Supplementary Material for: A. Newman, M.T. Ullman, R. Pancheva, D. Waligura, & H.J. Neville, "The Electrophysiology of words and rules: ERP studies of regular and irregular English past tense inflection"

## Regular and irregular past tense stimuli

The regular and irregular past tense verbs on each line were matched according to their frequency, orthography, and length, and are ordered from least to most frequent.

### Regular

## Irregular

Yesterday I vied/vie with Paul. Yesterday I bred/breed a dog. Yesterday she dyed/dye her hair. Yesterday she strung/string a bead. Yesterday he spied/spy on Chris. Yesterday he stung/sting an eye. Yesterday she stored/store a nut. Yesterday she wrung/wring a towel. Yesterday he viewed/view a movie. Yesterday he froze/freeze a steak. Yesterday he glued/glue it together. Yesterday he slung/sling a stone. Yesterday I sprayed/spray it on. Yesterday I dug/dig a hole. Yesterday he scrawled/scrawl a note. Yesterday he bled/bleed on it. Yesterday I fanned/fan our king. Yesterday I lent/lend him money. Yesterday I drowned/drown in love. Yesterday I bound/bind it together. Yesterday he dried/dry a flower. Yesterday he flung/fling a rock. Yesterday I frowned/frown at Billy. Yesterday I ground/grind up coffee. Yesterday he stirred/stir our soup. Yesterday he hid/hide a coin. Yesterday I swayed/sway around it. Yesterday I swam/swim with Janet. Yesterday I whipped/whip an egg. Yesterday I wept/weep with joy. Yesterday I sailed/sail a ship. Yesterday I dealt/deal with it. Yesterday he dared/dare our cousin. Yesterday he fed/feed our eagle. Yesterday I stripped/strip our bed. Yesterday I crept/creep into it. Yesterday I strained/strain a muscle. Yesterday I bent/bend a spoon. Yesterday he scored/score a point. Yesterday he stole/steal a pie. Yesterday he cared/care about her. Yesterday he swore/swear at school. Yesterday I weighed/weigh a package. Yesterday I ate/eat a banana. Yesterday I owed/owe a dollar. Yesterday I strode/stride into town. Yesterday she begged/beg in town. Yesterday she clung/cling onto it. Yesterday I tied/tie a ribbon. Yesterday I taught/teach a class. Yesterday he signed/sign a letter. Yesterday he sank/sink a ship. Yesterday she snapped/snap a finger. Yesterday she bore/bear a load. Yesterday he roared/roar with laughter. Yesterday he spun/spin on ice. Yesterday he shared/share a cake. Yesterday he sang/sing a song. Yesterday I planned/plan a party. Yesterday I spent/spend a dollar. Yesterday she urged/urge him on. Yesterday she shot/shoot an arrow. Yesterday he poured/pour it out. Yesterday he rang/ring our bell. Yesterday I sighed/sigh out loud. Yesterday I slid/slide across ice. Yesterday he cried/cry with joy. Yesterday he stuck/stick it on. Yesterday I slipped/slip on ice. Yesterday I slept/sleep in bed. Yesterday she changed/change a diaper. Yesterday she fought/fight with Larry. Yesterday she jumped/jump a yard. Yesterday she flew/fly over Disneyland. Yesterday I stepped/step over it. Yesterday I swept/sweep our floor. Yesterday she hoped/hope I won. Yesterday she struck/strike a nail. Yesterday he joined/join a club. Yesterday he meant/mean it well. Yesterday I rolled/roll a marble. Yesterday I sold/sell a car. Yesterday she caused/cause an accident. Yesterday she bought/buy one shoe. Yesterday she helped/help a stranger. Yesterday she won/win a prize. Yesterday she talked/talk with Albert. Yesterday she threw/throw a ball.

Yesterday she raised/raise a hand. Yesterday he failed/fail an exam. Yesterday she wished/wish you joy. Yesterday she served/serve a meal. Yesterday he pulled/pull a wagon. Yesterday she stared/stare at Rick. Yesterday I stayed/stay after school. Yesterday he played/play a piano. Yesterday she watched/watch our baby. Yesterday she dropped/drop a plate. Yesterday she worked/work with Fred. Yesterday I passed/pass his house. Yesterday he stopped/stop a taxi. Yesterday he tried/try it on. Yesterday she used/use a map. Yesterday she walked/walk after lunch. Yesterday he called/call a friend. Yesterday she asked/ask a question. Yesterday he seemed/seem happy enough. Yesterday she looked/look at Sue.

Yesterday she sent/send a letter. Yesterday he built/build a castle. Yesterday she rode/ride a horse. Yesterday she drove/drive our car. Yesterday he held/hold her hand. Yesterday she swung/swing a bat. Yesterday I sought/seek an answer. Yesterday he caught/catch a frisbee. Yesterday she grew/grow an inch. Yesterday she broke/break a glass. Yesterday she spoke/speak with Betty. Yesterday I lost/lose a key. Yesterday he kept/keep a penny. Yesterday he brought/bring it over. Yesterday she wrote/write a book. Yesterday she ran/run a mile. Yesterday he told/tell a story. Yesterday she took/take a bath. Yesterday he felt/feel an earthquake. Yesterday she thought/think about chocolate.

# Lexical-semantic and phrase structure conditions (Experiments 2 & 3)

**Semantic Controls** 

Yesterday they banned Ted's movie about America.

Yesterday I sang Lisa's song about freedom.

Yesterday I met his friend from Spain.

Ann published my novel from last year.

She opened each present from her mother.

I wrote that speech about migrants.

I hired the girl with long hair.

Yesterday Sue attended the benefit for cancer research.

Yesterday I drank Irene's beer from Germany.

Cathy envied Joanne's creativity in the classroom.

Yesterday he drank my wine from California.

I valued our friendship of many years.

Yesterday she drank some milk from their farm.

Yesterday I read some literature about rats.

I ordered the lobster from Massachusetts.

Sarah drank the tea from the South.

Yesterday I criticized Max's proof of the theorem.

Yesterday Fred bought Don's sketch of the landscape.

Yesterday I bought his painting of the ocean.

Bill enjoyed their review of the play.

They planned this purchase of the building.

I read every article of lunar geology.

Yesterday I witnessed the birth of our daughter.

Jim understood the explanation of the issue.

They envied George's inheritance of Ralph's fortune.

Yesterday I challenged Diane's comprehension of the issues.

She rewarded our loyalty to the Crown.

Yesterday Martin ridiculed my hatred of politics.

Yesterday I expressed some interest in the proposal.

Yesterday I showed some patience with his ignorance.

I supported the education of the poor.

Rob watched the grace of Jane's walk.

He slapped Andy's face at night.

Yesterday I met Todd's wife in Connecticut.

Yesterday I kissed my nephew on the cheek.

Yesterday Sam filled his belly at lunch.

They ate every cake with a spoon.

Yesterday I rode this tractor in the field.

We watched the comet for days.

I finished the task without her help.

They hurt Joe's pride for no reason.

Yesterday I found Jennifer's luggage on the roof.

Yesterday I ate my food at this restaurant.

Yesterday Daniel sipped his tonic for hours.

I smoked some opium in China.

Yesterday Dee swallowed some aspirin for her headache.

We ate the jelly with our hands.

**Semantic Anomalies** 

Yesterday they banned Ted's ocean about America.

Yesterday I sang Lisa's foot about freedom.

Yesterday I met his month from Spain.

Ann published my circle from last year.

She opened each second from her mother.

I wrote that shoulder about migrants.

I hired the century with long hair.

Yesterday Sue attended the rifle for cancer research.

Yesterday I drank Irene's corn from Germany.

Cathy envied Joanne's bacteria in the classroom.

Yesterday he drank my ability from California.

I valued our emission of many years.

Yesterday she drank some advice from their farm.

Yesterday I read some peace about rats.

I ordered the greed from Massachusetts.

Sarah drank the innocence from the South. Yesterday I criticized Max's seed of the theorem.

Yesterday Fred bought Don's rebel of the landscape.

Yesterday I bought his smile of the ocean.

Bill enjoyed their nose of the play.

They planned this female of the building.

I read every brother of lunar geology.

Yesterday I witnessed the block of our daughter.

Jim understood the pocket of the issue.

They envied George's topography of Ralph's fortune.

Yesterday I challenged Diane's kerosene of the issues.

She rewarded our physics to the Crown.

Yesterday Martin ridiculed my sand of politics.

Yesterday I expressed some light in the proposal.

Yesterday I showed some laughter with his ignorance.

I supported the land of the poor.

Rob watched the oxygen of Jane's walk.

He slapped Andy's god at night.

Yesterday I met Todd's job in Connecticut.

Yesterday I kissed my steeple on the cheek.

Yesterday Sam filled his adult at lunch.

They ate every curb with a spoon.

Yesterday I rode this penny in the field.

We watched the gender for days.

I finished the moon without her help.

They hurt Joe's liquor for no reason.

Yesterday I found Jennifer's mercury on the roof.

Yesterday I ate my paper at this restaurant.

Yesterday Daniel sipped his sarcasm for hours.

I smoked some chaos in China.

Yesterday Dee swallowed some torture for her headache.

We ate the granite with our hands.

I bought the whiskey at the store. I bought Brian's hat for my father.

Yesterday Paul put Kathleen's backpack on the floor.

He translated our note for the children.

Yesterday Patrick dedicated his sonnet to Jane.

I brought this toy for our dog. I sold this puppet to a circus.

Yesterday I told the rumor to my friend.

Yesterday Taylor sent the package to his cousin.

Yesterday I sold Mike's estate to Victor. Tim bought Karen's china for his fiancé.

They promised their money to environmental charities.

Sean donated his fortune to the orphans.

Yesterday I taught some French to the students.

Sheila added some cream to her coffee.

Yesterday I delivered the mail to the residents.

Yesterday Ned entrusted the information to his attorney.

I bought the thunder at the store. I bought Brian's hole for my father.

Yesterday Paul put Kathleen's glacier on the floor.

He translated our bed for the children.

Yesterday Patrick dedicated his proton to Jane.

I brought this snort for our dog. I sold this homicide to a circus.

Yesterday I told the radish to my friend. Yesterday Taylor sent the jail to his cousin. Yesterday I sold Mike's approval to Victor. Tim bought Karen's danger for his fiancé.

They promised their fire to environmental charities.

Sean donated his fog to the orphans.

Yesterday I taught some hair to the students.

Sheila added some jungle to her coffee.

Yesterday I delivered the heaven to the residents. Yesterday Ned entrusted the water to his attorney.

### **Phrase Structure Controls**

Jill disliked Orin's joke about the Queen.

Yesterday I praised Nadia's poem about the moon.

Yesterday I rented Tony's film about Spain.

Yesterday John ignored Frank's complaint about the noise.

Yesterday she ridiculed Brandon's anxiety about the trip.

Yesterday I ate Leah's broccoli from her garden.

The developers wanted Jim's land on the hill.

Yesterday Fred guzzled Pat's water from Colorado.

Yesterday I circulated Maya's description of the suspect.

The policeman obtained Peter's photo of our friends.

Yesterday we met Christy's student of physics.

She heard Matthew's report of my problem.

Yesterday I ignored Tom's fear of Martians.

The recruiters doubted Harry's knowledge of Spanish.

Yesterday Heather noticed Larry's admiration for her colleagues.

The scientist ridiculed Laura's belief in alien life.

My family rented Kirk's cabin for the summer.

We bought Emily's house in July.

Yesterday Kate attended David's concert with her friend.

Yesterday I read Richard's letter in the afternoon.

The priest challenged Terry's integrity on many occasions.

Yesterday I bought Anne's produce at her farm.

Yesterday I drank Lisa's brandy by the fire.

She sold Raymond's gold on his birthday.

Yesterday I gave Rhonda's dress to Erica.

Jimmy hung Alice's portrait on the wall.

Yesterday I read Bob's book to my niece.

She served Andrew's dish to her grandmother.

Daphne introduced Nick's art to the public.

Yesterday he turned Susie's bread into sandwiches.

Yesterday I gave Melissa's syrup to the children.

The prosecutor presented Ron's evidence to the jury.

The students heard Daniel's lecture about the planets.

Yesterday I read Ed's book about Africa.

Yesterday I resented John's comment about my looks.

The journalist criticized Elena's article about global warming.

Yesterday I published Don's poetry about love.

The agents discovered Fred's tobacco from Cuba.

I envied Barbara's life in Europe.

My mother cooked Rafaela's pasta from Italy.

The newspaper printed Joe's version of the story.

Yesterday I sold Ruth's picture of her father.

Yesterday I heard Sally's story of her escape.

The judge accepted Alice's account of the accident.

Yesterday I discovered Andrea's love of music.

The principal doubted Robin's respect for her teachers.

Yesterday I forgot Felicia's horror of hairy spiders.

Rob appreciated Paula's generosity to his father.

### **Phrase Structure Violations**

Jill disliked Orin's about joke the Queen.

Yesterday I praised Nadia's about poem the moon.

Yesterday I rented Tony's about film Spain.

Yesterday John ignored Frank's about complaint the noise.

Yesterday she ridiculed Brandon's about anxiety the trip.

Yesterday I ate Leah's from broccoli her garden.

The developers wanted Jim's on land the hill.

Yesterday Fred guzzled Pat's from water Colorado.

Yesterday I circulated Maya's of description the suspect.

The policeman obtained Peter's of photo our friends.

Yesterday we met Christy's of student physics.

She heard Matthew's of report my problem.

Yesterday I ignored Tom's of fear Martians.

The recruiters doubted Harry's of knowledge Spanish.

Yesterday Heather noticed Larry's for admiration her

colleagues.

The scientist ridiculed Laura's in belief alien life.

My family rented Kirk's for cabin the summer.

We bought Emily's in house July.

Yesterday Kate attended David's with concert her friend.

Yesterday I read Richard's in letter the afternoon.

The priest challenged Terry's on integrity many occasions.

Yesterday I bought Anne's at produce her farm.

Yesterday I drank Lisa's by brandy the fire.

She sold Raymond's on gold his birthday.

Yesterday I gave Rhonda's to dress Erica.

Jimmy hung Alice's on portrait the wall.

Yesterday I read Bob's to book my niece.

She served Andrew's to dish her grandmother.

Daphne introduced Nick's to art the public.

Yesterday he turned Susie's into bread sandwiches.

Yesterday I gave Melissa's to syrup the children.

The prosecutor presented Ron's to evidence the jury.

The students heard Daniel's about lecture the planets.

Yesterday I read Ed's about book Africa.

Yesterday I resented John's about comment my looks.

The journalist criticized Elena's about article global warming.

Yesterday I published Don's about poetry love.

The agents discovered Fred's from tobacco Cuba.

I envied Barbara's in life Europe.

My mother cooked Rafaela's from pasta Italy.

The newspaper printed Joe's of version the story.

Yesterday I sold Ruth's of picture her father.

Yesterday I heard Sally's of story her escape.

The judge accepted Alice's of account the accident.

Yesterday I discovered Andrea's of love music.

The principal doubted Robin's for respect her teachers.

Yesterday I forgot Felicia's of horror hairy spiders.

Rob appreciated Paula's to generosity his father.

Yesterday I cut Max's apple with my knife. The vet vaccinated Mary's dog in his office. My brother lost Pam's ring after the wedding.

Yesterday I answered Mark's message with pleasure.

Yesterday I spilled Kevin's juice on the floor. Yesterday I herded Bill's cattle by the river. They discussed Jared's occupation at the party. Yesterday Emily piled Frank's wood in the fireplace. Yesterday I recommended Brandon's cousin to my boss.

Yesterday Nikki threw Jessica's coat into the closet.

Adrian passed Lillian's note to his friend.

Yesterday I shared Ashley's secret with the teacher. Yesterday I took Leslie's furniture to the basement. Yesterday Julian offered Ginny's help to the lady. Yesterday I left Miriam's sugar in the cabinet.

Yesterday I cut Max's with apple my knife. The vet vaccinated Mary's in dog his office. My brother lost Pam's after ring the wedding.

Yesterday I answered Mark's with message pleasure.

Yesterday I spilled Kevin's on juice the floor. Yesterday I herded Bill's by cattle the river. They discussed Jared's at occupation the party. Yesterday Emily piled Frank's in wood the fireplace.

Yesterday I recommended Brandon's to cousin my boss.

Yesterday Nikki threw Jessica's into coat the closet.

Adrian passed Lillian's to note his friend.

Yesterday I shared Ashley's with secret the teacher. Yesterday I took Leslie's to furniture the basement. Yesterday Julian offered Ginny's to help the lady. Yesterday I left Miriam's in sugar the cabinet.

The announcer acknowledged Roger's presence to the audience. The announcer acknowledged Roger's to presence the audience