COGNITIVE AND DISCOURSE-PRAGMATIC FACTORS IN PASSIVISATION¹



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Passivisation results when the non-agent participant is more topical than the agent (or subject-of-active) in terms of both "natural" topicality and "discourse" topicality. The present article is a corpus-based study which examines the role of "topicality" in the English passive construction. It is also argued that this is a crucial factor involved in deagentivisation, where the non-agent participant displays lower topicality than the zero agent participant.

1. Introduction

Voice is a fundamentally pragmatic notion, since it allows for the construal of the same semantically transitive "event" from two different discourse-pragmatic perspectives (Givon, 1990). These two perspectives are linked to the notion of *topicality* of both the agent and patient. In the active voice the *agent* is the argument which has greater prominence, and as such greater probability of access to grammatical subject. In the passive voice the argument with a higher degree of topicality is some *non-agent* participant, while the agent (or subject-of-active) is defocused and typically coded as an optional argument or omitted altogether.

There is a parallel system of voice in ergative languages (Basque), with an *antipassive* construction, in which the agent retains a high degree of topicality while the patient's topicality is reduced with regard to the active / ergative. As Givon (1990) notes, patients in the antipassive tend to be thematically unimportant, non-referential and predictable. Some ergative languages, Mam (Mayan, Central America), also exhibit the contrast ergative-antipassive-passive. Shibatani (1985: 837) explains the existence of a passive in Mam as an agent-defocusing device, «contrasting with the antipassive construction - in which an agent is in the absolutive, and the defocused patient is not encoded».

In some languages, Plains Cree (Algonquian, N. America), we find a *direction* system, with a direct-*inverse* contrast, the latter resembling the passive in that the patient is more topical than the agent (Givon, 1994). Nevertheless the agent retains considerable topicality and is not "supressed" as in the passive constructions.

According to Givon (1990) there is a connection between these facts which has to do with the notion of cognitive *saliency*. Thus, when the agent is thematically more important, in the prototypical active clause and even more so in the antipassive, the focus is on those properties of the event which are more closely related to agentivity (intentionality, control, initiation, action and responsibility, cf. Lakoff, 1977). Also the agent participant tends to be more prominent, referential and individuated.

In Memoriam Leocadio Martín Mingorance, who was one of the members of the Examining Bo ard for the defence of my PhD Thesis. This article is partly based on that work.

In the prototypical passive, on the other hand, when the patient or some other non-agent participant is thematically more important, the attention falls on the properties of the event which are related to the patient. In this case the agent loses prominence and tends to be non-referential and non-individuated.

There are also languages (Philippine languages) with a topicalisation system, which according to Shibatani (1988: 5) constitute a different typological group and should be distinguished from other voice systems.

The Philippine voice system differs from both the active-passive opposition and the ergative-antipassive-(passive) opposition in that the basic voice is difficult to determine, especially because both the actor (agent)-topic form and the goal (patient)-topic construction have comparable morphological complexity and text frequency.

The passive construction may be viewed within the general function of detransitivisation (Moreno, 1987). Givon (1995: 76) singles out three basic semantic dimensions which define the prototypical transitive event:

- a. Agent: The prototypical transitive event involves a volitional, controlling, actively-initiating agent who is responsible for the event, thus its salient cause.
- b. Patient: The prototypical transitive event involves a non-volitional, inactive non-controlling patient who registers the event's changes-of-state, thus its salient effect.
- c. Verbal modality: The verb of the prototypical transitive clause codes an event that is perfective (non-durative), sequential (non-perfect) and realis (non-hypothetical). The protype transitive event is thus fast-paced, completed, real, and perceptually-cognitively salient.

The fact that passivisation affects all the properties of transitivity is reflected in the coding properties of passive constructions. Crosslinguistically, we may distinguish two types² of constructions (Givon, 1990: 575-76):

- (i) Promotional Passive: Constructions in which the topic-of-passive undergoes full promotion to subjecthood. These tend to:
 - (a) allow the agent-of-passive to appear, optionally, in a special oblique case;
 - (b) code the passive verb with more stative-intransitive grammatical form; and
 - (c) restrict the range of non-agent case-roles that can become the topic-of-passive.
- (ii) Non-promotional Passive: Constructions in which the topic-of-passive does not undergo full promotion, but rather retains some characteristics of the active construction. These tend to:
 - (a) delete the agent (or subject-of-active) obligatorily;
 - (b) code the passive verb with a more active-transitive grammatical form; and
 - (c) permit a wider range of non-agent case-roles to become the topic-of-passive.

These two constructions are represented by English and Ute (Uto-Aztecan, Central America). In Ute the agent (or subject-of-active) is obligatorily suppressed but maintains control³ of number agreement in the verb, and there are no restrictions on the case-role of the element which may be chosen as topic-of-passive.

² Similarly, Foley & van Valin (1984) identify two typological variants, a "foregrounding" and a "backgrounding" passive.

In English, although the new subject / topic-of-passive gains control over verbal agreement, we may observe certain "implicit argument effects" which show that the implicit agent still retains control in certain contexts (Baker, 1988: 318). (i) a. The bureaucrat was bribed [PRO to gain special privileges]. // b. This song must not be sung drunk.

(1) a. Táata'wa-ci-u siváatu-ci paxá-qa-xa

men-SUB-PL goat-OBJ kill-PL-ANT

"The men killed the goat"

b. Siváatu-ci paxa-qa-ta-puga

goat-OBJ kill-PL-PASS-PAST

"The goat was killed" (by some persons) (Givon, 1990: 581)

(2) a. wií-ci-m tuká-ta-qa-ax

knife-OBJ-INST eat-PASS-ANT-it

"Someone ate with a knife / A knife was eaten with"

b. tuvúpu-vwan 'aví-ta-qa-ax

ground.OBJ-on lie-PASS-ANT-it

"Someone lay on the ground / The ground was lain on"

c. puká-wúuka-ta-qa

hard-work-PASS-ANT

"Someone worked hard / It was worked hard" (Givon, 1990: 582-83)

The common denominator in both types of passive constructions is the demotion of the agent element. Shibatani (1985: 832) has thus argued that the main function of the passive is "agent defocusing", a cover term for a series of phenomena which are functionally related:

... absence of mention of an agent, mention of an agent in a non-prominent syntactic slot, blurring of the identity of an agent by the use of plural forms, and indirect reference to an agent by the use of an oblique case.

Passivisation, according to Givon (1979: 186), however, serves a topicalisation function, it is "the process by which a nonagent is promoted into the role of main topic of the sentence".

The issue of which of the two operations, promotion or demotion, is the primary one in the passive construction is beyond the scope of the present article. In this article we will argue that in English one of the crucial factors involved in the choice of the agented passive construction is the fact that the non-agent participant characteristically exhibits a higher degree of "topicality" than the agent (or subject-of-active).

With respect to the notion of *topicality*, we will distinguish, as Croft (1991: 151) suggests, between "natural topicality", which correlates with rank in the *Animacy Hierarchy* (Silverstein, 1976), the *Empathy Hierarchy* (Kuno & Kaburaki, 1977; DeLancey, 1981), or the *Definiteness Hierarchy* (Givon, 1979), and "discourse topicality" or "topic continuity", a gradient concept proposed by Givon (1983), which is a function of the "referential predictability" and "thematic importance" of a nominal element in the discourse. Quantitative text studies of case roles in English (Brown, 1983), and of voice in Chamorro (Malayo-Polynesian) (Cooreman, 1983) suggest that topic continuity appears to govern choice of subject or object, and voice alternations in these languages.

We will also focus on the agentless passive construction, that is, on "agent defocusing", and more specifically on cases of agent deletion where the identity of the agent is recoverable from the co-text, for which we shall be using the term "deagentivisation" (Marín, 1996a;1996b). *Deagentivisation* occurs precisely when the zero agent exhibits a higher degree of topicality than the passive subject. It will be argued that omission of the

agent participant, which competes for subject-topic status, sanctions the choice of a non-agent participant as subject-topic and avoids "unnatural distribution" of topicality of participants.

2. AGENT DEFOCUSING

In universal typological terms, we find the following patterns of expression or omission of the agent phrase in the passive construction (Marín, 1993):

- (i) Languages with a promotional passive construction defocus the agent but allow the expression of an agent phrase, typically as an oblique (Givon, 1990). Notable exceptions to this general tendency are:
 - Languages where the expression of the agent phrase is obligatory: e.g. Kota (Dravidian, India) Lango (Nilo-Saharan, East Africa)⁴.
 - Languages where the expression of the agent phrase is disallowed: e.g. Fijian (Malayo-Polynesian, Fiji Islands).
- (ii) Languages with a non-promotional passive construction delete the agent-of-passive obligatorily (Givon, 1990). In these languages there are no exceptions, that is, no cases where the expression of the agent phrase is obligatory. There are, however, certain cases where the agent is "optionally" allowed: e.g. Welsh.

The fact that in the majority of passive clauses in English the agent is not expressed has led many linguists to consider agent omission as the prototypical phenomenon and the agent argument as an optional element (Duskova, 1971; Shibatani, 1985, 1988; Weiner & Labov, 1983, *inter alia*). The agent phrase has thus been considered akin to an adjunct element, and not a real argument of the verb. Shibatani (1985: 831) holds that «passives are used when the singling out of an agent is either impossible or unimportant - because of its being unknown, obvious or irrelevant». Similar reasons are provided by Quirk et al. (1985) and Siewierska (1984). Omission of the agent allows for mystification of the role of agency, and as such may be the result of «possible ideologically motivated obfuscation of agency, causality and responsibility» (Fairclough, 1989: 124).

In contrast, Givon (1979: 63) claims that although «the bulk of passive sentences in English, namely, close to 80% of them, indeed *involve a presupposed agent*», the hypothesis that the main function of the passive is "impersonalisation" does not necessarily hold true. Givon (1979) points out that there are various possibilities for recovering the identity of the agent in agentless passives. The underlying agent may be directly recoverable from the preceding or following co-text. The agent may also be indirectly recoverable through our knowledge of a general body of background pragmatic presuppositions, which allows us to predict the type of agent characteristically involved in a particular type of event. In the latter case, the identity of the exact agent is not recoverable to the point where unique reference can be established.

(3) a. A6.3. He did not take the hand of Monsignor Campanati, since that was not proffered.

One might however argue that the passive in these two languages is a hybrid construction where the topic of passive is not fully promoted and the verb does not acquire the characteristic marking of the passive, so that voice alternation is only signalled by linear order of nominal elements. There are also certain contexts in English where the agent is obligatorily expressed (Mihailovic, 1966).

b. A4.14. The core of the house was a rugged old fort going back to the civil wars: later the thatched house had been built beside it. (**builders**) (Marín, 1993)

Givon (1979: 58) thus argues that agent omission is simply the result of the low degree of topicality of the agent participant:

The overwhelming majority of passive sentences in English texts are *agentless*. In other words, the degree of topicality of the agent argument appears to be so low that it is normally not mentioned at all.

The optionality of the agent phrase has been explained in diachronic terms. Givon (1990: 600) notes that the properties of the English passive are derived from the diachronic pathways through which the construction arose, namely «from an *adjectival predicate construction* where the main verb was "be", and the adjectival predicate was a *perfect-resultative* form of the complement verb». Initially this construction did not include the expression of the agent. According to Givon (1990: 602),

The acquisition of the optional by-phrase was a later development, representing a subtle shift toward the more *eventive* perspective.

As regards psycholinguistic evidence, it has been noted (Maratsos, 1978) that agentless passives are acquired prior to agented passives in English. In the basic transitive event schema, according to MacWhinney (1977), the passive allows for the dissociation of "perspective" and "agent". This dissociation of the basic causation schema imposes a complex perspective in agented passives, since the hearer / reader views the event from the perspective of the patient but also has to view the agent. Agentless passives, on the other hand, as MacWhinney (1978: 165) notes, "have only a perspective, with no agent; thus, rather than a complex perspective, they have a partial perspective. It would appear that the partial perspective, while more difficult than the simple one, is not as difficult as the complex perspective».

In this respect, Langacker (1991: 335-336), observes that «the markedness of a passive or passive-like construction does not derive from profiling (...). Rather, it resides in the fact that the participant otherwise expected to be the subject is bypassed in favor of a less qualified candidate». In the passive, both the agent and the mover are profiled participants. In this sense it «is like a canonical active in that the full action chain stands in profile». At the same time it resembles thematic-subject sentences in that the agent may be left unspecified.

3. NATURAL TOPICALITY: ATTENTION FLOW AND VIEWPOINT.

DeLancey (1981) accounts for the active-passive alternative through the notions of "Attention Flow", or order in which the speaker wishes the hearer to attend to the participants involved in the event, and "Viewpoint", or perspective from which the speaker describes the event. Attention Flow and Viewpoint are parameters which reflect the relative interest of the various entities involved in the event, and in this sense they relate to perceptual strategies.

Inherent natural AF recreates the flow of attention in actually witnessing an event, the basis of which is the temporal ordering of phases of the event. Linguistic AF will be marked through the linear order of nominal elements in the sentence. In the prototypical active transitive construction the agent is usually selected as starting-point for the event. The existing association between agency or control and initial position seems to be determined.

ned by «the interpretation of agent as the first mover in a transitive event, i.e. the starting point of natural AF» (DeLancey, 1981: 650). Unmarked linguistic AF in a transitive sentence would thus follow natural AF from agent to patient.

Voice alternations, according to DeLancey (1981), are mechanisms for managing AF. Crosslinguistic studies of voice alternations show that unnatural AF is highly marked. Thus agented passives, which reverse natural AF imposing an unnatural patient-to-agent AF, are much less frequent than agentless passives. Agentless passives, however, present only one end of the event, the Patient / Goal, so that unnatural AF is avoided. This greater acceptability of agentless passives is reflected in the fact that although there are languages where the agented passive is impossible, very rarely do we find languages which permit agented passives but exclude agentless ones.

A scene or an event may be described from a number of points of view: the viewpoint of an observer external to the event, or the viewpoint of the participants in the event. As DeLancey (1981) points out, presumably all languages have at their disposal a series of grammatical and lexical mechanisms for signalling the linguistic Viewpoint of a sentence, which allow the speaker to specify the viewpoint s / he is taking when reporting an event. The notion of "Viewpoint" may be associated with that of "Empathy" (Kuno & Kaburaki, 1977; 628):

Empathy is the speaker's identification, with varying degrees (...), with a person who participates in the event that he describes in a sentence.

It is intuitively obvious that the speaker is more likely to "empathize with" or to "take the viewpoint of" him / herself or of the interlocutor in a speech event. DeLancey (1981) thus notes that higher inherent eligibility for viewpoint status corresponds to higher position on the "Speech-Act Participant Hierarchy" (Kuno & Kaburaki, 1977).

In a transitive event, in cases where the Speech Act Participant (SAP) is also a participant in the event, the most natural viewpoint, and therefore the most natural choice for starting-point, will be the SAP⁵.

- (4) a. A5.11. I was invited by Harriet's doctor, Shafik,
 - b. Harriet's doctor, Shafik, invited me.

This distinction between SAPs and other participants, which is a result of the fundamentally speech-act-centred nature of viewpoint, is enough to motivate the choice of the passive alternant. As DeLancey (1981: 638) points out:

The reason for forsaking natural AF in a passive is to place the viewpoint NP first, i.e. to make it the starting-point of linguistic AF.

When the transitive event reported does not involve any SAP, viewpoint may be placed with either of the 3rd person referents. The difference in eligibility for viewpoint placement in this case appears to be motivated by differences in animacy, or position on the "Humanness Empathy Hierarchy" (Kuno & Kaburaki, 1977). The human participant seems to be the unmarked choice for viewpoint status, and therefore the most natural choice for starting-point of linguistic AF.

Kato (1979) observes the existence of passive sentences which seem to contradict these considerations of inherent topicality, and argues that we should not assess the acceptability of a passive sentence without bearing in mind its discourse context: (ii) I said, «Me watch it! Fuck that! Let him watch it.» He was hired by me. I could fire him if I didn't like him. (Studs Terkel, Working).

- (5) a. A4.11. **Kleopatra** was swept by a red surge of anger.
 - b. ?A red surge of anger swept Kleopatra.

This preference for the viewpoint of the human referent has been pointed out by Siewierska (1984: 221), who observes that:

Cross-language and intra-language investigations have shown that human discourse exhibits a strong egocentric bias. Humans beings tend to talk primarily about themselves, their interlocutors and other humans. Events and situations are more likely to be interpreted from the point of view of the persons involved rather than in terms of the events themselves or non-human, inanimate entities affected by the events. Hence not all NPs possess the same inherent potential for functioning as the topic of a clause.

Viewpoint may also be considered in relation to other factors such as the way the speaker presents information, the usual technique being for the speaker to choose some concept, usually a referent, as a starting point and then to add information about it. Chafe (1987: 37) points out that there is a direct relationship between the concept chosen as starting point for the communication and the state of activation of this concept, such that «a starting point is usually a given referent», occasionally it is «an accessible referent», and «rarely a new referent».

These notions are related to identifiability; given and accessible referents are typically identifiable, and as such coded as definite description, whereas new referents tend to be non-identifiable and are coded as indefinites. Though we cannot establish a total correlation between these features, it is usually the case that «definiteness and givenness often go together» and «indefiniteness entails newness» (Chafe, 1976: 42). We will therefore posit an "*Identifiability Hierarchy*" such that identifiable definite nominals are characteristically chosen as starting points⁶.

- (6) a. B15.33. He is approached by a gambling acquaintance called Bantam Lyons,
 - b. B20.10. The operations were carried out by a U.S. mercenary army,

We may thus hold that the relative eligibility for viewpoint status of a particular nominal element will be a function of the parameters involved in the following hierarchies:

SAP > 3rd PARTICIPANT

HUMAN > ANIMATE > NATURAL FORCE > INANIMATE

IDENTIFIABLE > NON-IDENTIFIABLE

4. Text-based Quantitative Measures of Natural Topicality.

In our examination of the role of topicality in passivisation and in deagentivisation, we analysed 1, 271 passive clauses randomly selected from a corpus of 40 text extracts (approx. 155.000 words) (Marín, 1993). The extracts represent two different discoursal types, contrasting mainly along the dimensions, "Narrative vs. Non-Narrative Concerns" and "Abstract vs. Non-Abstract Information" (Biber, 1988): Texts A (General Fiction) and Texts B (Academic Writing).

⁶ Givon (1979) finds that 90.1% of the subjects in active declarative clauses are coded as definite, while only 9.8% are indefinite. For passive declarative clauses, he finds 95.1% definite subjects and 7.3% indefinites.

As in other quantitative studies on the passive (Svartvik, 1966; Duskova, 1971), the percentage of agented passives (18.09%) is much lower than that of agentless passives (81.90%). However one cannot establish a direct association between agent deletion and mystification of agent identity. It is important to observe not only the figures for expressed agents (EA), but also the cases where the identity of the agent is unequivocally recoverable from the co-text (RA).

Table 1
Degree of Recoverability of Agent Identity: Agented & Agentless Passives

	TEXTS A		TEX	XTS B	TEXT	S A&B
	N	%	N	%	N	%
EA	52	17.99	178	18.12	230	18.09
RA	131	45.32	460	46.84	591	46.49
NRA	106	36.67	344	35.03	450	35.40
TOTAL	289	100	982	100	1.271	100

In order to study the status of subjects and agents with regard to the various parameters involved in natural topicality (SAP vs. 3rdP, Human-Animate vs. Force-Inanimate, Identifiable vs. Non-Identifiable), we further selected all the cases of agented passive clauses and agentless passive clauses with recoverable agents (821 tokens).

As we mentioned above, higher inherent eligibility of a non-agent nominal is a crucial motivating factor for passive choice. Once the patient is chosen as viewpoint, however, the presence of the agent, and thus unnatural patient-to-agent AF, is licensed basically in those cases where linguistic AF does not violate empathy considerations.

As regards the Speech-Act Participant Hierarchy, we found that subjects (Table 2) clearly outrank agents in the agented passive, and are thus the natural choice for viewpoint status. Agents (Table 3) are categorially coded as 3rd persons. The expression of the agent is allowed since linguistic AF does not violate natural attention flow.

TABLE 2
NATURAL TOPICALITY OF PASSIVE SUBJECT IN AGENTED PASSIVES

	TEXTS A		TE	XTS B	TEXTS A&B	
	N	%	N	%	N	%
SAP	7	13.46	1	0.56	8	3.47
3P	45	86.53	177	99.43	222	96.52
HA	27	51.92	21	11.79	48	20.86
FI	25	48.07	157	88.20	182	79.13
ID	45	86.53	112	62.92	157	68.26
NI	7	13.46	66	37.07	73	31.73
TOTAL	52	100	178	100	230	100

With regard to the Animacy Hierarchy, if we group natural forces and inanimate participants, we find that the majority of subjects are non-animate. There is thus a slight tendency for expressed agents to outrank subjects on this parameter, especially in Texts B. Unnatural AF is here coupled with less than natural choice for viewpoint.

TABLE 3
NATURAL TOPICALITY OF EXPRESSED AGENT IN AGENTED PASSIVES

	TEXTS A		TEX	XTS B	TEXTS A&B	
	N	%	N	%	N	%
SAP	0	0	0	0	0	0
3P	52	100	178	100	230	100
HA	23	44.23	43	24.15	66	28.69
FI	29	55.76	135	75.84	164	71.30
ID	30	57, 69	83	46, 62	113	49, 13
NI	22	42, 30	95	53, 37	117	50, 86
TOTAL	52	100	178	100	230	100

As regards the Hierarchy of Identifiability, passive subjects outrank expressed agents. Agents tend to be equally divided between identifiable and non-identifiable mentions.

We may hypothesize that in agented passives the synergetic effect of the parameters of "speech-act participant" and "identifiability" overrides the opposing effect derived from the parameter of "animacy".

In agentless passives we find the opposite tendency (Tables 4&5), especially in the case of Texts B, that is, zero recoverable agents outrank subjects on all three parameters⁸.

Table 4
Natural Topicality of Passive Subject in Agentless Passives

	TEXTS A		TEX	KTS B	TEXTS A&B	
	N	%	N	%	N	%
SAP	22	16.79	3	0.65	25	4.23
3P	109	83.20	457	99.34	566	95.76
HA	64	48.85	51	11.08	115	19.45
FI	67	51.14	409	88.91	476	80.54
ID	104	79.38	243	52.82	347	58.71
NI	27	20.61	217	47.17	244	41.28
TOTAL	131	100	460	100	591	100

⁷ See Bernárdez (1997) for a synergetic model of deagentivisation.

⁸ With respect to the feature of identifiability, and so as to avoid making decisions about non-expressed elements, we analysed their closest preceding co-referential mentions in the co-text.

Although the percentage of zero agents as SAP is moderate, zero recoverable agents are overwhelmingly human and identifiable, thus exhibiting higher inherent eligibility for viewpoint status than subjects.

Table 5
Natural Topicality of Zero Agent in Agentless Passives.

		TEXTS A		TEX	XTS B	TEXT	S A&B
		N	%	N	. %	N	%
SAP		7	5.34	145	31.52	152	25.71
3P		124	94.65	315	68.47	439	74.28
HA		114	87.02	384	83.47	498	84.26
FI		18	13.74	76	16.52	94	15.90
ID		122	93.12	358	77.82	480	81.21
NI	:	9	6.87	102	22.17	111	18.78
TOTAL		131	100	460	100	591	100

We may thus argue that deagentivisation or suppression of the recoverable agent takes place in order to avoid unnatural AF, especially when the passive subject is also the least natural choice for viewpoint.

The scales of inherent eligibility for viewpoint status with regard to the three parameters, according to the data, are the following:

 $SPEECH\text{-}ACT\ PARTICIPANT$: ZERO AGENT > PASS SUBJECT (-A) > PASS SUBJECT (+A) > PASS AGENT

ANIMACY: ZERO AGENT > PASS AGENT > PASS SUBJECT (+A) > PASS SUBJECT (-A)

IDENTIFIABILITY: ZERO AGENT > PASS SUBJECT (+A) > PASS SUBJECT (-A) > PASS AGENT

Different types of phenomena appear to be involved in the two constructions. In agented passives, higher natural topicality of the patient argument appears to motivate choice of this construction. The choice of the agentless construction is motivated by the need for deagentivisation in order to avoid violating natural Attention Flow.

5. DISCOURSE TOPICALITY: REFERENTIAL ACCESSIBILITY & THEMATIC IMPORTANCE

Givon (1990) argues that discourse-organized information about states or events refers basically to the "participants" in those states or events, which are the most common "topics", or more recurrent referents, in the discourse. According to Givon (1992: 12) the degree of topicality of clausal participants in the discourse is a function of two discourse-pragmatic dimensions:

- (a) Referential accessibility: in terms of the preceding («anaphoric») discourse context;
- (b) Thematic importance: in terms of the subsequent («cataphoric») discourse context.

These dimensions are mere constructs which are correlated with two cognitive domains, *memory access* and *attentional activation*. Referential accessibility «pertains to the *cognitive search* for the nominal referent in mental storage space», and thematic importance «pertains to the *cognitive activation* of important topics, and the non-activation of unimportant ones».

The referential accessibility of a nominal topic in the discourse is a composite product of several factors, the most relevant one for our study being referential continuity. Referential continuity may be assessed indirectly by means of the measure of referential distance⁹ (Givon, 1992: 16).

Referential Distance (RD): the number of clauses (or elapsed time) from the last occurrence in the preceding discourse.

On the other hand, thematic importance or relevance, at the local, paragraph, level appears to correlate with text-frequency of the participant in the following text. This is measured in terms of topic persistence¹⁰ (Givon, 1992: 17).

 Topic Persistence (TP): the number of times the referent persists as argument in the subsequent ten clauses following the current clause.

These measures, no doubt, provide a partial view of topic continuity. In this respect, Fox (1987: 158) has convincingly argued that:

If a referent's continuity with the preceding discourse is measured in clauses to most recent mention, then we can assume that continuity derives from the surface nature of the clauses, rather than their textual function, and that (presumably) all clauses are equal in their contribution to the measure of continuity ... The model thus assumes that discourse is made up of an undifferentiated string of clauses which follow one another in time but do not form larger units that could perform communicative functions in relation to one another.

Nevertheless, since the main aim of this study was to measure "relative" topicality of passive subjects versus agents, we believe that the results provide a valid indication of the discourse-pragmatic dimensions we propose to assess.

6. Text-based Quantitative Measures of Discourse Topicality: Referential Distance & Topic Persistence

Our corpus of agentive process passives was further submitted to measures of RD and TP. In this case, the measures were applied to agented and agentless passives found in finite clauses, in paratactic and hypotactic relations (642 tokens).

In agented passives, subjects seem to outrank agents in terms of referential continuity and thematic importance (Tables 6&7). The following figures represent the mean values of RD and TP for passive subjects and agents:

The minimal value is 1 clause, which represents highest continuity, and the maximal value is 20 clauses. Givon (1983: 36,n.6) admits that the 20 clause value has been arbitrarily assigned, but notes that this value, which is «the average referential distance value of definites returning into the register after a long absence», may justifiably be used as «a rough estimation of the maximal length of the pertinent discourse register», and thus also of «the arbitrarily assigned referential distance value of referential-indefinites».

In this case the values assigned are on a 0-10 scale, counting one occurrence per clause only. The minimal value of zero here signifies lowest persistence, and thus indicates immediate decay.

 $\label{eq:table 6} Table \ 6$ Referential Distance and Topic Persistence of Passive Subject in Agented Passives

		RDPS	TPPS
	N	(1-20)	(0-10)
TEXTS A	41	8.73	2.39
TEXTS B	135	11.93	0.65
TOTAL	176	11.18	1.05

TABLE 7
REFERENTIAL DISTANCE AND TOPIC PERSISTENCE OF PASSIVE AGENT IN AGENTED PASSIVES

	N	RDPA (1-20)	TPPA (0-10)
EXTS A	41	15.92	1.43
ΓEXTS Β	135	17.77	0.47
TOTAL	176	17.34	0.69

The RD of passive subjects is lower than that of passive agents, which indicates higher referential continuity of these nominal topics in the discourse. As regards TP, we also found that passive subjects are more recurrent and persistent topics than passive agents. Passive subjects outrank agents on both measures, which seems to indicate the higher degree of discourse topicality of these participants.

In the case of agentless passives, however, results differ (Tables 8&9). The zero recoverable agent exhibits both higher continuity and more persistence than the subject.

 ${\it Table~8} \\ {\it Referential~Distance~and~Topic~Persistence~of~Passive~Subject~in~Agentless~Passives} \\$

		RDPS	TPPS
N	(1-20)	(0-10)	
TEXTS A	110	8.63	1.64
TEXTS B	356	13.07	0.69
TOTAL	466	12.03	0.91

 ${\it Table 9} \\ {\it Referential Distance and Topic Persistence of Zero Agent in Agentless Passives} \\$

N	(1-20)	RDPS	TPPS
TEVTO A		(0-10)	2.40
TEXTS A TEXTS B	110	3.48	2.48
	356	5.72	1.91
TOTAL	466	5.19	2.04

In order to establish an appropriate frame of comparison, we took measures of RD and TP for subjects and objects in active clauses, again randomly selected from our text extracts. Figures in Table 10 show that expressed passive agents are highly discontinuous, in contrast with active subjects. Zero agents, however, exhibit an even higher degree of continuity in the discourse. As regards TP, once again there is an important contrast between passive agents, with low persistence values, and active subjects, with high persistence values, zero agents also exhibiting the highest degree of persistence.

Table 10

Relative Topicality of Active Subject, Active Object, Passive Subject, Passive Agent and Zero Agent

	N	RD	TP
ZERO AGT	466	5.19	2.04
ACT.SUBJECT	97	10.10	2.14
PASS SUBJ (+A)	176	11.18	1.05
PASS SUBJ (-A)	466	12.03	0.91
ACT.OBJECT	97	14.39	0.92
PASS AGT	176	17.34	0.69

We can thus establish the following scale of discourse topicality for these nominal topics:

ZERO AGENT > ACTIVE SUBJECT > PASS SUBJECT (+A) > PASS SUBJECT (-A) > ACTIVE OBJECT > PASS AGENT

These mean values of RD and TP do not, however, provide information about the frequency distribution between minimal and maximal values, that is, about possible clusterings around certain values. In agented passives, we found a clear split in the case of passive subjects, with highest frequencies at the two extreme poles, indicating either highest continuity or total discontinuity of these participants¹¹. Passive agents, on the other hand, were overwhelmingly discontinuous, the mean values clearly according with the clustering around the value of 20+.

The figures for frequency distribution of TP of subject and agent topics, however, indicate certain similarity in the non-recurrence of both types of participants. Here we find

In cases where the passive subject is highly discontinuous, the choice of the passive construction may be motivated, as Givon (1989: 235) points out, by other factors including "urgency of the task" and "focusing attention" on the non-agent participant: «A communicative task in discourse is more urgent if the speaker deems it to be either less predictable ("less accessible") to the hearer, or more important. As is well documented in cognitive psychology, the initial item in a string of information tends to receive more attention, it is memorized better and retrieved faster, compared to non-initial items. The fronted position must therefore be perceptually more salient. The pre-posing of more urgent information - either less predictable or more important must then be a communicative device designed to attract more attention, much like assigning a higher code-quantity to the information.»

a clustering around the value zero, representing non-recurrence, for both passive subject and agent, though the frequencies of low to medium persistence are still higher in the case of the subjects.

In the agentless passive, the frequencies for the subject were found to be very similar to those in agented passives. Once again we found a split between highest and lowest values in RD and low recurrence in terms of TP. There was, however, a striking difference between expressed agents and the zero agent. In the latter case we found a clustering around the values 1-3 for RD, indicating highest continuity in the majority of instances. As regards frequency distribution of TP, the majority of instances were found between persistence values of 1-4, indicating that zero agents are persistent, important discourse topics.

7. Conclusions

In this article we have examined the role of a series of parameters involved in natural topicality and discourse topicality re the choice of the agented passive construction *versus* the choice of an agentless passive construction.

With regard to the dimension of natural topicality, we have found the following results:

- Subjects in agented passives may be said to be higher than expressed agents in natural
 topicality through the synergetic effect of the parameters "speech-act participant" and
 "identifiability".
- Zero recoverable agents show a higher degree of inherent eligibility for viewpoint status, and thus natural topicality, than passive subjects on all the parameters analyzed.
- Zero recoverable agents compete with passive subjects for viewpoint status to a higher degree than expressed agents.

We have argued that these facts play a crucial role in deagentivisation, since suppression of the agent, which avoids an unnatural patient-to-agent AF, overwhelmingly takes place precisely in those cases where the agent displays a higher eligibility for viewpoint status.

The type of marked AF found in agented passives is at the same time tolerated in those cases where the agent participant displays fewer of the prototypical features of agents. Animacy markedness in AF is sanctioned by unmarkedness in the other parameters, so that the starting-point for linguistic AF is a non-agent participant with a higher degree of inherent eligibility for viewpoint status.

Regarding the discourse-pragmatic dimensions of topicality, we found the following results:

- Subjects exhibit a higher degree of referential continuity, and thus higher referential predictability, than agents in agented passives.
- Subjects exhibit a higher degree local persistence, and thus higher thematic importance, than agents in agented passives.
- Zero recoverable agents exhibit a higher degree of referential continuity, and thus higher referential predictability, than subjects in agentless passives.
- Zero recoverable agents exhibit a higher degree local persistence, and thus higher thematic importance, than subjects in agentless passives.

The figures for RD and TP seem to indicate that the choice of a non-agent participant as subject-topic of passive is motivated by the higher degree of discourse topicality of this participant in agented passives. In agentless passives, however, the subject / topic of passive is lower in topicality than the recoverable agent, so that we may assume that deagentivisation is motivated by a desire to avoid unnatural *attention flow* (DeLancey, 1981), from less predictable and less important topic to more predictable and important topic.

In conclusion, we believe that both dimensions of topicality, "natural topicality" and "discourse topicality", are crucially involved in passivisation, and in *deagentivisation*. One of the main functions of passivisation in English, the topicalisation of a non-agent element, and promotion to subject status, appears to be sensitive to the relative topicality of agents and patients in agented constructions, and thus to their relative cognitive prominence. In terms of the defocusing function of passivisation, the demotion of the agent to oblique status is also explained in the case of unimportant and unpredictable topics. Finally, as regards the suppression of the agent in agentless passive constructions, it appears (contra Givon, 1979) that in the cases where the identity of the agent is recoverable from the discourse context, the higher degree of topicality of the zero agent may be the factor that motivates its omission, and thus the choice of this particular construction.

REFERENCES

- Bernárdez, E. 1997: A partial synergetic model of deagentivisation. Unpublished Ms. Madrid: Universidad Complutense de Madrid.
- Biber, D. 1988: Variation across Speech and Writing. Cambridge: Cambridge University press.
- Brown, C. 1983: Topic continuity in written English narrative. > T. Givon ed.
- Chafe, W. 1976: Givenness, contrastiveness, definiteness, subjects, topics, and point of view. > C. N. Li ed.
- Chafe, W. 1987: Cognitive constraints on information flow. > R.S. Tomlin ed.
- Cooreman, A. 1983: Topic continuity and the voicing system of an ergative language: Chamorro. > T. Givon ed.
- Croft, W. 1991: Syntactic Categories and Grammatical Relations. Chicago: University of Chicago Press.
- DeLancey, S. 1981: An interpretation of split ergativity and related patterns. *Language*, 57: 627-657.
- Dixon, R. ed., 1976: *Grammatical Categories of Australian Languages*. Canberra: Australian Institute of Aboriginal Studies.
- Duskova, L. 1971: On some functional and stylistic aspects of the passive voice in present-day English. *Philologica Pragensia*, 14: 117-44.
- Fairclough, N. 1989: Language and Power. London: Longman.
- Foley, W. A. & R. D. van Valin 1984: Functional Syntax and Universal Grammar. Cambridge: Cambridge University Press.
- Fox, B. 1987: Anaphora in popular written English narratives. > R.S. Tomlin ed.
- Givon, T. 1979: On Understanding Grammar. New York: Academic Press.
- Givon, T. ed., 1983: Topic Continuity in Discourse: Quantitative Cross-Language Studies.

 Amsterdam: John Benjamins.
- Givon, T. 1989: *Mind, Code and Context: Essays in Pragmatics*. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Givon, T. 1990: Syntax: A Functional-Typological Introduction, Vol.II. Amsterdam: John Benjamins.

- Givon, T. 1992: The grammar of referential coherence as mental processing instructions. Linguistics, 30: 5-55.
- Givon, T. 1994: The pragmatics of de-transitive voice: Functional and typological aspects of inversion. > T. Givon ed.
- Givon, T. ed., 1994: Voice and Inversion. Amsterdam: John Benjamins.
- Givon, T. 1995: Functionalism and Grammar. Amsterdam: John Benjamins.
- Halle, M. et al. eds., 1978: *Linguistic Theory and Psychological Reality*. Cambridge, MA: MIT Press.
- Kato, K. 1979: Empathy and passive resistance. Linguistic Inquiry, 10: 149-52.
- Kuno, S. & E. Kaburaki 1977: Empathy and syntax. Linguistic Inquiry, 8: 627-73.
- Lakoff, G. 1977: Linguistic gestalts. Chicago Linguistic Society, 13: 236-287.
- Langacker, R.W. 1991: Foundations of Cognitive Grammar, Vol.II. Stanford: SUP.
- Li, C.N. ed., 1976: Subject and Topic. New York: Academic Press.
- MacWhinney, B. 1977: Starting points. Language, 53: 152-168.
- Maratsos, M. 1978: New models in linguistics and language acquisition. > M. Halle et al. eds.
- Marín Arrese, J. 1993: *La Pasiva en Inglés: Un Estudio Funcional-Tipológico*. Madrid: Editorial de la Universidad Complutense de Madrid.
- Marín Arrese, J. 1996a: Deagentivisation in the English passive: the role of viewpoint and attention flow. *Actas del XII Congreso Nacional de AESLA*, Universidad de Barcelona, abril 1994. Barcelona: AESLA.
- Marín Arrese, J. 1996b: Deagentivisation and degrees of topicality of agents and patients in the English passive. *Actas del XIX Congreso Internacional de AEDEAN*. Universidad de Vigo, diciembre 1995. Vigo: AEDEAN.
- Mihailovic, L. 1966: The agent in the passive construction. *English Language Teaching* 20: 123-26.
- Moreno Cabrera, J. C. 1987: Fundamentos de Sintaxis General. Madrid: Síntesis.
- Quirk, R., Greenbaum, S., Leech, G. N. & J. Svartvik 1985: A Comprehensive Grammar of the English Language. London: Longman.
- Shibatani, M. 1985: Passives and related constructions: A prototype analysis. *Language* 61: 821-48.
- Shibatani, M. 1988: Introduction. > M. Shibatani ed.
- Shibatani, M. ed., 1988: *Passive and Voice*. Typological Studies in Language, 16. Amsterdam: John Benjamins.
- Siewierska, A. 1984: *The Passive: A Comparative Linguistic Analysis*. London: Croom Helm.
- Silverstein, M. 1976: Hierarchies of features and ergativity. > R. Dixon ed.
- Svartvik, J. 1966: On Voice in the English Verb. The Hague: Mouton.
- Tomlin, R. S ed., 1987: *Coherence and Grounding in Discourse*. Typological Studies in Language, 11. Amsterdam: John Benjamins.
- Weiner, J. & W. Labov 1983: Constraints on the agentless passive. *Journal of Linguistics* 19: 29-58.

