**REGULATIONS ON USE**

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**Background**

The field manuals were originally intended as working documents for internal use only. They were supplemented by verbal instructions and additional guidelines in many cases. If you have questions about using the materials, or comments on the viability in various field situations, feel free to get in touch with the authors.

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**Hidden colour-chips task: demonstratives, attention, and interaction**

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**Projects:** Space, Gesture

**Priority:** High

**Background:** The Demonstratives Questionnaire, (attached as appendix to this volume), was designed by David Wilkins and colleagues to explore the kinds of conditions which lead speakers to select one demonstrative over another. This selection - for example, in English, between *this* and *that* - is sometimes said to be a function of distance of the referent from the speaker, or of distance from the addressee, or of some combination of both. However, it is clear from observation of real usage that mere measure of distance cannot provide an account. Furthermore, responses to the questionnaire show that in many cases, speakers feel that more than one demonstrative is possible in many cases. But in real use, speakers do choose only one. What is the basis for the choice? One possible factor concerns attention. That is, as suggested in the original questionnaire, it might make a difference whether or not the referent is currently (perceived to be) the focus of the addressee’s attention or not. However, it is impossible to get reliable speaker judgements as to what they ‘would say’ in different situations. This task is designed to create a situation in which the speaker is genuinely manipulating the addressee’s attention on objects in the immediate physical space in order to solve the task, and without being asked to introspect about which demonstrative they ‘would use’ in the situation. Also, the task elicits a great deal of spatial deictic gesture.

This task contributes to three sub-projects:

1. Deixis in action (forward-looking, to contribute to the seeding of interest in social interaction in language and cognition).

2. Spatial deixis in gesture (forward-looking, to contribute to current work on deictic gesture in the Gesture Project).

3. Demonstratives (backward-looking, to test and complement hypotheses about a subset of the 1999 Demonstratives Questionnaire, and to add to that with information about attention-direction, etc.).

**Instructions for running the ‘Hidden colour-chips’ task.**

**NOTE:** The task does not take long - only about 15 minutes total for two consultants.

**THE BASIC IDEA IS THIS:** The fieldworker strategically places 16 objects (Duplo pieces, etc., which are provided in a field kit) in a local space such as a large room, or yard. Under each of these objects are hidden small colour-chips. One consultant is shown where some of these colour-chips are hidden, and it is his/her task to remember which colours are under which objects. Then a second consultant brought in, and these two speakers sit down together. The game is for the second speaker (the ‘Checker’) to check the memory of the first speaker (the ‘Memoriser’) by asking, say, ‘Under which objects are the blue chips hidden?’. The task elicits demonstratives and other deictics (including deictic gesture) when the Memoriser answers - for example ‘That red thing has one under it’, ‘This thing here has one’, etc.

**INSTRUCTIONS:**

In a space of dimensions approximately 10m by 5m, set up the array of 16 objects (8 duplo pieces, 4 'drums', 2 'roofs', and 2 'men'), while the subjects are not around (as far as this is possible). This is to avoid making the objects known and talked about prior to the task. The objects need to be placed in the space around where the speakers (S and A) will be during the task (they will need to be seated, at right angles to each other, as illustrated in ‘Guidelines for shooting video’ in ‘Gesture’ section of this manual) with the following basic logic (the first column showing the number of the object marked on the ‘Set-up’ illustration below; second column explaining the rationale behind the placement of that object, and the third column specifying which of the scenes on the Wilkins Questionnaire this placement corresponds to):

<table>
<thead>
<tr>
<th>No</th>
<th>Rationale</th>
<th>Wilkins Q. counterpart</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very far from both S and A, out of 'here' space</td>
<td>15? (w/o 3rd person near referent), or 21?</td>
</tr>
<tr>
<td>2</td>
<td>Far from both S and A</td>
<td>13? (w/o 3rd person near referent)</td>
</tr>
<tr>
<td>3</td>
<td>Away from both S and A, far enough to have to take several steps; close to another item of similar distance (i.e. 4)</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>Away from both S and A, far enough to have to take several steps; close to another item of similar distance (i.e. 3)</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>Out of reach of both S and A, equally far from each, but only a few steps to get to it.</td>
<td>12 (but closer to speakers)</td>
</tr>
<tr>
<td>6</td>
<td>Very close to S, out of sight of A (i.e. obscured to A’s vision).</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Within S’s immediate reach, not in A’s reach, in sight of both, close to another item of similar placement (13)</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>Equally between S and A, within easy reach and sight of both.</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>Within A’s immediate reach, not in S’s reach, in sight of both.</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>Very close to A, out of sight of S (i.e. obscured to S’s vision).</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>Behind S, out of sight of both S and A, out of reach of S</td>
<td>11 (but out of sight of A also)</td>
</tr>
<tr>
<td>12</td>
<td>Behind S, out of sight of S, in reach of S.</td>
<td>11</td>
</tr>
<tr>
<td>13</td>
<td>Within S’s immediate reach, not in A’s reach, in sight of both, close to another item of similar placement (7)</td>
<td>6</td>
</tr>
<tr>
<td>14</td>
<td>Behind A, out of sight of A.</td>
<td>11, with S/A roles reversed</td>
</tr>
<tr>
<td>15</td>
<td>Near S, but out of immediate reach, out of sight because covered (identically to (16))</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>Near A, but out of immediate reach, out of sight because covered (identically to (15))</td>
<td>-</td>
</tr>
</tbody>
</table>

Replicate the layout in the illustration ‘Hidden colour-chips Set-up’, below (this was used in trials run in Nijmegen with Dutch speakers). If for some reason you need to do it differently, please make sure you follow the rationales in the table above.

Place one colour chip under each of the 16 pieces (following the layout in the illustrations ‘Hidden colour chips Phase 1’ and ‘Hidden colour chips Phase 2’, below - each illustration specifies where the 8 chips for each phase of the task are to be hidden). The colour chips are in two sets of 8 - each set has 2 red, 2 blue, 1 black, and 3 white chips.
2. Bring one participant - the 'Memoriser' - to the set-up, and ask them to sit down.

3. Explain the task to 'Memoriser' - i.e. that this is a memory task, and they will be asked to remember which colour-chips are under which objects in the array.

4. Consult the illustration ‘Hidden colour-chips, Phase I’, and demonstrate to the participant where the eight colour-chips are hidden. (Don’t let the participant see the illustration you are consulting.) Please do this for each colour (e.g. ‘Now I’m going to tell you where the red chips are’) by lifting the relevant object, and saying ‘There’s one under this __’, then replacing the object. Do this a second time, and further, if necessary, until the ‘Memoriser’ feels s/he is ready.

5. When the ‘Memoriser’ is ready, go and get the ‘Checker’. Before bringing him/her to the set-up, make sure s/he understands what the task is about, and that they are merely to ask the Memoriser the following: ‘Under which objects are black/white/red/green chips hidden?’, or ‘Tell me the objects which have black/white/red/green chips hidden under them.’ (IMPORTANT: The checker should NOT ask ‘Where are the black/white/red/green chips hidden?’, since this task is meant to elicit reference to objects, not places.)


7. Make sure the Memoriser knows that the Checker has NOT yet seen the array of objects. And ask the Memoriser to please not lift the objects - the Checker will be the one to do this. Ask the Checker to proceed with the questions, asking once for each colour, and checking each time if the memoriser is correct. Make sure the Checker goes back to his/her seat before s/he asks for the next colour. Keep score as to how many questions the Memoriser answers correctly.

8. When Phase I is finished, ask the two consultants to switch roles - the new Checker will have to go and wait somewhere else, while the new Memoriser is shown the location of the next set of eight colour chips. (NOTE: you don’t have to re-place the colour chips, since you placed 16 at the start, and each phase asks only for 8 chips.)

9. Repeat Step 5, only this time you will consult the illustration ‘Hidden colour-chips, Phase 2’.

10. Repeat Steps 5, 7. End task.

11. If the consultants wish to discuss the experiment (e.g. their performance), let them do so. Valuable data could emerge. Do not simply stop filming as soon as the basic task is over.

Note 1: Before beginning, consult the guidelines on video recording in the ‘Gesture’ section of this manual. Throughout the task, please be careful not to block the camera view, or the participants’ view of the objects. Make sure you use an external microphone, so as to pick up the sound as close to the speakers as possible. The camera angle may have to be fairly wide in order to get everything in the shot. Try not to make it so wide that you can’t capture gestures well.

Note 2: It is okay if other people are observing the task - in fact, it could elicit good data, if they are interjecting during the task - for example, an onlooker may urge, ‘No, not that one, this one!’.
Instructions for participants.

NOTE: These instructions were used in the trials conducted with Dutch participants in Nijmegen in June 2001. You will have to adapt them for your field situation.

Instructions for ‘Memoriser’.
This is a memory task. In this room there are a number of objects in different places. Under some of these objects are hidden some colour chips - red, green, black, and white. You will be shown where 8 colours are hidden, and you must remember which colours are under which objects. When you are ready, another participant will come into the room, and s/he will ask you ‘Under which objects are the red/green/black/white chips hidden?’ Each time you have answered, then s/he will lift the objects you have identified, and check if you have remembered correctly.
IMPORTANT: Please stay seated, and please do not lift the objects yourself. After you have finished, you will be asked to change roles with the other participant, and you will have to leave and wait while the other participant is asked to remember a different arrangement of hidden colours.

Instructions for ‘Checker’.
You are going to enter a space with some objects placed in various locations. Under some of those objects are hidden some colour chips - there are 8 in all, two red, two green, one black, and three white. The second participant in this task has been shown where these are hidden, and s/he has been asked to remember which colours are under which objects. This is a memory task for that person. Your task is simply to ask four questions. The first question is:

1. Under which objects are red chips hidden? Or: ‘Tell me the objects which have red chips hidden under them.’

IMPORTANT: Please don’t ask ‘Where are the red objects hidden?’

After you get an answer to this question and you are sure which objects have been identified, please lift the objects up and check if the answer is correct. The other participant has been asked not to lift any objects, so you will have to lift them yourself to check if the answers are correct. IMPORTANT: (1) Make sure you put the object back and hide the chip as before. (2) After you have asked a question and have checked whether the Memoriser is correct, make sure you sit back down where you started before you ask the next question.

Repeat this process with the next three questions:

2. Under which objects are green chips hidden? Or: ‘Tell me the objects which have green chips hidden under them.’

3. Under which objects are black chips hidden? Or: ‘Tell me the objects which have black chips hidden under them.’

4. Under which objects are white chips hidden? Or: ‘Tell me the objects which have white chips hidden under them.’

When this is finished, you will switch roles with the other participant, who will be asked to leave, while you are asked to remember a different arrangement of hidden colours.
Hidden colour-chips, set-up

This is the set-up used for trials with Dutch speakers in the Gesture Lab at MPI in May 2001. In the field, you may not be able to set it up exactly as specified here, but please make sure you cover the array of distinctions aimed at here - i.e. visibility, accessibility, speaker-addressee related distance, etc. See Table, above. See following page for explanation of symbols. (Each number is an object - the number is a reference to the Table above, which explains the rationale for placement of each object. After each number, in brackets, a letter specifies what the object is (i.e. 'Blue roof', 'Drum', 'Man', or 'Red Duplo piece'). (NB. in some sets the pieces are of other colours.)

Memoriser - (on a chair, or mat; sitting throughout the task.)

Checker - (on a chair, or mat; returning to this place after getting up to check Memoriser's response.)
Code for illustration ‘Hidden colour-chips, set-up’:

B = Blue ‘roof’
D = Drum
M = Man
R = Red Duplo Piece
(NB. in some sets the pieces may be of other colours.)

Consultant (seated):

Object covered by paper (or identical cloth/clothing) so as to be unseen to both participants:

In view of the participant sitting close, but not of the other participant (i.e. obscured by something):

Something which blocks view of thing behind it:

Code for illustration of ‘hidden colour-chips’ locations:

(I.e. each of these symbols indicates that there is a chip of the specified colour under the object at that location.)

White = 
Black = 
Green = 
Red = 
Hidden colour-chips, Phase 1
Hidden colour-chips, Phase 2