

---

研究報告

---

## Remarks on the Lexical Motivation for Constructional Productivity: The Case of the Gesture-Expression Construction

Shu-ichi KAWASAKI

### 構文の生産性と語彙的動機付け — 動作表現構文を例に

川崎修一

#### 抄 録

本研究では、英語の動作表現構文 (Gesture-Expression Construction 以下 GEC) を取り上げ、英語の文法構文の生産性について考察する。GEC とは、nod や smile 等の本来自動詞である動作表現動詞が、他動詞的に使用される構文である (e.g. Eva *smiled her thanks*.). GEC についての代表的先行研究としては Jespersen (1928), Ross (1970), Levin and Rapoport (1988), Levin (1993) が挙げられる。これらの研究においては、統語的、認知的、機能的側面からさまざまな分析がなされており、有益な研究成果が挙げられているが、同構文の生産性と語彙意味論的特性の關係に注目した研究は皆無である。そこで本研究では、GEC の生産性と動詞の語彙的特性に焦点を当て、同構文に容認される動詞の語彙的動機付けを明らかにする。まず Levin (1993) に基づき、GEC と共起できるとされる動詞を辞書がどのように扱っているかを調査する。さらに、大規模コーパスからの用例を基に、GEC と共起する動詞の語彙的意味特性を精査する。結論として、GEC と共起する動詞は、表現されている感情や反応が、動詞の語彙的意味に動機付けられているという仮説を提案する (GEC の語彙意味論的動機付け仮説)。\*

Key words: gesture-expression construction, dictionary entries, corpus data, constructional productivity, Lexical Motivation Hypothesis for GEC

---

\* I am indebted to two anonymous reviewers for their helpful comments and suggestions. All remaining errors are, of course, mine.

## I. INTRODUCTION

The present work discusses what is linguistically called the Gesture-Expression Construction (GEC, henceforth), exemplified in (1):

- (1) a. Pauline *smiled her thanks*. (Levin and Rapoport, 1988, p. 283)  
b. Tom *frowned his displeasure*. (Ross, 1970, p. 267)  
c. They *nodded a goodnight* to the security. (CALED)  
d. He *glanced defiance* at the pistols pointing at him. (ODE)

One of the most outstanding features that characterise this construction is the fact that intransitive verbs are used transitively, taking a noun phrase complement expressing emotions or reactions. This ‘syntactic nut’ (cf. Culicover, 1999) has attracted relatively a little attention, with a few exceptions such as Ross (1970), Levin and Rapoport (1988), and Levin (1993) (see Omuro, 2000 for details). In this paper I will [1] demonstrate and inspect the examples of GEC found in the web corpora and dictionaries with particular reference to the verbs listed in Levin (1993) (section II), and [2] hypothesize a lexical constraint motivating the constructional productivity (section III). The conclusion includes a summary and implications for future research.

## II. DICTIONARY ENTRIES AND CORPUS DATA

### A. Levin (1993)

In this section I will demonstrate and inspect the examples of the GEC found in web corpora and dictionaries. The data collection is based on the verbs that Levin (1993) argues can be compatible with the GEC. She listed two types of verbs in (2):

- (2) a. VERBS OF NONVERBAL EXPRESSION: beam, cackle, chortle, chuckle, cough, cry, frown, gape, gasp, gawk, giggle, glare, glower, goggle, grimace, grin, groan, growl, guffaw, howl, jeer, laugh, moan, pout, scowl, sigh, simmer, smile, smirk, sneeze, snicker, snuff, snigger, snivel, snore, snort, sob, titter, weep, whistle, yarn  
b. WINK VERBS: blink (eye), clap (hand), nod (head), point (finger), shrug (shoulders), squint (eyes), wag (tail), wave (hand), wink (eye)

### B. Dictionary entries vs. corpus data

Below is a list of verbs in frequency order whose tokens are found in the corpus search. Circles signify that the verbs’ compatibility with GEC is specified in the dictionary, whereas those verbs that are not compatible with the construction are marked with “x” s:

(3)

	CALED	ODE	TUD	KNEJD	LDOCE
<i>nod</i>	○	○	○	○	○
<i>smile</i>	○	○	○	○	×
<i>wave</i>	○	×	○	×	○
<i>wink</i>	×	×	○	○	×
<i>beam</i>	○	×	○	×	×
<i>cackle</i>	×	×	×	×	×
<i>chortle</i>	×	×	○	○	×
<i>chuckle</i>	×	×	×	×	×
<i>cough</i>	×	×	×	×	×
<i>cry</i>	×	×	×	×	×
<i>frown</i>	×	×	○	○	×
<i>gape</i>	×	×	×	×	×
<i>gasp</i>	×	×	×	×	×
<i>gawk</i>	×	×	×	×	×
<i>giggle</i>	×	×	○	×	×
<i>glare</i>	○	×	○	○	×
<i>glower</i>	×	×	×	×	×
<i>goggle</i>	×	×	×	×	×
<i>grimace</i>	×	×	×	×	×
<i>grin</i>	×	×	○	○	×
<i>groan</i>	×	×	×	×	×
<i>growl</i>	×	×	×	×	×
<i>guffaw</i>	×	×	×	×	×
<i>howl</i>	×	×	×	×	×
<i>jeer</i>	×	×	×	×	×
<i>laugh</i>	×	×	○	○	×
<i>moan</i>	×	×	×	×	×
<i>pout</i>	×	×	×	×	×
<i>scowl</i>	×	×	○	○	×
<i>sigh</i>	×	×	×	×	×
<i>simper</i>	×	×	×	×	×
<i>smirk</i>	×	×	×	×	×
<i>sneeze</i>	×	×	×	×	×
<i>snicker</i>	×	×	×	×	×
<i>sniff</i>	×	×	×	×	×
<i>snigger</i>	×	×	×	×	×
<i>snivel</i>	×	×	×	×	×
<i>snore</i>	×	×	×	×	×
<i>snort</i>	×	×	○	○	×
<i>sob</i>	×	×	×	×	×
<i>titter</i>	×	×	×	×	×
<i>weep</i>	×	×	×	○	×
<i>whistle</i>	×	×	×	×	×
<i>yarn</i>	×	×	×	×	×
<i>blink</i>	×	×	×	×	×
<i>clap</i>	×	×	×	×	×
<i>point</i>	×	×	×	×	×
<i>shrug</i>	×	×	×	○	×
<i>squint</i>	×	×	×	×	×
<i>wag</i>	×	×	×	×	×

This result suggests that, contrary to Levin's prediction, GEC is highly idiomatic in the sense that only 15 verbs out of 50 are lexically listed in the dictionary: *nod, smile, wave, wink, beam, chortle, frown, giggle, glare, grin, laugh, scowl, snort, weep, and shrug*. Furthermore, a substantial (actually countless) number of corpus data show that these verbs are highly conventionalised with GEC. See some of the examples from corpora and dictionaries in (4)-(19):

- (4) a. She nodded permission. (WB)  
 b. Mitzi nodded a perfunctory acknowledgement as her glass was filled. (WB)  
 c. Tom nodded a greeting but didn't say anything... (WB)  
 d. Thorne nodded his understanding, smiling benevolently. (WB)  
 e. They nodded goodnight to the security man. (WB)  
 f. Jackson turned his head and nodded a salutation... (WB)  
 g. He nodded greetings to Mary Ann and Michael and shook hands with Burke... (WB)  
 h. He nodded hello as he passed along the row of people at bar... (WB)  
 i. While Tony Blair lectures and cajoles, the country nods its agreement but listens less and less, weighed down by its own sense of disbelief that fortunes will ever change, that a new century will bring nothing but old problems, old lies and new violence. (WB)  
 j. As I hesitated, he nodded hello. (WB)  
 k. "That's old Edgar Blackett's bike," said one of them and others nodded accord. (WB)  
 l. Dennison plucked the Heckler & Koch from Marlette's grasp and nodded his approval as he appraised the automatic in his gloved hand. (WB)  
 m. Here Mr. Sergeant Buzfuz, with a tremendous emphasis on the word 'box,' smote his table with a mighty sound, and glanced at Dodson and Fogg, who nodded admiration of the Sergeant, and indignant defiance of the defendant. (*Charles Dickens, Pickwick Papers*)
- (5) a. The dog turned and smiled a welcome at Stott, who was moving forward menacingly. (WB)  
 b. He smiled his admiration of the great stone circle. (ODE)  
 c. I said, "That means, 'Merry Christmas!'" He smiled his delight and then he and his father walked off, hand in hand, in pursuit of a future more vivid. (WC)  
 d. Taking control he eased Alex down onto her back. Leaning over her, he studied the body beneath his own. Alex smiled her readiness. His mouth claimed hers once again as he lowered his body onto hers. (WC)  
 e. Grandmother smiled her consent. (WC)  
 f. No one is covering you because they don't think you can catch the ball.' She smiled her agreement. They got into formation. 'Hut, hut, hike!' Twenty steps down the field Annie turned and stopped. (WC)  
 g. Most, when asked if they had seen the movie "V for Vendetta", smiled their approval. (WC)  
 h. Two dozen grammar school students, clad in denim shifts or designer jeans, shook their fists and cried, 'The Yanquis will die!' before breaking into bashful giggles as adults smiled their approval. (WC)  
 i. "Nina, this is Dr. Bradbury. Rick, meet Nina Brochard." They smiled their greetings, and the doctor wheeled her into his examination room. (WC)

- (6) a. 'Drive safely,' he said and waved goodbye... (WB)  
 b. As she recorded he waved goodbye. (WB)  
 c. She waved invitation. (WB)  
 d. I waved goodbye and went down the store harbour steps... (WB)  
 e. Six hours after I waved goodbye to him as he drove off to New York, he collapsed at a gas station near Philadelphia. (WB)  
 f. So according to plan, I dropped her and her mum off, waved goodbye and returned home to wait. (WB)  
 g. But he'd waved goodbye to wisdom much earlier that day and he was too tired to renew acquaintance now. (WB)  
 h. In July, I wrote in this very column: "Jagger waved goodbye to a class act in the divorce courts last week. (WB)  
 i. She waved him goodbye. (ODE)  
 j. We waved your farewells. (ODE)
- (7) a. "This is my ride," he announced, and waved an acknowledgement to the driver. (WB)  
 b. Swiftly remembering that I was temporarily Ian McGunn, I waved thanks and went down the stone harbour front. (WB)  
 c. Obedient to the captain, the sergeant arose and waved invitation. (WC)
- (8) a. Jessie winked her approval and drew a proud smile from the youth. (WC)  
 b. "I think that's a good and wise decision, Lainey." She winked approval at her. (WC)  
 c. Fran winked her consent to the plan with her good eye. (WC)  
 d. Lily looked over her shoulder at Max and winked assent. (WC)  
 e. Then, listening to his stomach, she winked her agreement and looked up out of the gap in the couch. (WC)
- (9) a. The instructress beamed her approval. (ODE)  
 b. Scott's eyes beamed agreement and assurance at his cousin, and... (WC)  
 c. Tina Weymouth jumped in with a hearty yes, and Chris Frantz beamed assent, but Jerry Harrison dodged the question by saying he hadn't seen the movie again yet, and David Byrne remained silent. (WC)  
 d. His little eyes beamed consent. (WC)  
 e. When she came on the stage he beamed welcome. (WC)
- (10) a. A fat ex-schoolteacher named Arthur Bickle looked around at the crowd's hooligans, chortled his satisfaction. (WC)  
 b. As Fagan chortled his approval of McKinnon's lies, I counted the number of times McKinnon or Fagan said a federal bureaucrat would impose a... (WC)  
 c. Come to my arms, my beamish boy! O frabjous day! Callooh! Callay! He chortled his joy. (WC)  
 d. The corpulent Cyclops chortled his disapproval. 'The issue is about increasing access to primary care, not replacing GPs', he grunted. (WC)  
 e. Monday morning brought us no closer to freedom, even after the archeological artifacts "ex-

- perto” from the “Museo de Antropologia” chortled his most sarcastic disagreements with the customs agents. (WC)
- f. “Mommy needs to rest for a second sweetie, kick your feet and see how high you can go on your own.” The little girl chortled her acceptance and started to kick her feet wildly. (WC)
  - g. Breathlessly, the radiant lady in elegant evening pants chortled her surprise: “I didn’t even buy a dress!” (WC)
  - h. Dori had chortled her approval and repeated her name for Xena again in an affirming tone. (WC)
  - i. Velella clapped her hands and chortled her approval. (WC)
  - j. ‘PIMPLEKNOCKER!’ Camilla chortled her childish glee and even Sully managed a modest smile. (WC)
  - k. “Deal!” They shook on it and not two minutes later Darcy was digging into his pockets for a shiny shilling to hand over to his father while Georgie chortled her babyish delight, tugging on her mother’s hand in an insistent urge to become one with the cresting waves. (WC)
  - l. ‘You side with that crazy bitch. You encourage her. I’ve had enough of this behavior from you, Lori. I’ve told you to stay away from those women.’ Lori chortled her defiance. ‘I’ll pick my own friends, thank you.’ He stared at her with a curiously benign expression. ‘It’s like I don’t even know you anymore. What’s come over you?’ (WC)
- (11) a. ‘Spy on her?’ Kareen frowned disapproval. ‘Did Miles set you on me for this?’ (WC)
- b. “He’s a freak! You shouldn’t get too close to him!!!” Yuri frowned her defiance at the boy and marched off straight for the red headed child. (WC)
  - c. While Amy, Ali, John, Sally and Jen frowned their disgust, they made their way to the staircase. “No elevator?” John frowned. (WC)
  - d. Carey’s face, lean and harsh at the best, grew dark as he frowned annoyance. (WC)
  - e. “You’re planning to farm here, then?” Scott interrupted. Calibar frowned annoyance at him. “We heard the land was for sale,” Sulu said awkwardly. (WC)
- (12) a. ‘Now you see!’ Betsy cried, flouncing away like she owned the place. The other ballerinas giggled their amusement, and Christine laughed along, feeling eyes on her the entire time. (WC)
- f. ‘Paris, I think they are looking at my boobs.’ She giggled her rack. It disrupted some small clouds. Suddenly both Paris and Lindsay felt the ground vibrate a little. (WC)
  - g. She giggled her approval and said she was going to bake one of the frozen pizzas for lunch. (WC)
- (13) a. He glared anger [defiance] at me. (KNEJD)
- b. The man glared defiance [hate] at me. (=scowl) (TUG)
  - c. He glared his disapproval. (WC)
  - d. ... and for a moment he glared his hot resentment of the insult; then he dug his heels into his pony’s sides. (WC)
  - e. ...his eyes glared his hatred. (WC)
  - f. Every nerve in his body taut, he lay on the branch and glared his hatred from slitted, tawny eyes. (WC)

- g. "I sit all day at a desk. I do the work that might be done by any washerwoman's boy fresh from a board-school. This is what Matthew Arnold calls 'the fitness of things.'" He glared his sarcasm. (WC)
- h. She glared her silent hatred to Judson as an answer. (WC)
- i. Lady Gwendoline Sulby, a faded beauty in her mid-forties, glared her impatience as the object of her attention came to a halt neither up nor down the wide staircase. (WC)
- j. She glared her loathing at him for a moment before tearing down the staircase, cursing loudly. (WC)
- (14) a. But I grinned yes, wasn't it great, well done. (WB)
- b. Petro grinned approval. "Ha, a good idea! That way nothing of blame comes on us. For the rest we wish to leave only Pika, is that not so?" (WC)
- c. 'Bottles,' he said briefly, and grinned satisfaction. (WC)
- d. When I mentally ordered him away, he grinned defiance. (WC)
- e. Mr. Connors waved the skillet and his friend grinned his congratulations at what the token signified. (WC)
- f. He grinned his encouragement as his arms slid around her, tugging her into his lean body. (WC)
- g. ... and the driver eyed him sharply while he grinned his greeting across the backs of the horses. (WC)
- (15) a. He laughed his assent [dissent]. (TUG)
- b. Ariana laughed her pleasure at stumping her annoying friend, and rolled over lazily to finish watching the pillow fight. (WC)
- c. She laughed her pleasure when the salmon struck in the roaring mountain stream. (WC)
- d. She laughed her happiness through the spiced, warm mazes of Chinatown, her first-born cuddled to her breast, ready to be friends with everybody. (WC)
- e. The only African-American among them laughed his scorn: "Ha, ha! You need decent wheels and spats." (WC)
- f. After the boy laughed his scorn in the old man's face, he just gave up entirely. (WC)
- g. Recklow laughed his contempt of Recklow and spat upon the dead leaves. (WC)
- h. He laughed his consent. (WC)
- i. He laughed his delight at the victory. (WC)
- j. Though I was played around the whole night, I was very happy to see she laughed her delight at the victory. (WC)
- (16) a. President Coolidge scowled displeasure at the Senate. (WC)
- b. The soldier scowled his contempt at the distraught child, saying, "Don't worry about dear 'Papa', little Jew. (WC)
- c. What is he watching for? Richard wondered. Danger? Or conspiracies? He scowled his frustration at his keeper. (WC)
- d. Professor McNull scowled his approval of her disapproval. (WC)
- e. Nick did an about face and scowled his gripes about the perfect-appearing woman having kids.

(WC)

f. I told the mother, who quickly scowled her disapproval, and the child erupted in protests. (WC)

g. “You couldn’t possibly know this.” Esfirre’s eyes widened in horror. She clamped a hand over her mouth. Katirin scowled her irritation. “Don’t freeze in awe now. You’ve known me a year.”

(WC)

h. “I am not!” Adrienne scowled her protest. (WC)

(17) a. “There have,” said I, “been numerous petty thefts.” Holmes snorted his contempt. “This great and sombre stage is set for something more worthy than that,” said he. (WC)

b. Baghdad snorted defiance, talking of “holy war.” (WC)

c. “You’re lucky I love you. In a totally platonic way, I mean.” Taylor Booth snorted her amusement. (WC)

d. The mist quickly dissipated, and Maggie snorted her irritation. (WC)

e. She staggered, squealed and snorted her frustration. (WC)

f. Decepsun snorted her displeasure at being forgotten and nosed his back. (WC)

g. Officers were going to walk Pepa back to Margate police station on a lead, but she snorted her disapproval and a van was called to take her there instead. (WC)

h. She snorted her disliking of her surroundings and muttered to herself, “I had always liked Nameless’ terrain a lot better than anothers.” (WC)

(18) a. She wept her relief. (WC)

b. Buffy put her head in her hands and wept her sorrow, her grief for the lost baby of her dreams. (WC)

c. But he wept happiness when he saw his little girl again. (WC)

d. Twisting in the wash, lost in the impact, I wept pleasure from puss to eyes. (WC)

(19) a. Bluestone shrugged his disagreement. (WC)

b. Sayla waited a moment, shrugged her annoyance with this talkative Japanese, and with herself for listening. (WC)

c. Krysza, walking beside me, shrugged ignorance when I cocked an eyebrow at her. (WC)

d. We stayed with French speaking families and the facilitators shrugged ignorance when students blurted out English in frustration. (WC)

It might be that these verbs are more productive than dictionaries’ prediction; they list at most two possible nominal complement (e.g. *nod one’s agreement/pleasure* in LDOCE). By contrast, the other verbs in (2) are not listed in the dictionary as a constructional possibility. However, it does not necessarily mean that they cannot be compatible with the GEC.

The next section makes clear that there are cases where the verbs whose dictionary definitions do not indicate their compatibility with GEC are used in the construction and tries to show how creative GEC can be (NB There are some verbs that do not actually appear in this construction, according to the corpus data: *point* and *wag* seems unable to be in good harmony with GEC).



### III. INSPECTING CONSTRUCTIONAL PRODUCTIVITY

#### A. What corpus data show

In this section I will present corpus data of the verbs whose compatibility with GEC are not specified in the dictionaries to inspect constructional productivity. These verbs are classified into new categories for convenience of argumentation. Below are the results of searching the WebCorp (WC) for the examples of GEC containing these verbs:

**1. LAUGH verbs: *laugh, cackle, chortle, chuckle, giggle, guffaw, titter, snicker, snigger*** (see (12) for *giggle*, and (15) for *laugh*. No corpus data available with *snigger*):

#### (20) *cackle*

- a. Then there was a smile here, a chuckle there, an incredulous laugh, and Hence Sturgill, “bully of the Pocket,” rose from the wagon-tongue, closed his knife, came slowly forward, and cackled his scorn straight up into the teeth of Captain Mayhall Wells.
- b. Grimmjow cackled his supreme amusement from behind Ichigo’s ear.
- c. Olby cackled his insults and the gullible swallowed them whole.
- d. Salacious Crumb the Kowakian monkey-lizard cackled his approval and Jabba ate some frogs.

#### (21) *chortle*

- a. A fat ex-schoolteacher named Arthur Bickle looked around at the crowd’s hooligans, chortled his satisfaction.
- b. My wonderfully supportive and unflappable husband who was standing over us, ready to tuck our son into my parents’ car, chortled his glee, down at us, and ...
- c. As Fagan chortled his approval of McKinnon’s lies, I counted the number of times McKinnon or Fagan said a federal bureaucrat would impose a ...
- d. Come to my arms, my beamish boy! O frabjous day! Callooh! Callay! He chortled his joy.
- e. The corpulent Cyclops chortled his disapproval. ‘The issue is about increasing access to primary care, not replacing GPs’, he grunted.
- f. Monday morning brought us no closer to freedom, even after the archeological artifacts “experto” from the “Museo de Antropologia” chortled his most sarcastic disagreements with the customs agents.
- g. “Mommy needs to rest for a second sweetie, kick your feet and see how high you can go on your own.” The little girl chortled her acceptance and started to kick her feet wildly.
- h. Breathlessly, the radiant lady in elegant evening pants chortled her surprise: “I didn’t even buy a dress!”
- i. Velella clapped her hands and chortled her approval.
- j. ‘PIMPLEKNOCKER!’ Camilla chortled her childish glee and even Sully managed a modest smile.
- k. “Deal!” They shook on it and not two minutes later Darcy was digging into his pockets for a shiny shilling to hand over to his father while Georgie chortled her babyish delight, tugging on her mother’s hand in an insistent urge to become one with the cresting waves.

1. 'You side with that crazy bitch. You encourage her. I've had enough of this behavior from you, Lori. I've told you to stay away from those women.' Lori chortled her defiance. 'I'll pick my own friends, thank you.' He stared at her with a curiously benign expression. 'It's like I don't even know you anymore. What's come over you?'

(22) **chuckle**

- a. "Wow!" he said, and she chuckled her agreement.  
b. "That's very good. I really can't part them." "Well, you're not the only one, by any means." The others chuckled their sheepish agreements.

(23) **guffaw**

- a. His colleague practically did a spit-take as he guffawed his assent.  
b. The Green Man bore the invective impassively, while Gold Tooth's colleagues chortled and guffawed their appreciation.  
c. But it's easy to laugh at "Blazing Saddles" after millions of Mel Brooks fans have guffawed their approval.

(24) **titter**

- a. "I hear she is very small." The crowd tittered their approval.  
b. Now they tittered their amusement.  
c. Other customers tittered their assent.  
d. His nearby colleagues tittered their overwhelming approval.  
e. "This is Baby Jennie, and you all know Angelica." The gathered girls tittered their greetings and reached out to touch our bobbing dresses or pat our curly blonde hairstyles, and I couldn't prevent the shy smile tentatively tugging at the corners of my puffy pink mouth.

**2. CRY verbs: cry, sob, weep, snivel** (see (18) for *weep*)

(25) **cry**

- a. The old Mary would have wept loudly and cried her grief with sobs and moans, doing everything in her power to get those emotions out.  
b. He pulled her into his arms and simply held her while she cried her grief to the skies.  
c. And when Miyu had cried her sorrow for her mother's gift, and for her innocence lost, she summoned her courage.  
d. "Accidentally she touched her body beneath the water and thrilled to the sensation...she was about to orgasm and she might take off, spinning crazily, she cried her delight aloud..."

(26) **sob**

- a. With a stab of pain, she remembered watching as Xena held his lifeless body in her arms as she sobbed her grief.  
b. The one sat in her Bamboo Hermitage and sobbed her sorrow to the wind.  
c. "I will!" She sobbed her reply.  
d. Ayame sobbed her pain of the torture she went through with Suzume and Pippin.  
e. Andy turned and threw her arms around her mother who rocked her slowly crooning tender

words while the young woman sobbed her pain and anguish into her mother's warm bosom.

(27) **weep**

- a. Buffy put her head in her hands and wept her sorrow, her grief for the lost baby of her dreams.
- b. A manly heart saved her, she wept her grief there.
- c. she glanced up at the opaque sky and wept her misery.

(28) **snivel**

- a. Cass felt totally vindicated, while Helen and Judy enjoyably snivelled their regret at believing Bobbie.
- b. 'Mighty Zeus,' I said sullenly. 'Your wish is my command.' 'My command is your duty.' But my magic girdle is mine, I thought to myself as I snivelled my agreement.

**3. SIMLE verbs: *smile, grin, simper, smirk*** (see (5) for smile, and (14) for grin)

(29) **simper**

- a. ..., and at the end she simpered her thanks and...
- b. ... whilst Maria simpered her thanks. "Thank you officers"...
- c. ...and Miss Fane had simpered her acknowledgments of the applause which rewarded a severely conscientious performance.
- d. "That's enough, Donald. Hold your tongue." Cousin Beth, of course, simpered her agreement with Donnie, reiterating her tight-lipped pronouncement that Tara was an ungrateful, unnatural girl.

(30) **smirk**

- a. To show "esprit", the corrupt lawyers, parsons and schoolmasters that write this paper have smirked their approbation of the slaveholders since the outbreak of the American Civil War.
- b. When his numerous relatives had all shaken hands with him, and laughed, smiled, or smirked their felicitations, they made way for the press of eager acquaintances.
- c. He and his people have smirked their disregard for national security and for the lives and careers of CIA agents.

**4. STARE verbs (Facial expressions other than LAUGH, SMILE and CRY): *brink, frown, gape, gasp, gawk, glare, glower, goggle, grimace, pout, scowl, squint, wink, stare*** (see (11) for frown, (16) for scowl, and (8) for wink. No corpus data was available for goggle and squint)

(31) **blink**

- a. Carol blinked her surprise. "I'm just jealous you're still the same size you were when you got married."
- b. "You'll do fine," he muttered and turned back to his furs. Taala blinked her surprise. She had been certain that he would accept her offer of virgin maidens.
- c. The dog had made no noise, and the cat had only blinked her surprise at seeing a stranger and had gone to sleep again on the floor.
- d. Until she realized the voice was speaking in French. "Canadiens," a heavily armoured man called out to her. She finally blinked her surprise and turned to the soldier, though the images

of the area still stung.

- e. “No way, we’ve dealt with this shit before, right Kao?” Joel turned to Kaori, who blinked her surprise at the question and ran a hand through her spiky hair.
- f. When the football left Dave Challinor's grip on Wednesday afternoon, this small crowd blinked in disbelief.
- g. Sithspawn blinked disbelief as he saw the rest of his elite squad clad not in their standard armor wielding with blasters, but walking around in 2 piece swimsuits carrying....spatulas?
- h. At first the Jedi did not respond. Many stood and blinked disbelief, unsure whether they truly believed Anakin was the Chosen One or could accept that.
- i. “No watching sports on TV,” she declared, “no attending sporting events in person, and certainly no playing sports.” The blind date blinked disapproval and scanned her body with his eyes.

(32) ***gape***

- a. Yet of all these marvellous procedures and remedies, the Elets will let me use but a handful.’ Conley gaped surprise. ‘But - but why? Why train you, and then..?’ Her words seeped away.
- b. Yunho gaped surprise. “Is that what this is about? You’re angry about me being the leader?”
- c. He was literally blown away. His mouth gaped amazement.

(33) ***gasp***

- a. He kissed her gently and when she responded he couldn’t help slip his tongue between her lips. She gaped surprise slightly.
- b. “Oh my, it appers the weather has gotton worse!” My mother gaped astonishment.

(34) ***gawk***

- a. He gawked his interests remarkably with every nightshirt of his soaked professional heart.
- b. ... as coach roaches Survivors who gawked surprise in mud and ice.

(35) ***glare***

- a. He glared his disapproval.
- b. ... but a cry of protest stopped him, and for a moment he glared his hot resentment of the insult.
- c. “Go away Satsuki. Do not test my patience.” he glared his threat at the unfeeling Doll, the effect was lost on her.
- d. He glared defiance at the pistols pointing at him.
- e. Defiantly, she glared mistrust at him, but beneath her hard exterior lay a swirl of uncertain emotions.

(36) ***glower***

- a. On Tuesday’s endless rounds of television interviews, Stormin’ Norman Schwartzkopf glowered his approval of W.’s vow to go after terrorists and ...
- b. The Chapel was lit with lustrous, guttering flame. The Aquila statue, glowered disapproval, but I didn’t care.
- c. Martin glowered her hatred of the spy, then rushed out and slammed the door behind her.

d. She glowered her contempt upon the interrupters.

(37) **glimace**

- a. 'Don't want to believe it,' Matt interjected. Tom grimaced his agreement.
- b. He bobbed to the surface, but the umbrella was gone. He took a sip of the Sling and grimaced his approval.
- c. Ron looked at Harry for help, but Harry merely grimaced his helplessness.

(38) **pout**

- a. 'I don't want to run along, sheriff.' 'I said beat it, Lucy.' She pouted annoyance, got up, face faintly red and went behind the bar.
- b. 'It's all your fault isn't it? Never talks much about yourself.' She pouted complaint. 'You never asked. I thought perhaps you are not interested to my matter at all.'

(39) **stare:**

- a. Putting his bag on the floor at his feet, he crossed his arms across his chest and stared his defiance at every student who made the mistake of catching his eyes.
- b. The singer crossed her bandaged arms and stared her defiance.
- c. Dadda managed to run the Hudson right up on the cow-catcher where he and the motorman stared hostility at each other.
- d. Cradling Gabumon at his chest, Matt stared defiance at the monster.
- e. The girl flung up her head, and though there was a glitter of tears in her eyes and her face was white under the moon, she stared defiance. "Don't speak to me," she said.

**5. SOUND EMISSION verbs: *growl, howl, jeer, moan, sigh, sniff, snort, whistle***

(see (17) for *snort*)

(40) **groan**

- a. He must have groaned his desire, because her finger stilled suddenly, and she sat up on the bed.
- b. Taking her mouth, Wulf groaned his pleasure when she returned his kiss with equal fervor.
- c. He groaned his acceptance as he plunged his fingers into Dominic's hair and continued to kiss him.
- d. The tongue lingered for a moment, then pulled away, and she groaned her disappointment aloud.
- e. "No." Kellie groaned her resistance.
- f. She groaned her pleasure and... melted. She didn't know how long she laid there, just enjoying his fingers on her skin.

(41) **growl**

The wolf in him growled hostility at the enemy around him.

(42) **howl**

- a. Lothos tossed his mane of jet black hair over his shoulder and howled his pain to the beckon-

ing moon.

b. ... Gabriel threw his head back, and howled his pain to the sky.

(43) **jeer**

a. The awaiting crowd jeered their displeasure.

b. The crowd jeered their contempt for the ruling, screaming threats and abuse until Judge Rennie took the megaphone again, explaining patiently that any citizen caught insulting a Judge would receive similar punishment.

c. Although tension between the “pros” and “antis” never spilled over into open conflict, the hunters were clearly offended by the presence of the animal rights activists, and jeered their disapproval.

d. I had to run the gauntlet of my first welcome which was hosted by angry anti-war protestors who howled and jeered their greetings.

(44) **moan**

a. Duo moaned his impatience.

b. He moaned his pleasure and started rubbing my tummy in circular motions.

c. Though afraid of rejection, she slowly lifted herself on her tiptoes and suckled gently on his bottom lip. He moaned his satisfaction in her boldness, wrapped his arms around her and pulled her into his body where he took control of the kiss.

d. Jim moaned his assent.

e. Thus, sad in mind, he moaned his sorrow.

f. “I’m about to do very bad things to you, Darkness.” Black moaned his approval.

g. Will moaned his enjoyment and encouragement.

h. Mournful of mood, thus he moaned his woe, alone, for them all, and...

(45) **sigh**

a. M’Ladyhawke sighed her relief. “Thank Haven,” she told the lad.

b. She looked at the baby in worry and sighed her relief when the baby looked back at her with her own brilliant blue eyes, ...Claire threw down the papers and sighed her utter disgust. “They all look alike,” she repeated.

c. But the earth and sea were deaf and blind, and she wept and sighed her grief in vain.

d. For a while her hips continued rocking, and she sighed her contentment.

(46) **sniff**

a. “Then let me die!” He sniffed contempt fully. “Really? You wish for that?”

b. Serena sniffed contempt.

c. He thumped his pint pot down on the bar and sniffed contempt at the sullen faces surrounding him.

(47) **whistle**

a. The nearest patrons of the bar cheered her and a few whistled their admiration.

b. When the models undid a serpentine roll of scarf, to show that it grew out of a coat, the photog-

raphers whistled their applause.

6. **BODILY ACTION verbs: *clap, nod, shrug, wave*** (see (4) for *nod*, (19) for *shrug*, and (6) for *wave*)

(48) ***clap***

- a. Further, we have had some of the most outstanding entertainment tonight that I have ever heard.” She turned and clapped appreciation for the band seated behind her.
- b. Their performance abruptly ended, and the audience clapped appreciation.

7. **Physiological function verbs: *\*sneeze: \*snore: \*cough, yawn*** (no corpus data available for *sneeze*, *snore*, and *cough*)

(49) ***yawn***

- a. I’d much rather be programming,” and continued, “and, with something to eat, we’ll have the day before us.” The others *yawned their assent*, and went back to the tents to get their Bibles. “Whose turn was it to read? Lilianne’s?” said Sarah.
- b. The bolt thrower took full advantage of the Valiant Rune and yawned their apathy.
- c. “He yawned his disapproval about plans for the weekend trip.”

As is clear from the examples culled from web corpora, almost all the verbs are compatible with GEC, although their use in GEC is not specified in the dictionary entry (A few exceptions include *cough*, *sneeze*, *snore*, *point* and *wag*). This linguistic evidence suggests that these verbs have something in common that enables them to be compatible with GEC.

The next section investigates the conditions under which the verbs work well with GEC and hypothesizes a motivation for the constructional productivity.

## B. Motivation for Constructional Productivity

In this section I will inspect under what condition the verbs are allowed in GEC and hypothesize a constraint imposed on its constructional productivity with special attention to lexical semantics of the verbs.

Consider, for example, dictionary definitions of LAUGH verbs. These verbs all include *laugh* in their definitions, and are only different in a manner of laughing. See ODE definitions in (50):

- (50) a. ***laugh***: make the spontaneous sounds and movements of the face and body that are the instinctive expressions of lively amusement and sometimes also of derision; treat with ridicule or scorn

***laugh***: intr 1. To make spontaneous sounds associated with happiness, amusement, scorn, etc.

Thesaurus: chuckle, giggle, guffaw, chortle, snicker, snigger.

2. To express (a feeling, etc) by laughing. Example: *laughed his contempt*

- b. ***cackle***: laugh in a loud, harsh way
- c. ***chortle***: laugh in a noisy, gleeful way
- d. ***chuckle***: laugh quietly or inwardly
- e. ***giggle***: laugh lightly in a nervous, affected, or silly manner

- f. **guffaw**: laugh loudly and heartily
- g. **titter**: give a short, half-suppressed laugh
- h. **snigger**: laugh in a half-suppressed, typically scornful way

Next, compare these definitions with the corpus data given earlier in this section (No corpus data was available for *snigger*):

- (51) a. He laughed his delight at the victory. (= (15i))
- b. Grimmjow cackled his supreme amusement from behind Ichigo's ear. (= 20b))
- c. My wonderfully supportive and unflappable husband who was standing over us, ready to tuck our son into my parents' car, chortled his glee, down at us, and ... (= (21b))
- d. "Wow!" he said, and she chuckled her agreement. (= (22a))
- e. She giggled her approval and said she was going to bake one of the frozen pizzas for lunch. (= (12c))
- f. His colleague practically did a spit-take as he guffawed his assent. (= (23a))
- g. Now they tittered their amusement. (= (24b))

As the examples in (51) show, all the LAUGH verbs are perfectly compatible with GEC and it might be the case that this is because of the lexical motivation; the emotions associated with laughing are lexicalised in the LAUGH verbs' lexical semantics. All the examples given above contain the subject's intended emotion associated with a corresponding noun phrase complement. In other words, GEC is productive as long as the verbs are lexically motivated for the emotions that they are associated with: those emotions associated with laughter, such as 'amusement', 'happiness', 'derision', 'scorn', 'ridicule', 'assent', 'dissent'. I will hypothesize this as "Lexical Motivation Hypothesis for GEC":

(52) Lexical Motivation Hypothesis for GEC:

GEC is productive and acceptable to the extent that the verbs are lexically motivated for the emotions or reactions expressed.

The same holds for other verbs that can go along well with GEC. Consider this hypothesis in more detail with other types of verbs. Consider first CRY verbs, comparing the dictionary definitions with corpus data:

- (53) a. **cry**: shed tears in distress, pain, or sorrow (ODE); cf. A cry is a loud, high sound that you make when you feel a strong emotion such as fear, pain, or pleasure (CALED)
  - b. **sob**: cry noisily, making loud, convulsive gasps (ODE)
  - c. **weep**: to express deep sorrow for usually by shedding tears (Merriam-Webster's Online Dictionary)
  - d. **snivel**: cry and snuffle; complain in a whining or tearful way (ODE)
- (54) a. The old Mary would have wept loudly and cried her grief with sobs and moans, doing everything in her power to get those emotions out. (= (25a))
  - b. Ayame sobbed her pain of the torture she went through with Suzume and Pippin. (= (26d))



- c. She glanced up at the opaque sky and wept her misery. (= (27c))
- d. Cass felt totally vindicated, while Helen and Judy enjoyably snivelled their regret at believing Bobbie. (= (28a))

CRY verbs can also be used to express a number of emotions associated with crying: distress, sorrow, fear, pain and even pleasure, and so forth. All these verbs share the meaning specified in the definition of *cry* and they are lexically motivated for GEC.

Next, consider the case of SMILE verbs:

- (55) a. **grin**: smile broadly (ODE)
- b. **smile**: express (a feeling) by smiling (ODE)
- c. **simper**: smile in a affectedly coquettish, coy, or ingratiating manner (ODE)
- d. **smirk**: smile in an irritating smug, conceited, or silly way (ODE)
- (56) a. 'Bottles,' he said briefly, and grinned satisfaction. (= (14c))
- b. He smiled his admiration of the great stone circle. (= (5b))
- c. ..., and at the end she simpered her thanks and... (= (29a))
- d. He and his people have smirked their disregard for national security and for the lives and careers of CIA agents. (= (30c))

As is clear from the definition of *smile*, it could express unrestricted kinds of emotion and this prediction holds for other SMILE verbs; a variety of emotions are expressed by these verbs and even negative emotional state can be expressed, such as *disregard* in (56d) (for more examples, see section II).

Fourthly, observe the cases of STARE (facial expression) verbs (No corpus data was available for *squint*):

- (57) a. **blink**: react to (something) with surprise or disapproval (ODE)
- b. **frown**: furrow one's brows in an expression indicating disapproval, displeasure, or concentration (ODE)
- c. **gape**: stare with one's mouth open in amazement or wonder (ODE)
- d. **gasps**: catch one's breath with an open mouth, owing to pain or astonishment (ODE)
- e. **gawk**: stare openly and stupidly (ODE)
- f. **glare**: stare in an angry or fierce way (ODE)
- g. **glower**: have an angry or sullen look on one's face; scowl (ODE)
- h. **goggle**: look with wide open eyes, typically in amazement (ODE) \*No corpus data available
- i. **grimace**: make a grimace (cf. grimace: an ugly twisted expression on a person's face, typically expressing disgust, pain, or wry amusement) (ODE)
- j. **pout**: push one's lips or one's bottom lip forward as an expression of petulant annoyance or in order to make oneself look sexually attractive (ODE)
- k. **scowl**: frown in an angry or bad-tempered way (ODE)
- l. **squint**: looking or tending to look obliquely or askance (as with envy or disdain)  
(Merriam-Webster's On-line Dictionary)
- m. **wink**: close and open one eye quickly, typically to indicate that something is a joke or secret

or as a signal of affection or greeting (ODE)

n. **stare**: look fixedly or vacantly at someone or something with one's eyes wide open (ODE)

- (58) a. Carol blinked her surprise. "I'm just jealous you're still the same size you were when you got married." (= (31a))  
b. 'Spy on her?' Kareen frowned disapproval. 'Did Miles set you on me for this?' (= (11a))  
c. He was literally blown away. His mouth gaped amazement. (= (32c))  
d. "Oh my, it appears the weather has gotten worse!" My mother gasped astonishment. (= (33b))  
e. ... as coach roaches Survivors who gawked surprise in mud and ice. (= (34b))  
f. He glared defiance at the pistols pointing at him. (= (35d))  
g. Martin glowered her hatred of the spy, then rushed out and slammed the door behind her. (= (36c))  
h. Ron looked at Harry for help, but Harry merely grimaced his helplessness. (= (37c))  
i. 'I don't want to run along, sheriff.' 'I said beat it, Lucy.' She pouted annoyance, got up, face faintly red and went behind the bar. (= (38a))  
j. "I am not!" Adrienne scowled her protest. (= (16h))  
k. Fran winked her consent to the plan with her good eye. (= (8c))  
l. The singer crossed her bandaged arms and stared her defiance. (= (39b))

Each example shows that the expressed emotions or replies are all lexicalized (i.e. linguistically encoded) in the definitions, except the cases of *gawk* and *stare*; these cases suggest that these examples are 'pragmatically motivated'. Although they do not have lexical motivation for GEC, it is usually the case that gawking and staring are associated with surprise or other negative emotions. I will not go into detail of this issue here.

Fifthly, consider the cases of SOUND-EMISSION verbs:

- (59) a. **groan**: make a deep inarticulate sound conveying pain, despair, pleasure, etc. (ODE)  
b. **growl**: make a low guttural sound of hostility in the throat (ODE)  
c. **howl**: make a howling sound (cf. howl: a loud cry of pain, fear, anger, or amusement) shout in disapproval in order to prevent a speaker from being heard (ODE)  
d. **jeer**: make rude and mocking remarks, typically in a loud voice (ODE)  
e. **moan**: make a long, low sound expressing physical or mental suffering or sexual pleasure (ODE)  
f. **sigh**: emit a long, deep audible breath expressing sadness, relief, tiredness, or similar (ODE)  
g. **sniff**: draw up air audibly through the nose to detect a smell, to stop it running, or express contempt (ODE)  
h. **snort**: make a sudden explosive sound through one's nose, especially to express indignation or derision  
d. **whistle**: blow a whistle as a signal (ODE)
- (60) a. She groaned her pleasure and... melted. She didn't know how long she lay there, just enjoying his fingers on her skin. (= (40f))  
b. The wolf in him growled hostility at the enemy around him. (= (41))

- c. Lothos tossed his mane of jet black hair over his shoulder and howled his pain to the beckoning moon. (= (42a))
- d. The crowd jeered their contempt for the ruling, screaming threats and abuse until Judge Rennie took the megaphone again, explaining patiently that any citizen caught insulting a Judge would receive similar punishment. (= (43b))
- e. Duo moaned his impatience. (= (44a))
- f. But the earth and sea were deaf and blind, and she wept and sighed her grief in vain. (= (45c))
- g. Serena sniffed contempt. (= (46b))
- h. “There have,” said I, “been numerous petty thefts.” Holmes snorted his contempt. “This great and sombre stage is set for something more worthy than that,” said he. (= (17a))
- i. The nearest patrons of the bar cheered her and a few whistled their admiration. (= (47a))

As is evident from these examples, we find near perfect correspondence between a noun phrase complement realised in post-verbal position and the expressed emotion specified in the lexical definition, resulting in compatibility with GEC.

Sixthly, consider the cases of BODILY ACTION verbs:

- (61) a. **clap**: strike the palms of (one’s hands) together repeatedly, typically in order to applaud someone or something (ODE); show approval of a person or action by clapping (ODE)  
**clap**: When you clap, you hit your hands together to express appreciation or attract attention. (CALED)
- b. **nod**: lower and raise one’s head slightly and briefly, especially in greeting, assent, or understanding, or to give someone a signal (ODE)
- c. **shrug**: raise (one’s shoulders) slightly and momentarily to express doubt, ignorance, or indifference (ODE)
- d. **wave**: move one’s hand to and fro in greeting or as a signal (ODE)
- (62) a. Their performance abruptly ended, and the audience clapped appreciation. (= (49b))
- b. Thorne nodded his understanding, smiling benevolently. (= (4d))
- c. Krysza, walking beside me, shrugged ignorance when I cocked an eyebrow at her. (= (19c))
- d. ‘Drive safely,’ he said and waved goodbye... (= (6a))

Again, the expressed emotional states realised in post-verbal elements neatly correspond to the lexical specification of the verb semantics and this suggests the validity of lexical motivation hypothesis for GEC.

Finally, let us have a brief look at PHYSIOLOGICAL FUNCTION verbs. According to Levin’s prediction, these verbs are also compatible with GEC. However, this prediction contradicts linguistic reality, as for *sneeze*, *snore*, and *cough*. No corpus data was found where these three verbs were used in GEC. There exist a few examples of *yawn*. Speculatively, this is because these verbs express involuntary physiological functions. GEC is a construction where subject referents intentionally express their emotions or reactions, and they can hardly express these intentional expressions (see the definition of *sneeze* and *snore*, for example). In any rate, this issue needs further investigation. ‘Apathy’ corresponds to ‘boredom’ in the lexically encoded meaning of *yawn*, resulting in compatibility with GEC:

- (63) a. **sneeze**: make a sudden involuntary explosion of air from the nose and mouth due to irritation of one's nostrils (ODE)  
 b. **snore**: make a snorting or grunting sound while asleep (ODE)  
 c. **cough**: expel air from the lungs with a sudden sharp sound (ODE)  
 d. **yawn**: involuntarily open one's mouth wide and inhale deeply due to tiredness or boredom (ODE)

(64) **yawn**

The bolt thrower took full advantage of the Valiant Rune and yawned their apathy. (= (49b))

To sum up, it is suggested that each example from corpora contains the subject's intended emotion associated with a corresponding noun phrase complement. It can be hypothetically said that GEC is productive and acceptable to the extent that the verbs are lexically motivated for the emotions or reactions expressed in verbal complements. This is hypothesized as lexical motivation for GEC.

## CONCLUDING REMARKS

The discussion presented in this paper has hardly ever resolved the gesture-expression construction fully. It has, however, revealed some of the constructional creativity and its related factor, namely "Lexical Motivation for GEC", which goes as follows:

(65) Lexical Motivation Hypothesis for GEC:

GEC is productive and acceptable to the extent that the verbs are lexically motivated for the emotions or reactions expressed.

The analysis in this work draws heavily on the data collection from web corpora, and some examples are not fully explained by the lexical motivation hypothesis proposed here. In addition, it is unclear whether the verbs whose examples were not found in corpora but which lexicalize emotional elements satisfying lexical motivation hypothesis are compatible with GEC. I conclude that the idea proposed here remain undeveloped and needs further scrutiny to be theoretically justified, but I hope that it has explored the possibility of constructional creativity.

## REFERENCES

- Culicover, P. W. (1999). *Syntactic Nuts: Hard Cases, Syntactic Theory, and Language Acquisition*. New York: Oxford University Press.  
 Jespersen, O. (1928). *A Modern English Grammar III*, London and Ejnar Munksgaard, Copenhagen: George Allen & Unwin Ltd.  
 Levin, B. (1993). *English Verb Classes and Alternations: A Preliminary Investigation*. Chicago: The University of Chicago Press.  
 Levin, B. & T. R. Rapoport (1988). *Lexical Subordination*. *Chicago Linguistic Society* 24, 257-289.  
 Omuro, T. (1997). Gainen-imiron niyoru jirei kenkyu. In S. Tanaka., J. Abe., & T. Omuro (Eds.) *Nyūmon seisei gengo riron* (An Introduction to Generative Syntax) (pp.167-188). Tokyo: Hitsuji Shobo.

Ross, J.R. (1970). On Declarative Sentences. In Roderick Jacobs, R., & Rosenbaum, P. (Eds.), *Readings in English Transformational Grammar* (pp.222-272), Waltham, Massachusetts: Ginn and Company.

## DICTIONARIES

CALED: Collins Advanced Learner's English Dictionary New digital edition

TUG: Taishukan's Unabridged Genius 2<sup>nd</sup> edition

KNEJD: Kenkyusha's New English-Japanese Dictionary 6<sup>th</sup> edition

LDOCE: Longman Dictionary of Contemporary English Online (<http://www.ldoceonline.com/>)

MWOD: Merriam-Webster's Online Dictionary (<http://www.merriam-webster.com/>)

ODE: Oxford Dictionary of English 2<sup>nd</sup> edition

## CORPORA

BNC: British National Corpus (<http://www.natcorp.ox.ac.uk/>)

WBO: Word Banks Online (<http://www.collins.co.uk/Corpus/CorpusSearch.aspx>)

WB: Wordbank from Bank of English

WC: WebCorp (<http://www.webcorp.org.uk/>)

## 謝 辞

本研究を実施するにあたり、ご協力いただきました全ての方々に深く感謝申し上げます。本研究は、平成20年度日本赤十字看護大学伊藤・有馬記念基金の助成を受けて行いました。ここに御礼申し上げます。