

ON THE USE OF ENGLISH DEMONSTRATIVES

“THIS” AND “THAT”

You are being invited to take part in a research study. This study consists of 20 scenarios and 4 closed-ended survey questions following each scenario about the use of the English demonstrative expressions “this” and “that”. The study should take approximately 25 minutes to complete.

The study begins with an Instructions screen. Please, read the Instructions carefully because on the next screen you will be asked 3 comprehension questions about the Instructions and you will not be able to proceed if any of your responses is incorrect. This is followed by a Training phase in which you will learn how to proceed, step by step, and will actively use the methods that we have implemented in the study. Before beginning the study proper, however, please read the following Information and Consent Form.

If you agree to participate, please give us your consent (by checking the box below) and click “Next” to begin.

Subject Information and Consent Form

Introduction

You are being invited to take part in a research study. This research will study how native English speakers use the demonstrative expressions “this” and “that”. It is **your choice** if you want to participate in this study or not. **You can withdraw from the study at any time.** By participating in this study, you are agreeing to provide the most honest answers you can. Any responses you provide will be **anonymized** so that neither the researcher nor anyone who might be helping the researcher to analyze and compile the results will know which responses are yours. The (anonymized) research data collected in this study will be **available under the terms of a free license** and will serve as a basis for reviewed publications in the field of semantics. This study has not been designed to commercialize the results or the collected data.

What Is the Purpose of This Study?

The main reason for conducting this study is to help answer the following research question: what are the key elements that need to be considered when developing a cognitively plausible semantics of the English determiners/pronouns “this” and “that”? The study is designed to monitor changes that might occur when we know that these words are used correctly or incorrectly, given the context.

Who Can Take Part in This Study?

To take part in this study you must be a native English speaker. You should not take part in this study if you do not meet all of the following requirements.

You **cannot** participate in this study if:

- You are younger than 18 or you are older than 35
- You are not a native speaker of English
- You have language-related disorders, such as dyslexia (problems with reading or spelling words) or aphasia (problems with comprehending or formulating language)

- You are viewing this study on a mobile device with a screen smaller than 11 inches—it is recommended that you open this study on your personal computer (laptop or desktop) with a screen greater than or equal to 11 inches

I agree to participate in the research study. I understand the nature and purpose of this study.

Instructions

Please, read the Instructions carefully. On the next screen, you will be asked 3 comprehension questions about the Instructions.

This study is conducted in collaboration with the Faculty of Applied Linguistics at the University of Warsaw. The study is designed to monitor changes that might occur when we know that something is true or false.

The Faculty of Applied Linguistics provided us with a database of scenarios in which someone utters a sentence containing an English demonstrative expression—“this” or “that”. We were told that the scenarios were extracted from recorded conversations, books, movies, daily newspapers, and a variety of short-lived and internet texts. Members of the faculty had used the database to train an AI system to recognize what people mean when they say, e.g., “**this** smells bad” or “you looked so pretty in **that** dress”. The system had been trained to answer questions, such as: do people mean the things they are holding up to their noses or the room they just happen to walk into? Analogously, do people mean the dress that is already the subject of conversation or the one that is not yet so?

Now, the system can tell whether a particular utterance of a demonstrative expression is correct in the context of the scenario. For example, the system “knows” that knowingly saying “if you want to get to the museum, you need to go in **this** direction” and pointing in the opposite direction to where the museum actually is, is as incorrect as it gets.

In what follows, you will see scenarios from the database that the AI has recently qualified as either correct or incorrect. Before each scenario, a cue, describing its nature, will be presented. The word TRUE will be displayed when the content is correct, while FALSE will indicate that the content is incorrect. Note that this information will be true most of the time. However, there might be a few cases where it will not: we want to identify these cases because we are seeking to fine-tune the AI’s recognition skills. Therefore, after each scenario, you will be asked to rate whether you agree with the AI’s judgment or not.

Comprehension Questions 1

Note: you will not be able to proceed if any of your responses is incorrect.

This study is conducted in collaboration with...

- The Faculty of Philosophy at the University of Warsaw
- The Faculty of Applied Linguistics at the University of Warsaw
- The Faculty of Mathematics and Informatics at the University of Warsaw
- The Faculty of Modern Languages at the University of Warsaw

This study is designed to monitor changes that might occur when we know that something is...

- Accurate or inaccurate
- True or false

- Real or imaginary
- Good or bad

The faculty members had used the database to train ... to recognize what people mean when they use demonstrative expressions.

- A faculty member
- A student
- A machine
- An AI system

Sorry, at least one of your responses was incorrect. For this reason, you will not be able to complete the survey.

Training

Training Phase 1/10

In this study, you will see 20 scenarios, such as the one below. In each scenario, an utterance of an ordinary demonstrative sentence is made; that is, a sentence containing the demonstrative determiner/pronoun “this” or “that”. **The demonstrative expression is marked in red.**

This time the demonstrative sentence reads: “**If you want to get to the museum, you need to go in this direction**”.

A man stopped me in the street and asked for directions. I said:

“If you want to get to the museum, you need to go in **this direction”**

and pointed to the direction to where the museum actually is.

Training Phase 2/10

Before each scenario, a cue, describing its nature, is presented. The selection of cues is based on the judgment of the AI system which has recently qualified the utterances of the demonstratives “**this/that**” as correct or incorrect, given the context of the scenarios. Accordingly, the word **TRUE** is displayed when the AI qualified the utterance as correct, while **FALSE** indicates that the AI qualified the utterance as incorrect.

The AI has recently qualified the sentence containing the demonstrative “this/that” in the scenario as **TRUE**

Training Phase 3/10

Your task in this study is to state your opinion about the nature of the scenarios. Therefore, after each scenario, you will be asked to rate the utterances of demonstrative expressions for how conventional, objective and permissible they seemed to you, given the context of a particular scenario. Additionally, you will be asked to rate whether you agree with the AI’s judgment or not.

The use of the demonstrative “this/that” was:

- Unconventional
- Conventional

The use of the demonstrative “**this/that**” was:

- In a subjective meaning
- In the lexical, objective meaning

The use of the demonstrative “**this/that**” was:

- Impermissible
- Permissible

I agree with the AI’s judgment regarding the use of the demonstrative “**this/that**”: (50 = Neither disagree, nor agree)

- No
- Yes

Training Phase 4/10

Let us go through the task one more time. First, a cue is displayed based on the AI’s judgment about the scenario that follows. This time the AI “thought” that the utterance of the demonstrative “**this/that**” was incorrect, so it judged the demonstrative sentence **FALSE**.

Notice the timer below the cue. At least 5 seconds must pass before you are able to proceed. **Please, pay close attention to the cue—in a moment you will be asked to rate whether you agree with the AI’s judgment or not.**

Training Phase 5/10

Next, you are asked to read the scenario for at least 30 seconds. In each scenario, an utterance of an ordinary demonstrative sentence is made; that is, a sentence containing the demonstrative determiner/pronoun “this” or “that”. **The demonstrative expression is marked in red.**

A man stopped me in the street and asked for directions. I said:

“If you want to get to the museum, you need to go in **this direction”**

and pointed in the opposite direction to where the museum actually is.

Training Phase 6/10

Now, we ask you to state your opinion about the nature of the scenario: how conventional, objective and permissible was the utterance of the demonstrative “**this/that**”, given the context of the scenario? And to what extent do you agree with the AI’s judgment?

There is no time limit to submit the responses, so you will see no timer on this screen. However, you must actually use the sliders to be able to proceed.

The answers you submit by using the sliders can be understood in the following way:

- Conventional: in many cases, the connections between words and what they stand for are conventional. For instance, the conventional rule governing the use of demonstrative “**this/that**” dictates that the speaker can use the expression to refer to an object in the environment if she can ensure that her audience is in a position to identify the referent. If the audience could not identify the object referred to, then the use of a demonstrative was unconventional.

- With the lexical, objective meaning: according to a dictionary, demonstrative “**this/that**” is used to identify a specific thing being indicated. Therefore, English speakers use demonstratives to speak specifically about certain objects that they indicate, say, with a pointing gesture. At times, however, speakers take some objects for something else. On such occasions, people seem to mean different things from what they actually indicate. Suppose two people see the picture of an Elvis impersonator and take him for Elvis himself. They have a brief colloquy: “Do you know who **this** man is?” “**This** is Elvis, a famous singer, and an actor”. It seems the second participant has said something about Elvis even though they both indicated his impersonator. We may say that the utterance of demonstrative “**this**” by the second participant was in a subjective meaning because what she meant was determined by what she wished to talk about and not by what she indicated in practice.
- Permissible: any language consists of rules which are inherently social and normative: these rules govern how to communicate with others to ensure clarity and understanding. To what extent was the use of the demonstrative “**this/that**” in the present scenario permissible from your perspective or the perspective of your community?

Training Phase 7/10

Practice makes perfect: let us go through the task one last time. First, a cue is displayed based on the AI’s judgment about the scenario that follows.

Training Phase 8/10

Please, read the scenario carefully.

The police officer said:

“Mr. Smith, an old lady called the police saying that you maliciously broke her sewer pipe. For Christ’s sake, **this smells so bad!”**

An awful odor just went through the whole neighborhood. The police officer couldn’t help but notice it.

Training Phase 9/10

Please, state your opinion about the nature of the scenario and rate whether you agree with the judgment of the AI.

Training Phase 10/10

This concludes the Training Phase. Next, you are asked to complete the same task with different scenarios (some of which depict quite ordinary situations, such as pointing at something on your friend’s shoulder, while others involve more ingenious contexts). Please use the form below if you would like to leave feedback. In particular, let us know whether the Instructions and the Training Phase were clear and easy to understand. Click “Next” to proceed to the study proper.

Use the form below if you would like to leave feedback on the concluded part of the study.

Comprehension Questions 2

Please, answer the following questions before moving forward.

The AI has qualified the utterance of demonstrative “**this/that**” as ... in the last scenario.

- **TRUE**
- **FALSE**

During the Training, the notion of “conventional use” was characterized in terms of:

- Rules for preserving the connection between words and what they stand for
- Type of meaning determined by what the speaker wishes to talk about and not necessarily by what she indicated in practice
- Rules governing how to communicate with others to ensure clarity and understanding

During the Training, the notion of “subjective meaning” was characterized in terms of:

- Rules for preserving the connection between words and what they stand for
- Type of meaning determined by what the speaker wishes to talk about and not necessarily by what she indicated in practice
- Rules governing how to communicate with others to ensure clarity and understanding

During the Training, the notion of “permissible use” was characterized in terms of:

- Rules for preserving the connection between words and what they stand for
- Type of meaning determined by what the speaker wishes to talk about and not necessarily by what she indicated in practice
- Rules governing how to communicate with others to ensure clarity and understanding

[+d]: *possible* discrepancy between actual demonstration and intended demonstration

[+d] scenario 1 (Kaplan, 1978, p. 239, adapted)

Suppose that without turning and looking David points to the place on his wall which has long been occupied by a picture of Rudolf Carnap, a famous philosopher, and he says:

“**That** is a picture of one of the greatest philosophers of the twentieth century”.

But unbeknownst to David, someone has replaced his picture of Carnap with one of Elvis Presley, a famous singer but not a philosopher at all.

[+d] scenario 2 (Gauker, 2008, p. 363)

Suppose that Harry and Sally are at a department store and Harry is trying on ties. Harry has wrapped a garish pink-and-green tie around his neck and is looking at himself in a mirror. Sally is standing next to the mirror gazing toward the tie around Harry’s neck and says:

“**That** matches your new jacket”.

As a matter of fact, Sally has been contemplating in thought the tie that Harry tried on two ties back. At first, she thought she did not like it, but then it occurred to her that it would look good with Harry’s new jacket. We can even suppose that in saying “that” what she intended to refer to was the tie two ties back. But under the circumstances, Harry is in no position to realize that the tie she intended to refer to was the tie two ties back.

[+d] scenario 3 (Reimer, 1991a, pp. 190–191, adapted)

Suppose that I suddenly realize that I have left my keys on the desk in my (shared) office. I return to my office, where I find the desk occupied by my officemate. I then spot my keys, sitting there on the desk, alongside my officemate's keys. I then make a grab for my keys, saying just as I mistakenly grab my officemate's keys:

"These are mine".

[+d] scenario 4 (Reimer, 1991b, p. 180, adapted)

A dog named Spot has been making himself especially noticeable by barking raucously and dashing in front of Jane and Peter. But Jane hasn't noticed any of this and her attention has been caught by another dog—a dog way off in the distance—who seems to resemble remarkably her own dog Fido. Jane comes out with an utterance accompanied by a pointing gesture in a general direction in front of her:

"That dog looks just like Fido".

It would be natural to suppose that Jane believes—mistakenly—that Fido is also the focus of Peter's attention. However, the most noticeable dog appears to be Spot.

[+d] scenario 5 (de Gaynesford, 2006, p. 169)

My horse *Doorlatch* is in a race. As the horses thunder past for the finish, *Doorlatch* in the lead, I point and say:

"That is my horse"!

Unfortunately, in my excitement, I have closed my eyes for an instant and my gesture has not quite kept track of the field. So, as I utter the sentence, my finger actually points to the leading contender, *Two-fingered Salute*.

[+d] scenario 6 (McGinn, 1981, p. 162, adapted)

Noah is a factory inspector certifying cars as roadworthy as they come off an assembly line. His job is to say, as successive cars pass by,

"That car is certified as roadworthy".

Normally, he looks at each car and utters his incantation while gesturing in the appropriate direction; but on this occasion he absentmindedly looks away as a new car arrives before him, while uttering his usual sentence accompanied by his usual gesture.

[+d] scenario 7 (McGinn, 1981, p. 162, adapted)

Emma is looking through a transparent medium that alters the path of light in such a way that the real position of objects seen through it is three feet to the right of their apparent position. Emma knows the medium to have this property. She wishes to refer to a penny which she does not perceive but which she knows to be in a certain place, just the place in fact at which a penny she does perceive appears illusorily to be. To fulfill her intention she points to just the place where the second penny appears to be, but is not, and says:

"That penny will appear to be three feet to the left of where it really is".

[+d] scenario 8 (Perry, 2009, p. 193, adapted)

Suppose I believe that George W. Bush is the greatest president in US history, and I wish to express this belief by saying

“**This** is the greatest president in US history”

in a situation in which you and I have just turned on the television late at night, and a very Dubbya-looking fellow has appeared on our screen, making very Dubbya-like expressions and gestures. But it isn't really George W. Bush; it is the George W. Bush mimic that appears every so often on Jay Leno's Tonight Show.

[+d] scenario 9 (Siegel, 2002, pp. 10–11)

You are a salesman in a tie store. By reaching past an opaque door into a display case, you put your hand on a blue silk tie. At the same time, another salesman is reaching through the cabinet and touching a red silk tie. Through the glass top of the cabinet, you can see the red tie being held by the other salesman, whose arm looks like yours. You mistake his hand for yours and you believe that you are the one touching the red tie. You say to a customer, who was looking in another direction for a red silk tie

“**This** one is red”.

[+d] scenario 10

There are many people at a party of abstainers. Everyone toasts with mineral water. Without knowing it and thinking that there is martini in the glasses, Oliver points to the person sitting at the piano, who has just finished the concert, and says:

“**This** martini drinker is a good pianist”.

In fact, one person at the party has secretly brought a martini with them and is now drinking it.

[-d]: *no* discrepancy between actual demonstration and intended demonstration

[-d] scenario 1

James and Mary are at a party. At one point, Mary points at a man standing in the corner and says to James:

“**That** man is a spy”.

Only one man is standing in the corner.

[-d] scenario 2 (Textor, 2007, p. 955, adapted)

You and I hear a painfully loud noise. I know that you must hear it, and you know that I must hear it, and so forth. Hence, I can say:

“I wish **that** noise would stop”

without making any sort of gesture (pointing, nodding, glancing, etc.).

[-d] scenario 3 (Ciecierski & Makowski, 2020; cf. Perry, 2017, p. 979)

Someone utters the sentence in a dialect of Nebraska:

“**That** fish was yea big”

which differs from English as a global language only in that the Nebraska dialect contains the expression “yea”, which conventionally refers to the distance between the hands of the speaker. While uttering the expression, the speaker is making a suitable gesture.

[-d] scenario 4 (Ciecierski & Makowski, 2020, adapted)

Someone says:

“**This** is my favorite color”,

indicating a red object (lighting is normal, etc.). At the same time, imagine that the addressee (but not the speaker) of the statement does not distinguish between any colors except black and white: the addressee suffers from achromatopsia—total color blindness.

[-d] scenario 5 (King, 1999, p. 156, adapted)

Greg has just gotten back a math test on which he scored very poorly. Greg knows on completely general grounds that exactly one male received a score of one hundred on the exam—Greg’s evil but scrupulously honest teaching assistant told Greg this as he tossed Greg his failing effort. Reflecting on the difficulty of the exam, Greg says:

“**That** guy who scored one hundred on the exam is a genius”.

[-d] scenario 6

One day when Father Butler was hearing the four pages of Roman History clumsy Leo Dillon was discovered with a copy of *The Halfpenny Marvel*.

“Now Dillon, up! What have you there in your pocket?”, Father Butler said.

Everyone’s heart palpitated as Leo Dillon handed up the paper and everyone assumed an innocent face. Father Butler turned over the pages, frowning.

“What is **this** rubbish?” he said. “*The Apache Chief!* Is **this** what you read instead of studying your Roman History?”

[-d] scenario 7 (Reimer, 1991a, p. 194, adapted)

Suppose that you and I are in the park, observing the antics of several neighborhood dogs, one of whom I recognize as my dog Fido. Suppose further, that I wish to inform you of the fact that Fido is among this canine group, and that I thus say to you

“**That** dog is Fido”,

but fail to accompany my utterance with any sort of ostensive gesture (pointing, nodding, glancing, etc.), due to some sort of sudden, momentary, paralysis. Suppose that, though my intention was to point at Fido, I suddenly found myself (in the midst of my utterance) unable to do so. Suppose further that I was unable to demonstrate Fido via any sort of glance or stare in his direction, as my eyes,

frozen in their sockets, had shifted from Fido to my addressee, and could not (due to the paralysis) be shifted back to Fido.

[-d] scenario 8

Somewhere in the monastery at Podolin there is, or was, an old painting, showing a shaggy-haired figure with a wild upcurled mustache; a thick beard, red as a woman's hair; two big round eyes with elongated pale blue pupils; and a complexion as ruddy as the color on a white tablecloth when light passes through a full wine glass on a sunny winter noon.

“**This** man was Prince Lubomirski”, said Sindbad looking at the painting.

The time is uncertain but the place is precise and the view is clear.

[-d] scenario 9

Stephen bent forward and peered at the mirror held out to him, cleft by a crooked crack.

“Who chose **this** face for me?”—he wondered—“**This** dogsbody to rid of vermin. It asks me too”.

[-d] scenario 10

From the other end of the square was coming a tall Arab, thin, vigorous, wearing a sky-blue burnoose, soft brown boots and gloves, and bearing his bronzed aquiline face loftily. Nothing but the *cheche* that he was wearing swathed as a turban distinguished him from those French officers in charge of native affairs whom Janine had occasionally admired. He was advancing steadily toward them, but seemed to be looking beyond their group as he slowly removed the glove from one hand.

“Well”—said Marcel as he shrugged his shoulders—“there's one who thinks he's a general. Yes, they all here look proud; but **this** one, really, is going too far”.

Although they were surrounded by the empty space of the square, he was walking straight toward the trunk without seeing it, without seeing them. Then the distance separating them decreased rapidly and the Arab was upon them.

Closing Message

Thank you for your participation!

This study was designed as a part of the “Semantic and Epistemological Aspects of Ostension: From Demonstrating Procedures to the Exploitation of the Context of Utterance” (SEAO) Project. [For more information on the SEAO Project, click here.](#)

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