

CONSTRAINTS BETWEEN PASSIVE SUBJECTS AND AGENTS*

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The passive voice has often been maligned by traditionalists as "weak" and "unemphatic" - a construction to be avoided. Transformationalists have usually elevated it to the status of a stylistic variant of the active voice - derived from the active deep structure by an optional rule. Neither of these approaches acknowledges that there are clear-cut cases of both acceptable and unacceptable passives along with varying degrees in between, forming a squish.

In this paper, I will discuss only one of the reasons for the varying degrees of acceptability - namely that passives are more acceptable if their subjects are more important than their agents, and less acceptable if they are less important.

I will try to avoid discussing another important reason, which involves the way that the discourse topic affects the passive sentence. Instead, I will try to examine the sentences in isolation, disregarding the fact that each of these sentences could become more acceptable in certain contexts, and thus, in isolation, cannot be considered totally unacceptable.

I will also avoid discussing the use of passives in technical or formal discourse, where there is more tolerance for slightly unacceptable passives in order to achieve a more impersonal effect. The judgments of acceptability will be based on an informal style of discourse.

Finally, I will avoid discussing the effect of the verb type on the degrees of acceptability. I have used only verbs that could give an acceptable passive, but I have divided them into three classes. The first class contains action verbs which describe something happening to the passive subject, so that one can say "What happened to Gerald was that he was attacked by women." Verbs of this type form the optimal passive and are the main ones I used for determining the constraints between passive subjects and agents. The second class consists of action verbs which do not describe anything happening to the passive subject, like describe, refer, and build, so that one cannot say "What happened to Gerald was that he was described by women," at least in any literal sense of the word described. These verbs do not have all of the constraints

that the first class has, possibly because of their frequent use in formal discourse, which, as pointed out above, is more tolerant of slightly unacceptable passives. The third class contains nonaction verbs like hate, trust, and see. These also do not describe anything happening to the passive subject, so that one cannot say "What happened to Gerald was that he was hated by women." Although verbs of this class can form acceptable passives, they do not, in most dialects, form the most optimally acceptable ones. Nevertheless, they do follow the same constraints as those in the first class.

In order to show that the passive subjects should be more and not less important than their agents, I will begin by pointing out two respects in which they can be important. The first involves the definiteness and specificity of the noun phrase, and the second involves the humanness and animacy of the noun phrase.

I The Definiteness and Specificity Constraint

The constraint on definiteness and specificity in noun phrases is basically a constraint on the degree of referential information present in the noun phrase. For simplicity, I will distinguish only three degrees of referential information.¹

Noun phrases which have the highest degree of referential information are definite-specific noun phrases. This type can consist of proper names, like "Squeaky", common nouns with the determiners the, this, that, these, or those, like "this woman", or personal pronouns like she, he, or it. In these noun phrases, the reference of the noun is known by the speaker and, the speaker presupposes, by the hearer, either because of previous knowledge, previously mentioned information, or information present in the speech situation. Thus the sentence "The assassin sat in this chair" is acceptable only if both the speaker and the hearer share knowledge about an assassin and both can see the chair referred to.

The next lowest degree of referential information is in indefinite-specific noun phrases. This type can consist of common nouns with the determiners a(n) or some, like "a woman", or the indefinite pronouns someone or something. In these, the reference of the noun is known by the speaker, but the speaker has no presuppositions as to whether the hearer knows or not. In the sentence "An assassin aimed a gun at the president," the speaker has previous knowledge of an assassin and a gun, but the hearer is not expected to. The reference may be quite specific in the mind of

the speaker, as in "I married someone from my hometown," or it may be barely specific, as in "I heard someone come in "

The lowest degree of referential information is found in nondefinite-nonspecific noun phrases. These can take common nouns with the determiners a(n), any, or some, like "any woman", or the indefinite pronouns someone, something, anyone, anything. In these, the noun has no reference in the real world, for either the speaker or the hearer. In the sentence "Any woman can assassinate a president," there is no previous knowledge or mention of a woman or a president, by the speaker or the hearer.

These three types of noun phrases differ in the amount of referential information provided. On the basis of these differences, I have ranked them on the Definiteness-Specificity Hierarchy, from here on referred to as the D-S Hierarchy.

The Definiteness-Specificity Hierarchy [D-S]

- I Definite-Specific NP
- II Nondefinite-Specific NP
- III Nondefinite-Nonspecific NP

This hierarchy participates in the constraint between passive subjects and agents. A passive sentence will be shown to be less acceptable if its passive subject is lower on the D-S Hierarchy than its agent, and more acceptable if it is as high or higher.

First, I will show sentences whose passive subjects are the highest noun phrases on the D-S Hierarchy, those that are definite-specific [d-s]. Regardless of whether the agents are definite-specific [d-2], nondefinite-specific [nd-s], nondefinite-nonspecific [nd-ns], or have been omitted as a result of Indefinite Agent Deletion (as I have shown by the parentheses), the passive subject will never be lower on the hierarchy than its agent, and thus each passive sentence will be acceptable.

- | | I | II | III |
|---|---|----|-----|
| 1 | The president was attacked/criticized/hated by that woman [d-s] | | |
| 2 | The president was attacked/criticized/hated by a woman [nd-s] | | |
| 3 | The president was attacked/criticized/hated (by someone) [nd-s] | | |

- | | | I | II | III |
|---|---|---|----|-----|
| 4 | The president may be attacked/criticized/hated by any woman [nd-ns] | | | |
| 5 | The president may be attacked/criticized/hated (by anyone)[nd-ns] | | | |

Next, I will show sentences whose passive subjects are second to highest on the D-S Hierarchy, those that are nondefinite-specific [nd-s]. When their agents are as high on the hierarchy as they (= [nd-s]), or lower on the hierarchy (= [nd-ns]), the sentences are acceptable

- | | | I | II | III |
|----|---|---|----|-----|
| 6 | An assassin was grabbed/described/noticed by a bystander [nd-s] | | | |
| 7 | An assassin was grabbed/described/noticed (by someone) [nd-s] | | | |
| 8. | An assassin may be grabbed by a bystander [nd-ns] | | | |
| 9. | An assassin may be grabbed (by anyone) [nd-ns] | | | |

But when the agents are higher on the hierarchy (= [d-s]), the sentences are less acceptable

10. ?An assassin was grabbed/described/noticed by that bystander [d-s]

Finally, I will show sentences whose passive subjects are lowest on the D-S Hierarchy, those that are nondefinite-nonspecific [nd-ns]. When their agents are equally as low on the hierarchy (= [nd-ns]), or when the agent has been deleted by Indefinite Agent Deletion, regardless of the specificity of the agent before it was deleted, the sentences are acceptable

11. Anyone could be shot/accused/doubted by a woman [nd-ns]
12. Anyone could be shot/accused/doubted (by anyone) [nd-ns]
13. Anyone could have been shot/accused/doubted (by someone) [nd-s]

However, when the agents are higher on the D-S Hierarchy than the passive subject (= [d-s] or [nd-s]), the sentences are less acceptable

14. ?Anyone could have been shot/accused/doubted by that woman [d-s]
15. ?Anyone could have been shot/accused/doubted by a certain woman [nd-s]

From the preceding sentences, one can see that passives are less acceptable if their agents are higher on the D-S Hierarchy than they. The passive subject must be as high on the hierarchy as the agent, or higher, this constraint can be formulated as follows

The Definiteness-Specificity Constraint

A passive sentence tends to be more acceptable if the passive subject is as high on the Definiteness-Specificity Hierarchy as its agent, or higher. It tends to be less acceptable if the passive subject is lower on the hierarchy than its agent

This constraint reflects the way that speakers of English feel about the placement of referential information in a passive sentence that the passive subject should contain more referential information than the passive agent, since it is the position of most importance

II The Humanness and Animacy Constraint

The second constraint on passive subjects and agents involves their humanness and animacy. For simplicity, I will distinguish only three levels: human-animate noun phrases, which name or describe human beings, like "Squeaky" or "women", nonhuman-animate noun phrases, which name or describe animals, like "Rover" or "cats", and nonhuman-nonanimate noun phrases, which name or describe things like plants, objects, ideas, or forces, such as "morning glories," "fences," "theories," or "fire."

These three types of nouns vary according to the interest value that a speaker would place on them. Speakers within our ontological framework usually view humans as inherently more interesting and valuable than animals, and animals more so than things. This ranking according to interest value can be represented on the Humanness-Animacy Hierarchy, from here on the H-A Hierarchy

The Humanness-Animacy Hierarchy [H-A]

- 1 Human-Animate NP
- 11 Nonhuman-Animate NP
- 111 Nonhuman-Nonanimate NP

While these relative values hold true in isolation, in context they can shift. Thus if a discourse is about an antique table, a non-human-nonanimate noun phrase, the table is of more interest than the person who carved his initials in it. Nevertheless, it seems generally the case that we are more interested in animate things than nonanimate, and in humans than nonhumans.

The H-A Hierarchy participates in the second constraint between passive subjects and agents. Passive sentences will be shown to be less acceptable if their passive subjects are lower on the H-A Hierarchy than their agents. They will be shown to be more acceptable if their passive subjects are as high on the hierarchy as their agent, or higher.

First, I will show sentences whose passive subjects are highest on the H-A Hierarchy, that is human-animate noun phrases [h-a]. Regardless of whether the agents are human-animate [h-a], nonhuman-animate [nh-a], nonhuman-nonanimate [nh-na], or deleted by Indefinite Agent Deletion, the passive subject cannot be lower on the hierarchy than its agent. Consequently, all of these sentences are acceptable.

- | | | I | II | III | |
|----|---|---|----|-----|--|
| 16 | The president was attacked/criticized/hated by the assassin [h-a] | | | | |
| 17 | The president was attacked/. . . /hated by the dog [nh-a] | | | | |
| 18 | The president was struck/lightning [nh-na] | | | | |

Next, I will show sentences whose passive subjects are second to highest on the hierarchy, that is nonhuman-animate noun phrases [nh-a]. When their agents are the same rank as they are [nh-a], or a lower rank [nh-na], the sentences are acceptable.

- | | | I | II | III | |
|----|---|---|----|-----|--|
| 19 | This horse was attacked/. . . ./hated by that dog | | | | |
| 20 | This horse was struck/... . ./... by lightning | | | | |

But when the agent is higher on the hierarchy than the subject, the sentences are less acceptable.

- | | | I | II | III | |
|----|---|---|----|-----|--|
| 21 | This horse was attacked/described/hated by that man | | | | |

Finally, I will show sentences whose passive subjects are lowest on the H-A Hierarchy, that is nonhuman-nonanimate noun phrases.

When their agents are of the same rank on the hierarchy [nh-na], the sentences are acceptable

22. This chair was damaged/ . . . / . . . by fire ,

I II III

But when their agents are higher on the hierarchy ([h-a] or [nh-a], the sentences are less acceptable ²

23 ?This chair was damaged/ . . . /hated by that man
24 ?This chair was damaged//hated by that dog

I II III

It is at this point that the Class II verbs do not seem to follow the constraints observed with the other two classes, and, as mentioned earlier, they may be due to the frequent use of these verbs in formal discourse where slightly less acceptable passives are tolerated for the sake of a more impersonal tone. Thus the following sentences do not seem as unacceptable with Class II verbs as they do with the others in (23)

23' This chair was described/referred to/built by that man

II II II

In all of the preceding sentences, the acceptable ones had passive subjects that were as high on the H-A Hierarchy as their agents, or higher. Only the less acceptable sentences had passive subjects that were lower on the hierarchy than their agents. This second constraint on passives can be worded as follows

The Humanness-Animacy Constraint

A passive sentence tends to be more acceptable if the passive subject is as high on the Humanness-Animacy Hierarchy as its agent, or higher. It tends to be less acceptable if the passive subject is lower on the hierarchy than its agent.

Kenneth Hale (1973), has described a similar constraint in Navaho, involving animacy and passive-like inversion. Sentences containing the passive-like inversion are acceptable if the passive subject is animate (thus high on the Interest Hierarchy) and its agent is either animate (the same rank on the hierarchy) or nonanimate (lower on the hierarchy). They are unacceptable if the passive subject is nonanimate (thus low on the hierarchy)

and its agent is animate (higher on the hierarchy), however they are also unacceptable if the agent is nonanimate (the same rank on the hierarchy). Furthermore, the passive-like inversion is even obligatory for active sentences where the active subject, i.e., the agent, is nonanimate (low on the hierarchy) and the active object, i.e., the passive subject is animate (high on the hierarchy), showing that the constraint seems to apply not just to passive-like inversions in Navaho, but also to active sentences

Thus in English, and it seems in other languages too, the H-A Constraint reflects the way that speakers feel about the placement of interesting information in a passive sentence, that the passive subject should contain more interesting information than the passive agent, since the subject position is most important

III The Importance Constraint

The D-S and H-A Constraints discussed in the preceding two sections are really constraints on the importance of information present in the passive subject relative to that in the agent. A high amount of referential information is more important than a low amount, and a high amount of interest value is more important than a low amount. Thus noun phrases which are highest on both the D-S and the H-A Hierarchies contain the most important information, as in a definite-specific, human-animate noun phrase like "Squeaky" or "that woman". Noun phrases which are lowest on both the D-S and the H-A Hierarchies contain the least important information, as in a nondefinite-nonspecific, nonhuman-nonanimate noun phrase like "anything" or "any chair". In between these two extremes, one finds varying degrees of importance

In order to compare the varying degrees of importance and show how the values of referential information and interest can interact and counterbalance each other, I will use the following device. It is not intended to have any theoretical significance. Points will be assigned to represent the importance of each noun phrase. The most important noun phrase on the D-S Hierarchy, the definite-specific noun phrase, will be assigned three points. Similarly, the most important noun phrase on the H-A Hierarchy, the human-animate noun phrase, will also be assigned three points. The second most important noun phrase on the D-S Hierarchy, the nondefinite-specific noun phrase, will be assigned two points, and that on the H-A Hierarchy, the nonhuman-animate noun phrase, will also be assigned two points. The least important noun phrase on the D-S Hierarchy, the nondefinite-nonspecific noun phrase, and

on the H-A Hierarchy, the nonhuman-nonanimate noun phrase, will each be given one point.

Thus a noun phrase which is definite-specific and human-animate will consist of a total of six points, the highest number of points given, reflecting that it would be the most important in both referential information and interest value. A noun phrase which is nondefinite-nonspecific and nonhuman-nonanimate will be given a total of two points, the lowest number of points given (except for zero points given to a deleted agent), reflecting that it would be the least important in both referential information and interest value. The ranking of these noun phrases along with their point counts is represented in the following hierarchy, which combines the D-S and the H-A Hierarchies into the Importance Hierarchy

The Importance Hierarchy

i	Definite-Specific + Human-Animate NP	3+3=6
ii.	Definite-Specific + Nonhuman-Animate NP	3+2=5
	Nondefinite-Specific + Human-Animate NP	2+3=5
iii.	Definite-Specific + Nonhuman-Nonanimate NP	3+1=4
	Nondefinite-Specific + Nonhuman-Animate NP	2+2=4
	Nondefinite-Nonspecific + Human-Animate NP	1+3=4
iv	Nondefinite-Specific + Nonhuman-Nonanimate	2+1=3
	Nondefinite-Nonspecific + Nonhuman-Animate	1+2=3
v	Nondefinite-Nonspecific + Nonhuman-Nonanimate	1+1=2
vi	Deleted Agent	0+0=0

Just as the D-S and H-A Hierarchies can be combined into the Importance Hierarchy, so can the D-S and H-A Constraints be combined into the Importance Constraint. Passive sentences will be shown to be less acceptable when their subjects are less important than their agents, or put formally, when their subjects are lower on the Importance Hierarchy than their agents. These sentences will be more acceptable when their subjects are more important than their agents, or put formally, when their subjects are higher on the Importance Hierarchy than their agents.

First, I will show sentences whose passive subjects are highest on the Importance Hierarchy and whose agents are lowest. These are the most acceptable passives.

25	The president may be attacked (by anyone)	6-0=6
26	The president may be struck by lightning	6-2=4

In (25), the passive subject is definite-specific and human-animate, thus worth 6 points. Its agent is deleted, and thus worth 0 points, so that the subject is worth 6 more points in importance than the agent. In (26), the same passive subject occurs with a nondefinite-nonspecific and nonhuman-nonanimate agent worth only 2 points, so that the subject is worth 4 points more in importance than the agent.

Next, I will show sentences whose passive subjects are lowest on the Importance Hierarchy and whose agents are highest. These are the least acceptable passives.

27	???	A beer can could be crushed by that woman	2-6=-4
28	???	A gun can be confiscated by that cop	2-6=-4

In both cases, the passive subject is nondefinite-nonspecific and nonhuman-nonanimate, thus worth only 2 points. The agent, however, is definite-specific and human-animate, thus worth 6 points in both cases, so that the subjects are each worth 4 points less than the agents, making them unacceptable.

In between, one finds varying degrees of acceptability forming a squish.

29	??	This can was crushed by that woman	4-6=-2
30	?	This can was crushed by a woman	4-5=-1
31		This can could have been crushed by any woman	4-4= 0
32.	+	This can was crushed by a car	4-3= 1
33	++	This can could have been crushed by a car	4-2= 2

In each case, the passive subject is definite-specific (3 points) and nonhuman-nonanimate (1 point), making 4 points. In (29), the agent is definite-specific (3 points) and human-animate (3 points), making 6 points, which is 2 points more than the subject, and is fairly unacceptable, but not as unacceptable as in (27) and (28), where the agent was 4 points more than the subject. In (30), the agent is nondefinite-specific (2 points) and human-animate (3 points), making 5 points total, which is 1 point more than the subject and thus slightly unacceptable, but less so than in (29).

In (31), one can see a case where the passive subject is lower in interest value than its agent, as represented on the H-A Hierarchy ("can" = 1 point, "woman" = 2 points), which should make the sentence less acceptable. But the passive subject is higher in referential information than its agent, as represented on the D-S

Hierarchy ("this" = 3 points, "any" = 1 point), which compensates for the low interest value, making the passive subject equal in importance with the agent, as represented on the Importance Hierarchy ("this can" = 4 points, "any woman" = 4 points), and thus the sentence is acceptable

Sentences (32) and (33) both have agents which are lower than the passive subject and thus are acceptable. In (32), the agent is nondefinite-specific (2 points) and nonhuman-nonanimate (1 point), making 3 points, which is 1 point less than the subject and slightly more acceptable than (31). In (33), the agent is nondefinite-nonspecific (1 point) and nonhuman-nonanimate (1 point), making 2 points, which is 2 points less than the subject, and thus more acceptable than (32).

From the preceding examples, one can see that the ranking on the D-S Hierarchy interacts with the ranking on the H-A Hierarchy to determine the relative importance of noun phrases, as represented on the Importance Hierarchy. Thus the D-S Constraint and the H-A Constraint described in the first two sections can be combined into one constraint on the importance of noun phrases.

The Importance Constraint

A passive sentence tends to be less acceptable if the passive subject is lower on the Importance Hierarchy than its agent, and more acceptable if it is as high or higher.

IV Conclusion

In the preceding sections, I have tried to show that passive sentences vary in acceptability according to the importance of the passive subject relative to the agent. The importance of each was described as a combination of their degree of referential information, as represented by their definiteness and specificity, and their degree of interest value, as represented by their humanness and animacy.

These observations allow us to account for cases where people have thought that passive changes meaning, as in the following sentences⁴

34 The president believes a woman to make a good leader

35 A woman is believed by the president to make a good leader

The first sentence has both a specific and a nonspecific reading, but the passive version has only a specific reading. Rather than see this as evidence that passive changes meaning, one can see it as an instance of one choosing the least unacceptable readings. Since the passive subject should be higher on the Importance Hierarchy than the agent, and since the agent ("the president") is quite high, one would tend to choose the higher reading for the passive subject ("a woman"), which would be the specific reading rather than the nonspecific. Furthermore, as the Importance Constraint would predict, if the agent is low on the hierarchy, both readings would be easier to choose.

36 A woman is believed (by someone) to make a good leader

37 A woman is believed by a psychologist to make a good leader

In (36), the agent has been deleted, so that the passive subject is necessarily higher in importance, whether it has the specific or the nonspecific reading. In (37), the agent could have either a specific or a nonspecific reading, and its passive subject can too.

It is not clear how the constraints described in this paper can be incorporated into any of the current versions of a generative-transformational grammar. However, it is clear that the constraints cannot be made into conditions on the passive rule, because the constraints would have to apply after agent deletion, which can only apply after passive. Furthermore, as I have just started finding out, the constraints described here apply not just to passives, but also to other transformations that move one noun over another, as in dative movement ("She gave the assassin to a policeman"/"*She gave a policeman the assassin") and tough movement ("*A president is easy for Squeaky to assassinate"/"A president is easy (for someone) to assassinate"/"A President is easy for a woman to assassinate").

So I close this paper with the feeling that a lot more investigation is needed into constraints between nouns in sentences of various types, and into the ways that these constraints interact in discourse with such things as subjects, topics, themes, new information versus old, focus, and stress patterns.

NOTES

* I am grateful to Jerry Morgan for many helpful discussions of this topic

¹There are different degrees of referential information within each of the three levels described below. Proper nouns like "Squeaky" or "Rover" have more referential information than common nouns like "the woman" or "the dog," and they have more than pronouns like "she," "it," "someone," or "anything." Furthermore, the amount of referential information available with common nouns can be increased by the use of descriptive modifiers like "the tall, stately, gray-haired woman" or "the small brown dog."

²There are sentences where the passive subject would normally be considered low in interest value and where the agent is famous and would normally be considered extremely high in interest value, which should make the sentence unacceptable, but it isn't

This car was dented by Henry Kissinger/?by John
 This fence was damaged by Secretariat/?by that horse
 This bed was slept in by Clark Gable/?that man

It is as though the "car," "fence," or "bed" has become famous as a result of its contact with the famous agent.

³The "+" mark is used to show degrees of positive acceptability in the same way that "?" mark is used to show degrees of negative acceptability

⁴Harman (1972)

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