

## 1 The English causative-inchoative alternation

### 1.1 The beginning of the story

#### El-Nabih (2010)

Most of the discussion here is based on this dissertation:

El-Nabih, Hassan (2010). *The acquisition of the English causative-inchoative alternation by Arabic native speakers*. Ph.D. dissertation, Boston College.

#### Alternation

In English, there are many verbs that “alternate”—the same verb can be used two different ways, one transitive and one intransitive:

- (1) English causative-inchoative alternation
  - a. Tom broke the cup. (Causative)
  - b. The cup broke. (Inchoative)

The story begins with the observation that Palestinian Arabic native speakers learning English will often judge sentences like (1b) to be ungrammatical, preferring the passive (*The cup was broken*).

#### Unaccusatives and alternation

The verbs that allow this alternation are *unaccusatives*—those intransitive verbs that have only a “theme” (that is, the subject has something happen to it, rather than being an “agent” and causing something). The alternation can be thought of as a process of adding an agent to an unaccusative: *Tom broke the cup* is, more or less, “Tom caused the cup to break.” However, not all unaccusatives alternate.

- (2) Alternating unaccusatives: *break, open, melt*
- (3) Non-alternating unaccusatives: *happen, occur, appear*

## Passive

Turning an alternating unaccusative into a transitive verb is essentially *adding an agent*. This is kind of the reverse operation to what happens when you form a passive, which *removes the agent*. You can kind of “march them up to the top of the hill and march them down again” by passivizing a causativized unaccusative as well. But only if you can *form* a transitive.

- (4) a. The vase broke.
- b. Tom broke the vase.
- c. The vase was broken (by Tom).
- (5) a. The rabbit appeared.
- b. \* Tom appeared the rabbit.
- c. \* The rabbit was appeared (by Tom).

## Unergatives

Similarly, unergative verbs (the kind that only has one argument, and it is an agent) cannot be causativized (nor causativized then passivized).

- (6) a. The child laughed.
- b. \* Tom laughed the child.
- c. \* The child was laughed (by Tom).

## 1.2 Montrul (2000)

### English, Spanish, and Turkish as L2

Montrul (2000) investigates L2 acquisition of English, Spanish, and Turkish to determine how these alternations transfer. In particular, she focuses on two areas of potential transfer: “morphology,” and the “lexico-semantic interface.”

The idea: For a given basic verb meaning (“VERB”) that can be identified between the L1 and L2, the alternation pattern could be transferred (i.e. VERB participates in the causative-inchoative alternation), as could the morphological means of effecting the alternation (e.g., add a morpheme to the inchoative to get the causative).

### Spanish alternation

In Spanish, the transitive form is morphologically simple, but the intransitive form is complex (consisting of the reflexive clitic *se* and the verb root).

- (7) a. El enemigo hundió el barco.  
the enemy sank the ship  
'The enemy sank the ship.'
- b. El barco se hundió.  
the ship REFL sank  
'The ship sank.'

### Turkish alternation: causative pattern

In Turkish, the derivation can go either direction for verbs that alternate. The transitive form of some verbs is simple. . .

- (8) a. Düşman gemi-yi bat-ır-mış.  
enemy ship-ACC sink-CAUS-PAST  
'The enemy sank the ship.'
- b. \*Düşman gemi-yi bat-mış.  
enemy ship-ACC sink-PAST  
( 'The enemy sank the ship.' )

### Turkish alternation: anticausative pattern

. . . whereas the intransitive form of other verbs is simple.

- (9) a. Hırsız pencere-yi kır-dı.  
thief window-ACC break-PAST  
'The thief broke the window.'
- b. Pencere kır-ıl-dı.  
thief window-ACC break-PASS-PAST  
'The window broke.'

### Universal restrictions

There are some cross-linguistic commonalities in what can alternate. Some verbs are only transitive, some are only intransitive. The ones that alternate generally denote a change of state, with the transitive form having a causative meaning, and the intransitive form emphasizing the final state.

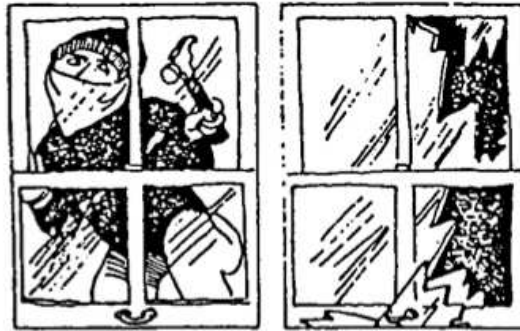
Also, unergative verbs never alternate (*\*The dentist cried the boy*), and some verbs (at least in English, Turkish, and Spanish) occur only in the transitive form (*\*The chicken cut*).

### Montrul's participants

Montrul's study involved the following set of participants, and three tests (one in English, one in Spanish, and one in Turkish). The main task was a picture judgment task.

	L2 English study	L2 Spanish study	L2 Turkish study
English	19 (controls)	31	18
Spanish	29	20 (controls)	24
Turkish	18	19	18 (controls)

### Montrul's transitive items



The thief broke the window.

-3 -2 -1 0 1 2 **3**

The thief made the window break.

**-3** -2 -1 0 1 2 3

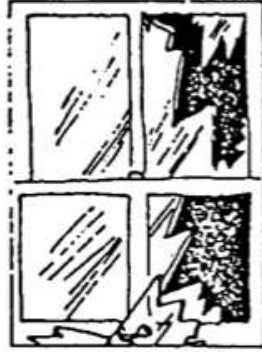
El ladrón rompió la ventana.

El ladrón hizo romper la ventana.

Hırsız pencere-yi kır-mış.

Hırsız pencere-yi kır-dır-mış.

### Montrul's intransitive items



The window broke.

-3 -2 -1 0 1 2 (3)

The window got broken.

(-3) -2 -1 0 1 2 3

La ventana rompió.

La ventana se rompió.

Pencere kır-mış.

Pencere kır-ıl- mış.

### Hypotheses

What Montrul wanted to explore was whether the (morphological) process transfers and whether the (lexico-semantic) alternation class transfers.

Montrul found that L2'ers would reject or accept alternations in ways that differed from their L1, so they are not transferring the alternation class. E.g., when the L2 was Spanish, neither English nor Turkish speakers rejected *The picture se painted*, though the Turkish speakers liked it more.

### Hypotheses

Spanish derives the inchoative from the transitive by adding a morpheme (*se*), which Turkish also does, but English doesn't. If "morphology transfers" then the Turkish pattern biases the Turkish speakers to accept these—*the picture se painted* had a chance because it is the right morphological form. The English speakers reject it because English doesn't use an extra morpheme to derive the inchoative from the transitive, so the *se* shouldn't be there according to their L1 morphological rules. Despite the fact that *paint* doesn't alternate in any of these languages.

### 1.3 Alternation in Arabic

#### Adding a causer

These same kinds of alternations are possible in Arabic, but the morphological patterns and verbs eligible to undergo these alternations differ. (Note on Arabic: the examples I have here are generally rendered in Modern Standard Arabic.)

#### Causative–inchoative via “anticausative”

English does not make a morphological distinction between the inchoative form and the causative form of the verb. Arabic, on the other hand, adds a “de-causativizing” morpheme to a transitive verb to get the inchoative (for most verbs).

- (10) a. fataha al-walad-u al-bab-a.  
opened the-boy-NOM the-door-ACC  
‘The boy opened the door.’
- b. in-fataha al-bab-u.  
ANTICAUS-opened the-door-NOM  
‘The door opened.’
- c. \* fataha al-bab-u.  
opened the-door-NOM  
(‘The door opened.’)

#### Side note: anticausative is different from passive

There is a separate construction for the passive. In the passive, the demoted agent is very rarely mentioned. The anticausative (but not the passive) allows modification by *bi-nafsihi* ‘by itself’ or *tilqa:’yyan* ‘spontaneously.’ The passive (but not the anticausative) allows modification by *’amdan* ‘on purpose’ or *bi’ihma:lin* ‘carelessly’—there is still semantically an agent around in the passive.

- (11) a. kasara al-walad-u al-finja:n-a.  
broke the-boy-NOM the-cup-ACC  
‘The boy broke the cup.’
- b. kurira al-finja:n-u.  
broke-PASS the-cup-NOM  
‘The cup was broken.’

### Causative–inchoative via causative morpheme

Arabic also has a less common pattern for some verbs, which essentially takes the inchoative as basic and adds a causative morpheme to form the causative.

- (12) a. thaba ath-thalj-u.  
melted the-ice-NOM  
'The ice melted.'
- b. a-thaba-t ash-shams-u ath-thalj-a.  
CAUS-melted-FEM the-sun-NOM the-ice-ACC  
'The sun melted the ice.'
- c. \* thaba-t ash-shams-u ath-thalj-a.  
melted-FEM the-sun-NOM the-ice-ACC  
'The sun melted the ice.'

### Causative–inchoative via suppletion/zero-derivation

And, rare verbs alternate via suppletion, zero-derivation.

- (13) a. ghala al-ma:'-u.  
boiled the-wather-NOM  
'The water boiled.'
- b. ghala ar-rajul-u al-ma:'-a.  
boiled the-man-NOM the-water-ACC  
'The man boiled the water.'
- (14) a. qatala al-ma:'-u.  
boiled the-wather-NOM  
'The mouse died.'
- b. qatala al-qiT-u al-fa'r-a.  
killed the-cat-NOM the-mouse-ACC  
'The cat killed the mouse.'

### MSA vs. Palestinian Arabic

One difference between MSA and PA (apart from lexical differences) is that the anticausative inchoative and the passive are identical in form.

- (15) a. kasar l-walad l-finja:n-a.  
broke the-boy the-cup  
'The boy broke the cup.' (PA)

- b. (i)n-kasar l-finja:n.  
broke-PASS the-cup  
'The cup was broken.' (PA)
- c. (i)n-kasar l-finja:n.  
ANTICAUS-broke the-cup  
'The cup broke.' (PA)

### Verb types

- Type-1 alternating unaccusatives (Arabic: intransitive = transitive + morphology) (*open, close, break*)
- Type-2 alternating unaccusatives (Arabic: transitive = intransitive + morphology) (*melt, freeze, sink*)
- Non-alternating unaccusatives (Arabic: transitive = intransitive + morphology) (*arrive, appear, happen*)
- Unergatives (Arabic: transitive = intransitive + morphology) (*laugh, cry, swim*)

### Contexts

Each item had an introductory context setting a scenario. They were:

- P–P (encourages passive, structure is passive)
- P–I (encourages passive, but structure is intransitive)
- I–I (encourages intransitive, structure is intransitive)
- I–P (encourages intransitive, but structure is passive)
- C–C (encourages causative, structure is causative)

### Examples with contexts

(16) P–P

- a. Suddenly there were a lot of flies outside. So immediately all the windows were
- b. \* Mary was very depressed, and her friends wanted to help. To make her feel better, Mary was laughed.



(17) P-I

- a. \* Two customers complained about their food. Therefore, some butter melted on the fish in order to improve the taste.
- b. Jennifer got seriously ill. Her husband called an ambulance, and soon she arrived at the hospital.

#### Examples with contexts

(18) I-I

- a. My aunt had a beautiful vase, but it was cracked. Yesterday the vase broke.
- b. Pablo studied very hard, but he got a low grade. He cried when he heard the news.

(19) I-P

- a. \* Mary put some orange juice into the freezer. The juice was frozen gradually.
- b. \* Yesterday the weather was very foggy. Several accidents were happened.

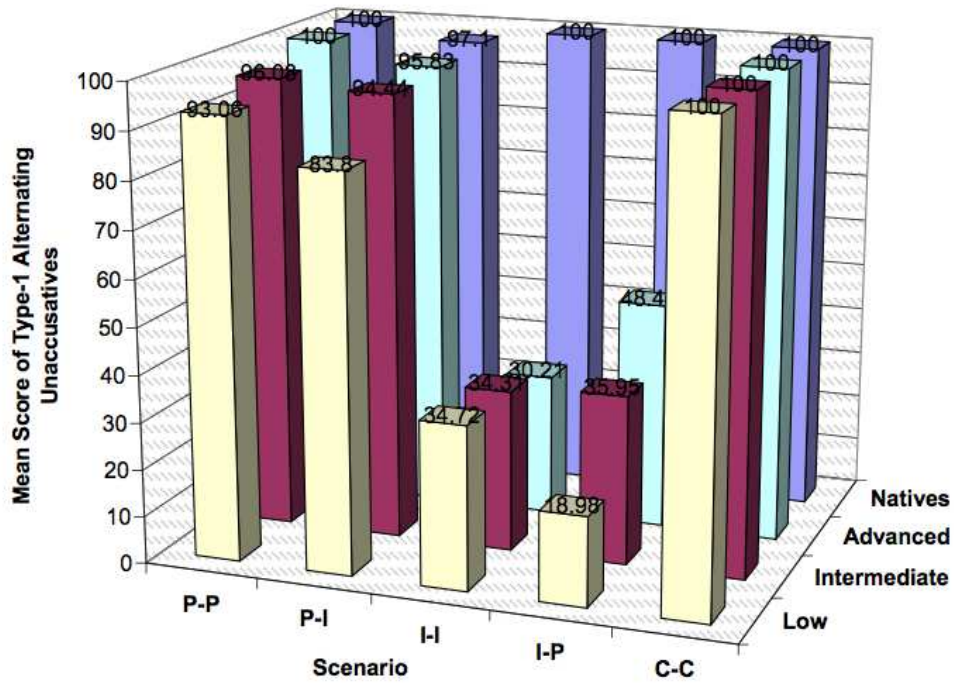
#### Examples with contexts

(20) C-C

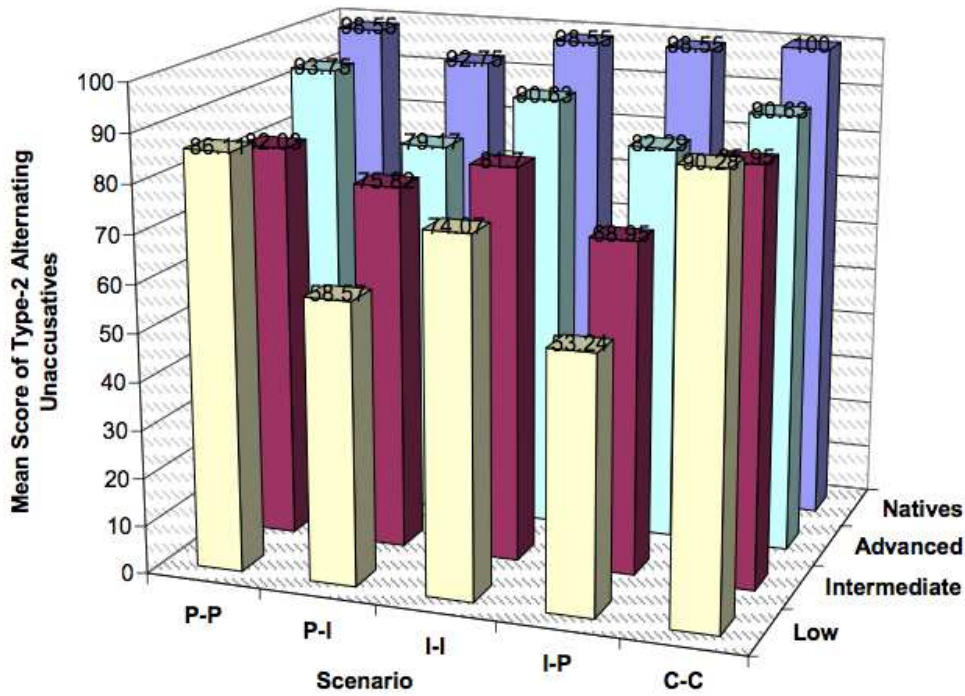
- a. The fishermen jumped into the sea before the enemy attacked their boat. However, a rocket sank the fishing boat.
- b. \* The magician performed several tricks. In one of the tricks, he appeared a bird from the box.

## 1.4 Results

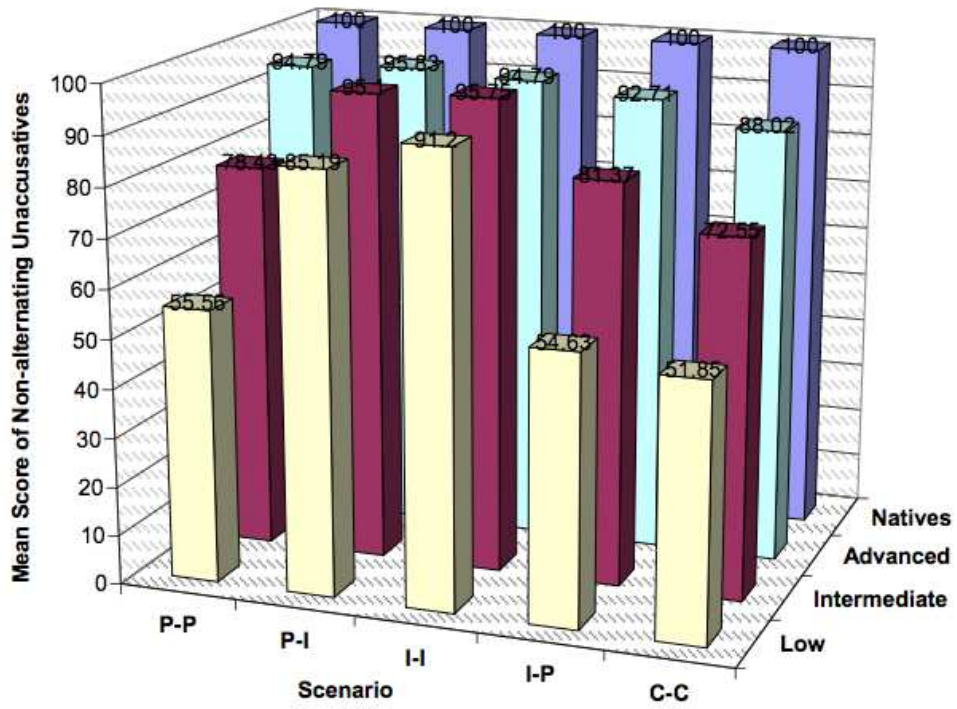
### Type 1 alternating



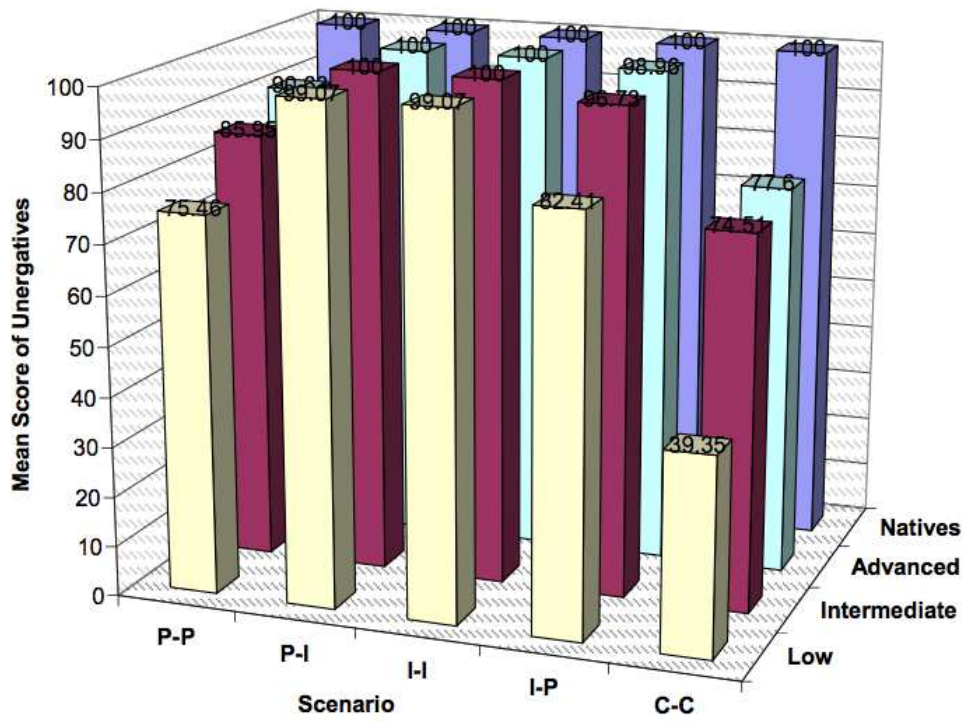
**Type 2 alternating**



**Non-alternating**



### Unergative



### Results

Type-1 alternating unaccusatives caused the greatest “difficulty,” non-alternating unaccusatives caused the least.

## **References**

Montrul, Silvina A. 2000. Transitivity alternations in L2 acquisition. *Studies in Second Language Acquisition* 22: 229–273.