえ、物理的世界としての自然を擁護する見方である。

　自然は概念か、それとも物理的世界か。長いあいだ物議をかもしているこの問題に関し、私自身は、自然は概念と物理的世界の両方だとするケイト・ソパーの見方に同意する。著書『自然とは何か』において、ソパーは自然をめぐる二つの見方を紹介している。先の説明と重複するが、ひとつは、物理的環境としての自然により関心を向ける「自然支持派」であり、もうひとつは、自然は概念以外のなにものでもないと主張する「自然懐疑派」である。そして、それぞれを次のように要約している。自然支持派のアプローチは、自然の物理的な限界や自然への人間の依存状態を再確認することをうながすエコロジカルな特徴を持ち、自然懐疑派のアプローチは、自然がいかに文化的に構築されたものであるかを認識させ、概念の政治性を絶えず問うように仕向けるものである、と。問題はこの二つの見方の善し悪しではなく、両者が折り合いをつける地点を見極めることにあるとし、ソパーは次のように語る。「ディスコースから独立しているものを指示することはできない。ディスコースにおいてそうするというなら話は別だが。しかし、それをもって、ディスコースの外部に自然という現実が存在するということを否定する見解には与しない。」これをよりわかりやすく私なりに言い換えてみるならば、次のようになる。私たちが自然という言葉で把握するものは、あらかじめ分節化され概念的に分類されたものにほかならないが、それが概念外世界の存在を否定する根拠にはならない、と。

出典　結城正美「エコクリティシズムをマップする」『水声通信』水声社、2010 年 [一部改変]。

問題　5

　以下の問題 5 － 1 （ドイツ語）、問題 5 － 2 （フランス語）のうちから <u>一つ</u> を選択して解答しなさい。なお、この問題を選択した場合には、辞書を使用しても構わない。ただし、辞書は出題者が用意したものを使用するので、必要な場合には試験監督者に申し出ること。

＊この問題を選択した場合には、答案用紙左上にある「問題番号」の欄に「5 － 1」あるいは「5 － 2」と記入すること。

問題 5 - 1

以下のドイツ語の文章を日本語に訳しなさい。

Das Spielen als zweckfreie, nicht auf die Produktion einer Ware oder den Erwerb von Wissen (primär) ausgerichtete Tätigkeit, allein oder mit anderen, gehört auch im Zeitalter der Massenmedien zu den Lieblingsbeschäftigungen der Kinder. Wobei mit beginnender Schulpflicht, zunehmendem Alter andere Freizeitbeschäftigungen dem Spiel seinen Rang abnehmen.

Für Philosophen ist Spiel Teil der Menschwerdung, kulturschaffend, für die gesellschaftliche Entwicklung liegt im Kinderspiel die Nachahmung der Erwachsenen, Vorbereitung auf Aufgaben in der Erwachsenenwelt. So haben sich "bestimmte Grundmuster kindlichen Spielverhaltens innerhalb kulturell hochstehender Gesellschaften in drei Jahrtausenden kaum verändert". Spiel ist stets Spielen "mit etwas", für das Kind kann jeder beliebige Gegenstand zum Mittel seines Spiels werden. Aus Vorzeit und Altertum sind bereits zum Spielzeug bearbeitete Gegenstände aus Holz, Stein, Ton und Leder überliefert.

※出典：Horst Heidtmann, Kindermedien, Stuttgart 1992 （一部省略）

問題　5－2

以下のフランス語の文章を日本語に訳しなさい。

Nous avons presque tous découvert le cinéma lors de notre enfance, en assistant à la projection sur grand écran d'un dessin animé de Walt Disney. Ce moment souvent inoubliable et empreint de nostalgie nous a émerveillés, amusés, terrifiés ou émus selon le sujet du film et notre âge ce jour-là.

Les plus anciens se souviennent des premiers courts métrages de Mickey en noir et blanc et des Silly Symphonies colorées en complément de programme des classiques du cinéma hollywoodien. Les plus jeunes ont souvent découvert ces chefs-d'œuvre en vidéo, la reprise traditionnelle des grands dessins animés ayant fait place aux nouvelles productions du studio.

A chacun son « Walt Disney » préféré : Steven Spielberg ne s'est jamais remis de l'émotion que lui a procurée *Dumbo* et Luc Besson considère *Le Livre de la jungle* comme l'un des meilleurs films de l'histoire du cinéma. Avec le temps, les dessins animés de Walt Disney ont fait le lien entre les différentes générations.

出典 Pierre Lambert, *Walt Disney L'Âge d'Or,* Rozay-en-Brie : Démons & Merveilles, 2006.　［一部改変］

問題　6

以下の文章を読んで、問いに答えなさい。

One important question to be asked at the outset of a study on the complementizer system is: what is the role of the complementizer in the clausal structure?

We can think of the complementizer system as the interface between (ア)a propositional content (expressed by the IP) and the superordinate structure (a higher clause or, possibly, the articulation of discourse, if we consider (イ)a root clause). As such, we expect the C system to express at least two kinds of information, one facing the outside and the other facing the inside.

Consider first the information looking at the higher structure. (ウ)Complementizers express the fact that a sentence is a question, a declarative, an exclamative, a relative, a comparative, an adverbial of a certain kind, etc., and can be selected as such by a higher selector. This information is sometimes called the clausal Type (Cheng 1991), or the specification of Force (Chomsky 1995). Here we will adopt the latter terminology. Force is expressed sometimes by overt morphological encoding on the head (special C morphology for declaratives, questions, relatives, etc.), sometimes by simply providing the structure to host an operator of the required kind, sometimes by both means (this is the rare case, presumably due to an economy of representation type principle favoring overt expression of a certain substantive specification on the head or on the specifier, but not simultaneously on both).

The second kind of information expressed by the C system faces the inside, the content of the IP (エ)embedded under it. It is a traditional observation that the choice of the complementizer reflects certain properties of the verbal system of the clause, an observation formalized, e.g., by "agreement" rules between C and I, responsible for the co-occurrence of *that* and a tensed verb, or *for* and an infinitive in English, etc. A straightforward manner to account for these dependencies would be to assume that C contains a (オ)tense specification which matches the one expressed on the lower inflectional system). On the other hand, the "temporal" properties encoded by C are very rudimentary. For instance, in Italian the form *che* co-occurs with present, past and future indicative, with present and past subjunctive and present and past conditional, thus distinguishing these forms from infinitival, gerundival and participial clauses, a situation which is quite general in Romance and Germanic. So, it appears that, at least in these language families, (カ)C expresses a distinction related to tense but more rudimentary than tense and other inflectional specifications on the verbal system: finiteness.

I will assume here that the finiteness system is a valid linguistic one, even though its morphological realization can vary somewhat from language to language. Languages tend to split verbal paradigms into two classes of forms. Finite forms can manifest mood distinctions (indicative, subjunctive, conditional and/or other distinctions of the realis/irrealis type), manifest tense and subject (person) agreement, co-occur with nominative subjects. Non-finite forms do not manifest mood distinctions, in the core case they do not express person agreement, and do not co-occur with nominative subjects, they have a more rudimentary system of tense distinctions (e.g., in many languages non-finite forms do not have a morphological present/future distinction, can express past only through the periphrastic form aux + past participle, etc.). The first class of forms co-occurs with complementizers of the *that* kind, the second does not. Various dissociations from these core clusters are apparently tolerated, but a split along these lines is robustly attested cross-linguistically.

Following much recent work (e.g., Holmberg and Platzack 1988), I will then assume that the C system expresses a specification of finiteness, which in turn selects an IP system with the familiar characteristics of finiteness: mood distinctions, subject agreement licensing nominative case, overt tense distinctions (these specifications being subject to some cross-linguistic variation).

Again, we should think of finiteness as the core IP-related characteristics that the complementizer system expresses; (2)languages can vary in the extent to which additional IP information is replicated in the complementizer system: some languages replicate mood distinctions (special subjunctive complementizers in Polish, etc.), some replicate subject agreement (different Germanic varieties), some seem to express genuine tense distinctions (Irish), negation (Latin, Celtic), etc.

How does the CP system relate to the rest of the clausal structure? Recent proposals consider the IP system an extension of the V system: the different inflectional heads are V-related in that they attract the verb (overtly or covertly) to check its morphological specification (Chomsky 1993), so that the whole IP system can be seen as an extension of the verbal projection (an "extended projection", in Grimshaw's (1991) sense). (3)Should the CP system be considered an analogous extension of the IP system, hence ultimately of the VP? I believe there is a substantial difference between the two cases. Whatever "inflectional" properties C reflects, they are not encoded in the form of verbal morphology, in the general case: they are expressed on free functional morphemes (*that, que,* etc.) which, if anything, look nominal more than verb-like, as they often resemble demonstrative pronouns, *wh* elements, certain kinds of nouns ("fact", etc.), etc. So, I will continue to assume that the C system is fundamentally distinct from the I system, the latter but not the former being V-related in the general case.

（出典：Rizzi, Luizi (1997) "The Fine Structure of the Left Periphery," *Elements of Grammar: Handbook of Generative Syntax,* 一部改変）

問 1　次の(A), (B)のいずれか一方を選び、その中の(a)~(d)のミニマルペアの統語的特徴（統語構造、移動の有無、文法性など）について、下線部（ア）～（オ）の 5 つの用語を<u>すべて</u>使って<u>英語で</u>説明しなさい。

(A)　　a. This book is hard to buy without reading.

　　　　b.*It is hard to buy this book without reading.

　　　　c. What did you file without reading?

　　　　d.*The report was filed without reading.

(B)　　a. 僕は彼を不真面目だと思った。

　　　　b. 僕は彼が不真面目だと思った。

　　　　c. I thought him to be insincere.

　　　　d.*I thought (that) him was insincere.

問 2　下線部(1)はどういうことか、本文に即して日本語で説明しなさい。

問 3　下線部(2)を日本語に訳しなさい。

問 4　下線部(3)について、筆者の結論とその結論が導かれる理由を、本文に即して日本語で説明しなさい。

問題　7

次の文章を読んで、後の問いに答えなさい。

The "generative enterprise" abandoned the procedural approach of structural linguistics and sought instead to develop a concept of language concrete enough to guide the study of its essential properties as well as the related inquiries that necessarily rely on such a conception. The first step is to focus attention on a core property of language that had been largely neglected: each language incorporates a mechanism that determines an infinite array of hierarchically structured expressions that are transferred for interpretation to two interfaces: the sensory-motor system SM for externalization, and the conceptual-intentional system CI for thought (broadly understood). In this sense, language is "sound with meaning," in Aristotle's common sense dictum.

UG ("universal grammar") in the technical sense of the generative enterprise is not to be confused with descriptive generalizations about language such as Joseph Greenberg's universals, a very important topic that has given rise to much valuable inquiry, but a different one.

(A)Putting aside genetic variation (an interesting but marginal phenomenon in the case of language) and conceivable but unknown non-genetic effects, the principles of UG, whatever they are, are invariant, and are typically not exhibited directly in observed phenomena, much as in other domains. Far more generally, the essential art of science, revealed everywhere, is reduction of "complex visibles to simple invisibles," as Nobel laureate in physics Jean Baptiste Perrin put the matter.

In contrast, descriptive generalizations should be expected to have exceptions, because many factors enter into the observed phenomena. Discovery of such exceptions is often a valuable stimulus for scientific research. To mention a classic case, the discovery of perturbations in the orbit of Uranus did not lead to the abandonment of Newton's principles and Kepler's laws, or to the broader conclusion that there are no physical laws, but to the postulation -- later discovery -- of another planet, Neptune. Exceptions to largely valid descriptive generalizations play a similar role quite generally in the sciences. Within the generative enterprise, the exceptional properties that have driven much important inquiry are sometimes purposely identified that way, as a stimulus to further inquiry: (B)Exceptional Case Marking (ECM), Extended Projection Principle (that is, exceptions to the Projection Principle), etc.

A sensible approach to the discovery of violation of generally valid observations is captured in Eric Reuland's remark on early proposals about binding theory 30 years ago: "Too bad to be true, too good to be false" (Reuland, 2011). He and others proceeded to identify and explore various factors that enter into a more complete picture, maintaining much of the spirit of the original.

(C)<u>Binding theory provides useful lessons on taking tentative principles and exceptions seriously</u>. That is illustrated in one of the rare examples of an effort to address a significant property of language, binding theory (Chater and Christiansen, 2010). Consider the sentence (1):

(1) Do they expect to talk to each other?

Here *they* is the antecedent of *each other*. Chater and Christiansen propose that this anaphoric relation is simply "an instance of a general cognitive tendency to resolve ambiguities rapidly in linguistic and perceptual input."

Counterexamples abound in the literature, and pursuing them has led to important insights. Thus if (1) is modified to (2), then the quickest way to find the anaphor is again to take "they" to be its antecedent, since *John* cannot be:

(2) *Do they expect John to talk to each other?

A variety of such cases show that it is necessary to determine what is a potential antecedent, a matter that quickly becomes complex. Consider for example (3) and (4):

(3) Who [do they expect to talk to each other?] (*, with *they* as antecedent)
(4) (a) *They gave instructions to John to talk to each other
　　 (b) They received instructions from John to talk to each other

The bracketed part of (3) is identical to (1), though the anaphoric relation of (1) is blocked in (3), thus refuting the proposal. The reason is intuitively clear: there is an antecedent for *each other* closer to it than *they*, a "simple invisible" in Perrin's sense: namely the unpronounced element in the position of *John* in (2) and the variable in the interpretation of (3) as (5), present in the mind but not in the external output:

(5) For which persons x, they expect persons x to talk to each other?

Investigation of these properties reaches far into core and invariant UG principles.

(D)<u>Examples (4) lead to inquiry into the theory of control</u>, and illustrate the ways in which semantic and structural properties interweave in determining the interpretation of the unpronounced element PRO that serves as the antecedent of the anaphor, in the position of John in (2) and the

unpronounced element in (3).

While the Chater－Christiansen principle had long been known to be untenable as it stands, nevertheless there is an important element of truth to it: namely, the role of minimal structural distance, a significant property of UG quite generally, and a puzzling one in many ways. And exploration of the counterexamples yields a very rich harvest and new insights into UG. That is quite often the case.

Early proposals about binding theory assumed that linear order is essential, as simple examples like (1)－(4) seem to indicate. But work of Tanya Reinhart and others in the 1970s showed persuasively that hierarchy alone was involved in core cases, hence structural rather than linear distance. That suggests a much more far-reaching thesis with many consequences:

(6) Order and other arrangements are a peripheral part of language, related solely to externalization at the SM interface, where of course they are necessary.

If (6) holds generally as a principle of UG, then Aristotle's dictum should be modified: (E)language is not sound with meaning, but rather meaning with sound (or some other externalization), a very different concept, reflecting a different traditional idea: that language is primarily an instrument of thought— "audible thinking," "the spoken instrumentality of thought," as William Dwight Whitney expressed the traditional conception. The shift of perspective, to which we return, has many consequences concerning cognitive architecture and its evolution.

（出典：Chomsky, Noam (2013) "Problems of Projection," *Lingua* 130. [一部改変]）

問1　下線部(A)を日本語に訳しなさい。

問2　下線部(B)にある2つの現象について、いずれか1つを取り上げ、どのような点で exceptional であると言えるのかを3行程度の日本語で説明しなさい。

問3　下線部(C)に関して、tentative principles と exceptions がそれぞれ何であって、どのような点で useful lesson となっているのかを本文に即して日本語で説明しなさい。

問4　下線部(D)の examples (4)に関して、(4a)と(4b)の文法性の違いが生じる理由を日本語で説明しなさい。

問5　下線部(E)の"sound with meaning"と"meaning with sound"の違いについて本文に即して3行程度の日本語で説明しなさい。

問題　8

次の文章は、語の多義性がどのように生じるかを説明したものである。これを読んで後の問いに答えなさい。

Homonymy arises in language mostly through coincidence or because the senses of a polyseme have become so separated from each other over time that we no longer perceive them as the same. One kind of coincidental homonymy arises from changes in the language that bring different words closer together in form. For example, the musical genre *pop* is a clipping from *popular music* and has nothing to do with the use of *pop* as an affectionate term for a father (from *papa*), or as the onomatopoeic verb for the action of bursting something like a balloon or a bubble. Each of these meanings of *pop* evolved in its own way and just happened to end up sounding and looking like one another.

The same situation holds when we borrow words from other languages that happen to be the same as existing words. For example, *yen* meaning 'yearning' (as in *I have a yen for fine whiskies*) already existed in English when *yen*, the currency of Japan, was borrowed into the language, so the two *yens* are homonyms.

Polysemy, on the other hand, arises because we frequently assign new senses to old words. There are several ways in which an old word can develop a new sense, including: metonymy, metaphor, broadening/narrowing, conversion, and grammaticalization.

Metonymy is when a word is used to refer to something that is related to something else that the word can denote. For example, we might say that a farmer has *three hands* working for him. In this case, *hands* refers to laborers—i.e. people who use their hands—rather than to a body part. Similarly, we can refer to things or people by referring to the place where they are, as when we refer to a monarch as *the throne* or the American film industry as *Hollywood*. (A)Another example involves using the same word to refer to plants and the food they produce, as can be seen in the two senses of *carrots*.

Metonymy can be used productively to create figurative language in a particular context. For example, on discovering a case of double-parking, a car owner might exclaim *Someone's blocked me in!* The *me* in this sentence means 'my car.' But if you look up *me* in a dictionary, you will not find the sense 'the speaker's car,' because that particular interpretation is absolutely dependent on the context. Lexical change, resulting in polysemy in the lexicon, occurs when the new sense becomes conventionalized, as it has for *hand* 'laborer.'

Like metonymy, metaphor is a means of using language figuratively, which can either be used in nonce conditions, or can be conventionalized to create new cases of polysemy. Metaphor involves seeing

similarities between different things and describing one as if it were the other. We can see an example of conventionalized metaphor in another sense of *hand*: as in *the hands of a clock*. Here the metaphor plays on the similarities between the hands on people and the pointers on a clock. A computer mouse is so-called because it resembles a live mouse in terms of its shape and the way it "scurries."

Another way in which words can have different senses is if they are autohyponyms: that is, if one of the word's senses is a more specific version of another of its senses. Historically speaking, this can happen through the broadening or narrowing of one of the word's senses. For example, the verb *drink* can mean 'consume liquid by mouth' or 'consume alcohol by mouth,' as in (1) and (2), respectively.

(1) After surgery, Jen could only drink through a straw.

(2) After his liver transplant, George swore never to drink again.

In this case, the 'consume alcohol' sense in (2) is a subcategory of the 'consume liquid' sense in (1)—the original 'liquid' meaning has been (X). An example of (Y) is *Yankee*, which in its original meaning denotes specifically people from the northern United States (in contrast to those from the South), but now can also denote someone from any part of the US, in contrast to those from other countries.

Finally, words can also take on new senses by changing their grammatical category, for example from noun to verb, or, on a grander scale, from content word to function word. If a word keeps the same form (that is, it doesn't have a prefix or suffix and keeps the same pronunciation) when it changes from one category to another, then it has undergone a process known as conversion (or zero derivation). Conversion happens quite easily in English. For instance, recent technologies have spurred on noun-to-verb conversions like *to Google* 'to search for a word or phrase using the Google search engine,' *to friend* 'to select someone as your friend on a social networking site,' *to text* 'to send a text message.' Much rarer and slower are cases of grammaticalization, in which lexical content words change to grammatical function words or functional morphemes—yet this is how languages get most of their function words. For example, the modal verb *will*, which we use as a future tense marker, has come to modern English from the Old English lexical verb *willan*, which meant 'want (to do something).'

(B)How did this happen? Well, if you want to do something, then you are probably talking about a future action. For example, if I say *I want to eat lunch*, I'm not eating lunch at the moment, but there is a good chance I will eat it in the near future. So the seeds for 'futureness' were already there in *willan*. The verb already appears before other verbs, so it is in the right position to be interpreted as an auxiliary verb. Over generations of learners, people paid less and less attention to the lexical 'want' aspect of the meaning and focused on the futureness of it—until the lexical meaning was mostly forgotten. This process is known as semantic bleaching, since the main force of the meaning has been washed away. The future marker *will* went a long way in its grammaticalization—losing all the grammatical markings of a lexical

verb. Thus, as (3) shows, unlike the lexical verb *want* that *willan* was originally like, *will* does not appear with tense or agreement marking or an infinitive marker on the following verb. And, again, unlike *want*, it cannot appear with a modal verb (in standard dialects of English).

(3)　*Ira wills to go home.

(4)　*Ira can will go home.

In other cases, we can see semi-grammaticalization—which may mean that we're still on the path to grammaticalizing a form. For instance, Romaine and Lange (1991) have suggested that the use of *like* to introduce reported speech, as in (5), is on its way to being grammaticalized as a 'quotative complementizer'—that is, a grammatical morpheme that links a main clause to a quotation.

(5)　Jody was like 'I can't believe it!'

Because it is still in the early stages of grammaticalization, the grammatical status of quotative *like* is hard to define (is it an adverb? a preposition? a complementizer?) and it still retains some of its comparative lexical meaning, in that we seem to be saying that Jody in (5) said something like *I can't believe it,* but didn't necessarily say it in those words or in the same manner as the reporter of the utterance has said it. But the prediction is that *like* will become much more regular in use and lose the association with comparison as it becomes more grammaticalized over the years. By the time that grammaticalization is finished, we should perceive the quotative *like* as a different word from the comparative preposition *like* in *days like this*. That is to say, it will become different enough from its original use that the relation between comparative *like* and quotative *like* will be a clear case of homonymy, rather than polysemy. For this reason too, we see the future marker *will* as a homonym of the 'document for expressing wishes in the event of one's death' *will*, although historically they come from the same verb.

[出典　M. Lynne Murphy (2010) *Lexical Meaning*. Cambridge: Cambridge University Press. (一部改変)]

問1　homonymy が生じる要因を本文から 3 つ探して日本語で答えなさい。

問2　下線部(A)を説明するための例文を *carrot* という語を使って作成しなさい。

問3　metonymy と metaphor の違いはどのようなものか。本文に即して具体例を
　　　用いながら日本語で説明しなさい。

問4　空所 X と Y それぞれを埋める一語として適切なものは何か。本文中から
　　　探し、必要に応じて語形変化をさせて答えなさい。

問5　下線部(B)の問いに対する筆者の説明を日本語で要約しなさい。

問6　例文(5)に見られる *like* の特性を本文に即して日本語で要約しなさい。

平成 27 年度実施
東北大学大学院情報科学研究科
博士課程前期入学試験問題
（2015 年 8 月 27 日）

共通外国語科目　第５群
（英語）

○ 試験終了後、答案用紙に加えて、この問題冊子も回収する。

問題

次の文章は、日本の科学技術の特徴を日本文化論の一部として論じたものである。これを読んで後の問いに答えなさい。

　　The Japanese do seem to have a penchant for electronic gadgets. By the year 2000, over 10 million Japanese accessed the internet via mobile phones. The use of mobile phones now exceeds that of home phones. (A)How do we account for this? Young Japanese enjoy the ease of communication afforded by mobile phones, and thereby avoid being overheard by parents or other family members. Cramped living space and limited privacy have, it has been argued, been factors in the popularity of text messaging by mobile phone. In addition, the high cost of establishing a landline has encouraged many Japanese to purchase cell phones instead. NTT DoCoMo's i-mode system provides users with cheap and continuous wireless access to the internet, using cellular phones with a screen the size of a business card. There are, thus, structural reasons as well as cultural justifications for the current levels of consumption.

　　We can point to (B)a number of features of Japanese cyber-culture which differentiate it from elsewhere. Firstly, although 68 per cent of the Japanese population surf the internet, it is mainly through mobile or cellular phones rather than personal computers. The WAP (Wireless Application Protocol) for mobile phones, which provides access to a basic version of the World Wide Web, became very popular in Japan, in contrast with the US. This has enabled those without computers to access the internet.

　　Also, it is clear that the traffic on the internet is primarily directed towards Japanese websites in the Japanese language. Although some websites have pages in the English language, the Japanese, not surprisingly, show a preference for their own language. Even the face marks that the Japanese use to personalise emailed messages show some differences when compared with those used in the US. American symbols tend to be read at 90 degrees to the line of words, whereas Japanese symbols often flow in the same direction as the sentence.

As for the profile of users, the internet was initially particularly popular among males in Japan, but the percentage of female users has increased dramatically, rising from 16.5 per cent in 1997 to 44.5 per cent in 2001. The popularity of internet shopping is one of the reasons for this increase. The fact that online shopping is popular in both the US and Japan is not surprising, but unlike in the US, purchased items are often collected and paid for at convenience stores rather than by credit cards and delivered to the home, reflecting the preference for cash over plastic.

(C)<u>We can account for some of the similarities in Japanese and Western technological culture by pointing to the fact that much technology in Japan originates elsewhere. This is one of the fundamental truths symbolised by the *wakon yōsai* slogan. Differences emerge, however, when the Japanese adopt and adapt foreign ideas and make them their own.</u> For example, despite the early lead by the US in the introduction of robotics, by 1984 Japan was using four times as many industrial robots as the US.

In 2007, General Motors attempted to show that it was getting serious about improving the quality of its vehicles by televising a commercial that suggested a new workplace culture where mistakes would no longer be tolerated. The commercial showed a robot in a GM factory getting fired after having made an error, and then committing suicide. Public outcry at the trivialisation of suicide portrayed in the advertisement resulted in the removal of the unhappy ending. This poor attempt at humour was revealing, in that it showed discomfort with the idea of robots in the American workplace. (D)<u>Rather than a human being dismissed, it was a robot.</u>

In contrast, (E)<u>the Japanese have taken their embrace of technology to extremes not countenanced elsewhere.</u> Robots are seen as offering possible solutions for dealing with the increasing burden of caring for the aged in Japan. It is estimated that one quarter of the population will be over the age of 65 by 2020. While the prospect of having a human-like robot nurse the elderly might seem akin to science fiction, the concept of a robotics sick room with equipment to monitor bodily functions might not seem so far-fetched, given the already

high-tech nature of hospitals today.

(F)How do we account for the popularity of robots in Japan? Robert Geraci (2006) suggests that American researchers prefer to focus on artificial intelligence (AI) and virtual reality as Christian beliefs in salvation in purified unearthly bodies encourage a disembodied approach to information. In Japan, in contrast, he argues that Buddhism and Shinto beliefs of *kami* (deities) being manifested in nature allow even robots to have a spirit and be integrated into society.

Recently, there have been cases where real efforts have been made to put humanoid robots into the service of ordinary people. In January 2006, the People Staff Company announced that it would start making robots available to work in nursing homes and as receptionists. The robots include Ifbot, a 45-centimetre-high communication robot which retails at ¥495,000, the price of a used car in reasonable condition. Ifbot can talk, sing, and give quizzes to elderly residents. Hello Kitty Robo is marketed as a night receptionist. It has a sensor that recognises visitors, greets them, and relays images and sound back to computers at the staffing agency.

A Kyoto nursing home was brave enough to install an Ifbot, but unfortunately it languished in a corner for two years after the initial novelty wore off. The director of the nursing home, Sawada Yasuko, concluded that stuffed animals are more popular. The story of the Ifbot in Kyoto reflects Japan's fascination with and fear of robots. Given these problems, manufacturers are making an effort to meet the special needs of the elderly at a more basic level. Sony has produced an easy-to-operate radio cassette player and the major mobile phone operator DoCoMo released a phone in 2001 with an easy-to-read screen and a bigger keypad.

There are clearly limits to which technology can be used to solve social problems. While the Japanese are keen to push the boundaries, some commentators suggest that there are aspects of Japanese society and culture that work against the Japanese realising their hopes for a hi-tech future.

Morris Low. 2009. "Technological culture," *The Cambridge Companion to Modern Japanese Culture*, ed. by Yoshio Sugimoto, Cambridge University Press, Cambridge. [一部改変]

問 1　下線部(A)の問いに対する答えとして論じられていることを日本語で簡潔に説明しなさい。

問 2　下線部(B)の事例として挙げられているものを本文から3つ取り出し、日本語で説明しなさい。

問 3　下線部(C)を日本語に訳しなさい。

問 4　下線部(D)を日本語に訳しなさい。

問 5　下線部(E)の事例として挙げられているものを本文から2つ取り出し、日本語で説明しなさい。

問 6　下線部(F)の問いに対するあなたの考えを10行程度の英文で述べなさい。