

Sentence Accent Assignment and the Stage/Individual Contrast*

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0. Introduction

In my 1992 paper, I proposed a semantic generalization about the accentuation of English predicates, making essential use of Nakau's (1985; 1994) action/nonaction distinction. The most fundamental insight of the generalization is that action-type predicates must receive a pitch accent within a broad focus domain, whereas nonaction-type predicates must not. The generalization makes a piece of contribution to the study of English sentence prosody in that it provides a unified account of a range of prosodic facts which were seen as distinct from each other. At the same time, however, it has some apparent empirical difficulties in that it faces prosodic facts for which it cannot provide any explanations. These facts, unless explained in some way or other, would defy the generalization. Most challenging among the facts is the accentuation of adjectival and passive predicates, which are both characterized as nonaction-type predicates. These two kinds of predicates can receive a pitch accent in a context where they are expected to be accentless by the generalization. In this paper, therefore, I will be committed to the task of showing that "deviant" prosodic patterns of the two kinds of predicates do not defy the generalization by demonstrating that another factor overrides the action/non-action distinction.

This paper is organized as follows. Section 1, which is devoted to a brief review of Okazaki's (1992) proposal, introduces the semantic generalization with representative examples. Section 2 adduces exceptions to the generalization and demonstrates that they do not constitute a class of counterexamples to the generalization. It is argued that the exceptional predicates, which receive a pitch accent in a context where they are expected to be accentless, are identified as individual-level predicates, which express essential and permanent properties of their subject NPs. Section 3 explores the correspondence between the stage/individual contrast and the information structure of a sentence. It is shown that individual-level predicates cannot occur in a sentence where the subject NP and the predicate form a broad focus domain, and that the accenting of nonaction individual-level predicates is due to the fact that they form a focus domain of themselves. Section 4 is concerned with an explanation for accentless nonaction individual-level predicates which seem to be problematic for the conclusion derived

in section 3. It is argued that accentless nonaction individual-level predicates do not pose any problems, for the sentences containing them do not express the speaker's categorical judgment (Marty (1897) and Kuroda (1972)), which is typical of sentences containing individual-level predicates.

1. Okazaki's (1992) Generalization

Okazaki (1992) proposes the following semantic generalization about the accentuation of English predicates.

(1) Okazaki's Generalization

An action-type predicate within a broad focus domain must receive a pitch accent in a sentence uttered with neutral emotion, while a nonaction-type predicate within a broad focus domain must not.

It is appropriate here to make a brief introduction to the notions utilized in (1). In the first place, the action/nonaction distinction is the one proposed by Nakau's (1985; 1994) tripartite theory of basic predicate types. Action-type predicates include verbs denoting (i) a simple action (e.g., jump and dance (ACT predicates)), (ii) an action which affects an existential mode of an object NP (e.g., kick and kill (AFFECT predicates)), and (iii) an action which results in producing something (e.g., dig and paint (EFFECT predicates)). Nonaction-type predicates (state and process predicates) include unaccusative verbs (e.g., (dis)appear and die), predicates headed by be (be+AP, be+NP, and be+PP), passive predicates, and so forth, which denote either the change of an existential mode, or an existential mode itself, of a subject NP. Second, the broad focus domain is defined as a domain of new information corresponding to a domain wider than a single maximal projection (e.g., a VP comprising a verb and an object NP in examples like He hit Mary serving as an answer to the question What did he do?). Finally, neutral emotion is defined as the state of the speaker's mind where (s)he is neither excited nor depressed. For example, it is observed in utterances of capable TV or radio announcers who deliver news in a quite objective tone of voice without being influenced by nonverbal interrupting factors in daily verbal behavior. For further details of these notions, see Okazaki (1992).

Let us turn to an exemplification of the generalization in (1). The data in (2), which are uttered with neutral emotion, show that action-type predicates must receive a pitch accent within a broad focus domain.

- (2) a. What happened?—JESUS WEPT.
 b. What happened?—The HEADMISTRESS LAUGHED.
 c. What's this noise?—My BROTHERS are WRESTLING.
 d. What's this noise?—It's just a WOMAN CRYING.

In (2), the predicates are all identified as action-type predicates in that they are seen as denoting a simple action. In fact, the predicates form a broad focus domain with their respective subject NPs in that none of the subjects and the predicates occur in the previous discourse. That is why they receive a pitch accent within a broad focus domain.

The data in (3)-(5), which are also uttered with neutral emotion, show that nonaction-type predicates are accentless within a broad focus domain, as contrasted with action-type predicates.

- (3) a. What happened?—JOHN (dis)appeared.
 b. What happened?—JOHNSON died.
 c. (out of the blue) A WAR began.
 (4) a. (out of the blue) Your SHOES are muddy.
 b. Why are you so upset?—The FLOOR is dirty.
 c. Hey!—Your COAT's on fire.
 (5) a. Your TROUSERS are torn.
 b. Why was the ambulance in such a hurry?—An ACCIDENT had just been reported.
 c. What happened?—The GOVERNOR has been kidnapped.

The predicates in (3)-(5) are unaccusative verbs, predicates headed by be, and passive predicates, respectively. As indicated at the outset of this section, the three kinds of predicates are all subclasses of nonaction-type predicates. That is why they are accentless within a broad focus domain.

The generalization in (1) makes an important contribution to understanding the nature of English sentence prosody, for it captures an explicit correspondence between conceptual-semantic information and prosodic patterns of predicates. In addition to this contribution, the semantic generalization has three further advantages over previous studies on sentence prosody.

First, it clarifies a factor governing the prosodic contrast between the predicates in (2) and those in (3)-(5). Notice that the prosodic contrast was one of the mysteries yet to be explained in previous studies on English sentence accent

assignment.

The second advantage of the generalization in (1) is that it provides an answer to the question of why unaccusatives, predicates headed by be, and passive predicates constitute a class with respect to the accentuation within a broad focus domain. This question, though essential for understanding the nature of English sentence prosody, has been left unanswered for the lack of the semantic standpoint advocated by Okazaki (1992).

The third advantage of the generalization in (1) is that it sheds new light on the peculiar prosodic behavior exhibited by verbs like cook and smoke. As shown in (6) and (7), these verbs exhibit two types of accentuation, depending on the difference in meaning, in a neutral-emotioned utterances where verbs are contained in a broad focus domain.

- (6) a. We can't eat yet. Your MOTHER's still COOKING. (=cook something (in the kitchen))
 b. We can't eat yet. Your MOTHER's still cooking. (=being cooked (in the oven))
- (7) a. One of my STUDENT was SMOKING. (=smoking a cigarette)
 b. One of my STUDENT was smoking. (=smoldering)

In (6) and (7), the predicates in the a-examples receive a pitch accent, and those in the b-examples are accentless. This prosodic contrast corresponds exactly to the action/nonaction contrast. The predicates in the a-examples are both action-type predicates, for they denote an action which affects an existential mode of an object NP. The predicates in the b-examples are, on the other hand, both nonaction predicates, for they denote the change of an existential mode of a subject NP. It should be noticed here that the prosodic facts in (6) and (7) can be characterized properly only in terms of the action/nonaction distinction.

2. Accented Adjectival and Passive Predicates

In the previous section, Okazaki's (1992) generalization has been argued to be empirically adequate. However, it faces apparent empirical difficulties. It is not so hard a task to find prosodic facts which do not follow directly from the generalization. In particular, adjectival predicates headed by be and passive predicates often exhibit prosodic patterns deviant from the generalization when they are contained in an out-of-the-blue neutral-emotioned utterance. In this section, I will attempt to explain "deviant" prosodic patterns of the two sorts of

predicates.

2.1. Exceptions to Okazaki's (1992) Generalization

The first kind of exception relevant to the discussion here comes from facts about the accentuation of adjectival predicates headed by be. As indicated in (8b), the adjective nice, as contrasted with the adjective muddy in (8a), must receive a pitch accent and is less likely to be accentless than muddy is. This fact cannot be predicted by the generalization in (1).

- (8) a. (out of the blue) Your SHOES are muddy. (=4a)
 b. (out of the blue) Your SHOES are {#nice/NICE} .

Notice here that both (8a) and (8b) seem to have no difference from each other. In the first place, both of them have the same surface syntactic structure, which is relevant to accent assignment. They consist of a subject NP and an adjectival predicate headed by be. Second, both of them contain the predicates characterized as nonaction-type predicates. Third, both of them are uttered out of the blue. Neither the subjects nor the predicates seem to have any antecedents in the previous discourse. Fourth, both of them are uttered with neutral emotion. Neither of them is uttered with amplified or depressed emotion. Thus, the example in (8b) would, unless otherwise explained, issue a challenge to the generalization in (1).

Some additional examples are given below:

- (9) Well, just make sure you don't get caught. Driving without license is ILLEGAL. (Schuerling (1976: 41))
 (10) a. What's the MATTER? Your EYES are red. (Oakeshott-Taylor (1984: 15))
 b. Mary has fair HAIR, her eyes are BLUE. (Ibid.)
 (11) Milk is ANIMAL.

These examples are all nonaction propositions which can be uttered with neutral emotion in a context where the predicates are expected to be accentless. In fact, however, the predicates in (9), (10b), and (11) receive a pitch accent.

The second kind of exception involves the accentuation of passive predicates. As indicated in (12b), there are passive predicates which receive a pitch accent, and are unlikely to be accentless, in an out-of-the-blue utterance.

- (12) a. The GOVERNOR has been kidnapped. (=5c)
 b. The GOVERNOR has been {#praised/PRAISED} .

The fact in (12b) also seems to be problematic for the generalization in (1). Again, there seems to be no difference between the two examples in (12). They are both nonaction propositions which have the same surface syntactic structure and can be uttered with neutral emotion in a context where the passive predicates can be interpreted as contained in a broad focus domain.

Some additional pairs of examples are given below which are pointed out by Oakeshott-Taylor (1984: 15).

- (13) a. We CAN'T go out. The DOG has to be looked after.
 b. Don't you REALIZE that dogs have to be looked AFTER?
- (14) a. Extra MONEY must be found.
 b. Secrets must be KEPT.
- (15) a. In parts of INDIA, dried COW-DUNG is burnt.
 b. In the PAST, witches were BURNT.
- (16) a. To patrons of a restaurant: TIES must be worn.
 b. To users of an escalator: Dogs must be CARRIED.

The a-examples in (13)-(16) exhibit the "regular" prosodic pattern which is subject to the generalization in (1). The b-examples in (13)-(16), by contrast, exhibit the "deviant" prosodic pattern which cannot be predicted by the generalization. The predicates in the b-examples are naturally nonaction-type predicates, and seem to have no difference from those in the a-examples. Thus, the prosodic contrasts in (13)-(16), unless otherwise explained, have the strong likelihood of defying the generalization.

We are now left with two options. One is to abandon the semantic generalization in (1) and to formulate a different generalization which provides a unified account of both the "regular" and the "deviant" prosodic pattern. The other is to circumvent the difficulty that the generalization faces by demonstrating that another factor overrides the action/nonaction distinction in the "deviant" cases mentioned above. In this paper, I choose the latter option for the following two reasons. First, it is hardly possible to provide a unified account of both the "regular" and the "deviant" cases. Second, there is every reason to claim that another factor overrides the action/nonaction distinction in the above-mentioned "deviant" cases. Specifically, I claim below that in the exceptions, the contrast between stage-level and individual-level predicates overrides the requirement that nonaction-type predicates be accentless in out-of-the-blue contexts.

2.2. The Stage/Individual Contrast

A clue to resolving the difficulty with the generalization in (1) lies in Bolinger's (1985: 98) observation. He points out the following striking prosodic contrast which is similar in nature to those adduced in the previous section.

- (17) a. Why are you so upset?—The FLOOR is dirty. (=4b))
 b. Why are you so upset?—Pornographic books are DIRTY. I'm going to burn this piece of trash.

The point here is also that the nonaction-type predicate be dirty in (17a) is accentless within a broad focus domain as the generalization predicts, whereas the same predicate in (17b) is accented contrary to the prediction of the generalization.

Bolinger states that there is a sort of semantic difference between (17a) and (17b). He observes:

- (18) The dirtiness of pornographic books is ... a settled, essential characteristic (in the mind of the speaker, that is). The dirtiness of the floor is ... an accidental state, a result, to be sure of the event of becoming. (Bolinger (1985: 98))

This intuitive observation is of great importance in that it correctly reflects the contrast between stage-level predicates, which express an accidental state of a subject NP, and individual-level predicates, which express an essential and permanent characteristic of a subject NP. That is, the predicate in (17a) is a stage-level predicate, and that in (17b) is an individual-level predicate.

The above-mentioned reinterpretation of Bolinger's observation is confirmed by Diesing's (1992) observation. She observes that the two interpretations of potentially ambiguous sentences like (19) correspond to the prosodic contrast in (21). Specifically, the stage-level reading in (20a) corresponds to (21a), in which the predicate is accentless, and the individual-level reading in (20b), to (21b), in which the predicate is accented.

- (19) Firemen are available. (Diesing (1992: 49))
 (20) a. $\exists x$ x is a fireman \wedge x is available (stage-level reading)
 b. $\text{Gen}_{x,t}$ [x is a fireman \wedge t is a time] x is available at t (individual-level reading)
 (21) a. FIREMEN are available. (stage-level reading)
 b. Firemen are AVAILABLE. (individual-level reading)

From these two observations follows the following descriptive generalization.

- (22) Nonaction stage-level predicates are accentless within a sentence uttered out of the blue with neutral emotion, while nonaction individual-level predicates are accented in a sentence uttered out of the blue with neutral emotion.

I argue below that the above generalization accounts for the "deviant" cases adduced in section 2.1.

2.3. Explanations for the Exceptions

I now turn to the task of showing that the stage/individual contrast, which is determined partly by the inherent meaning of a predicate and partly by the way the speaker sees the world, accounts for the prosodic contrast adduced in section 2.1. In the first place, I will explain the prosodic contrast in (8), where the predicate are muddy is accentless, whereas the predicate are nice is accented. The former predicate is qualified as a stage-level predicate in that it expresses an accidental state of the subject NP your shoes. Notice that in our real world, being muddy cannot be one of the essential characteristics of shoes. The latter predicate is by contrast qualified as an individual-level predicate in that it expresses a property which the speaker believes to be essential for the subject NP your shoes. It is intuitively natural that being nice is much less likely to be an accidental state, than it is an essential characteristic, of shoes. Notice that in our real world, shoes which are sometimes nice and sometimes bad do not serve their function, and do not sell well. It follows, then, that in (8b) the stage/individual contrast overrides the requirement that nonaction-type predicates be accentless in out-of-the-blue contexts.

The same line of reasoning applies to an account of the prosodic facts in (9)-(11). In (9), the predicate is illegal, which receives a pitch accent, expresses an essential property of the subject NP driving without license. Notice that driving without license is prohibited by law in modern civilized nations. In (10), are red, which is accentless, is qualified as a stage-level predicate, and are blue, which is accented, is qualified as an individual-level predicate. Being red is an accidental state of the subject NP your eyes. In this case, it implies that your eyes are blood-shot. That is, it indicates that something is wrong with the eyes. The predicate naturally describes an accidental state of the eyes. Being blue is by contrast seen as an essential property of your eyes, for it means that

the color of the iris of the eyes is blue. Notice that the color of the iris does not change. In (11), the predicate is animal, which is accented, is an individual-level predicate, and the sentence containing it is characterized as a typical generic sentence. Being animal is an essential property of milk in our real world, for it is a product of mammals, not of plants or vegetables.

The stage/individual contrast also serves as a useful tool for treating the peculiar prosodic behavior of the passive predicates in (12), where has been kidnapped in (12a) is accentless, while has been praised in (12b) is accented. The former predicate expresses an accidental state of the subject NP the governor. Being kidnapped cannot be an essential property of a governor or, more generally, of a human being. The latter predicate, on the other hand, seems to be more likely to express an essential property, than an accidental state, of the subject NP for a pragmatic reason. Notice here that the predicate in (12b) has the role of evaluating the governor. Being praised should possibly be one of the essential properties of a governor, for (s)he must win elections. If being praised is merely an accidental state of the governor, (s)he is highly likely to lose elections. This pragmatic condition forces the predicate in (12b) to behave as an individual-level predicate.

The same line of explanation can be provided for the prima facie peculiar prosodic contrasts adduced in (13)-(14). The passive predicates in the a-examples describe accidental states of the subject NPs. Be looked after in (13a) denotes a situation of the subject NP the dog which the speaker believes to be accidental. The sentence denotes an idea which does not occur to the speaker until (s)he thinks of going out. Be found in (14a) describes a situation which the speaker sees as an accidental state of the subject NP extra money, or a situation which does not emerge until the speaker is short of money. The passive predicates in the b-examples, by contrast, describe essential and permanent properties of the subject NPs from the viewpoint of the speaker. That is, they describe a property which the speaker believes to be essential for every member of each subject NP.

The prosodic contrast in (15), repeated below for the sake of convenience, is much more complex than those observed in (13) and (14).

- (15) a. In parts of INDIA, dried COW-DUNG is burnt.
 b. In the PAST, witches were BURNT.

It seems at first glance that both of the sentences describe essential properties of the subject NPs. However, that is not the case. The a-sentence, which describes

the way of heating, means that in parts of India, people burn dried cow-dung for heating. In other words, it describes an essential property of parts of India or people who live there, not of dried cow-dung. Thus, be burnt is a stage-level predicate which expresses a merely accidental state of dried cow-dung. That is why the predicate in the a-sentence is accentless as predicted by the generalization in (1). The b-sentence, by contrast, describes an event which happened in the past to every woman who was labeled as a "witch". That is, it describes a property which the speaker believes to be essential for "witches" who lived in the past. It follows, then, that be burnt in (15b) functions as an individual-level predicate. It is not surprising that it is accented as contrasted with the predicate in (15a).

I turn to an explanation for the prosodic contrast in (16), repeated below, which is as complicated as that observed in (15).

- (16) a. To patrons of a restaurant: TIES must be worn.
 b. To users of an escalator: Dogs must be CARRIED.

Both of the examples at first glance seem to be descriptions of essential properties of the subject NPs, which take the form of a bare plural. However, that is not the case. Oakshott-Taylor (1984: 16) states the difference between the two examples as follows:

- (23) [The b-example] refers to any and every dog that the escalator user happens to have with him; if he doesn't have a dog, the notice does not apply to him. [The a-example], however, means any (male) patron must wear an exemplar of the class "tie", otherwise he will not be admitted.

If this observation is correct, example (16b) is characterized as a typical generic sentence which expresses an essential property of every dog which escalator users have. However, (16a) is not characterized as a generic sentence expressing an essential property of the subject NP ties. Rather, it should be characterized as a sentence expressing a requirement for every patron of a restaurant. Thus, be worn does not express an essential property, but an accidental state, of the subject NP. That is why it is accentless.

2.4. Summary

I have shown above that stage/individual contrast enters into the prosodic facts which do not follow from the semantic generalization in (1). Specifically,

the accented nonaction predicates adduced above are qualified as individual-level predicates. In cases containing nonaction individual-level predicates, the stage/individual contrast overrides the action/nonaction contrast. This indicates that cases in which adjectival and passive predicates are accented do not constitute a class of counterexamples to the generalization in (1).

Given the above conclusion, however, the following question arises:

- (24) Why is it that nonaction individual-level predicates receive a pitch accent in contexts where nonaction stage-level predicates are accentless?

I will provide an answer to this question in the next section.

3. The Stage/Individual Contrast and Information Structure

3.1. Previous Studies

Kuroda (1972) observes that the speaker makes a judgment consisting of two separate acts, which is called the categorical judgment or the double judgment (*Doppel Urteil*), on generic sentences, which contain an individual-level predicate. The two separate acts are 'the act of recognition of that which is to be made the subject' and 'the act of affirming or denying what is expressed by the predicate about the subject' (p. 154).

The following example, which describes an essential property of dogs, illustrates the above-mentioned point.

- (25) Dogs run.

In the first place, the speaker is committed to the act of recognition of unmarked representative entities expressed by the noun dog. In the second place, the speaker is committed to the act of affirming what is expressed by the predicate run on the basis of recognition of representative entities expressed by the subject NP.

The above process of interpretation of generic sentences implies that entities expressed by the subject NP of a sentence containing an individual-level predicate are established as a discourse topic about which a property which the speaker believes to be essential is described (cf. Sasse (1987: 569)). The subject NP, though not mentioned in the previous discourse, serves as a base for description of a property expressed by the predicate and does not serve as a focus. Only the predicate serves as a focus in a sentence containing an individual-level predicate.

This interpretation of Kuroda's analysis is confirmed by Diesing's (1992)

claim. She claims that in English the subject of a sentence containing an individual-level predicate is in [Spec, IP] position at the level of LF and that elements in the position are presupposed (p. 79). It follows, then, that the subject of a sentence containing an individual-level predicate does not have the status of focus and that only the predicate has the status of focus.

Diesing (1992: 52) also observes that a sentence which contains an accented subject NP and an accentless stage-level predicate forms a broad focus domain, while a sentence which contains an accented subject and an accentless individual-level predicate cannot. The data in (26) illustrate the point.

- (26) a. Betty only said that EGGPLANTS are available.
 b. Betty only said that EGGPLANTS are poisonous.

The that-clause in (26a), which contains the accented subject NP eggplants and the accentless stage-level predicate be available, can be interpreted as forming a broad focus domain. By contrast, the that-clause in (26b), which contains the accented subject NP and the accentless individual-level predicate be poisonous, cannot be interpreted as forming a broad focus domain, although it exhibits the same prosodic pattern as that of (26a). Only the subject NP forms a focus domain, and the predicate has the status of shared knowledge.

These observations indicate that individual-level predicates cannot form a broad focus domain with their subject NPs. Put differently, contexts where sentences containing an individual-level predicate occur are limited to two. One context, which is unmarked, is a situation where only predicates have the status of focus. Out-of-the-blue contexts are included in this unmarked context. The other, which is marked, is a situation where only subject NPs have the status of focus (cf. (26b)).

3.2. The Information Structure of the Exceptions to Okazaki's Generalization

Given the conclusion reached in the previous section, I will next turn to a consideration of the information structure of the sentences adduced in section 2.1, which, containing the nonaction individual-level predicates, exhibit the "deviant" prosodic pattern.

I claim that the exceptions to the generalization in (1), which have been shown to be sentences describing essential properties of the subject NPs, comprise the subject NPs which do not have the status of focus and the predicates which have the status of focus.

It is indeed true that the relevant exceptions can be uttered in a context where a subject NP and a predicate can form a broad focus domain. But the speaker makes categorical judgments on the exceptions, which contain individual-level predicates. That is, the speaker is committed to recognition of the existence of what is expressed by a subject NP and, then, to the act of affirming what is expressed by a predicate.

The claim also receives a piece of support from the prosodic pattern of the exceptions. The first piece of evidence is that the exceptions to the generalization in (1) which were adduced in section 2.1 exhibit the prosodic pattern which is typical of sentences comprising a presupposed subject NP and a focused intransitive nonaction-type predicate. Most of the exceptions but (8b) and (12b) exhibit the accentual pattern parallel to the cases in (27).

- (27) a. John (DIS)APPEARED.
 b. John is HAPPY.
 c. Kennedy was ASSASSINATED.

It should be noticed here that none of the examples in (27) are appropriate as an answer to questions like What happened?. The appropriate context for the examples in (27) is the one where the subject NPs are established as topic and have the status of shared knowledge.

The prosodic pattern of (8b) and (12b), repeated below, is also appropriate for sentences comprising an implicitly presupposed subject NP and a focused nonaction-type predicate.

- (8) b. Your SHOES are {#nice/NICE} .
 (12) b. The GOVERNOR has been {#praised/PRAISED} .

One might argue that the prosodic pattern of the above examples is not appropriate for sentences comprising the presupposed subject NP, for the subject NP itself receives a pitch accent. However, this argument does not stand. The nuclear pitch accent assigned to the subject NPs of (8b) and (12b) does not signify their focus-status but their topic-status. That is, the nuclear pitch accent also plays the role of attracting the hearer's attention to their topic status. This is motivated by the following facts.

- (28) a. What happened?---TRUMAN DIED. (Bolinger (1989: 241))
 b. (out of the blue) Emperor Hirohito of JAPAN has just DIED. (BBC TV news, January 6, 1989)

Bolinger (1989: 241) observes that (28a) is appropriate in a context where 'Truman's health had been a much discussed news item'. In other words, Truman has already been a much discussed topic and has the status of shared knowledge. The nuclear accent the NP bears attracts the hearer's attention to it. The same is true of (28b), which I myself heard. Emperor Hirohito's health had also been a much discussed topic, as we all remember. Thus, the nucleus on the last word of the subject NP also serves as attracting the hearer's attention to Emperor Hirohito, which has the status of shared knowledge. The examples in (28) show that linguistic elements which have the status of shared knowledge can be accented. It follows, then, that the prosodic pattern of (8b) and (12b) is seen as appropriate for sentences whose subject is labeled as shared knowledge.

The second piece of prosodic evidence supporting the above-mentioned claim is that there actually exist NPs which have the status of shared knowledge without being mentioned in a discourse. Consider the accentuation of the following two pairs of examples.

- (29) a. JOHNSON died. (Schmerling (1976: 90))
 b. Truman DIED. (Ibid.)
- (30) a. Hey!...Your COAT's on fire. (Schmerling (1976: 41))
 b. Hey!...Your coat's been PRESSED. (Allerton and Cruttenden (1979: 51))

The examples in (29) and (30) are all appropriate out-of-the-blue utterances comprising nonaction-type predicates. The a-sentences exhibit the "regular" prosodic pattern as predicted by the generalization in (1). The b-sentences, however, does not follow the generalization. This anomalous prosodic behavior of the b-sentences stems from the fact that their subject NPs, although they are not mentioned in the previous discourse, are established as topic and have the status of shared knowledge.

The subject NP Truman in (29b) has the status of shared knowledge even in an out-of-the-blue utterance. The health of Harry Truman, a former president of the United States, had been a much discussed topic in the United States, and the speaker sees it as shared knowledge without referring to it in the previous discourse (cf. Schmerling (1976)). In the same vein, the subject NP your coat in (30b) also has the status of shared knowledge. Example (30b) is most appropriate in a context where a clerk of a cleaner's informs one of the customers of the fact that the customer's coat has been pressed (cf. Okazaki (1992)). That is, the speaker assumes the subject NP to be shared knowledge without mentioning it in the preceding

discourse. It follows, then, that linguistic elements can have the status of shared knowledge even in an out-of-the-blue utterance. Whether a linguistic element has the status of focus or not depends not only on discourse but also on the way the speaker sees the world.

The above arguments lead us to conclude that the exceptions to the generalization in (1) which are adduced in section 2.1 are characterized as sentences consisting of the implicitly presupposed subject NPs and the focused predicates.

3.3. An Answer to the Question in (24)

Given the conclusion mentioned above, we are now in a position to answer the question raised in (24), which is repeated below.

- (24) Why is it that nonaction individual-level predicates receive a pitch accent in contexts where nonaction stage-level predicates are accentless?

An answer to this question is formulated as follows:

- (31) Nonaction individual-level predicates cannot form broad focus domains with their subject NPs. They form focus domains of themselves, and their subjects do not have the status of focus but of shared knowledge.

Now that the accenting of nonaction individual-level predicates is attributed to the fact that they form focus domains of themselves, it is not surprising that they usually receive a pitch accent. In fact, they exhibit quite regular prosodic behavior.

4. A Further Puzzle: Accentless Nonaction Individual-Level Predicates

In the previous section, I have shown that nonaction individual-level predicates receive a pitch accent because they form focus domains of themselves. However, prosodic patterns of individual-level predicates are not so simple as observed above. There actually exist puzzling examples in which nonaction individual-level predicates are accentless and must be interpreted as contained in a broad focus domain. Since such examples have the possibility of offering a challenge to the conclusion derived in section 3, I must provide an explanation for accentless nonaction individual-level predicates contained in a broad focus domain.

There are two sorts of cases relevant to the discussion here. The first sort of examples involves individual-level adjectival predicates. The examples in (32)-

(34) illustrate the point.

- (32) The news has just come in. ABORTIONS are legal. (Bolinger (1985: 97))
 (33) I've just learned that ASBESTOS is dangerous. Have you got any of the stuff about the house? (Bolinger (1985: 106))
 (34) According to my diet book, BEANS are good for you. Let's get some. (Bolinger (1985: 106))

The relevant predicates in the above examples (are legal, is dangerous, and are good) are all nonaction individual-level predicates in that they denote essential properties of their subject NPs. Thus, they are expected to be accented. In fact, however, they are accentless. The sentences which contain them exhibit the prosodic pattern which is characteristic of cases where a subject NP and a nonaction stage-level predicate form a broad focus domain. The relevant predicates cannot be interpreted as having the status of shared knowledge but must be interpreted as contained in a broad focus domain.

The second sort of puzzling examples involves individual-level nominal predicates, which describe an essential property of a subject NP. Consider the accentuation of the following examples.

- (35) (Have you heard?) The First SECRETARY is a spy. (Gussenhoven (1984: 44))
 (36) How strange! DOLPHINS are mammals. Did you know that? (Bolinger (1985: 105))
 (37) This article says that fluorescent LIGHT is a no-no. (Bolinger (1985: 106))
 (38) The prophet Haros arose in the night and cried out, I shall preach it to the world! The whole EARTH is my sphere! (Bolinger (1985: 106))

The sentences containing the relevant predicates (is a spy, are mammals, is a no-no, and is my sphere) would also exhibit the prosodic pattern parallel to that of the exceptions adduced in section 2.1. However, they exhibit the prosodic pattern characteristic of nonaction stage-level predicates in a broad focus domain. The relevant predicates are also to be interpreted as contained in a broad focus domain.

The above-mentioned anomalous prosodic behavior of individual-level predicates might defy the conclusion derived in section 3 that nonaction individual-level predicates are not contained in a broad focus domain. Notice, however, that the examples in (32)-(38) differ in one crucial respect from the exceptions to the generalization in (1) which were adduced in section 2.1. Whereas the exceptions

describe a piece of acquired knowledge of the speaker, the examples adduced above, although their predicates are qualified as nonaction individual-level predicates, denote knowledge unknown to the speaker until at the time of speech. Given this difference, I now turn to an explanation for the data in (32)-(38).

I claim here that the prosodic facts under consideration are accounted for from a pragmatic point of view. The reason for a pragmatic analysis is twofold. The first reason is that we cannot find any syntactic or semantic differences between the exceptions to the generalization in (1) which were adduced in section 2.1 and the data adduced in (32)-(38). The two kinds of examples comprise subject NPs and predicates headed by be, and are characterized as sentences describing essential properties of the subject NPs. The second reason for a pragmatic analysis is that the accentlessness of the predicates in the relevant cases cannot be attributed to any phonological factors. The accentlessness cannot be determined by genuine phonological factors like the number of syllables or the distance between the stressed syllable of a subject and that of a predicate. Notice that both the number of syllables of the predicates and the distance between the stressed syllables of the subjects and those of the predicates vary in (32)-(38).

I propose here that the pragmatic avoidance of the categorical judgment on sentences containing individual-level predicates be operative in (32)-(38). That is, the pragmatic peculiarity of the data in (32)-(38) forces the speaker to avoid making a categorical judgment, which is typical of sentences containing individual-level predicates (cf. section 3.1). In other words, the speaker does not provide any judgments, but provides only judgment materials, in (32)-(38). Thus, the predicates in (32)-(38), though they are canonically nonaction individual-level predicates, exhibit the same prosodic pattern as that of nonaction stage-level predicates contained in a broad focus domain.

Let us first consider the examples containing the adjectival predicates by taking (32) as an example. Example (32) is uttered in a situation where the speaker, who presupposes that being illegal is an essential property of every case of abortions, knows at the time of speech that abortions become legal by an amendment of a law. This pragmatic condition forces the speaker to give up making a categorical judgment on (32), which is canonically qualified as a generic sentence. In addition, the pragmatic peculiarity is also reflected on the fact that (32) can be interpreted as embedded in a that-clause such as that in (39), in which typical generic sentences cannot be interpreted as embedded.

(39) The news that abortions are legal has just come in.

This fact indicates that the categorical judgment on Abortions are legal is blocked by the presence of a that-clause headed by the news. The same applies to (33) and (34).

The pragmatic avoidance of categorical judgments also accounts for the peculiar prosodic behavior of predicative NPs in (35)-(38). Take example (36), for example. The predicate are mammals is canonically an individual-level predicate, but the speaker does not know the fact that dolphins are mammals until at the time of speech. Thus, the speaker avoids making a categorical judgment about (36), and provides it as a judgment material. It should be noticed that as shown in (40), (36) can also be interpreted as embedded in a that-clause.

(40) It is strange that dolphins are mammals.

That is, the categorical judgment on Dolphins are mammals is blocked by the presence of a that-clause headed by the modality it is strange, in which typical generic sentences cannot occur.

The avoidance of categorical judgments about generic sentences makes it possible for nonaction individual-level predicates to form a broad focus domain without receiving a pitch accent. That is why the predicates in (32)-(38) are all accentless and contained in a broad focus domain. In this respect, they exhibit the regular prosodic pattern predicted by the generalization in (1).

Note finally that the question of why that-clauses like those in (39) and (40) block the categorical judgment on generic sentences still remains to be answered. A tentative answer to this question is that the embedding of generic sentences in that-clauses like those in (39) and (40) causes a sort of contradiction. It must be admitted here that I cannot give a definite answer to the above question. But to give a definite answer to the question is far beyond the scope of this paper. It suffices here to show that the speaker does not make any categorical judgments in (32)-(38).

5. Conclusion

In this paper, I have been concerned with an explanation for the two kinds of exceptions to Okazaki's (1992) generalization about the accentuation of predicates, which is formulated in terms of the action/nonaction distinction, and reached the conclusion that the exceptions, which include facts about adjectival and passive

predicates, do not constitute a class of counterexamples to the generalization in that their accentuation is governed also by the stage/individual distinction. Specifically, I have shown that the accenting of the predicates in the exceptional cases is due to the fact that the predicates are qualified as nonaction individual-level predicates, which typically form focus domains of themselves.

I have also been concerned with an explanation for accentless nonaction individual-level predicates, which are anomalous in light of the conclusion drawn in section 3. I have proposed that the anomalousness stems from the pragmatic avoidance of the categorical judgment on sentences containing nonaction individual-level predicates.

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