

Focus on Demonstratives: Experiments in English and Turkish

Definiteness Across Domains (4th Meeting)

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What is this talk about?

Demonstratives

The starting point of any discussion of demonstratives in linguistics and philosophy is often Kaplan (1989), which focused on their deictic uses.

- Deictic demonstratives refer to a contextually salient entity accompanied by a demonstration such as pointing, eye gaze, *etc.* in the direction of the entity.

- (1) a. That_→ is a book. [→ indicates accompanying gesture]
b. [That dog]_→ looks happy.

Demonstratives

More recent studies have illustrated that demonstratives are not restricted to deictic uses:¹

Anaphoric readings:

(2) I saw a dog. **That dog** looked happy.

(Ahn and Davidson 2018: 1)

Bound variable readings:

(3) Every dog in my neighborhood, even the meanest, has an owner who thinks that **that dog** is a sweetie.

(Roberts 2002: 5)

Demonstratives essentially taken to be *marked* definites.

¹King 2001; Abbott 2002; Roberts 2002; Wolter 2006; Elbourne 2008; Nowak 2014; Hinterwimmer 2015; Ahn and Davidson 2018; Ahn 2022

Demonstratives vs. Definites

BUT demonstratives are not always a natural/ preferred option in anaphoric contexts, unlike definites:

- when two discourse referents are introduced in the preceding sentence

(4) I saw a dog and a cat. **The/??That dog** looked happy.

- Previous accounts fail to account for this contrast at first sight at least.

Demonstratives vs. Bare Nouns

- For a determinerless language, Mandarin, where bare nouns serve as definite descriptions, divergent patterns have been reported in the use of bare nouns and demonstratives in anaphoric contexts.

Demonstratives vs. Bare Nouns

Jenks (2018):

- Bare nouns function as weak definites, while demonstratives denote strong definites.
- In the sense of Schwarz (2009): anaphoric definites, i.e., strong definites, are differentiated from uniqueness-based definites, i.e., weak definites, solely by the presence of an index argument.
- Then, in Mandarin (which one might generalize to other languages with bare definites and overt demonstratives), demonstratives differ in adding an index argument.

Demonstratives vs. Bare Nouns

In their response to Jenks (2018), Dayal and Jiang (2021):

- Based on new data, in Mandarin, bare nouns can function as both weak and strong definites, akin to definite descriptions in English, whereas demonstratives behave as standard demonstratives.
- BUT they identify what appears to be the reverse of the English contrast in (4) (repeated below) between demonstratives and (definite) bare nouns in Mandarin.

(5) I saw a dog and a cat. **The/??That dog** looked happy.

Demonstratives vs. Bare Nouns

Dayal and Jiang (2021: 23):

(6) Jiaoshi li zuo zhe yi ge nansheng yi ge nüsheng.
classroom inside sit PROG one CL boy one CL girl
'There is a boy and a girl sitting in the classroom.'

a. Nüsheng zuo zai nansheng pangbian.
girl sit DUR boy side
'The girl was sitting next to the boy.'

b. Wu zuotian yudao {#Ø/ na ge} nansheng.
I yesterday meet that CL boy
'I met the boy yesterday.'

- If the initial situation in (6) remains unchanged, as in (6a): the simpler option, the bare noun is preferred.
- If the situation is extended (e.g., including a new participant), as in (6b): the demonstrative is preferred.

Demonstratives vs. Bare Nouns

The situation extension favors demonstratives over definites.

- Definites might end up infelicitous if the extension in situation is drastic enough to fail the uniqueness requirement of the definite.
- Demonstratives would remain felicitous, because they have an anti-uniqueness requirement, and this requirement can be satisfied in a wider situation.
- **Anti-uniqueness** (Robinson, 2005): a demonstrative requires that its referent not be the only member in the set denoted by its NP complement (*#That sun is hot* vs. *The sun is hot*).

What is missing?

- Dayal and Jiang do not linguistically manipulate and control for single vs multiple referents.
- They also note that definites and demonstratives are equally available in anaphoric contexts in English, demonstratives suggesting a slight sense of contrast:

(7) A woman and a man came into the room. **The woman/That woman** sat down. (Dayal and Jiang 2021: 20)
- But no discussion about how English definites and demonstratives pattern in comparison to Mandarin, particularly in contexts where the situation may involve a new participant.

Our experiment

Goals:

- experimentally evaluate the robustness of the following contrast:
(8) I saw a dog and a cat. The/??That dog looked happy.
- tease apart the effects of **multiple discourse referents** and the presence or absence of **a new situation** in the follow-up sentence

Our experiment:

- crosses these two variables hypothesized to affect the acceptability of anaphoric demonstratives
- in both a language with a definite determiner (English) and one without (Turkish)

Our findings:

- ▶ The acceptability of demonstratives depends on ...
 - ★ the number of discourse referents introduced in the 1st sentence (one or multiple)
 - ★ the situation type of the 2nd sentence (same or new)
- ▶ This is regardless of the presence of a definite determiner in the language.

Our claim:

- ★ Adopting a focus-driven information structural approach, demonstratives are fundamentally different from definites in evoking focus alternatives on this index argument.

Our Experiment

What do we test?

- Two experiments: one in English and one in Turkish
- Testing the acceptability of definite and demonstrative descriptions in anaphoric contexts.

Things to know about Turkish:

- SOV language with nominative-accusative case alignment
- Definite descriptions through bare nouns due to the lack of an overt definite determiner
- Bare singulars convey definite descriptions in case-marked argument positions, but weak indefinites when non-case-marked due to pseudo-incorporation (e.g., Öztürk 2005 and Sağ 2022)
- Our experiment involved no pseudo-incorporated nouns, thereby removing any potential ambiguity in interpreting bare singulars.
- Note: There is evidence that subject arguments in Turkish carry null nominative case.

2x2x2 design testing ...

- the acceptability of definite and demonstrative descriptions in anaphoric contexts (**def vs dem**)

that differed on ...

- the number of competing discourse referents introduced in the 1st sentence (**one NP vs two NP**)
- situation type in the 2nd sentence
(**new situation vs same situation**)

Experimental Items

- Participants read a short context scenario sentence, in bold, at the top of the screen, and were asked to rate the two possible continuations (**def** and **dem**). ~> 1st sentence
- The continuations were always presented below the context in a random order with continuous response bars underneath them. ~> 2nd sentence
- The slider bar responses were stored as an integer from 0 - 100, with 0 being “least natural” and 100 being “most natural”.

Screenshot of experiment for English (top) and Turkish (bottom) in 2NP New Situation condition

A boy and a girl entered the classroom.

I had noticed that boy at a coffee shop yesterday.



Least natural

Most natural

I had noticed the boy at a coffee shop yesterday.



Least natural

Most natural

Sınıfa bir kız ve bir oğlan girdi.

O oğlanı daha önce bizim kafede görmüştüm.



en az doğal

en doğal

Oğlanı daha önce bizim kafede görmüştüm.



en az doğal

en doğal

Dual Representation Design

Following Marty et al. (2020), a dual representation design:

- Even subtle contrasts between conditions can be drawn out more effectively via joint presentation of conditions with a continuous scale and labeled endpoints.
- Allowing direct comparisons between conditions on the same screen attune participants to small judgment differences.
- It provides a benefit of highlighting the aspect of the judgement which the experimenter intends the participant to focus on (not, for example, choices of nouns and verbs, overall likelihood of the scenario, etc.)

Materials

- 12 experimental items across 4 conditions
- 12 fillers —also functioned as catch trials
- Items balanced for both animacy and syntactic positions of the target NPs
- In the two referent conditions (Two NP), both target NPs were introduced in the same syntactic positions.
- New situations (NS) always differed from same situations (SS) in being marked by both a new event participant (e.g. speaker or someone else) and a temporal change from the scenario in the context situation.
- Latin Square design: each participant saw one condition each from the 12 items, and conditions were evenly presented across participants.

English Experimental Items

A full example of experimental items across all the conditions in English:

One NP conditions:

- (9) {[*OneNP* A boy]} entered the classroom.
- a. The/That boy sat down in the front row. **SS**
 - b. I had noticed the/ that boy at a coffee shop yesterday. **NS**

Two NP conditions:

- (10) {[*TwoNP* A boy and a girl]} entered the classroom.
- a. The/That boy sat down in the front row. **SS**
 - b. I had noticed the/ that boy at a coffee shop yesterday. **NS**

One NP conditions:

- (11) Sınıf-a {[*OneNP* bir oğlan] gir-di.
class-DAT one boy enter-PAST
'A boy entered the classroom.'
- a. { \emptyset /O} oğlan ön sıra-lar-dan biri-ne otur-du. **SS**
 \emptyset /that boy front seat-PL-ABL one.of-DAT sit-PAST
'The/That boy sat down in one of the front seats.'
- b. { \emptyset /O} oğlan-ı daha önce bizim kafe-de
 \emptyset /that boy-ACC before our cafe-LOC
gör-müş-tü-m. **NS**
see-ANT-PAST-1SG
'I had seen the/the boy at our coffee shop before.'

Two NP conditions:

- (12) Sınıf-a [_{TwoNP} bir kız ve bir oğlan]} gir-di.
class-DAT one girl and one boy enter-PAST
'A girl and a boy entered the classroom.'
- a. { \emptyset /O} oğlan ön sıra-lar-dan biri-ne otur-du. **SS**
 \emptyset /that boy front seat-PL-ABL one.of-DAT sit-PAST
'The/That boy sat down in one of the front seats.'
- b. { \emptyset /O} oğlan-ı daha önce bizim kafe-de
 \emptyset /that boy-ACC before our cafe-LOC
gör-müş-tü-m. **NS**
see-ANT-PAST-1SG
'I had seen the/tha boy at our coffee shop before.'

Participants

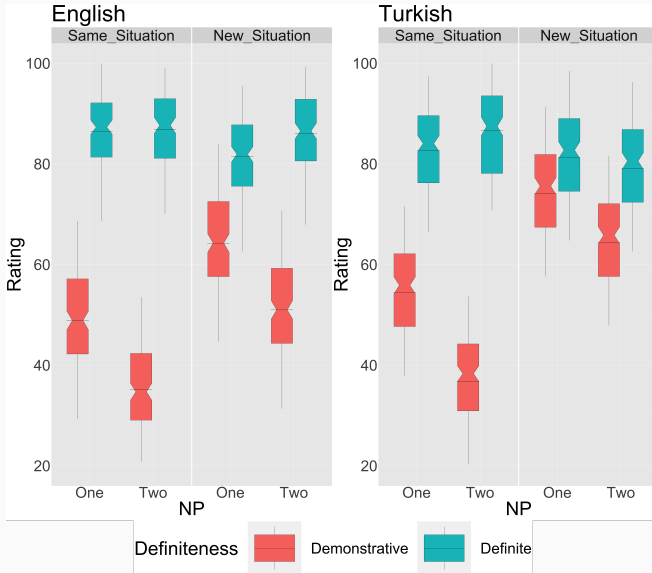
- Participants ($N = 55$ for English and $N = 62$ for Turkish) were recruited via Prolific.co. and paid.
- The survey was presented via Qualtrics software and took about 15 minutes to complete.
- Data from participants were removed from all further analysis if they did not rate ungrammatical sentences in the catch trials in the bottom half of the response bar (removal of 9 participants in English and 2 in Turkish).

Results

Overall Results

- Linear mixed-effects model in R, with experimental conditions as predictors and random by-participant and by-item slopes for experimental conditions. (`fit = lmer(Rating ~ Definiteness*NP*Situation + (1|ID) + (1|Scenario), data=dataframe)`)
- Significant positive main effect of Definites vs. Demonstratives ($p < 0.05$) in both English and Turkish
- Repeated our analyses on both our full data and on the subset of data with only demonstratives
- In each language, we generally found the same pattern both in the overall dataset and within demonstrative responses.

Results from English and Turkish Experiments



Results from English and Turkish Experiments

Findings:

- ▶ Main effect of number of prior referents:
 - Demonstratives were significantly more acceptable in **One NP** contexts.
- ▶ Main effect of situation:
 - Demonstratives were significantly more acceptable in **New Situations**.
- ▶ No interaction between New Situation and Two NP cases in English ($p = 0.61$), but the Turkish data showed an interaction between the two ($p = 0.01$) in this model.

Statistical Summary of Results

English		
<i>parameter</i>	<i>estimate</i>	<i>p-value</i>
Definites (main effect)	39.412	p < 0.05
Demonstratives		
2 NP	-15.069	p < 0.05
New Situation	15.392	p < 0.05
New Situation*2 NP	1.803	p = 0.61

Turkish		
<i>parameter</i>	<i>estimate</i>	<i>p-value</i>
Definites (main effect)	28.548	p < 0.05
Demonstratives		
2 NP	-17.913	p < 0.05
New Situation	19.723	p < 0.05
New Situation*2 NP	8.092	p = 0.01

Discussion

1. Participants' ratings of continuations using definite descriptions were generally highly acceptable.
 - unsurprising given the unique, previously mentioned matching NP.
2. Continuations using demonstratives showed acceptability that ranged from ...
 - near definite levels in the case of a single NP in a new situation
 - to much lower levels in the case of two NPs in a same situation

Our findings revealed that the acceptability of a demonstrative can depend on whether ...

- one or two NPs are introduced in the initial sentence
- the follow-up sentence introduces a clearly new situation or not

The pattern is robustly borne out irrespective of how languages choose to express definiteness—with overt lexical exponent, as in English, or with bare nouns, as in Turkish.

Not clear why English and Turkish differed in interaction between New Situation and Two NP cases.

- We further analyzed data from each language via an *anova* model comparison, finding the model with an interaction (NP*Situation) to be significantly better in accounting for variance in both English and Turkish.

A focus-driven Approach to Demonstratives

The semantics of demonstratives and definites

What do our results mean for the semantics of demonstratives and definites?

Our starting point is the assumptions made in Dayal and Jiang (2021):

- ▶ In anaphoric contexts both demonstratives and definites involve an anaphoric index argument, building on Schwarz's (2009) analysis of strong vs. weak definites.
- ▶ Demonstratives have an anti-uniqueness presupposition that *can* be satisfied in a larger situation (introduced by the 2nd sentence) despite the value of the demonstrative expression itself being evaluated in the smaller situation (introduced by the 1st sentence).

Slightly modifying their view, we instead argue that ...

- ▶ Demonstratives are **evaluated in the maximal situation**, wherein their anti-uniqueness requirement *must* also be met.
- ▶ A Maximal situation s is $s_1 \oplus s_2$, where
 - s_1 : the situation in which the initial sentence is evaluated
 - s_2 : the new situation introduced in the subsequent sentence, if it involves an additional participant and a temporal change from the previous situation

Our Proposal

Definite and demonstrative determiners in anaphoric contexts:

$$(13) \quad \llbracket \text{DEF} \rrbracket = \lambda s. \lambda y. \lambda P : \exists! x [P_s(x) \wedge x = y]. \iota x [P_s(x) \wedge x = y]$$

(Schwarz, 2009)

\rightsquigarrow takes a situation s and an index argument y besides a property P and returns the unique individual that both satisfies P and equals y in s , if defined

$$(14) \quad \llbracket \text{DEM} \rrbracket = \lambda s. \lambda y. \lambda P : \text{Maximal}(s) \wedge \exists! x [P_s(x) \wedge x = y] \wedge |P_s| > 1.$$
$$\iota x [P_s(x) \wedge x = y]$$

\rightsquigarrow differs in definedness conditions:

- ▶ the existence of a unique individual that both satisfies P and equals y in $s_1 \oplus s_2$ *uniqueness*
- ▶ the set denoted by P must have cardinality greater than 1 in $s_1 \oplus s_2$. *anti-uniqueness*

We propose a focus-driven information structural approach in the sense of Rooth (1992) and Roberts (2002) to demonstratives:

- The definite determiner is used in **the absence of focus** in the DP or when **focus is on the entire DP**.
- The demonstrative is used when **focus is within the DP on its index argument**.
 - The situation argument combines with the demonstrative D before the property argument (Elbourne, 2005), and thus the semantic focus on the index prosodically falls on the demonstrative D: THAT boy

Definites: no focus with DP, e.g. One NP cases

- no expectation for DP focus at all in One NP cases.

(15) [*OneNP* A boy] entered the classroom.

- The boy sat down in the front row. **(Same Situation)**
- I had noticed the boy at a coffee shop yesterday. **(New Situation)**

(16) the boy/Ø oğlan

$$\llbracket \llbracket \text{DEF } 1 \rrbracket \text{ boy} \rrbracket^{\circ} = \iota x [\text{boy}(x) \wedge x = g(1)]$$

Definites: focus on the DP, e.g., Two NP cases

- In Two NP cases the natural focus is on the DP itself

(*the boy* as opposed to *the girl*)

(17) [_{TwoNP} A boy and a girl] entered the classroom.

- The boy sat down in the front row. **(Same Situation)**
- I had noticed the boy at a coffee shop yesterday. **(New Situation)**

(18) the BOY/Ø OĞLAN

$\llbracket \llbracket \text{DEF } 1 \rrbracket \text{ boy} \rrbracket_F \rrbracket^o = \iota x [\text{boy}(x) \wedge x = g(1)]$

$\llbracket \llbracket \text{DEF } 1 \rrbracket \text{ boy} \rrbracket_F \rrbracket^f =$

$\{\iota x [\text{boy}(x) \wedge x = g(1)], \iota x [\text{girl}(x) \wedge x = g(2)]\}$

Demonstratives: focus on the index, e.g., One NP New Situation cases
(*that boy* as opposed to *another boy*)

(19) [*One*_{NP} A boy] entered the classroom. I had noticed that boy at a coffee shop yesterday. **(New Situation)**

(20) THAT boy/O oğlan
 $\llbracket \llbracket \text{DEM } 1_F \rrbracket \text{ boy} \rrbracket^o = \iota x [\text{boy}(x) \wedge x = g(1)]$
 $\llbracket \llbracket \text{DEM } 1_F \rrbracket \text{ boy} \rrbracket^f =$
 $\{\iota x [\text{boy}(x) \wedge x = g(1)], \iota x [\text{boy}(x) \wedge x = g(3)]\}$

Demonstratives

- **Degraded in Two NP cases:** biases towards the placement of focus on the whole DP

(21) [*TwoNP* A boy and a girl] entered the classroom.

- a. That boy sat down in the front row. (**Same Situation**)
- b. I had noticed that boy at a coffee shop yesterday. (**New Situation**)

- **Degraded in Same Situation cases:** continuation with a new situation is most compatible with considering a maximal situation involving other boys (e.g., $g(3)$)

(22) [*OneNP* A boy] entered the classroom. That boy sat down in the front row. (**Same Situation**)

- ▶ That we find the same pattern in languages that express definites through articles (English) or bare nouns (Turkish) reinforces the potential crosslinguistic breadth of our proposal.

- ▶ That we find the same pattern in languages that express definites through articles (English) or bare nouns (Turkish) reinforces the potential crosslinguistic breadth of our proposal.

But how about the case of Mandarin?

- (23) Jiaoshi li zuo zhe yi ge nansheng yi ge nüsheng.
classroom inside sit PROG one CL boy one CL girl
'There is a boy and a girl sitting in the classroom.'
- a. Nüsheng zuo zai nansheng pangbian.
girl sit DUR boy side
'The girl was sitting next to the boy.'
- b. Wu zuotian yudao {#Ø/ na ge} nansheng.
I yesterday meet that CL boy
'I met the boy yesterday.'

We suggest that the contrast between definites and demonstratives (23b) is obfuscated since ...

- ▶ Bare nouns in Mandarin can also have generic readings owing to the lack of tense and aspectual marking, as well as indefinite readings in postverbal positions (Cheng and Sybesma, 1999).
- ▶ Demonstratives, though, would be unambiguously anaphoric.

Deriving the Focus Alternatives

We proposed that a demonstrative is evaluated in the maximal situation.

- to derive the desired focus alternatives, involving $g(3)$ (another boy) as an alternative to $g(1)$ (that boy)
- Imagine DemP is evaluated in s_1 : if $g(3)$ is not explicitly introduced in s_1 (the case in our experimental items), the DemP will fail to involve $g(3)$ in the alternative set (the focus value).
- If the demonstrative is always evaluated in the maximal situation $s_1 \oplus s_2$, it will still refer to $g(1)$ introduced in s_1 and will be able to involve other boys that are part of the new situation s_2 in the alternative set.

Deriving the Focus Alternatives

In fact, $g(3)$ does not have to be explicitly introduced in the discourse.

- The question is how easily we can consider the potential presence of other boys in the situation where the demonstrative is evaluated.

We conjecture that ...

- $s_1 \oplus s_2$ is more compatible with considering alternative boys than s_1 alone, when such boys are not introduced explicitly in the discourse.
- When the 2nd sentence introduces new participants together with a temporal change from the previous situation, it is more likely that other boys are now also part of it.

Defining a New Situation

Caveat: Defining a new situation in a manner that distinguishes it from the previously introduced situation is not entirely straightforward.

A minimal situation encompasses only the individuals, properties, and relationships necessary to render a particular proposition true (Kratzer, 1989).

- Then, what we refer to as the “same situation” in our trials should be considered an extension of the minimal situation introduced in the 1st sentence.

Defining a New Situation

- But our experiment tests the impact of a significant situational change in the second sentence on the acceptability of demonstratives.
- Therefore, we attempt to differentiate between a minimal situational extension and a significant one in the 2nd sentence to the best of our ability.
- In line with Dayal and Jiang, though, we label these as “same situation” vs. “new situation” rather than using terms like “minimal extension” vs. “significant extension,” for instance.
- We consider the situation introduced in the 1st sentence to remain unchanged (minimal/same) in the 2nd sentence unless new discourse referent(s) and a temporal change are both involved (significant/new).

A Further Case to Consider

Cases of Multiple Anaphoric DPs

- Our experimental items always involved only one anaphoric DP in the follow-up sentence regardless of whether the initial sentence introduced one or two discourse referents.
- Hinterwimmer (2019) and Hinterwimmer and Patil (2022) recently discuss a contrast between definite and demonstrative descriptions in continuations with multiple anaphoric DPs.

Cases of Multiple Anaphoric DPs

They found that sentences with two anaphoric demonstrative descriptions (24b) are less acceptable than both ...

- sentences with two anaphoric definite descriptions (24a), and
- sentences where one of the two referents introduced in the previous sentence is picked up by a demonstrative description, while the other one is picked up by a definite description [(24c) and (24d)].

Cases of Multiple Anaphoric DPs

Hinterwimmer and Patil (2022: 3)

- (24)
- a. Last night, a dog chased a cat in front of my house. Fortunately, [the cat] was pretty fast, while [the dog] was rather slow.
 - b. Last night, a dog chased a cat in front of my house. ??Fortunately, [that cat] was pretty fast, while [that dog] was rather slow.
 - c. Last night, a dog chased a cat in front of my house. Fortunately, [that cat] was pretty fast, while [the dog] was rather slow.
 - d. Last night, a dog chased a cat in front of my house. Fortunately, [the cat] was pretty fast, while [that dog] was rather slow.

Hinterwimmer and Patil (2022):

- Utterance of a demonstrative description implicitly sets up a comparison between the referent of that demonstrative and all other entities that satisfy the predicate denoted by the NP-complement of the demonstrative determiner.

A Pragmatic Account

- (25) Last night, a dog chased a cat in front of my house.
??Fortunately, [that cat] was pretty fast, while [that dog] was rather slow.
- The particular cat denoted by the first demonstrative is implicitly contrasted with all other cats in the world of evaluation and the same process happens with the second demonstrative.

A Pragmatic Account

- (25) Last night, a dog chased a cat in front of my house.
??Fortunately, [that cat] was pretty fast, while [that dog] was rather slow.
- The particular cat denoted by the first demonstrative is implicitly contrasted with all other cats in the world of evaluation and the same process happens with the second demonstrative.
 - Since the two entities ('that cat' and 'that dog') are referred to by DPs that only differ with respect to the nominal predicates, they are automatically implicitly contrasted with each other as well.
 - This is unnecessarily complex and thus dispreferred.

(26) Last night, a dog chased a cat in front of my house. Fortunately, [the cat] was pretty fast, while [the dog] was rather slow.

- Only one implicit contrast is invoked: the contrast between the unique cat and the unique dog in the given situation.

A Pragmatic Account

- (27) a. Last night, a dog chased a cat in front of my house.
Fortunately, [that cat] was pretty fast, while [the dog] was rather slow.
- b. Last night, a dog chased a cat in front of my house.
Fortunately, [the cat] was pretty fast, while [that dog] was rather slow.
- Only the contrast between the entity denoted by the demonstrative and the individuals in the set denoted by its NP complement.
 - No implicit contrast between the two anaphoric entities ('that dog' and 'the cat', and vice versa).

Comparison with our Study

- Our proposal aligns with Hinterwimmer and Patil's proposal in that a demonstrative establishes a contrast between the referent of that demonstrative and other entities denoted by the NP-complement of the demonstrative determiner.

Comparison with our Study

- Our proposal aligns with Hinterwimmer and Patil's proposal in that a demonstrative establishes a contrast between the referent of that demonstrative and other entities denoted by the NP-complement of the demonstrative determiner.
- However, it is uncertain how their implementation can account for our Same Situation, Two NP trials.

- (28) a. I saw a dog and a cat. The dog looked happy.
b. I saw a dog and a cat. ??That dog looked happy.

Comparison with our Study

We seem to have contradictory findings:

- We found that if two discourse referents are introduced in the preceding sentence, using a demonstrative to pick one of them up anaphorically is degraded.

Comparison with our Study

We seem to have contradictory findings:

- We found that if two discourse referents are introduced in the preceding sentence, using a demonstrative to pick one of them up anaphorically is degraded.
- In Hinterwimmer and Patil (2022), examples in which one of the two referents introduced in the previous sentence is picked up by a demonstrative, while the other one is picked up by a definite are found to be felicitous.

(29) Last night, a dog chased a cat in front of my house. Fortunately, [that cat] was pretty fast, while [the dog] was rather slow.

Our experimental designs differed in one crucial way:

- Our experiment always introduced both referents in the same syntactic position (subject or object), necessarily pitting them against each other as focus competitors.
- The sentences reported in Hinterwimmer and Patil (2022) introduced them in different syntactic positions, one referent in the subject position and one in the object position.

Comparison with our Study

Why does that matter?

- The two discourse referents introduced in their context sentences were not focus competitors of each other.

Consider the following:

(30) A bear killed a man.

- possible focus alternatives in the subject position:
{ a bear, a lion, a tiger, ... }
- possible focus alternatives in the object position:
{ a man, a woman, a child, ... }
- The two discourse referents 'a bear' and 'a man', are not (readily) focus competitors of each other.

Comparison with our Study

So, no bias for DP focus here:

- (31) Last night, a dog chased a cat in front of my house. Fortunately, [that cat] was pretty fast, while [the dog] was rather slow.

Summary

Our study, in a nutshell

- The acceptability of demonstratives depends independently on the introduction of **one or two NPs** in the initial sentence and the presence or absence of a **new situation** in the follow-up sentence.
- Assuming that both definites and demonstratives include an index argument in anaphoric contexts, we argue that the key difference of demonstratives is their ability to evoke focus alternatives on the index argument.

Concluding Remarks

- Our study naturally has limits. For example, participants judged demonstratives directly against definites, which is likely to highlight the contrast between the two.
- Nevertheless, we view our conclusions as broadly complementing work on the demonstrative spectrum, proposing focus placement as playing a critical role in the distinction between definites and demonstratives.
- The consistent pattern observed in languages that express definites through articles (English) or bare nouns (Turkish) enhances the potential applicability of this proposal across different languages.

Thank you!

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References

- Abbott, B. (2002, 12). Donkey demonstratives. *Natural Language Semantics* 10, 285–298.
- Ahn, D. (2022). Indirectly direct: An account of demonstratives and pointing. *Linguistics and Philosophy* 45, 1345 – 1393.
- Ahn, D. and K. Davidson (2018). Where pointing matters: English and Korean demonstratives. *Proceedings of North East Linguistic Society* 48.
- Cheng, L. L.-S. and R. Sybesma (1999). Bare and not-so-bare nouns and the structure of np. *Linguistic inquiry* 30(4), 509–542.
- Dayal, V. and L. J. Jiang (2021). The puzzle of anaphoric bare nouns in mandarin: A counterpoint to index! *Linguistic Inquiry* 54, 147–167.

- Elbourne, P. (2005). *Situations and individuals*.
- Elbourne, P. (2008). Demonstratives as individual concepts. *Linguistics and Philosophy* 31, 409–466.
- Hinterwimmer, S. (2015). A Unified Account of the Properties of German Demonstrative Pro- nouns. P. Grosz, P. Patel-Grosz and I. Yanovich (eds). *The Proceedings of the Workshop on Pronominal Semantics at NELS 40*.
- Hinterwimmer, S. (2019, Jul.). How to point at discourse referents: On anaphoric uses of complex demonstratives. *Proceedings of Sinn und Bedeutung* 23(1), 495–514.
- Hinterwimmer, S. and U. Patil (2022). The interpretative options of anaphoric complex demonstratives. *Glossa: a journal of general linguistics* 7(1).

- Jenks, P. (2018). Articulated definiteness without articles. *Linguistic Inquiry* 49(3), 501–536.
- Kaplan, D. (1989). Demonstratives: An essay on the semantics, logic, metaphysics and epistemology of demonstratives and other indexicals. In J. Almog, J. Perry, and H. Wettstein (Eds.), *Themes From Kaplan*, pp. 481–563. Oxford University Press.
- King, J. (2001). *Complex Demonstratives*. Cambridge, MA: MIT Press.
- Kratzer, A. (1989). An investigation of the lumps of thought. *Linguistics and philosophy* 12(5), 607–653.
- Marty, P., E. Chemla, and J. Sprouse (2020). The effect of three basic task features on the sensitivity of acceptability judgment tasks. *Glossa: a journal of general linguistics (2016-2021)* 5(1), 72.
- Nowak, E. (2014). Demonstratives without rigidity or ambiguity. *Linguistics and Philosophy* 37, 409–436.

- Roberts, C. (2002). Demonstratives as definites. In K. van Deemter and R. Kibble (Eds.), *Information Sharing: Reference and Presupposition in Language Generation and Interpretation*, pp. 89–196. Stanford: CSLI Press.
- Robinson, H. M. (2005). *Unexpected (in) definiteness: Plural generic expressions in Romance*.
- Rooth, M. (1992). A theory of focus interpretation. *Natural language semantics* 1(1), 75–116.
- Sağ, Y. (2022). Bare singulars and singularity in turkish. *Linguistics and Philosophy* 45(4), 741–793.
- Schwarz, F. (2009). *Two types of definites in natural language*. Ph. D. thesis.
- Wolter, L. (2006). *That's that: The semantics and pragmatics of demonstrative noun phrases*. Ph. D. thesis.

Öztürk, B. (2005). *Case, Referentiality, and Phrase Structure*.
Amsterdam: John Benjamins Publishing Company.