# The TRANSITIVE INTO -ING Construction in English: A Usage-based Approach\*

Jong-Bok Kim·Nam-Geun Lee (Kyung Hee University) (Chosun University)

Kim, Jong-Bok & Lee, Nam-Geun. 2013. The TRANSITIVE INTO -ING Construction in English: A Usage-based Approach. Korean Journal of English Language and Linguistics, 13-2, 395-418. The so-called TRANSITIVE INTO -ING construction raises intriguing questions in terms of diachronic and synchronic English syntax. This paper performs a corpus search to figure out its uses in real life, while figuring out the construction's idiosyncratic, grammatical properties. Based on the corpus search, the paper supports Rudanko's (2005, 2006) view that the construction is employed as innovative uses, but questions remain if the construction's incipience has to do with differences between BrE and AmE. Our search with the BNC corpus also indicates the same innovative uses of the construction and vields no clear difference from the American English, contra Rudanko (2005, 2006). The paper also sketches a Construction Grammar analysis to account for the grammatical properties of the TRANSITIVE INTO -ING construction. In particular, it shows that the construction inherits properties from the ditransitive, the cause-motion, and the resultative construction, but is distinctive from these with respect to the entailment relationship of the gerundive phrase.

**Key Words:** construction grammar, COCA, COHA, BNC, infinitive, resultative

\_

<sup>\*</sup>An earlier version of this paper was presented in the AACL (American Association for Corpus Linguistics), held at San Diego State University between Jan 18 and 20, 2013. We thank the audiences of the conference for comments and questions. We also thank three anonymous reviewers of this journal for constructive comments to improve the quality of the paper.

#### 1. Introduction

The so-called TRANSITIVE INTO -ING construction, exemplified by the naturally occurring examples in (1), raises intriguing questions in terms of diachronic and synchronic English syntax (Hunston and Francis 2000, Gries and Stefanowitsch 2003, Rudanko 2005, 2006).<sup>1</sup>

- (1) a. Love at first sight had **coerced** him <u>into marrying</u> a complete stranger. (COCA 2006 FIC)
  - b. I probably **pressured** him <u>into driving</u> around the barricades. (COCA 1997 FIC)

The construction, introduced by verbs like *coerce* and *pressure*, has three arguments: subject, object, and *into*-gerundive clause. In terms of meaning, the subject referent causes the object referent into the state of affairs expressed by the gerundive clause.

The construction pattern in PE (present-day English) has been noted by Bridgeman et al. (1965), Francis et al. (1996), Hunston and Francis (2000), and Rudanko (1991, 2002, 2005, 2006). It seems that the uses of the TRANSITIVE INTO -ING construction have recently increased and appear to be innovative as evidenced from its frequency from 1810 to 2009 in the corpus COHA (Corpus of Historical American English), on which this research is based on:

\_

<sup>&</sup>lt;sup>1</sup>The corpus data are from the online available corpora COCA (Corpus of Contemporary American English) and COHA (Corpus of Historical American English). Each has about 450 million words. When necessary, we also use the BNC (British National Corpus) with about 100 million words. All these three are freely available online from http://corpus.byu.edu. See section 3 for further information about the corpora.

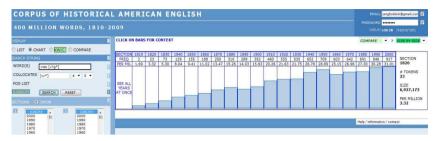


Figure 1. Frequency of the TRANSITIVE INTO -ING in the COHA

As seen from the normalized frequency in the Figure here, the use of the construction has increased from 1.69 per million to 31.01 per million since 1810. Seeing this noticeable increase in the uses of the construction, the immediate question is how creatively speakers use the construction. The literature, including Rudanko (2005, 2006, 2007), has noted that the TRANSITIVE INTO –ING construction typically involves verbs of 'flavored (negative)' causation (e.g., nag, embarrass, badger, con, fool):

- (2) a. He **fooled** Peggy into believing he was fast enough. (flavored: negative)
  - b. It has **led** some men into seeking new ways of expressing masculinity. (unflavored: manner-neutral) (data from Rudanko 2006)

Rudanko (2005) has performed a corpus-based research using 144 million words of British English corpora (news, books, and spoken) and 117 million words of American English corpora (news, books, and spoken), and suggested that the construction can be used with verbs of 'unflavored' or even neutral causation (e.g., induce, impel, prompt, stimulate, motivate, etc:

- (3) a. He seems to have **influenced** Rhodanius of Toulouse into going into exile also. (COCA 2007 ACAD)
  - b. It would appear that committing themselves to the

enriched program **induced** these mothers into taking a much more active pan in the entire Head Start program. (COCA 1990 MAG)

Observing such a widespread use of the construction, Rudanko (2005) suggests that the uses of 'unflavored' verbs for the construction are sort of 'innovative' uses in the sense that this usage has not or has not yet attained the status of being included in a major work of reference (Rudanko 2005: 173).<sup>2</sup> The supporting evidence is claimed to come from the uses of the 7 manner-neutral verbs (*impel, induce, influence, lead, motivate, prompt, stimulate*) in British and American corpora. In addition, his corpus search led to the claim that the emergence of the construction occurs at the expense of *to*-infinitive and aided by the distinctive semantic favor, spearheaded by BrE rather than AmE.

This paper looks into the uses of the TRANSITIVE INTO -ING construction in larger corpora such as the COCA (Corpus of Contemporary American English) and COHA (Corpus of Historical American English), both of which are available online. It also tries to check the validity of Rudanko's (2005) assumptions: Is the construction innovative? Does BrE trigger the innovation of the construction? Are there any semantically distinctive properties (distinction between manner-neutral and flavor-determined verbs)? Seeking answers to these questions, the paper also sketches a Construction Grammar analysis to account for the grammatical properties of the construction.

\_

<sup>&</sup>lt;sup>2</sup>In Rudanko (2005, 2006), the 'innovative' use means that the spread of the TRANSITIVE INTO -ING construction in relatively large size of corpora complies with "what has recently come to be widely accepted as the generalization governing such change".

# 2. Grammatical Properties of the Transitive *into -ing*Construction

The TRANSITIVE INTO -ING construction has three syntactic arguments: subject NP, object NP, and *into*-gerundive clause. One intriguing constraint we can observe is that the gerundive clause cannot be replaced by a simple NP (Rudanko 1991, 2002, 2005):

- (4) a. He fooled Peggy into believing he was fast. b. \*He fooled Peggy into an athlete.
- (5) a. They bribed her into wearing the clothes. b. \*They bribed her into the clothes.

This implies that the preposition *into* is different from typical cases where it selects an NP or an indirect question:

(6) a. Mary ran [into [the fence]] and scraped her elbow. b. There will be an investigation [into [who is to blame]].

An additional constraint we observe is that the gerundive clause cannot have either a genitive or an accusative subject:

(7) a. \*He fooled Sam into him believing he was fast. b. \*He fooled Sam into his believing he was fast.

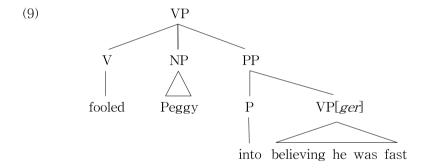
There is also supporting evidence for the complementhood of the gerundive clause (Rudanko 1991, 2005):

- (8) a. What he fooled you into was [believing he was fast enough].
  - b. [What] did he fool Sam into? He fooled Sam into [believing he was fast enough].
  - c. \*How did he fool Sam into? He fooled Sam into

believing he was fast enough.

As illustrated here, the gerundive clause can occur in the postcopular position of the *wh*-cleft and can be even *wh*-questioned with the argumenthood *what*, but not with the adverbial *how*.

These grammatical properties we have discussed so far challenge the selectional locality. Consider a simple structure of the construction:



The matrix verb combines with an NP and a PP headed by *into* as its complements. But the problem is that, as observed, the verb also needs to have access to the prepositional object, the gerundive phrase, which is not accessible within the verb's local domain. That is, the c-selection (category) information of the verb *fool* here thus needs to include the nonlocal VP[*ger*] too, which makes the construction syntactically peculiar.

The verbs occurring in the TRANSITIVE INTO -ING construction can be classified into three types. The first type is object control verbs such as *cajole*, *coax*, *con*, *embolden*, *force* and *persuade*. These verbs require the object NP as well as the *to*-infinitive phrase:

(10) a. Throughout history we could never actually **coerce** someone [to reveal information]. (COCA 2009 SPOK)

- b. They figured we'd **coerced** Jeffrey [into coming with us]. (COHA 2011 FIC)
- (11) a. That **forced** him [to get rid of the copper and start over with strips of nickel]. (COCA 2012 MAG)
  - b. I can use the proxies to **force** him [into giving me those mineral rights]. (COCA 1991 FIC)

The second type includes pure transitive verbs selecting two arguments such as *fool*, *frighten*, *deceive*, *bully*, *provoke*, *tease*, *intimidate*, etc.

- (12) a. Does it appear they're trying to **deceive** us with these answers? (COCA 2006 FIC)
  - b. He had soothed people's fears and **deceived** them into walking docilely to their deaths. (COCA 2001 FIC)
- (13) a. For a long time Mama had **fooled** him anytime she wanted to. (COCA 2011 FIC)
  - b. he's an actor we hired to **fool** the girls into believing he's drunk. (COCA 2012 SPOK)

These verbs thus introduce the *into*-gerundive phrase as a new argument. The third minor type includes verbs like *talk*:

(14) Carl Perkins has actually **talked** Scotty into playing again now. (BNC C9J)

As noted by Rudanko (2005, 2006), the verb *talk* does not combine with an infinitive phrase as in (15a), and even when it is used as a transitive verb, its object is different from the object of verbs like *fool* in that the object is not a patient or undergoer as seen from (15b):

- (15) a. \*He talked me to do that.
  - b. He talked politics.

In terms of meaning, the verbs in the TRANSITIVE INTO –ING construction can be classified into three types as well (Hunston and Francis 2000):

- · annoy-class: he verbs in this group are concerned with making someone feel something and typically evoke negative emotion. Verbs in this class include *annoy*, *scare*, *shock*, *frustrate*, *embarrass*, *frighten*, *intimate*, *irritate*, *panic*, etc.
  - (16) a. She **annoyed** them into letting her join the band. (BNC CK5)
    - b. They had no swords, only cudgels, with which they **frightened** people into giving them money. (COHA 1913 MAG)
- · coax-class: The verbs in this class are concerned with using language cleverly, deviously, or forcefully to make someone do something. The verbs include *badger*, *cajole*, *coax*, *flatter*, *persuade*, *tease*, *wheedle*, etc.
  - (17) a. I **coaxed** her into talking about herself. (COCA 2008 FIC)
    - b. She **badgered** another group into going skiing. (COHA 1920 FIC)
- · fool-class: The verbs in this class have to do with deceiving or misleading. Verbs like *con*, *deceive*, *fool*, *mislead* and so forth belong to this class:

- (18) a. Imitation and affectation may **deceive** people into thinking that such an instinct is quickening amongst us. (COHA 1882 NF)
  - b. It may **mislead** people into obeying the law. (BNC ANH)

The semantic locus of the construction is that the subject referent of the construction 'causes' the object referent to perform the action denoted by the gerundive clause and then be in the resultant state. For example, consider one typical example:

(19) John bribed Lily into buying the gift.

There are two subevents in (19): a bribing event and a buying subevent. With the action of bribing, the subject referent 'John' causes the object referent 'Lily' to buy the gift. This in turn means that the second event is caused by the subject referent (Hunston and Francis 2000, Rudanko 2005).

### 3. Corpus Research: Corpora and Methodology

To investigate the authentic uses of the construction in more detail, we have searched the following three corpora available online (http://corpus.byu.edu), all of which are created by Mark Davies of Brigham Young University (see Davies 2011, 2012).

- · COCA (Corpus of Contemporary American English): about 450 million words from 1990 to 2012, with contemporary American English data from a variety of registers including written and spoken data.
- · COHA (Corpus of Historical American English): about 400

million words of text of American English from 1810 to 2009. The corpus allows us to check how constructions have increased or decreased in frequency, how words have changed meaning over time, and how stylistic changes have taken place in the language.

· BYU-BNC: 100 million word British National Corpus (1970s-1993). The BNC was originally created by Oxford University Press in the 1980s-early 1990s, and this one is created as an online web version.

The search method we have adopted is a simple one adopting string search methods, as represented in the following:

#### (20) [vv\*] 0.4 into [v?g\*]

This means 'search strings' beginning with any verb followed by the preposition *into* and gerundive verb while the distance between the verb and *into* can be from zero to four. The context 0.4 represents 4 or less (including zero) collocate distances between the main verb and the *into* gerundive.<sup>3</sup> The distance zero is to include examples like the following passive construction:

- (21) a. She said she was **coaxed** into joining a tour of the fraternity house. (COCA 2006 SPOK)
  - b. He was **forced** into performing many similar surgical operations. (COCA 2009 FIC)

Of the data we have obtained with the search methods, we have manually ruled out examples like the following:

<sup>&</sup>lt;sup>3</sup>This implies that the number of words for the object NP is taken to be 1 to 3, ignoring more complex object NPs.

- (22) Embedded cases with verbs like try, let, etc.
  - a. He was also **trying** to <u>manipulate</u> you into changing your testimony. (COCA 2012 SPK)
  - b. I **let** him goad me into taking a drink. (COCA 2005 FIC)
- (23) Intransitive uses with verbs like look, go, get, come, etc.
  - a. The restaurant is **looking** into having T-shirts made for the winners. (COCA 2011 NEWS)
  - b. What **goes** into making this mission successful? (COCA 2012 SPOK)
  - c. She **was** into seeing people who were into LSD. (COHA 1979 FIC)
- (24) Different non-object control usages with verbs like *put*, *pour*, etc.
  - a. Mrs. McDonnell is **putting** a great effort into promoting Virginia wine. (COCA 2005 SPOK)
  - b. Armstrong decided to **pour** his savings into opening a grocery store. (COCA 2009 NEWS)
- (25) Mistakes in tagging V-ing forms
  - a. Thousands of others **turned** the highways into parking lots. (COCA 2012 NEWS)
  - b. To **turn** them into voting booths just doesn't make sense at this point in time. (COCA 2002 NEWS)

In examples like (22), it is not the verbs *try* and *let* that introduce the TRANSITIVE INTO –ING construction but the verbs *manipulate* and *goad*. In (23), *look into*, *go into*, and *be into* do not have any causative meaning and lack any object. In (24), the object does not function as a cause performing the action represented by the gerundive clause. The examples in (25) include cases where the *ing* verb form is an adjectival, rather than a verbal, expression.

## 4. Findings and Discussion

Performing the string search methods, our investigation has yielded substantial instances of the construction in the three corpora, as given in the following frequency table:

Table 1. Frequency of the String [vv\*] 0.4 into [v?g\*] for the 100 verbs

Corpus	Corpus Size	Tokens of the String	Normalized Frequency
BNC	100 million	2593	27.13
COCA	450 million	12698	27.37
СОНА	400 million	7835	19.58

In each corpora, we thus can find at least 20 instances of the construction per million words. The top frequency verbs in each of the three corpora are listed in the following with the token numbers.

Table 2. Top Frequency Verbs in the Three Corpora

Domla	COCA	Token	DNC	Token	СОНА	Token
Rank	COCA	No. BNC		No.	СОПА	No.
1	TALK	887	FORCE	79	TALK	473
2	TRICK	536	TRICK	75	TRICK	221
3	FOOL	327	FOOL	57	FORCE	152
4	COERCE	226	TALK	51	FOOL	134
5	FORCE	226	MISLEAD	46	DECEIVE	125
6	PRESSURE	171	COERCE	36	FRIGHTEN	121
7	COAX	166	DECEIVE	36	SPRING	103
8	SCARE	125	BULLY	35	COAX	100
9	LURE	114	PROVOKE	30	COERCE	100
10	MANIPULATE	95	LEAD	29	MISLEAD	82
11	TRANSLATE	93	CON	28	DELUDE	81
12	BULLY	87	PRESSURE	21	BULLY	79
13	MISLEAD	86	BLACKMAIL	18	PRESSURE	77

14	DELUDE	83	PRESSURISE	18	LURE	71
15	SEDUCE	78	DRAW	17	SCARE	71
16	GOAD	73	COAX	15	BEGUILE	70
17	SHAME	71	SHOCK	15	LEAD	64
18	DECEIVE	69	DELUDE	14	GOAD	60
19	FRIGHTEN	68	TRAP	13	PROVOKE	53
20	CON	67	DUPE	12	PERSUADE	51

Many verbs (e.g., *talk*, *trick*, *fool*) are used in all three, but some verbs are used only in one corpora:

- (26) a. The company has **pressurised** the Health Department into allowing its distribution here. (BNC HH3)
  - b. She had been **dragooned** into helping with the housework. (BNC EVC)
  - c. No doubt that she had **inveigled** Howard into marrying her. (COHA 1909 FIC)

We can also notice that three syntactic types of the verbs in the construction are prevalent, but data with the subject control verbs like *try* and *promise* are not found:

- (27) a. Her husband will **coax** her into parting with it to him or to his creditors. (BNC ABP)
  - b. But he had **pleaded** and **persuaded** her into accepting him that very night. (COHA 1869 FIC)
- (28) a. You can't **bully** people into doing what you want. (COHA 1993 FIC)
  - b. How could there be any intent to **deceive** people into thinking it is French champagne? (BNC AKV)
- (29) a. You think I **talked** Peter into giving me those earrings, don't you? (BNC JXU)

b. I'll tell you where she's staying and you can try to sweet-talk her into coming back. (COHA FIC 1980)

As illustrated here, the object control verbs, pure transitive verbs, and *talk*—type verbs all are often used in the TRANSITIVE INTO –ING construction.

We have also identified the seven manner-neutral matrix verbs that Rudanko (2005) investigated, some of which are given in the following:

- (30) a. The government had **induced** the defendant into buying material ... (COCA 2002 NEWS)
  - b. But the prospect of losing the money wouldn't **influence** us into buying the house. (COCA 1993 FIC)
  - c. That desire to be thin has **led** many women into developing abnormal attitudes about food. (COCA 1994 MAG)

The following table illustrates the frequency in the two corpora COCA and BNC (R's BrE represents Rudanko's British English corpus, while R's AmE means Rudanko's American English corpus):

			1						
	impo	Lindua	influona	c lood	motivet	nromnt	atimulata	Total	Nor.
	шире.	muuce.	шшиенс	t leau .	mouvau	грготрі	stimulate	1 Otal	Freq
R's BrE	2	1	7	32	2	10	12	66	0.44
R's AmE	0	2	0	10	2	1	0	15	0.12
BNC	0	3	4	33	2	6	6	54	0.54
COCA	0	12	16	82	4	3	12	129	0.29
Chi-	NA	5.40	7.20	20.00	0.67	1.00	2.00		
Square	INA	3.40	1.20	20.88	0.07	1.00	2.00		
Significance	NA	p<.05	p<.01	p<.01	p<.05	p<.05	p<.05		

Table 3. Frequency of the 7 manner-neutral Verbs

As seen from the table, except for the verb *lead*, the 'unflavored' verbs occur in the construction at a minimum level. One main difference between BNC and COCA is observed from the normalized frequency of the manner-neutral verbs. For the BNC, the normalized frequency is 0.54 while the corresponding frequency for the COCA is 0.29. To figure out if the observed frequency is statistically significant, we calculate chi-square values. As shown from the chi square p value, the higher occurrence of the pattern in the BNC than in the COCA is statistically significant in the 7 verbs (df=6), though questions remain over how the lower frequencies of these verbs validate the significance.

As we have suggested earlier, the first question that arises with respect to the TRANSITIVE INTO -ING is if its uses are innovated in the Modern English. The uses of *coax* in the transitive *into -ing* started from 1830s, but more uses can be found from 1970s.

CO	₹P	US	OF HIST	ORICAL	AME	RIC	AN	ENG	LIS														ACC	ESS: 5/
	MI	ili	ON WORDS	, 1810-20	09													START	•	7		history	lists   pr	ofile   logo
DISPLA	SE	E CON	TEXT: CLICK ON WO	ORD (ALL SECTION	IS), NUMBE	R (ONE S	ECTION),	OR [CO	NTEXT] (S	SELECT)	[HELP]									C	OMPARE	. 1	SIDE BY	SIDE *
@ LIST		Į.	CONTEXT	ALL 🖥	1810	1820 E	1830	1840	1850	1850	1870	1880	1890	1900	1910 E	1920	1930	1940 	1950	1960	1970 E	1980	1990	2000
SEARCH STRING	1	B	COAXED	59			1	3	1	1	4		2	1	3	Ĭ	2	i		1	Ä	9	9	12
	2	B	COAX	42			1	1		2	1	2	4		1		2		2	2	5	6		6
WORD (S)	3	Ī	COAXING	8										-1				1		1	1			2
COTTO	4	O	COAXES	3															1					2
POS			TOTAL	110	0	0	2	4	1	3	5	6	6	2	4	Á	4	2	3	4	10	15	13	22 seconds

Figure 2. Usages of the object control verb *coax* in the transitive *into*-ing in the COHA

This contrasts with the infinitival uses of the verb as seen from the following table:

				UKILAL																				
0 M			ON WORDS															START	-					
ı,	er i	CONT	EXT: CLICK ON WO	RO (ALL SECTION	S), NUMBE	R (ONE S	eCTION).	OR (CO	итект) (з	ELECT)	(HEAL)									è	ZHINK	• 1	500	
	۱	0	CONTENT	ME	1	-	7	H	=	B	T	H	T	Ŧ	15	F	8	100	T	1	10	8	T	7
	ı	Ð	COAX	150		0				12	13	11			W.	15	3.4	1	67				(4)	
	2	B	COANGO	142			4	14	227	2	12	194	.0	111			12		1		40	1		
	)	E	COMMO	165		2	1	1	1				2	10	2	(4)		2	1	23	7		1	
		Ð	CONTRACT	(34)		130		(3)	1		(4)	88			377						(8)	H.		
F	s	ō	COARES	12					1 3			- 2		7	2				1		. 1	1	1	
	6	O	COAVONO	1/4														1		1.	1		1	
1	1	n	COAKED	7/1									1											
Ł	,	n	COAX	(1																				
ġ.	ij		TUTAL	415	1	10.8	D.	и	- M	- 24	1	ж	11	25	35	34	12	ш	34	14 J	181	.15	34	

Figure 3. Usages of the object control verb *coax* in the transitive *to*-infinitive in the COHA

The figure shows us that the uses of *coax* in the *to* infinitive has been decreasing from the early 19th century.

The next question that arises from these observations is if it is AmE or BrE that leads the innovation process or that initiates the emergence of this construction (Mair 2002, Rohdenburg 2007). Leech (2003) suggests that the grammatical change today is being spearheaded by AmE. Meanwhile, Rudanko (2005, 2006) suggests that as for the TRANSITIVE INTO –ING construction, it is not AmE but BrE that motivates the emergence. Our search from the three corpora COCA, COHA, BNC indicates that the BNC has more uses with manner–neutral verbs. This may support Rudanko's (2006) observations, but it may be too hasty to reach this line of conclusion with no significant statistical differences.

#### 5. A Construction Grammar View

In accounting for the grammatical properties of the TRANSITIVE -ING construction. we accept the philosophy of Construction Grammar (Goldberg 2006). Within the philosophy of Construction Grammar (CxG), all levels of description (including morpheme, word, phrase, and clause) are understood to involve pairings of form with semantic or discourse functions. Constructions vary in size and complexity and form and function are specified if not readily transparent as seen in the following:

Table 4. Examples of constructions, varying in size and complexity (Goldberg 2006)

Constructions	Examples				
Morpheme	pre-, -ing				
Word	avocado, anaconda, and				
Complex word	daredevil, shoo-in				
Complex word (partially filled)	[N-s] (for regular plurals)				
Idiom (filled)	going great guns, give the Devil				
Idioiii (iiiled)	his due				
Idiom (partially filled)	jog (someone's) memory, send				
renom (partially inica)	(someone) to the cleaners				
Convariational conditional	The X-er the Y-er ( <i>The more you</i>				
Convariational Conditional	have, the better you are.)				
Ditransitive	Subj V Obj1 Obj2 ( <i>He gave her a</i>				
Dittalisitive	fish taco.)				
Passive	Subj Aux VP (PP[by]) ( <i>The</i>				
	armadillo was hit by a car.)				

As seen from the table here, there is no principled distinction between words, phrases, and even rules: a lexical entry is more word-like to the extent that it is fully specified, and more rule-like to the extent that it can also have variables that have to be filled by other items in the sentence. In addition, one important tenant of the CxG is that language-specific generalizations across constructions are captured via inheritance networks. reflecting commonalities differences or among constructions. In what follows, we will see how this notion of inheritance hierarchy of constructions plays an important role in capturing the fact that the TRANSITIVE INTO -ING construction inherits properties from its supertypes.

Together with the grammatical philosophy, in particular, developing Rudanko's (2005) and Goldberg's (2006) analyses, we

assume that the TRANSITIVE INTO -ING construction is a subtype of constructions such as ditransitive argument structure, *caused-motion* construction, and resultative construction, each of which has the following constructional properties:

Table 5. Related Constructions and Semantic Properties

Construction type	Semantic Properties	Examples
ditransitive-cx	X CAUSES Y TO RECEIVE Z	Pat faxed Bill the letter.
caused motion-cx	$1 \times (\Delta 1) \leq 6 \leq V + 10 + M(1)/6 + 2$	Pat sneezed the napkin off the table.
resultative-cx	X CAUSES TO BECOME Z	Pat kissed her unconscious.

The ditransitive construction has three arguments, with the semantic properties such that the subject causes the object to receive Z. This general argumenthood property is inherited to its subtypes including the TRANSITIVE INTO –ING construction. As seen from the semantic properties, the caused–motion construction involves manipulative causation and actual movement (Goldberg 1995). The verb in this construction denotes motion (causative accomplishment or activity), while the selected argument PP encodes a literal location, conveying a change of location (see Goldberg 1995):

- (31) a. Frank pushed it into the box. (prototypical, motion verb)
  - b. John blew my photograph off the desk. (verb encodes motion)
  - c. Frank laughed him out of the room. (involves a metaphor)
  - d. She was persuaded into love against her judgement. (involves phycological effect)

One notable semantic property of the construction is that no direct entailment relationship with respect to the movement

holds in the construction. Consider the following two examples:

- (32) a. Sam asked him into the room.
  - b. Sam urged him into the room.

The motion of entering the room is not entailed here. The sentences mean that the subject referent caused the object referent to move into the room, but the action may not be performed (see Goldberg 1995 for discussion).

Further, observe the following contrast (data from Goldberg 1995: chapter 7.4):

- (33) a. Sam coaxed Bob to go into the room.
  - b. Sam encouraged Bob to go into the room.
- (34) a. Sam coaxed Bob into the room.
  - b. \*Sam encouraged Bob into the room.

There is no contrast in the infinitival caused-motion but there is one in the *into*-NP caused-motion construction. In a similar fashion, Goldberg (1995) points out that verbs like *convince*, *persuade*, *instruct* cannot be used in the caused-motion construction, while each can be used the infinitival complement:

- $(35) \ a. *Sam \ convinced/persuaded/instructed \ him \ into \ the \ room.$ 
  - b. Sam convinced/persuaded/instructed him to go into the room.

The difference has to do with the fact that unlike verbs like *coax*, *frighten*, those like *encourage*, *convince*, *instruct* entail that the entity denoted by the direct object requires a cognitive decision, which brings out the contrast here. Based on this contrast, Goldberg (1995) suggests that no cognitive decision can mediate between the causing event and the entailed motion.

The resultative construction denotes 'X CAUSES Y TO BECOME Z', sharing many properties with the caused-motion construction. The resultative construction includes three expressions: a verb form that denotes an activity, a patient argument undergoing a change of state or location as a result of the activity denoted by the verb, and the 'resultative' expression denoting an endpoint of the activity (Goldberg 1995). Consider the following examples:

- (36) a. John broke the glass into a thousand pieces.
  - b. The river froze solid.
  - c. He hammered the metal flat.

(36a) describes the situation where John performed the action of breaking the glass and as the result, the glass reached the endpoint of being into a thousand pieces. This kind of semantic property is also inherited to its subtype constructions including the TRANSITIVE INTO -ING construction.

Now consider the TRANSITIVE INTO -ING construction. As represented in the above table, we assume that the construction represents the semantic properties, 'X CAUSES Y TO BECOME Z & BECOME Z happened'. The distinctive property of the construction is that the construction conveys the sense of accomplishment or result. The implication of reaching a resultant state as achievement differentiates the construction from the *to* infinitive caused-motion and the resultative construction:

- (37) a. They bribed her to spy on the prince, but she refused to do so.
  - b. He urged them into the room, but they did not go into the room.
  - c. #They bribed her into spying on the prince, but she refused to do so.

As illustrated here in (37a) and (37b), the *to*-infinitive and the resultative construction do not entail that the action of entering the room really happened, but the TRANSITIVE INTO -ING does imply that the action is really happened. This is why (37c) sounds unnatural (see Vosberg 2003 and Rudanko 2005 for a brief discussion of this matter).

Except for the difference in the sense of accomplishment, the TRANSITIVE INTO -ING construction is similar to its supertype constructions, resultative and caused-motion constructions. For example, the TRANSITIVE INTO -ING construction also observes 'no cognitive decision constraint' too: no transitive *into -ing* is observed with verbs like *convince*, *encourage*, *instruct*, etc.

(38) \*Sam convinced/encouraged/instructed him into going into the room.

We thus can conclude that the TRANSITIVE INTO -ING inherits constructional properties from its supertypes including the ditransitive, caused-motion, and resultative constructions, while employing its own constructional properties. We can represent these properties as following in a simple manner:

$$\begin{bmatrix} \textit{ditransitive-cx \& caused-motion-cx \& resultative-cx} \\ \text{Syntax: } \begin{bmatrix} \text{NP1}_x \ \text{NP2}_y \ \text{into-VP[} \textit{ing} \end{bmatrix}_z \end{bmatrix} \\ \text{Sem/Prag: } x \text{ causes } y \text{ to become } z \& \text{ accomplished(} y \text{ becomes } z) \end{bmatrix}$$

Figure 4. The TRANSITIVE INTO -ING Construction

As illustrated here, the TRANSITIVE INTO -ING construction is a subtype of several constructions. Syntactically, it selects three arguments: causer subject, causee object, and an *into* VP[*ing*]. Meanwhile, the construction entails that the causee becomes Z, implying that the result state of affairs is in fact accomplished.

This CxG view hints that as long as a verb (with the subject's role as a causer) can fit into this frame semantics, it may be used in the construction. The corpus search also yields quite innovative uses of verbs in this sense. See the verbs like *argue* and *charm*.

- (39) a. I wish you'd promise me not to let anyone **argue** you into changing your mind. (COHA 1935 FIC)
  - b. I used my powers to **charm** him into selling it to me for almost nothing. (1993 FIC)

The verbs *argue* and *charm* at first glance may not be used in the TRANSITIVE INTO –ING construction, but they are employed in the construction since their semantic properties match with the constructional meaning. That is, as long as the semantic properties of the verb in question matches with the TRANSITIVE INTO –ING constructional meaning, we would expect its use in the construction.

#### 6. Conclusion

The uses of the transitive *into -ing* appears to be innovative in American English too, as evidenced from its uses in the COCA and COHA. Our corpus-based research supports Rudanko's view that the construction is employed as innovative uses. To see if the construction's innovative uses are initiated or triggered by the BrE as suggested by Rudanko (2005, 2006), we have investigated different corpora (COCA, COHA, BNC), and found no significant differences from AmE though there are a little bit more uses of the construction in BrE with the 7 unflavored verbs. We have hinted that it is rather premature to reach any definite conclusion yet.

This paper has sketched a Construction Grammar analysis to account for the grammatical properties of the TRANSITIVE INTO –ING construction. The construction inherits properties from the ditransitive, caused–motion, and resultative constructions, but is distinctive from these with respect to the entailment relationship of the gerundive phrase: it implies the situation denoted by the gerundive phrase is actually accomplished. Such an implication for the achievement of the action involved in the construction is not found in the infinitive or resultative constructions.

#### References

- Bridgeman, Lorraine, Dale Dillinger, Constance Higgins, P. David Seaman & Floyd A Shank. 1965. *More Classes of Verbs in English*. Bloomington, Indiana, Indiana University Linguistics Club.
- Davies, Mark. 2011. The Corpus of Contemporary American English as the First Reliable Monitor Corpus of English. *Literary and Linguistic Computing* 25, 447–65.
- Davies, Mark. 2012. The 400 Million Word Corpus of Historical American English (1810–2009). In Iren Hegedus, et al. (eds.), *English Historical Linguistics 2010.* Philadelphia: John Benjamins. 217–50.
- Francis, Gill, Susan Hunston and Elizabeth Manning, eds. 1996. *Collins Cobuild Grammar Patterns 1: Verbs.* London, HarperCollins
- Goldberg, Adele. 1995. Constructions: A Construction Grammar Approach to Argument Structure. Chicago: University of Chicago Press.
- Goldberg, Adele. 2006. Constructions at Work: Constructionist Approaches in Context. New York: Oxford University Press.
- Gries, Stefan Th., and Anatol Stefanowitsch. 2003. Co-Varying Collexemes in the Into-Causative. In Michel Achard and Suzanne Kemmer (eds.), *Language, Culture, and Mind*, 225–36. Stanford, CA: CSLI Publications.
- Hunston, Susan, and Gill Francis. 2000. Pattern Grammar: A Corpus-Driven Approach to the Lexical Grammar of English. Amsterdam: John Benjamins.
- Leech, Geoffrey. 2003. Modality on the Move: The English Modal Auxiliaries 1961–1992. In Roberta Facchinetti, Manfred Krug, and Frank Palmer (eds.), Modality in Contemporary English, 223–40. Berlin: Mouton de Gruyter.
- Mair, Christian. 2002. Three Changing Patterns of Verb Complementation

in Late Modern English: A Real-Time Study Based on Matching Text Corpora. *English Language and Linguistics* 6, 106–31.

Rohdenburg, Gunter. 2007. Functional Constraints in Syntactic Change: The Rise and Fall of Prepositional Constructions in Early and Late Modern English. *English Studies*, 88, 217–233

Rudanko, Juhani. 1991. On verbs governing in -ing in present-day English. English studies 72, 55-72.

Rudanko, Juhani. 2002. *Complements and constructions*. Lanham, MD: University Press of America.

Rudanko, Juhani. 2005. Lexico- Grammatical Innovation in Current British and American English: A Case Study on the Transitive into -ing Pattern with Evidence from the Bank of English Corpus. Studia Neophilologica 77, 171-87

Rudanko, Juhani. 2006. Emergent Alternation in Complement Selection: The spread of the Transitive into -ing Construction in British and American English. *English Linguistics* 34, 312-331.

Vosberg, U. 2003. Cognitive complexity and the establishment of -ing constructions with retrospective verbs in Modern English. In Dossena, M. and C. Jones (eds.), *Insights into Late Modern English*. 197–220. Bern: Peter Lang.

Jong-Bok Kim School of English, Kyung Hee University 1 Hoegi-dong, Dongdaemun-gu Seoul 130-701, Korea Tel: 02)961-0892 E-mail: jongbok@khu.ac.kr

Nam-Geun Lee
Dept. of English Education, Chosun University
375 Seosuk-dong, Dong-gu
Gwangju 501-759, Korea
Tel: 062) 230-7325
E-mail: nglee@chosun.ac.kr

Received: 2013.04.21 Revised: 2013.06.05 Accepted: 2013.06.17