1	Contributions to a neurophysiology of meaning: The interpretation of
2	written messages could be an automatic stimulus-reaction mechanism
3	before becoming conscious processing of information.
4	
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14	SUPPORTING
15	INFORMATION
16	

17	Supporting Information
18 19	Summary
20	$\underline{\text{SECTION 0}} - About \text{ method}$
21 22	Part I - Materials and Method SECTION 1 – The research guide-lines
23	<b>SECTION 2</b> – The case: description and research's rationale
24	<u>SECTION 3</u> – The research protocol
25 26	<u>SECTION 4</u> – The questionnaire: message texts and questions (English translation)
27	SECTION 5 – Case structure and communication critical points
28	Part II - The collected data
29	<u>SECTION 6</u> – About the sample
30	<u>SECTION 7</u> – The harvest
31 32 33	<u>SECTION 8</u> – Data quality check: compliance with research requirements and technical-theoretical questions related to answer interpretation
34 35	SECTION 9 – Data quality check: analysis of the collected data distribution
36	Part III - Added materials
37	SECTION 10 – Analysis of some indicated component distributions
38	<u>SECTION 11</u> – Complement materials on coherence investigation
39	SECTION 12 – The "block preference" analysis
40	References
41	<u>Figures</u> : <u>Fig. S1</u> ; <u>Fig. S2</u> ; <u>Fig. S3</u> ; <u>Fig. S4</u> ; <u>Fig. S5</u> ; <u>Fig. S6</u> ; <u>Fig. S7</u> ;
42	<u>Fig. S8</u> ; <u>Fig. S9</u> ; <u>Fig S10</u> ; <u>Fig. S11</u>
43	<u>Tables</u> : <u>Tab. S1</u> ; <u>Tab. S2</u> ; <u>Tab. S3</u> ; <u>Tab. S4</u> ; <u>Tab. S5</u> ; <u>Tab. S6</u> ; <u>Tab. S7</u> ;
44	<u>Tab. S8;</u> <u>Tab. S9;</u> <u>Tab. S10;</u> <u>Tab. S11;</u> <u>Tab. S12;</u> <u>Tab. S13</u>

#### 45 SECTION 0 – *About method*

The naturalistic approach we chose presents several difficulties, given that human communication cannot actually be observed "from outside": it is part of us and we simultaneously belong to it; it is impossible to avoid interactions (i.e. "interference") with the studied sample. However, for research purposes, there is an at least partial solution: an external point of view can be simulated. We designed such simulation considering that a total exclusion of personal/relational factors is illusory, even with unknown persons, given that it is impossible to take under control their emotional involvement (their subjective reactions to the survey in itself and to survey conductors, independently of any specific content). On this basis, we made three operative decisions: on the specific subject in which to involve the sample; on the materials to be employed for data collection; on the survey modalities.

About the subject, we involved the sample in a real world-like communication About the subject, we involved the sample in a real world-like communication search case, neutral with respect to possible personal critical issues and totally external to the sample members' lives and to their possible relationships with the survey conductors. About the materials, we employed the complete sequence of the messages exchanged in About the materials, we employed the complete sequence of the messages exchanged in the case, full-text versions, submitting them to the sample through a specifically designed questionnaire that alternated messages and questions in a precise sequence. About the survey modalities, we tried to transform the relational weak point in a strong one: we concluded that, in the end, the most effective condition could never be the sillusory neutrality; rather, it could be the possibility to act in a stress-free condition, to for read messages without time pressure, to let sensations and emotions emerge and to report

6

67 them without any fear. It is worth delving a little further in how we carried this last 68 decision out: a friendly, familiar environment, with a known conductor (to reduce the 69 structural initial difficulties in human relationships); a shared programming of the survey 70 date and hour (to get the maximum possible of comfort and relax); the possibility to 71 answer free from any constrictions (for this, we mainly used questions with opened 72 answers); the certainty about anonymity and the non-evaluative purposes of the survey. 73 At the same time, the consciousness of participating to a serious work and the guarantee 74 (for the research's purposes) of mostly uniform survey modalities.

Two last considerations. The first is that we define our approach as "naturalistic" 76 in that it is aimed to explore the interpretation process in the "natural" conditions in 77 which it is performed: for example, in their communications, human beings usually deal 78 with (and interpret) full messages; however, current laboratory approaches are forced to 79 privilege the use of single words or isolated short phrases because of the difficulties 80 associated to the study of free natural language interactions. We decided to check, 81 through our "naturalistic" approach, the possibility to complement current studies and 82 bring something new to scientific knowledge.

The second consideration regards the kind of control that, through our approach, 84 we exerted on the survey: besides the rigorously standardized data collection procedure 85 (see this Supporting Information, <u>Section 1</u> and <u>Section 3</u>), our control mainly lied on the 86 reliability and the homogeneity of the relational system, rather than on the (impossible) 87 attempt to cut off the relational aspects.

# 88 PART I - Materials and Method 89

#### 90 SECTION 1 – The research guide-lines

91 Object to be investigated: human communication, the process through which a 92 receiver attributes meaning to a message (i.e. the interpretation process, the way he/she 93 "understands" the incoming message).

Methodological approach: given that research on human communication (H.c. 95 from now on) has provided, about interpretation, abundance of theoretical hypotheses 96 along with still indefinite answers, it seems a good solution to re-start from a basic 97 exploration, which means from the **phenomenology** of specific events in a given 98 environment ("naturalistic" approach).

99 Action plan: (1) Submitting a real world-like case to the sample and requesting 100 the solution of a concrete problem related to it; (2) Observing respondents' reactions 101 through collecting their accounts; (3) Analysing the respondents' accounts. The case 102 should be suitable to be fully documented for the sample and its investigation should 103 require a reasonably short time.

104 On the basis of these premises, the GUIDE-LINES for our investigation are 105 established as it follows:

The research will be carried out through a qualitative and quantitative
statistics-based research.

The sample will be randomly composed by adult Italians, granted with High school degree (or upper education levels) and regardless of their student or
 employed (any employment) condition.

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111	•	About education level, possible exceptions only for people whose literacy,
112		joined with their life experience, allow them to understand without effort the
113		case documentation <sup>1</sup> .
114	•	The sample will be engaged in an appropriately documented H.c. case and
115		individual reactions to it will be investigated through a questionnaire. The
116		questionnaire will end posing a concrete problem, referred to the case, and
117		requiring the respondent's solution.
118	•	The case must be <b>quasi-real</b> , not a mere laboratory exercise. So, it will be
119		based on real world cases, remaining as close as possible to reality, at the
120		same time avoiding any reference or hint to the original real situations. It will
121		be a written communication case (to allow for a better control on the stimuli
122		submitted to the participants), short enough to be taken into account complete,
123		unabridged and accomplished.
124	•	The sample will collect about 100 individuals and the survey sessions must
125		not exceed the $30 - 45$ minute time range. The sessions may be attended
126		individually or in groups, but the filling of the questionnaires will always be
127		an individual act.
128	•	All the survey sessions will take place under the control of a conductor, who
129		will follow a standard procedure for presenting the texts about the case and
130		the questions (in order to send homogeneous inputs to the sample).
131		

 <sup>12&</sup>lt;sup>1</sup> Actually, only 4 participants, out of the 102 composing the sample, had qualifications inferior than a
 13 High-school degree.

#### 132 SECTION 2 – The case: description and research's rationale

133 *Introduction and rationale of the research*. We examined, for our research, a 134 series of real-world cases of interaction some of the authors had dealt with in their 135 professional experience. The chosen cases were short enough to be easily handled and, at 136 the same time, they were fully representative of the real world's complexity. The case to 137 be created should have consisted of a realistic problem to challenge participants with; 138 moreover, it should have been fully documented from start to end, consisting of written 139 messages (e-mails) only and set inside an Italian corporation. We set up our case, we 140 named it "The employee and the architect" (as a tribute to the protagonist characters) and 141 we drew up the research protocol (see this Supporting Information, <u>Section 3</u>).

A complete description of the case can be found ahead in this present Section. In A complete description of the case can be found ahead in this present Section. In A complete description of the case can be found ahead in this present Section. In A complete description of the case can be found ahead in this present Section. In A complete description of the case can be found ahead in this present Section. In A complete description of the case can be found ahead in this present Section. In A complete description of the architect; we have submitted these messages to the sample the between the employee and the architect; we have submitted these messages to the sample and the sample leading its members in a two-step work. In the first step, we have asked the participants the to carefully read Messages #1, #2 and #3 in sequence; then, to interpret them and the the to carefully read Messages #1, #2 and #3 in sequence; then, to interpret them and the the their interpretations were based. The rationale was: *in vivo* observation of the the interpretation process, quali-quantitative analysis and formulation of a hypothesis.

In the second step, we have submitted to participants the last two messages asking 151 them to read carefully the texts, to interpret them, then to solve a problem: the last two 152 messages were two different versions of Message #4 and the problem was to indicate 153 which of the two could have produced the final answer (fifth message). The rationale

15

154 was: exploring the relationship between interpretation and action and, through a155 quantitative analysis, obtaining a first check of our hypothesis.

156 *Case details*. What follows is a complete description of the case used for our157 research, from its start to its end.

158 <u>TITLE</u>: We named the case "The employee and the architect", as a tribute to its 159 protagonist characters.

160 <u>CHARACTERS</u>:

161	• XX – The employee. Female, line worker in an office of an Italian
162	corporation. Her office is undergoing works regarding the heating plant.
163	• YY – The architect. Male, executive in charge of the works. He is a colleague
164	of XX, being himself an employee of the corporation. He has superior
165	position and duties, with respect to her, but he belongs to another branch and
166	has no hierarchic power on her.
167	• Dr. KK and Dr. ZZ – Employee's (XX) colleagues, just mentioned by the
168	architect in reference to the works in progress.
169	• The Colleague – A shadow character in the interaction, as he never appears
170	during the action. The architect (YY) requests his advice about the text of one
171	message to be sent to XX.
172	NOTE: The employee and the architect do not know each other; this interaction is
173	their first contact, started and ended through e-mails only.

174 <u>The STORY</u>:

Notice – The texts of the messages that will be mentioned here below can be
found in this Supporting Information, <u>Section 4</u>. The first three messages are presented
under the form of a description in order to make the whole situation more
comprehensible to the reader of this Supporting Information; however, they have been
submitted to the sample as full-text documents.

180 Prologue – Work on the heating plant is coming to its end; XX (the employee)
181 starts the interaction by writing to the architect (Message #1). She requests an inspection
182 for quality control on the basis of generically claimed issues.

183 YY (the architect) replies immediately (<u>Message #2</u>) declaring, very briefly and 184 generically as well, that the situation has already been checked and lies under control.

185 Several weeks later, XX writes again (Msg #3) insisting for an inspection and 186 indicating some specific issues at the basis of her claim. The tone of her message appears 187 to be hardened and one passage seems to contain a sort of threat.

Action – YY prepares a new reply (Msg #4, "Hard" version, in short Msg #4/H)
189 but requests his colleague an advice, before sending it. The colleague accepts YY's
190 request and suggests sending a different version (Msg #4, "Softer" version, in short Msg
191 #4/S).

192 The architect accepts the advice, the "Softer" Msg #4/S is sent and the case ends 193 with a last reply of XX (<u>Msg #5</u>) declaring her satisfaction.

194 NOTES: Because of a specific choice of YY's colleague, <u>Msg #4/S</u> (the "Softer"
195 version) bears the same content of <u>the "Hard" (H) version</u> but is written in different form

196 and its topics are put in a different sequence. Although XX expresses her satisfaction, no197 inspection has been carried out nor it has been requested any more.

#### 198 SECTION 3 – *The research protocol*

199 Notice – The texts of the messages that will be mentioned here below can be
200 found in this Supporting Information, <u>Section 4</u>. The first three messages are presented
201 under the form of a description in order to make the whole situation more
202 comprehensible to the reader of this Supporting Information; however, they have been
203 submitted to the sample as full-text documents.

204 **The protocol**:

#### 205 <u>INTRODUCTION</u>

206	1.	A case managed completely via e-mail, between an employee and a
207		professional (the "architect"), has been set up. It concerns an interaction,
208		related to a problem, inside an Italian corporation; the interaction lasts one
209		month and a half. The problem developed and was completely solved through
210		5 transactions (5 messages were exchanged, chronologically labelled from #1
211		to $\#5$ ). The employee starts the first transaction ( <u>Message <math>\#1</math></u> ) and concludes
212		the interaction with the fifth one (Message $\#5$ ).
213	2.	During the action, the architect requests the opinion of a colleague of his; such
214		request refers to a draft of the answer to Msg #3 spontaneously prepared by
215		the architect (such draft is the first version of Msg #4, the "Hard"/H version).
216		The colleague studies the case and proposes an alternative Msg #4 (the
217		<u>"Softer"/S version</u> ); the advice is accepted by the architect, the "S" version is

sent and produces the expected result, as the last reaction of the employee

219 demonstrates (Msg #5).

# 3. The used case is based on real cases which some of the authors had dealt with;

it remains as close as possible to reality at the same time avoiding any

- reference or hint to the original real situations.
- 223 The QUESTIONNAIRE and its MANAGEMENT

4. Anonymity of respondents will be fully guaranteed during either the survey
(questionnaire collection) or the analysis (data elaboration). No personal data
will be asked; information that is necessary for statistical purposes (age,
gender, education level and employment) will be requested as aggregated
through pre-defined bins only.

229 5. For a better representation in the questionnaire, the case has been divided into 230 two parts. In the first part (corresponding to the "Prologue" of the case 231 description, see this Supporting Information, Section 2), the first 3 messages 232 are gathered, in the same order they have been sent. These messages have 233 been printed in sequence, in a single A4 page. The aim of this first part is to 234 collect data about the interpretation process in general through a first set of 235 questions. Such questions have been printed in another single A4 page (two 236 opened questions,  $\frac{\#1}{2}$  and  $\frac{\#2}{2}$ , the first sub-divided into three sub-questions). 6. In the second part (corresponding to the "Action" of the case description, see 237 238 this SI, Section 2), the two versions of Msg #4 (the "Hard" and the "Softer" 239 one) are presented, in separate A4 pages. They are submitted to participants in 240 sequence (not simultaneously) and the remaining questions are printed in a 241 last A4 page. At first (Questions #3 and #4) the participants' opinions are

242		requested (separately) about the presumable effects of each version of Msg #4
243		on XX. In the end, after the transcription of the very brief $Msg \#5$ (the
244		employee's last reply), participants are requested (Final Question) to indicate
245		which version (the <u>"Hard"</u> or the <u>"Softer</u> "), in their opinion, has produced the
246		effect showed in Message $\#5$ . The aim of this second part is to collect data
247		about the relationship between the interpretations of the alternative messages
248		and the action (the choice) performed by participants.
249	7.	All the questions (or sub-questions, if present) have been divided into two
250		parts: in the first one, the interpretation of the respondent about one specific
251		aspect is requested. In the second one, he/she is invited to "indicate the
252		concrete elements (words, sentences, expressions etc) on which your
253		answer is based".
254	8.	A special attention has been dedicated to the wording of the questions.
255		Structural ambiguity of natural language implies the impossibility to
256		formulate sentences that can be univocally interpreted by everybody, as the
257		acknowledged Italian linguist De Mauro confirms <sup>2</sup> . Thus, any idea to pursue
258		completely unambiguous formulations has been dropped. After the first
259		careful formulation of the questions, two pilot-sessions will be set up for
260		testing the questionnaire's suitability and gather indications about possible

 <sup>28&</sup>lt;sup>2</sup> The author (<u>De Mauro, 1980</u>) says that natural language is "equivocal" in etymological sense, from
 29 Latin *aeque vocare* (to name in the same way). That is: a same word can be used to refer to different

<sup>30</sup> things; different words can be used to indicate the same thing.

261	corrections. In addition, ex-post specific controls will discard from
262	quantitative analysis all the possibly remained ambiguous cases.
263	9. Same attention has been dedicated to possible statistical distortion effects. For
264	example the YY's Colleague opinion on $Msg #4/H$ (the original, "Hard"
265	version) could influence respondents inducing some biases in their final
266	choice; furthermore, there could be a possible precedence effect if the two
267	versions of Msg #4 were submitted always in the same order. On these bases,
268	the presentation of the two versions to the participants will be
269	counterbalanced: all the participants will be informed that they are going to
270	see, at first, the version spontaneously prepared by the "architect". The second
271	(the "alternative" version) will be presented as suggested to him by one of his
272	colleagues when asked for an advice. However, about one half of the sample
273	will actually receive the two versions in that order (first $Msg #4/H$ , then $Msg$
274	$\frac{\#4/S}{S}$ ; the remainder will receive them in the reverse order.
275	SURVEY and DATA COLLECTION:
276	10. All the conductors of the survey sessions (12 persons, in total) are members of
277	the research group or in contact with it. Non-members will follow a brief
278	training, led by one of the authors. All the conductors are committed to avoid
279	expressing any comment about the message texts and concentrate on survey
280	process conformity. Conductors have also to assure that the process is clear fo
281	the participants and that they understand the structure of the case and the
282	questions. In order to minimize the speech necessities for the conductors, a

title page has been prepared; it contains a presentation of the survey and the
main context information (see this SI, <u>Section 4</u>). The conductors are due to
invite participants to carefully read it. In the title page, the case will be
presented as a real world case.

287 11. Informed consent will be requested verbally, after the reading of the title page. 288 Written consent will not be collected for two reasons: the first is that it would 289 imply the creation and management of a general database, paradoxically 290 increasing, by its mere existence, the risks of accidental data diffusion. The 291 second reason is that our data collection procedure (see also following points) 292 anyway fully guarantees anonymity of participants. At the end of data 293 collection, it will be impossible for everyone either to trace back participants 294 starting from the filled questionnaires or to reconstruct the participants' list. 295 12. The 12 conductors will operate in a completely independent way and the 296 participants will be enlisted by using their personal relationship network. 297 extended until the third degree of separation. Enlisting requirements: adult 298 condition (age>18 years), High-school degree at least. Exceptions about 299 education level are accepted just for people whose literacy and life experience 300 allow them to understand the case documentation without effort (see Note 1). 301 13. The conductors will collect questionnaires bereft of every personal indications 302 (or even hints) related to participants. They will individually deliver the 303 collected anonymous questionnaires to the authors' team and those documents 304 will be randomly numbered and stored in a dedicated collection box. The

35

research activities that will follow (data entry, in order to set up a digital data
base, and qualitative and quantitative analysis) will be performed on such
anonymous database.

308 **NOTE**: Once the protocol defined, two successive pilot sessions have been set up 309 (7 and 5 people respectively) and these experiences helped to progressively refine the 310 form of the questions, until the definitive shape was reached. The texts of the messages 311 remained always unaltered. The following <u>Section 4</u> presents the questions in their final 312 form.

	Questionnaire	e summarizing for	·m
Part / Question #	n. of sub-quest.	n. of items	NOTES
Title page			Presentation of the research and general instructions to participants
Statistical information			Gender, age range, education level, employment
Question #1	3	$2 \times 3 = 6$	Opened answers
Question #2	2	1	Closed answer
		2	Opened answers
Question #3		2	Opened answers
Question #4		2	Opened answers
Final Question		1	Closed answer
		1	Opened answer
Total of 5 questions	Total of 8 quest. / sub-questions	Total of 15 items	Total of 2 closed answers and 13 opened answers

313 SECTION 4 – *The questionnaire: message texts and questions (English translation)* 314

316

# 317 Title page

318 First of all, welcome and thank you for joining our research.

319 The e-mails on which this study is based will be submitted to you during the present 320 session. They have been exchanged in a real working environment and they refer to an 321 interaction that occurred in real life. They are presented in their original version; their 322 text has not been modified to be used for this research. Of course, all the elements that 323 specifically refer to persons, or to the real context, have been removed or appropriately 324 altered for privacy reasons.

325 Your task consists in reading the messages, respecting their submission sequence.

326 Please, read carefully and answer the questions intuitively, not analytically (although, 327 not excluding some personal reflections, if necessary). Underline the text, take notes or 328 look back at the message text, when deemed necessary, any time you need it.

329 All the questionnaires will be anonymous. We only ask you to give us general 330 information about yourself, here below, for merely statistical purposes (data 331 disaggregation).

332 [*Questions followed on gender, age range, education level and employment (answers 333 requested through pre-defined bins only).*]

#### 335 Message #1 (description)

336 A female line-worker (the "employee", named "XX") writes a 67 word e-mail to the
337 Project Account (the "architect") about the installation of the heating plant in her office.
338 She requires an inspection, claiming about "flaws" in the present state of the works.
339 Flaws are no better detailed. In her request, she declares that she is also speaking in the
340 name of some colleagues and she uses the expression: "we would be pleased if, at least
341 once, someone of our Corporation would come here and control...".

342

# 343 Message #2 (description)

344 The Project Account (a male professional, the "architect", named "YY") answers to XX. 345 In his brief message (48 words) he declares regularity in the Project progress, and ends 346 with: "at the moment, the progress substantially complies with the chronogram".

347

# 348 Message #3 (description)

349 XX replies to YY's answer declaring herself totally unsatisfied. Her message (136 words) 350 presents two main features: (i) some minor flaws are listed; (ii) she expresses what 351 resembles an actual threat against YY, in the case he would not take measures regarding 352 to the presented problem (she specifically refers to a hypothetic "waste of public 353 money", given that the Project funding involved public sources).

354

# 355 QUESTIONS #1 and #2, about Messages #1, #2, #3 (full text)

# 356 1 \* Please, read Messages #1 and #2 and answer to the following questions:

- 357 <u>a What do you think is going on, between XX and YY</u>?
- 358 Could you indicate the concrete elements (words, sentences, expressions etc...) on
- 359 which your answer is based?
- 360 <u>b In particular, how would you define XX's position during the interaction</u>?
- 361 Could you indicate the concrete elements (words, sentences, expressions etc...) on
- 362 which your answer is based?
- 363 <u>c How would you define, then, YY's position during the interaction</u>?
- 364 Could you indicate the concrete elements (words, sentences, expressions etc...) on
- 365 which your answer is based?

# 366 2 \* Please, read Message #3 and answer to the following questions:

- 367 Do you think the attitude of XX towards YY has changed, in respect to Message #1?
- 368 [*YES/NO*]
- 369 If it has, how would you define the new XX's position, in respect to YY?
- 370 Could you indicate the concrete elements (words, sentences, expressions etc...) on
- 371 which your answer is based?

# 372 373 Message #4 / "H" version (the spontaneous "Hard" version by the architect, 374 full text)

375 <u>Block #1</u>

- 376 From: YY (*Project Account for the heating plant works*)
- To: XX (*Employee in one of the offices affected by the works*)
- 378 Cc: ZZ (Office referent for the works)
- 379 Sent: ... [*date*] [*hour*]
- 380 **Subject**: R: heating plant

381

382 Dear Mrs. XX,

# 383 <u>Block #2</u>

- 384 I want to premise that, for the sake of a wise management of the work process, intended to 385 optimize the utilization of our Corporation resources (exactly, in order to avoid wasting 386 public money):
- Before Project start, I asked the Director of your structure (B wing of the building), Dr.
  KK, to put a specific person in charge of controlling the work's progress;
- As far as I am concerned, the indicated person is, and will remain, Dr. ZZ;
- 390 Dr. ZZ carefully planned the project development steps with us;
- Each office, situated in the B wing of the building, has been already supplied with heat ing systems (hardware), fully complying with the timetable agreed with Mrs. ZZ;
- The heating plant is now working, even though in provisional mode.

I do recommend you to send any communication, concerning the mentioned Project, to the specific person in charge of controlling, in order to avoid (as already happened) message

396 exchange with personnel that is not directly and formally involved within the process.

# 397 <u>Block #3</u>

- However, I inform you that, at the moment, the works under discussion have been suspended,
  in order to enable the provisioning of the plant-control software. It will manage automatically
  the heating system in the offices, including yours, regulating the warm air diffusion (in order,
  as said above, to reduce any waste of money).
- 402 As soon as the software will be installed by the contractor, the works will come to end. By 403 the way, in this phase they should not affect the rooms situated in the B wing of the building 404 at all, but only the thermo-station.
- 405 All quantitative and qualitative controls, requested by the CHK form [formal inspection
- 406 *document*], will be carried out after the end of the works and just before their compliance to
- 407 fixed quality standards will be attested, as prescribed by the current rules.

# 408 <u>Block #4</u>

- 409 This said, I have found your objections very interesting. For this reason, once the real
- 410 existence of the problems you have marked will be assessed, I will certainly solve them as a
- 411 part of my duty.

#### 412 <u>Block #5</u>

- 413 Yours sincerely
- 414 The Project Account
- 415 Arch. YY [Corporation branch] .....
- 416
- 417 418

# 419 Message #4 / "S" version (the "Softer" version suggested by YY's colleague, 420 full text)

#### 421 <u>Block #1</u>

- 422 From: YY (*Project Account for heating plant works*)
- 423 To: XX (*Employee in one of the offices affected by the works*)
- 424 Cc: ZZ (Office referent for the works)
- 425 Sent: ... [*date*] [*hour*]
- 426 **Subject**: R: heating plant
- 427 428 D M XX
- 428 Dear Mrs. XX,

# 429 <u>Block #2</u>

- 430 I remember your last message, which I have already answered, and now I really thank you for
- this new one. In fact, we do believe that the attention of our colleagues, on field operating
- 432 with structures and plants we provide, is fundamental to complete our tasks at best.

# 433 <u>Block #3</u>

- In order to optimize our contribution, I have been since the beginning asking for a unique
- 435 person in charge of controlling the works, accounted for your office's building. This person is
- 436 Doctor ZZ (I might have already mentioned her in my previous answer even though, at
- 437 present time, I am not certain about this). Her duty is to collect all the observations expressed
- 438 by the staff about the work in progress, then to send it directly to my office. I think you
- already know her and she is going to receive a copy of the present message. I thought this
- 440 would make communication easier.

# 441 <u>Block #4</u>

- 442 Concerning your request, you can be certain that, so far, our Project has been developed by
- following all the technical and formal standards prescribed by the current rules. In addition, I
- inform you that the works are not yet concluded and final checks (along with possible
- inspections) are about to be carefully planned. Please, inform your colleagues about the
- existence of a person in charge of control and do not hesitate to contact her in the case of
- 447 further observations or possible problems. As I said, she will return your indications to us; 448 this way. I assure you they will not be ignored
- this way, I assure you they will not be ignored.

# 449 <u>Block #5</u>

- 450 Best regards
- 451 The Project Account
- 452 Arch. YY [Corporation branch] .....

# 454 QUESTIONS #3 and #4, about Messages #4/H and #4/S (full text)

455 **Premise**: YY prepares Message #4 as an answer to Message #3 (received from XX). 456 Before he sends it, he consults one of his colleagues, who advises him against sending 457 and suggests a different text (**alternative** Message #4).

# 458 3 \* Please, read Message #4 and answer to the following questions:

459 In your opinion, what effect will this version produce on XX?

460 Could you indicate the concrete elements (words, sentences, expressions etc...) on which 461 your answer is based?

# 462 4 \* Please, read alternative Message #4 and answer to the following questions:

463 In your opinion, what effect will the alternative version produce on XX?

464 Could you indicate the concrete elements (words, sentences, expressions etc...) on which 465 your answer is based?

466

467 -----

468

469

# 470 Message #5 (full text)

471 Thank you very much for your interest and for the information. That was very kind of 472 you and your answer was exhaustive.

473 Best regards

474 XX

475

476

**477 FINAL QUESTION** 

# 478 Consider that Message #5 was the final reaction of XX and answer the following 479 questions:

480 In your opinion, which version of Message #4 did XX receive?

481 [*YY's draft / Alternative*]

482 Could you indicate the concrete elements (words, sentences, expressions etc...) on which 483 your answer is based?

#### 485 SECTION 5 – Case structure and communication critical points

Focusing on the communication aspects of our case, we can synthesize its Focusing on the communication aspects of our case, we can synthesize its Focusing on the communication aspects of our case, we can synthesize its Focusing on the communication aspects of our case, we can synthesize its Focusing on the communication aspects of our case, we can synthesize its Focusing on the communication aspects of our case, we can synthesize its Focusing on the communication aspects of our case, we can synthesize its Focusing on the communication aspects of our case, we can synthesize its Focusing on the communication aspects of the interaction Focusing on the communication aspects of the interaction Focusing the employee and the architect. Such scheme can be translated in plain language Focusing as it follows: apparently, the employee (working for the architect's same corporation but Focusing to a different branch, with no executive commission) was complaining, Focusing Message #1, about the quality of the heating plant installation. However, some Focusing Message for example the claimed "flaws" were not specified) suggest to figure out Focusing the possible different reasons.

The architect's first answer (Message #2) can be interpreted as an attempt to 495 quickly end the interaction; however, the reaction of the employee (Message #3) 496 demonstrates the failure of this tactic. It is particularly worth quoting a possible threat 497 contained in that message, considering that XX literally writes: "if the work had regarded 498 my home... there's a matter of public money...". She was hinting to the fact that the 499 Project funding involved public sources. All this should arouse alarm and caution. 500 On the contrary, the architect's spontaneous reaction (Message #4, "Hard" 501 version, in short Msg #4/H) follows the escalation initiated by the employee: he 502 squabbles, with a repeated retaliation, about the question of money; he expresses doubts 503 about the fondness of the employee's statements ("once the real existence of the 504 problems you have marked will be assessed, I will certainly solve them..."); he 505 substantially refuses to establish any relationship with the employee, putting just a hint of 506 appreciation at the end of the message ("This said, I have found your objections very

49

507 interesting..."), at the same time counterbalancing it with his doubts. The most probable 508 result should be an escalation of the conflict.

Now, if we analyse in deep Msg #4/H (the "Hard" version of Msg #4) structure, 510 we can detect in it five main content blocks (they are marked through specific sub-511 headings along the message text). Msg #4/S (the "Softer" version, suggested to YY by 512 one colleague of his) maintains the same content while its written form is reviewed and 513 its sequence modified. In practice, the "alternative message" #4/S presents the same 514 content blocks of Msg #4/H in a different order and under a new written form. We have 515 synthesized a comparison of the two structures in <u>Table S2</u>.

The substantial difference between the "Hard" and the "Softer" versions of 517 Message #4 is founded on the diverse approach to the arising conflict: while the "Hard" 518 spontaneous reaction of YY approached it through a direct confrontation, the alternative 519 "Softer" version maintains the same information content but approaches the relation with 520 XX in terms of welcome and acknowledgement.

#### 522 PART II - The collected data

523

#### 524 SECTION 6 – *About the sample*

Our work was aimed to explore the process of message interpretation, sharing the 526 general assumption that the communication process is universally uniform. We mean that 527 human communication, although its expressions appear extremely variable, must 528 however stem from a unique base of fundamental factors and processes. Something like a 529 limb in a heterogeneous sample of humans: its aspect looks very different in function of 530 sex, age, size, health and so on; nonetheless, it is based on a unique anatomical and 531 functional scheme. For this, the sample's representativeness with respect to the Italian 532 people was not critical. Thus, we decided to increase, as much as possible, the amount of 533 participants while easing the sampling process (see research protocol, in this Supporting 534 Information, <u>Section 3</u>, point 12).

We recruited 102 participants in our sample, whose characteristics are displayed in manuscript Tables 1-3. The total sample composition (manuscript Table 1) shows an exceeding rate of women vs. men and of Graduates/Post-graduates vs. High-school sald degree granted members (columns "Education", "Gr" bin vs. "Dg" bin; people granted sale with Elementary degree are inessential, only 4 out of 102). We also highlight the high state of students and unemployed vs. employed members (columns "Employment", "E" state of students and unemployed vs. employed members (columns "Employment", "E" state of students and unemployed vs. employed members (columns "Employment", "E" state of students and unemployed vs. employed members (columns "Employment", "E" state of students and unemployed vs. These reasons, even if sample statistical analysis is less states the total sample. state of students in our work, we have drawn more balanced sub-samples from the total sample. states the total sample. 544 sub-samples every time it turned out necessary. The first sub-sample ("AGE",

545 manuscript Table 2) is exclusively composed by people over 29 years-old (age bins B, C

546 and D, excluding A; in total, 60 members). The second one ("EMPLOYMENT",

547 manuscript Table 3) is exclusively composed by employed people (A to D bins,

548 excluding E and F, i.e. students and unemployed people; in total, 65 members).

#### 549 SECTION 7 – *The harvest*

In this section we present in detail an assessment about the amount of the 551 collected materials ("how much" the respondents have written in their answers, the 552 "physical amount" of the answers).

553 Starting data analysis, we firstly transcribed into a .xls file the filled 554 questionnaires; such file turned into 1 tab containing 8 data-sheets, one for each main 555 question or data source (information for disaggregating data, Questions <u>#1-a</u>, <u>#1-b</u>, <u>#1-c</u>, 556 <u>#2</u>, <u>#3</u>, <u>#4</u>, <u>Final question</u>). Secondly, we reviewed transcriptions with regard to text 557 correction (typos) and we harmonized data entries (different operators had produced little 558 differences in managing spaces near punctuation marks and in using suspension points, 559 abbreviations and similar details). At this point, it was possible to measure the collected 560 data amount:

561	·	Paper archive: each participant provided a 6 pages long document. Four pages
562		contained the information materials (the title page and the transcriptions of the
563		messages). In a few cases, on those pages, respondents had written very short
564		notes and underlined some words. The other two pages contained the answers,
565		which are the actual data source of our research. In conclusion, we collected
566		$102 \ge 204$ handwritten pages containing data to be processed.
567	١	Digital archives: they contain the transcriptions of opened answers (harmon-
568		ized text), that returned totals of 16,094 words, corresponding to 89,685 char-
569		acters (spaces excluded) or 104,200 characters (spaces included).

57

570	•	In order to let the readers estimate the amounts better, we calculated that using
571		Times New Roman font, 12 size characters, space 1, with a "letter" page
572		format and 1" for all margins, the opened answer texts should be occupying
573		about 26.7 to 27.4 pages (range of 3,800-3,900 characters per page, spaces in-
574		cluded, text only, no picture, table or main titles).
575		We also calculated the filling rate of the questionnaires (opened answers) in
576		the following way: we excluded the two opened items of $\frac{\text{Question } \#2}{\text{Question } \#2}$ (an-
577		swering the opened part of the question was under condition and it was per-
578		formed by just 60% of the sample); then, we recorded 27 unanswered items on
579		an expected total of 102 participants x 11 items = 1,122 answers (see SI, Sec-
580		tion 4, questionnaire <u>summarizing form</u> ). The filling rate is: (1,122-
581		27)/1,122x100 = 97.6%
581 582		27)/1,122x100 = 97.6%. This last information says which percentage of the opened questions received
582		This last information says which percentage of the opened questions received
582 583	·	This last information says which percentage of the opened questions received an answer but says nothing about the length of those answers. We can calcu-
582 583 584	•	This last information says which percentage of the opened questions received an answer but says nothing about the length of those answers. We can calcu- late an average length in two ways: the first is dividing the total words by the
582 583 584 585	•	This last information says which percentage of the opened questions received an answer but says nothing about the length of those answers. We can calcu- late an average length in two ways: the first is dividing the total words by the amount of participants and, then, by the amount of the opened items. The res-
582 583 584 585 586	•	This last information says which percentage of the opened questions received an answer but says nothing about the length of those answers. We can calcu- late an average length in two ways: the first is dividing the total words by the amount of participants and, then, by the amount of the opened items. The res- ult is 16,094/102/13=12.1 words per respondent per item (answers to Question
582 583 584 585 586 586	•	This last information says which percentage of the opened questions received an answer but says nothing about the length of those answers. We can calcu- late an average length in two ways: the first is dividing the total words by the amount of participants and, then, by the amount of the opened items. The res- ult is 16,094/102/13=12.1 words per respondent per item (answers to Question #2 are included in this calculation). In order to appreciate this value better we
582 583 584 585 586 587 588	•	This last information says which percentage of the opened questions received an answer but says nothing about the length of those answers. We can calcu- late an average length in two ways: the first is dividing the total words by the amount of participants and, then, by the amount of the opened items. The res- ult is 16,094/102/13=12.1 words per respondent per item (answers to Question #2 are included in this calculation). In order to appreciate this value better we can follow the second way: one page, of the previously approximated 27, has

- words; a satisfactory result, about the accomplishment of their commission bythe sample members.
- About the closed answers, only the <u>Final question</u> is relevant (for the closed part of <u>Question #2</u>, see previous points), and 101 out of 102 answered to it.
- 596 In the end: survey returned a good harvest, consistent with our expectations and

597 with the research needs.

# 598 SECTION 8 – Data quality check: compliance with research requirements and599technical-theoretical questions related to answer interpretation

600 a – <u>Answer general features and compliance with research requirements</u>. A first

601 noticeable aspect is that it is not possible, in any of the answers, to find overt doubts, 602 uncertainty statements, declarations of impossibility to answer, indications of equivalent 603 alternatives<sup>3</sup>. For each respondent, his/her own interpretation seems to be **the only** 604 **available option**. This happens in spite of the fact that about 28% of the total sample 605 describes the effects of the <u>"Hard"</u> and of the <u>"Softer"</u> versions of Msg #4 as similar: for 606 an 18% (18 people) they both will solve or ease the contrast; for a 10% (10 people) they 607 both will escalate the contrast (see this SI <u>Section 11</u> and <u>Table S5</u>, "Total sample" 608 columns, H+/S+ and H-/S- cells). This observation confirms that the answers are 609 spontaneous and that our survey collected subjective perceptions, instead of elaborated 610 rational reflections. That is what we aimed to, while following the research guide-lines 611 and protocol (see this SI, <u>Sections 1</u> and <u>3</u>)<sup>4</sup>.

Another important point is that no one of the sample members uses any technical 613 word or expression. About this, it is worth considering how participants reacted to the 614 two points which, from a communication slant, can be rated as the most critical: the 615 possible threat XX expressed in <u>Message #3</u>; the squabbling and the personal attack by

<sup>63 &</sup>lt;sup>3</sup> Just 1 participant (out of 102) declares some uncertainties in his final choice, writing that the final

<sup>64</sup> effect (as it appears in <u>Message #5</u>) could be obtained both with the "Hard" or the "Softer" version

<sup>65</sup> of Message #4. Nevertheless, while answering to the other questions, his statements are in all similar

<sup>66</sup> to the other participants' ones.

<sup>67&</sup>lt;sup>4</sup> Exactly in order to facilitate such result, in the actual survey sessions (lasting range: 20 to 45

<sup>68</sup> minutes) no discussion about the answers was allowed before the filled in questionnaires had been

<sup>69</sup> collected by the conductor; in addition, no further contact with the questionnaires was permitted

<sup>70</sup> after the sessions were over.

616 YY against XX in Message #4/H (see also this SI Section 5 and Table S1). Even if some 617 participants refer to these passages in their answers, none stresses them as particularly 618 critical and almost none labels them as "threat" or "personal attack". Finally, while 619 examining the answers to <u>Questions #3</u> and <u>#4</u> and to the <u>Final Question</u>, we found that 620 about one fourth of the sample (mean for the three questions 26.5%, range 16% - 36%) 621 overtly stated, at least once, the impossibility to analytically answer to the second part of 622 the questions (which requested to point out the "concrete elements" that induced the 623 answer to the first part). These respondents describe their answers to the first part of the 624 questions as the result of "a general impression", "a sensation/a perception"; in other 625 cases they present such answers as "an opinion drawn from the whole message" or 626 something similar. These observations confirm the general naïve condition of the sample 627 about human communication (another feature requested by our research plan).

b - About the questionnaire interpretation. Interpretation problems, related to the 629 questionnaires, are essentially of two kinds: interpretation of the questionnaire questions 630 by the sample; interpretation of the sample answers by the research team. Following here, 631 two selected examples of the first kind:

632 1. Question #1 ("What do you think is going on, between XX and YY?") – It has
633 been interpreted, in certain cases, in terms of interpersonal relationship, in
634 other cases in terms of organizational position or professional profile.

635 2. Questions #1 and #2, first part (each containing indications for focusing on a
636 specific message, out of the first three) – Actually, a large part of the sample

- 637 answered ignoring indications and simultaneously referring to all the three 638 messages.
- 639 Here, two examples of the second kind:

640 3. Question #1 ("What do you think is going on, between XX and YY?") – In 641 one of the answers, Message #2 is defined as "bureaucratic"; however, it is 642 impossible to understand if this adjective is used with a technical meaning 643 (referring to a normal interaction inside an office) or with a relational one 644 (defining a conflict, with YY using formality to resist to XX's action). We 645 found other similar cases.

646 4. Question #2, first part (requesting if, after comparing Message #3 with

647 Message #1, the respondent considers XX's position as "changed") – It is 648 interesting to see that 41 people (40% of the sample) answered "NO – Not 649 changed", and 61 (60%) answered "YES – It has changed". These answers are 650 nonetheless unsuitable for deep quantitative analysis because of the different 651 interpretation of the word "changed". For example the answer "YES" (the 652 position has changed) may correspond to the actual perception of an escalated 653 interaction; however, it may also be simply connected with attention on 654 isolated linguistic elements (like some technical terms, introduced in Message 655  $\frac{#3}{10}$  but absent in  $\frac{#1}{10}$ . The answer "NO" (no change detected) could mean that 656 the respondent does not actually perceive any difference; it may also indicate 657 that the differences, clearly detected relationship-wise, are nevertheless

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658 considered scarcely effective on the respective organizational positions of XX 659

and YY.

660 As stated in the research protocol (previous Section 3, point 8.), given the

661 impossibility of a completely unambiguous formulation of concepts in natural language,

662 we ex-post discarded from quantitative analyses all the unsuitable data.

#### 663 SECTION 9 – Data quality check: analysis of the collected data distribution

In order to check the existence of possible imbalances in the collected data, we 665 explored the distribution of the answer texts with respect, by one hand, to the 666 questionnaire questions/sub-questions and, by the other hand, to the respondents. We 667 quantified these texts through the amount of words and characters contained in the filled 668 questionnaires. We remind that each question/sub-question was divided into two items; 669 when we refer to "totals", we mean that the presented data are the result of summing 670 values related to the "strict" answer (first item, i.e. first part of the question) and values 671 related to the indicated "concrete elements" (second item, i.e. second part of the 672 question).

a – <u>Text amount distribution with respect to items</u>. The results of this first analysis 674 are displayed in <u>Table S3</u> and <u>Fig. S1</u>. <u>Table S3</u> shows totals and some statistical indexes 675 with regards to the distribution of the answer text amounts on questions/sub-questions. 676 Data referred to all the answers (left part) are compared with those excluding <u>Question</u> 677 <u>#2</u> (right part). The reason of such exclusion: answering was under condition and 678 <u>Question #2</u> was answered by only a part of the sample. In order to investigate the 679 distribution shape, we drew the histogram of <u>Fig. S1</u>, which displays the percent 680 distribution of text amounts (in terms of words and characters, <u>Question #2</u> excluded) 681 with respect to the questionnaire items. It shows evident lower levels for <u>Questions #1-b</u> 682 and <u>#1-c</u> (whose minimum, all the same, is around 7%); the rest of the values seesaws 683 between 9% and 11% (the general percent mean, per item, is 100:11=9.1%, see <u>Table</u>. 684 S3, right part, "% Gen. means per item" row).

685 About this, we must consider that several respondents answered in short to sub-686 <u>questions #1-b</u> and <u>#1-c</u>, just indicating some references to the previous sub-question 687 (<u>#1-a</u>, indeed having the highest values). Thus we prefer to use, for comparing different 688 items, values referring to the percent mean of the three sub-questions of Question #1, that 689 is 8.3% both for words and for characters (SI = spaces included). On the whole, we have 690 a range oscillating between 8.3% and 11.1% (for words) or 11.3% (for characters). No 691 meaningful difference is recordable; the distribution of the answer texts with respect to 692 the questionnaire items has an almost rectangular shape and can be assessed as 693 satisfactorily uniform. Actually, no question at all has been neglected by respondents. 694 b – Sample distribution with respect to the text amounts. The results of this 695 analysis are displayed in Table S4 and Fig. S2 and S3. Table S4 shows totals and some 696 statistical indexes referred to the amounts of text (in terms of words and characters, 697 <u>Question #2</u> excluded) provided by respondents through their answers. Data are 698 displayed separating values referred to the first item of the questions ("strict" answer) 699 from those referred to the second one ("concrete elements"). In order to investigate the 700 distribution shape, we drew two histograms, in which participants have been grouped in 701 bins referred to words (30-word bins, Fig. S2) and characters (200-character bins, Fig. 702 <u>S3</u>, SI=spaces included) amounts. The histogram shapes have features comparable to a 703 bell-curve, even though imperfect (see statistical details in the figure captions). Data 704 uphold the idea of differences mainly due to spontaneous random variations and lead to 705 the conclusion that also such distribution can be considered thoroughly acceptable (no 706 participants seem to have neglected their commission).

#### 707 **PART III - Added materials** 708

#### 709 SECTION 10 – Analysis of some indicated component distributions

In this Section we detail the results of our check on the distribution of the 711 components indicated by participants, searching for possible imbalances that could 712 contradict our findings presented in the main text (about components, see manuscript, 713 Section "Results/1", Sub-section *Answers to the second input of the questions*).

Firstly, we have checked the percent distribution of components under two 715 profiles: (i) With respect to questions/sub-questions of the questionnaire (Fig. S4, which 716 presents an almost rectangular shape, showing that no question has been privileged or

717 neglected in the participants' indications) ; (ii) With respect to component types (<u>Fig. S5</u>,
718 types approximately ranked by physical dimension, histogram presenting an almost

719 "bell-curve" shape, hinting to a spontaneous variability of the sample).

Secondly, we have checked the percent distribution of the sample under two 721 profiles: with respect to the amount of component types employed (Fig. S6) and with 722 respect to the amount of components indicated (Fig. S7). Both the histograms show "bell 723 curve" shapes, which we assumed due to the spontaneous variability of the sample, 724 without special imbalances to be considered.

#### 726

#### 727 SECTION 11 – Complement materials on coherence investigation

In this Section we present some complement data, and the related analysis, referred to the investigation of the coherence among participants' interpretations and r30 choices.

#### 731 a – <u>From the interpretation of Message #4 two versions to the coherence</u>

732 *assessment*. In this sub-section we report some complement data regarding the passage 733 from the interpretations of the two Msg #4 versions (the <u>"Hard"/H</u> and the <u>"Softer"/S</u>) to 734 the conceiving and using of the "coherence" statistical indicator (coherence between the 735 interpretations provided by participants and the final choice they expressed).

The interpretations of the "Hard" and "Softer" versions are expressed in terms of 737 predictions about their effects on XX through the dummy variable "Expected effects", 738 which can take the values "+" (if the interpretation entails the prediction of solving or 739 easing the conflict) or "-" (if the interpretation entails the prediction of a surge or 740 escalation of the conflict). <u>Table S5</u> displays data in a dichotomous representation and 741 shows that there is a clear convergence on the "H-/S+" combined prediction (further 742 details in manuscript, Section "Results/2", Sub-section *The coherence between* 743 *interpretation and choice*).

<u>Table S6</u> displays the participants' combined predictions cross-checked with the 745 final choice (i.e. the answer to the Final Question, asking which of the two versions could 746 elicit the final XX's reaction, reported by Message #5). The most frequent combined 747 prediction (H-/S+) appears to be strongly associated to the <u>"Softer" message</u> choice

748 (further details in manuscript, Section "Results/2", *Sub-section The coherence between* 749 *interpretation and choice*).

Table S7 displays the scale of the coherence indicator, i.e. the levels through 751 which the coherence between, on the one hand, the interpretations of the <u>"Hard" (H)</u> and 752 the <u>"Softer" (S)</u> versions of Message #4; and, on the other hand, the final choice, is rated 753 (see manuscript for details about the definitions of the four levels of coherence set by the 754 authors). The use of this scale allowed the study of the sample distribution with regards 755 to the aforementioned coherence.

b – <u>Graphic representations complement materials</u>. In this sub-section some 757 complement materials are presented regarding some graphic representations of sample 758 distributions with respect to the coherence between the predictions about the effects of 759 the <u>"Hard" (H)</u> and the <u>"Softer" (S)</u> version of Msg #4 and the final choice between 760 them.

In <u>Fig. S8-S9-S10-S11</u> each histogram compares the percent distributions of "H" r62 and "S" choosers with respect to the aforementioned coherence (expressed through the r63 coherence indicator). Each histogram regards a specific sub-sample; the displayed subr64 samples are: Male, Female, High-School degree granted, Graduated participants. All the r65 histograms show a clear difference in the distribution shape of "H" with respect to "S" r66 choosers (further details in manuscript, Section "Results/2", Sub-section *The coherence* r67 *between interpretation and choice*). In addition, <u>Table S8</u> and <u>Table S9</u> contain the source data for the manuscript 769 Fig.7 and Fig.8, which display, for the sub-samples "Age" and "Employment", the same 770 kind of histograms of <u>Fig. S8-S9-S10-S11</u>.

#### 771 SECTION 12 – *The "block preference" analysis*

772 The second indicator we have used (block preference indicator), was built starting 773 from the consideration (this SI, <u>Sections 4</u> and <u>5</u>) that the <u>"Hard" (H)</u> and the <u>"Softer" (S)</u> 774 version of Message #4 contain the same content blocks (it was an overt decision of YY's 775 "colleague"), differing for the order of presentation and for linguistic form. Each block is 776 identified as concerning a given content (see this SI, Section 5 and Table S2). Then, we 777 investigated about possible differences regarding the attention paid by "H" and "S" 778 choosers to different blocks, while answering to <u>Questions #3</u> and <u>#4</u> (predictions of the 779 messages' effects on XX). Our goal was to explore finer characteristics in the choice 780 process. Specifically, we intended to verify if the different choices ("H" or "S") were 781 linked to differences in focusing on the blocks or in detecting diverse characteristics 782 inside same blocks. In the first case the different contents, ascribable to the different 783 blocks, would lead the process; in the second case, other factors would play a critical 784 role.

785 To build the block preference indicator we, at first, examined the answers to 786 Questions #3 and #4 and highlighted all the direct references to Message "H" and 787 Message "S" texts (i.e. sentences in quotation marks or undoubtedly referring to clearly 788 identifiable passages). Then, we associated them to the text blocks. Results from this part 789 of the analysis are displayed in Tables S10-S13<sup>5</sup>; they contain clear indications about the

<sup>91</sup> 5 Tables S10 and S11 display data with regards to the amount of references to each block 92 expressed by participants. In Table S10, totals for each block and each evaluated message (as 93 well as general totals) can be higher than the people amount, given that each person can express more than one references. Tables S12 and S13 display data with regards to the amount of 94 95 participants that referred to each block. In Table S12, totals for each block and each evaluated 96 message must be inferior to the participants' amount; however, the general totals can be higher, 97

given that each person could refer to more than one block.

790 message blocks which the attention of participants has fallen upon. We will base our 791 analysis on <u>Table S12</u> data; blocks are displayed along with the texts of the <u>"Hard" (H)</u> 792 and the <u>"Softer" (S)</u> versions of Message #4; a comparison among them is presented in 793 <u>Table S2</u>.

Regarding the <u>"Hard" (H)</u> message blocks, both "H" and "S" choosers express the 795 same preference, as their attention is mainly attracted by <u>Block #2</u> (from both the 796 versions of Msg #4) in a similar proportion: (13+9)/(21+11), about 70%, for "H" 797 choosers; (10+43)/(17+65), about 65%, for "S" choosers. Conversely, with regard to the 798 <u>"Softer" (S)</u> version, "H" and "S" choosers split. Indeed, "H" choosers focus on <u>Blocks</u>. 799 <u>#2</u> and <u>#3</u> (converted numbers<sup>6</sup>) in a large majority: (6+10+7+3)/(18+14), more than 800 80%. "S" choosers focus on <u>Blocks #3</u> and <u>#4</u> in a minor but still strongly prevailing 801 proportion: (34+3+35+0)/(95+7), a little more than 70%. The principal differences 802 regarding <u>Block #2</u> and <u>Block #4</u> are the following: <u>Block #2</u> is the paragraph through 803 which YY refuses to engage XX's request and re-addresses XX to another account (*ZZ*) 804 inside the organisation. Both "H" and "S" choosers give <u>Block #2</u> a prevalent attention, 805 when they read it in the <u>"Hard" (H)</u> message. However, when they read it in the <u>"Softer"</u> 806 (<u>S</u>) version, we see that "H" choosers maintain their preference (with a little shift towards 807 <u>Block #3</u>, containing specific information) while "S" choosers pay the minimum of

103 is the same of the correspondent block in Message "H" (see this SI, <u>Section 5</u>, and <u>Table S2</u>,

<sup>100 &</sup>lt;sup>6</sup> We remind that Message "S" maintained the same content of Message "H", and that content

<sup>101</sup> was divided into analogous text blocks, but varying their sequence (besides their written form).

<sup>102</sup> For reliable comparing, it has been necessary to give each "S" block a "converted number", that

<sup>104</sup> extreme right column). From now on, until express notice, all the numeric references to "S"

<sup>105</sup> blocks must be intended as converted numbers.

808 attention to it (18+4=22 references) moving towards <u>Block #3</u> and <u>#4</u> (34+3=37 and 809 35+0=35 references respectively).

Block #4 is the paragraph expressing YY's relational acceptance toward XX; in 811 Message "H", it is placed at the end, immediately before the form of salute, and is 812 scarcely considered by both sides (even if, as usual, in different proportions). Reading it 813 in Message "S" (where it comes as second, immediately after the form of address), we 814 see that "H" choosers confirm their neglecting while "S" choosers pay great attention to 815 it. In other words, "H" choosers give constantly their preference to YY's refuting and, a 816 little less, to information providing. "S" choosers vary their preferences according to the 817 message and they seem to attribute importance to the relational block just in Message 818 "S", even if it is present in Message "H", too.

What does this result mean? Data seemed to be insufficient for drawing reliable 820 conclusions; for this reason, we returned to the answers' texts (answers to <u>Questions #3</u> 821 and <u>#4</u>, in particular the second item, "concrete elements") and discovered what it 822 follows. First, the apparent convergence of "H" and "S" choosers behaviour, about their 823 taking into account Message "H" (both choosers preferentially focused on <u>Block #2</u>), is 824 not real: almost all "S" choosers rate the impact of <u>Block #2 from Message "H"</u> on XX-825 YY conflict as negative **for relational reasons**. It is notable that their answers are about 826 an information that YY gives to XX (Dr. ZZ assuming a role of account) but they refer 827 quite exclusively to the relational impact of the passage. In this way, choosers behave 828 homogeneously and coherently select Message "S".

Conversely, "H" choosers clearly split: on the one hand, 12 of them (out of 24, 830 50%, see manuscript Table 14, left column, L and LM rows) express, on the <u>"Hard" (H)</u> 831 message, the same negative rating of "S" choosers (XX-YY conflict escalation) and for 832 the same reasons (relation aspects), too. Nevertheless, they eventually choose that same 833 Message "H" providing various justifications for their choice. On the other hand, 12 of 834 them (50%, see manuscript Table 14, left column, MG and G rows) rate the impact of 835 Message "H" on XX-YY conflict as positive. Coherently, they choose that message but 836 indicate final effects of different nature: XX should be "calmed", because of the great 837 quantity of information received. However, she could also be sorted out, just stopped 838 despite her dissatisfaction. These 12 people behave as if they were thinking that 839 information is what it matters and they pay little attention to relational aspects. Such 840 situation reminds the differences between "H" and "S" choosers' behaviours highlighted 841 by coherence indicator analysis (specifically, the sample distribution with respect to 842 coherence level).

We successively noted that a minority of "S" choosers, while evaluating the 844 <u>"Hard" (H)</u> message, focused on <u>Block #4</u> (the relational acceptance passage) and rated 845 it, overwhelmingly, negative (4+15=19, see <u>Table S12</u>, Block #4 row, column "S" 846 choosers/"H" evaluation). Some of them, for example, justify their evaluation 847 interpreting that YY overtly declares that he does not trust XX, given that he says he 848 reserves himself to check for the real existence of the problem, before intervening<sup>7</sup>. They

<sup>110 &</sup>lt;sup>7</sup> We observe that, as widely discussed in the manuscript (specially in the Discussion section),

<sup>111</sup> the question is not linked to the information *per se*, nor it regards YY's right to control. The

<sup>112</sup> question is "the fact that" YY decided to overtly declare, in a certain point of his message and

<sup>113</sup> under a certain form, his doubt and his intentions.

849 do not pay any importance to the formal relational acceptance that Block #4 contains. 850 Moving to Message "S" evaluations, we face apparent divergent behaviours, as "H" and 851 "S" choosers focus on different blocks; nevertheless, this appearance covers an actual 852 continuity with what we observed about the evaluations on Message "H". For example, 853 "S" choosers that focus on Message "S"/Block #4 (we remind this is the "converted" 854 number, corresponding to the original #2, see Table S2) express positive rates for 855 relational reasons; quite homogeneously, they hold this block responsible for solving the 856 conflict and they constantly describe the effects of the "Softer" (S) message (and its 857 <u>Block #4</u> in particular) with words like "acceptance", "XX satisfaction", "reassuring", 858 "XX will feel listened to", "acknowledgement", "appreciation". Conversely, "H" chooser 859 behaviour, once again, is split: those who, regardless of their choice, rate "S" effects as 860 positive (10+5=15, see manuscript Table 14, left column, L and MG rows), express their 861 evaluations in terms which are very similar to those of "S" choosers: "satisfaction" of 862 XX, "reassuring", "calming", "attention given" and so on. Nine of them, who deem "S" 863 as negative (2+7=9, see manuscript Table 14, left column, LM and G rows), give the 864 maximum of importance to XX notifying the necessity to refer to a different person (Dr. 865 ZZ). Only in 2 or 3 cases we found generic comments about the excessively "diplomatic" 866 form of Message "S".

All these observations summed up, our investigation through the second indicator 868 helps us to answer the initial question: if the choice between Message "H" and Message 869 "S" can be linked to differences in block focusing or to different characteristics detected 870 inside same focused blocks. Indeed, even though our observations seem to be pointing to

116

871 the second option, we got the impression that such formulation could result weak and 872 that the observed processes cannot be restrained to such dichotomy. Then, how can we 873 explain our observations? The picture can be synthesized as it follows:

874	•	When predicting Message "H" effects, both "H" and "S" choosers mainly
875		focus on the same block but they are attracted by different characteristics: "H"
876		choosers by its information content; "S" choosers by its relational impact.
877	•	When predicting Message "S" effects, "H" and "S" choosers mainly focus on
878		different blocks. However, their answers show that such behaviour is linked to
879		the attraction they feel towards the same characteristics that stimulated them
880		in the previous case: "H" choosers insist on privileging information content
881		(and <u>Blocks #2</u> and <u>#3</u> , that concentrate the information); "S" choosers shift
882		towards new blocks that make evident the relational care of YY with regards
883		to XX ( <u>Blocks #3</u> and <u>#4</u> , converted numbers, see <u>Note 6</u> ).

One last aspect to be cleared: the second point contains, besides the specific 885 divergence in focusing, a new example of the first case, i.e. the same focusing joined to 886 attention paid to different characteristics. Actually, both "H and "S" choosers focus also 887 on <u>Block #3</u> (converted number) of the <u>"Softer" (S)</u> message, that is labelled as 888 "Information" in <u>Table S2</u>. However, even though that block undoubtedly contains 889 information, the two versions present it in different ways. Confronting the texts, we can 890 easily verify that the "H" version bears just technical and formal contents while the "S" 891 version pays attention to present the information as a "service" for the colleagues. 892 Evidently, respondents jointly take such aspect into account but (as usual) they interpret

893 it in different ways. As a matter of fact, "H" choosers mainly highlight the information
894 that "the works are not yet concluded and final checks... are about to be carefully
895 planned"; "S" choosers mainly emphasize the reassurance (a purely relational aspect)
896 that YY expressly gives to XX with his words "I assure you [that your indications] will
897 not be ignored".

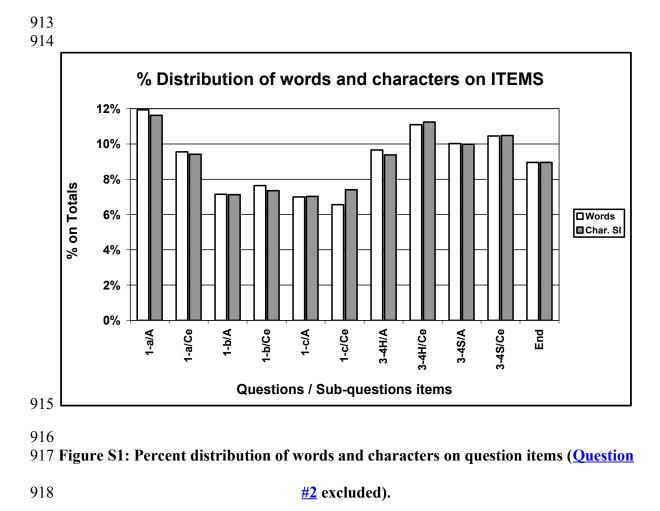
In synthesis, what we found is that, about focusing on blocks, the differences, as 899 well as the convergence, are apparent and the attention of participants seems to be 900 attracted by those blocks that can "resound" something they are possibly looking for, 901 something pre-existent. What drives the focusing is not the mere information content of 902 the blocks. Once more, we have observed nothing else than a "disassembling" operation 903 (see manuscript for details). In doing so, we have collected two examples of what kind of 904 "pre-existing blueprints" (in some way present in the actors' central nervous system) can 905 orient focusing and explain the different approaches employed by "H" or "S" choosers: 906 the first mainly focus on content or context aspects; the second ones mainly focus on 907 relational aspects.

#### 909 References

910 De Mauro T. 2003 (1980). Guida all'uso delle parole. Roma: Editori Riuniti.

911

912 SUPPORTING INFORMATION Figures



919 [Legend: <u>1-a</u>, <u>1-b</u>, <u>1-c</u> = Answers to sub-questions of <u>Question #1</u>; 3-4/H, 3-4/S =

920 Answers to <u>Questions #3</u> and <u>#4</u> referred to <u>Message "H"</u> (the "Hard" version of Msg #4)

921 or to <u>Message "S"</u> (the "Softer version); End = <u>Final question</u>; A = "Strict" answers; Ce

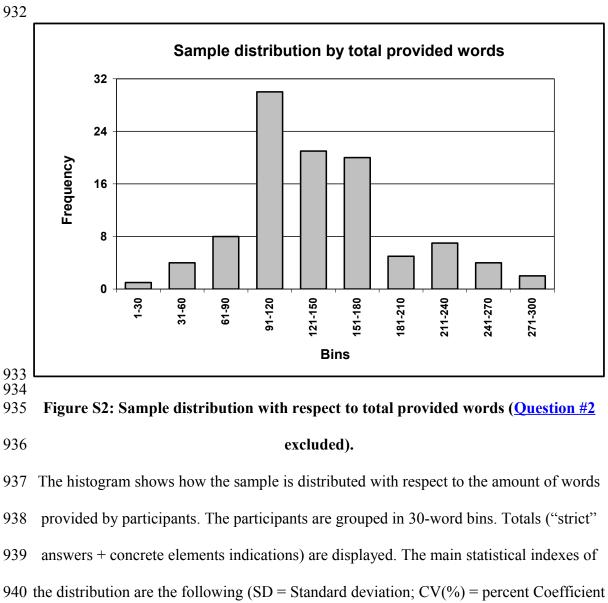
922 = Concrete elements; Char.SI = Characters (spaces included)]

923

924 This histogram shows that the word and character percent amounts resulting from the

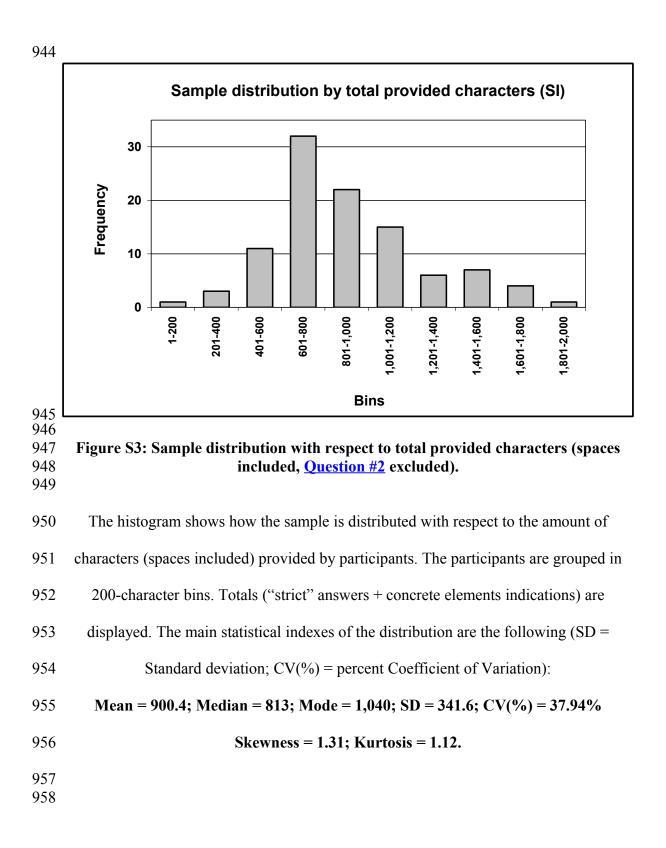
925 respondents' answers vary, with respect to items, from 6.6% to 11.9% (words) and from

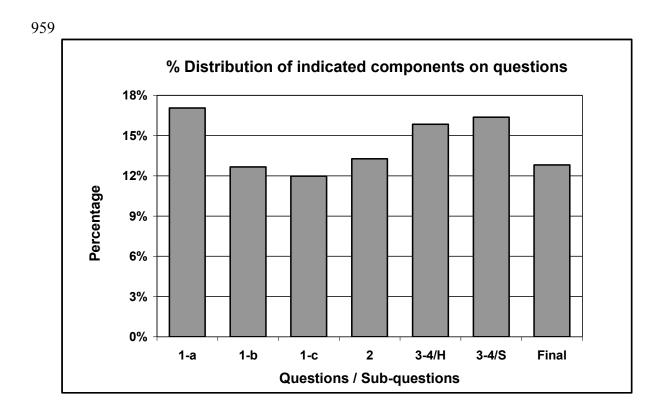
926 7.0% to 11.6% (characters, spaces included). The range reduces to 8.3%-11.1% (words)
927 and 8.3%-11.3% (characters SI) if the three sub-questions of Question #1 are grouped
928 together and their mean is considered (see text for details). The amounts appear to be
929 distributed in an almost rectangular distribution (i.e. in a satisfactorily uniform shape)
930 across the questions of the questionnaire. On the whole, no item seems to be definitely
931 privileged, or neglected, by participants.



941 of Variation):

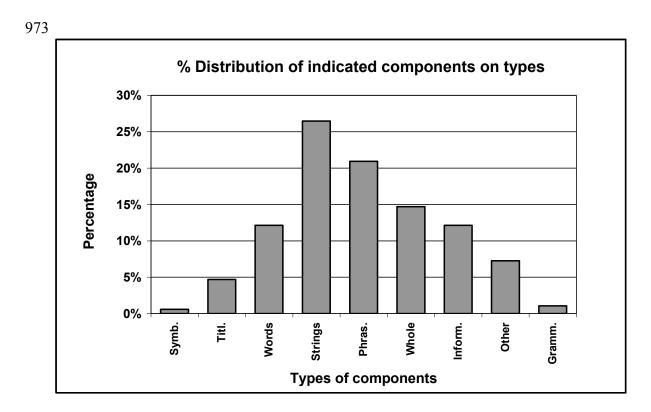
```
942 Mean = 138.5; Median = 131; Mode = 142; SD = 53.7; CV(%) = 38.75%.
```





# 961 962 Figure S4: Percent distribution of indicated components with respect to 963 questions/sub-questions.

964 With respect to questions, the respondents' indications about the focused components 965 (see text for definition) present a rectangular-like percent distribution (differences in a 966 range around 5%, from 12% to 17% about, source data from Table 8, "%" column). The 967 range reduces to around 3.6% (from 12.8% to 16.4% about) if we group together the 968 three sub-questions of Question #1 and consider their mean (the reason is that the 969 answers to Questions #1-b and #1-c are often given in short, indicating reference to the 970 already provided answer to Question #1-a). The indications are distributed without any 971 significant imbalance among the different questions of the questionnaire. The approach through subjective selective focusing does not definitely privilege any question or item. 972



975 LEGEND: Symb. = Punctuation marks; Titl. = Title/salutes (opening and closing expressions);
976 Phras. = Complete phrases/periods; Whole = References to the message as a whole; In977 form. = Information content; Gramm. = Grammar notations (verb tense etc.)
978

#### 979 Figure S5: Percent distribution of indicated components with respect to component

980

#### types.

981 The respondents' indications have been grouped in bins by type. The presented percent

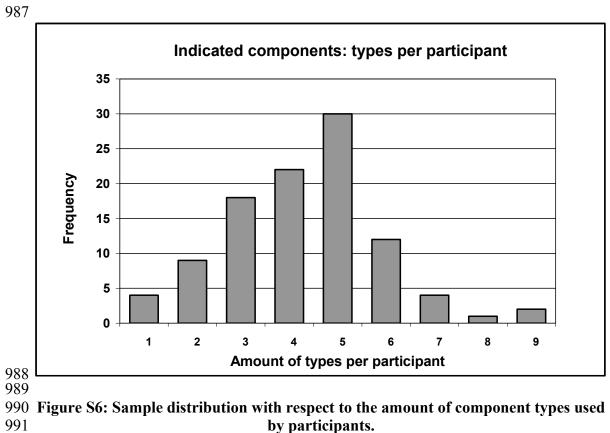
distribution (source data from manuscript Table 8, "%" row) has been built through

983 ranking the first six types (from "Symbols" to "Whole") by their increasing size. The

984 remaining three types (Information content, Other components and Grammar notations)

985 have been added ranking them by decreasing percent values. The highest frequencies

986 correspond to middle-sized "chunks" of the messages.



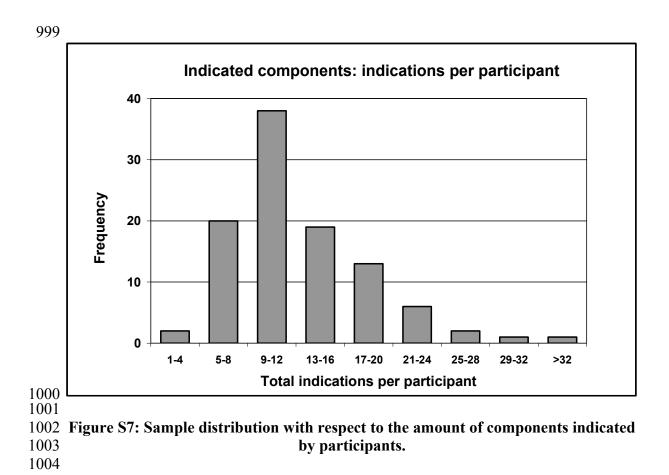
992

993 Respondents have been grouped in bins by the amount of component types (see text for

994 definition) they used. The histogram shows the sample's distribution; it presents the

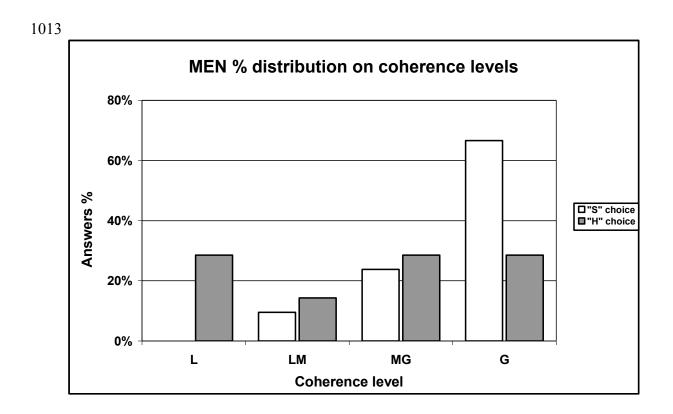
995 highest frequencies on the 3-4-5 types-per-participant bins and has an almost "bell curve"

shape. The main statistical indexes of the distribution are the following:



1005Respondents have been grouped in bins by the amount of components (see text for1006definition) they indicated. The histogram shows the sample distribution; it presents the1007highest frequencies on the second, third and fourth bins and has an almost "bell curve"1008shape (even though it is clearly skewed towards the left side). The main statistical indexes1009of the distribution are the following:1010Mean = 12.9; SD = 6.2; Skewness = 1.93; Kurtosis = 7.18.

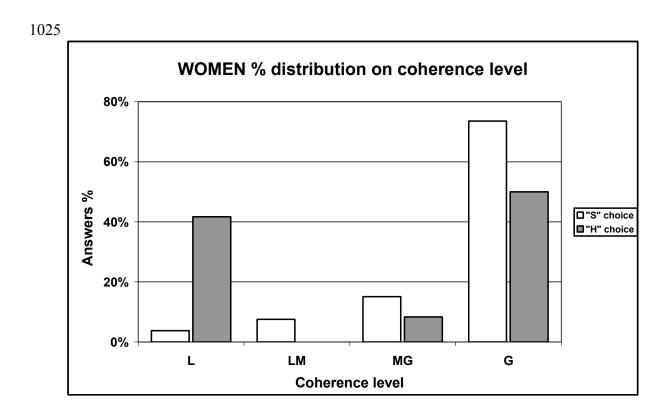
1011 ..



#### 1017 Figure S8: Sample percent distribution with respect to coherence levels / Comparing

#### 1018 <u>"Hard"</u> and <u>"Softer"</u> Msg #4 version choosers / Sub-sample MEN

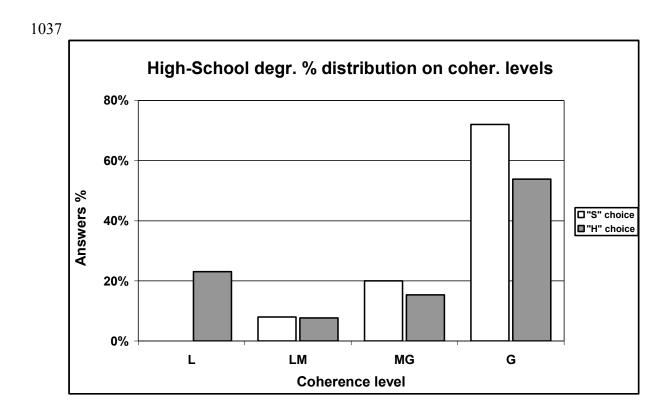
1019 This histogram shows the percent distributions of MALE respondents according to the 1020 coherence (expressed through the coherence indicator) between, on the one hand, their 1021 interpretations of the <u>"Hard" (H)</u> and the <u>"Softer" (S)</u> version of Msg #4; on the other 1022 hand, their final choice between the two versions. Data is shown separately for "H" and 1023 "S" choosers. Chi-squared test unsuitable for the presence of a zero value; Fisher's Exact 1024 test: p=0.003.



#### 1029 Figure S9: Sample percent distribution with respect to coherence levels / Comparing

#### 1030 <u>"Hard"</u> and <u>"Softer"</u> Msg #4 version choosers / Sub-sample WOMEN

1031 This histogram shows the percent distributions of FEMALE respondents according to the 1032 coherence (expressed through the coherence indicator) between, on the one hand, their 1033 interpretations of the <u>"Hard" (H)</u> and the <u>"Softer" (S)</u> version of Msg #4; on the other 1034 hand, their final choice between the two versions. Data is shown separately for "H" and 1035 "S" choosers. Chi-squared test unsuitable for the presence of a zero value; Fisher's Exact 1036 test: p=0.004.



1041 Figure S10: Sample percent distribution with respect to coherence levels /

1042 Comparing <u>"Hard"</u> and <u>"Softer"</u> Msg #4 version choosers / Sub-sample High School

1043 This histogram shows the percent distributions of HIGH-SCHOOL degree granted

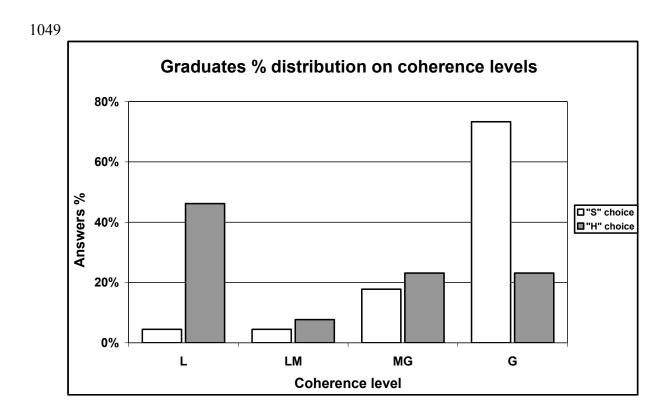
1044 respondents according to the coherence (expressed through the coherence indicator)

1045 between, on the one hand, their interpretations of the <u>"Hard" (H)</u> and the <u>"Softer" (S)</u>

1046 version of Msg #4; on the other hand, their final choice between the two versions. Data is

1047 shown separately for "H" and "S" choosers. Chi-squared test unsuitable for the presence

1048 of a zero value; Fisher's Exact test: *p*=0.001.



#### 1053 Figure S11: Sample percent distribution with respect to coherence levels /

1054 **Comparing "Hard" and "Softer" Msg #4 version choosers / Sub-sample Graduates** 1055 This histogram shows the percent distribution of GRADUATED respondents according 1056 to the coherence (expressed through the coherence indicator) between, on the one hand, 1057 their interpretations of the "Hard" (H) and the "Softer" (S) version of Msg #4; on the 1058 other hand, their final choice between the two versions. Data is shown separately for "H" 1059 and "S" choosers. Distributions result significantly different (Chi-squared test and 1060 Fisher's Exact test: p=0.001).

#### 1061 **SUPPORTING INFORMATION Tables**

- 1062
- 1063

Message	Author	Character	Critical points	Notes
<u>#1</u>	XX	The employee, woman, line position	Lack of matter: no specific claim, no evident goal (consequent suspect of relational problems).	Start message
<u>#2</u>	YY	The professional, man, executive in charge of the Project	Evasive action, bureaucratic answer.	First feed- back
<u>#3</u>	XX	The employee	Hardened position, presence of a possible threat ( <i>ALARM</i> !!).	Reaction / Reinforce
<u>#4 "H"</u>	YY	The professional	Squabble + Refusing relational level + Personal attack to XX ( <i>ALARM</i> !!).	Second feed- back

1064 1065

#### Table S1: The case structure and the communication critical points.

1066 This scheme displays the interaction structure and the communication critical points

1067 related to the first part of the case. It considers the exchanged messages (Messages #1 to

1068 <u>#3</u>) and provides comments on the <u>"Hard" version of Message #4</u> (spontaneously

1069 prepared by the "architect", i.e. YY). While creating our case, we figured that exactly this

1070 could be the analysis of YY's colleague (or some external communication expert) that

1071 drove him/her to suggest the alternative.

1074				
	Blocks	"H" Structure	"S" Structure	Conversion
	#1	Form of address	Form of address	$\underline{S"1"}$ → $S"1"$ converted
	#2	Re-addressing XX	Relational acceptance	$\underline{S"2"}$ → $S"4"$ converted
	#3	Information	Re-addressing XX	$\underline{S"3"}$ → $S"2"$ converted
	#4	Relational acceptance	Information	$\underline{S"4"}$ → S"3" converted
	#5	Form of saluting	Form of saluting	$\underline{S"5"}$ → $S"5"$ converted

1075

# 1076 Table S2: Comparing text blocks in the two versions (the <u>"Hard"</u> and the <u>"Softer"</u>1077 one) of Message #4.

1078 The message presented as alternative to Message #4/H (i.e. the "Softer" version of

1079 Message #4, in short Msg #4/S) has the same text blocks of the "Hard" version with the

same information content. Only the position in the text and the written form were

1081 modified. Extreme right column shows the "conversion table" of the blocks numbers for

1082 the two versions, in order to simplify referencing while comparing them.

1083

1085

	All the	Questions (	(13 items)	Quest. #	2 excluded (	(11 items)
	Words	Char.(SE)	Char.(SI)	Words	Char.(SE)	Char.(SI)
TOTALS	16,094	89,685	104,200	14,128	79,097	91,843
General means per item	1,238	6,899	8,015	1,284	7,191	8,349
% Gen. means per item	7.7%	7.7%	7.7%	9,1%	9,1%	9,1%
CV(%)	21.0%	20.3%	20.5%	18.78%	17.19%	17.56%
General means per person	158	879	1,022	139	776	900
Gen. means per person-item	12.1	68	79	12.6	71	82

1086

### 1087 **Table S3: Descriptive analysis of the text amount distribution with respect to the**

1088

#### questionnaire items.

1089 [Legend: Char.(SE) / (SI) = Character amounts, (Spaces Excluded) / (Spaces Included); CV(%) =

1090 percent Coefficient of Variation]

1091

1092 The table shows totals and some statistical indexes (some means and percent coefficient

1093 of variation) referred to the word and character amounts resulting from the texts of the

1094 respondents' answers. Indexes are calculated on question items, in two ways: on all the

1095 opened items (13 items, left part of the table); on all the items excluding Question #2 (11

1096 items, right part of the table, see text for the reasons of such exclusion). Further

1097 info

information in Fig. S1.

1101									
		answers			e element		Totals	-	
	Words	Ch.(SE)	Ch.(SI)	Words	Ch.(SE)	Ch.(SI)	Words	Ch.(SE)	Ch.(SI)
TOTALS	6,463	35,484	41,461	7,665	43,613	50,382	14,128	79,097	91,843
% on General total	45.7%	44.9%	45.1%	54.3%	55.1%	54.9%	100 %	100 %	100 %
Gen. means p. person	63.4	348	407	75.1	428	494	138,5	775	900
CV(%)	48.58%	43.63%	44.80%	45.56%	45.46%	45.75%	47.77%	46.13%	46.61%
Minimum	8	73	76	4	25	28	4	25	28
Maximum	175	905	1,075	185	1,030	1,180	185	1,030	1,180
1102 1103 <b>Table S4: De</b> 1104	scriptive	·		ample di xt amou		on with r	espect to	) the	
1105 [Legend: Ch.(SE) /	(SI) = Ch	naracter ar	nounts, (S	Spaces Ex	cluded) / (	Spaces In	cluded);	CV(%) =	
1106 1107				ent of Var	-			init of	
<ul><li>1108 The table shows t</li><li>1109 variation and mini</li></ul>				,					
1110 by the responden	ts throug	h their ar	nswers. A	Answers t	o <u>Questic</u>	<u>on #2</u> hav	ve been e	xcluded	
1111 (see text for the re	easons of	such exc	clusion).	In the lef	t part, da	ta from t	he answe	ers to the	
1112 first item of th	e questic	ons ("stric	et" answe	er); in the	central p	oart, to th	e second	item	
1113 (concrete eleme	ents). Tot	al values	are disp	layed in t	he right p	part of the	e table. F	urther	
1114		infor	mation in	n <u>Fig. S2</u>	, <u>S3</u> .				
1115 1116									

- 1117
- 1118
- 1119

	Tot	Fotal sample						Sub-sample "AGE"				Sub-sample "EMPLOYMENT"						
	S+		S-		Tot	als	S+		S-		Tot	als	S+		S-		Tot	als
H+	18	22.5%	9	47.4%	27	27.3%	8	17.4%	4	36.4%	12	21.1%	9	18.4%	6	46.2%	15	24.2%
H-	62	77.5%	10	52.6%	72	72.7%	38	82.6%	7	63.6%	45	78.9%	40	81.6%	7	53.8%	47	75.8%
Tot.	80	100.0 %	19	100.0 %	99	100.0%	46	100.0%	11	100.0%	57	100.0%	49	100.0%	13	100.0%	62	100.0%
Gen. Total	99	1	<b>I</b>	1		1	57	1	1	1		1	62	1	1	1		1

1121

#### 1122 Table S5: Distribution of predictions about the effects of the <u>"Hard" (H)</u> and the

1123

<u>"Softer" (S)</u> version of Message #4 on the receiver.

1124 Predictions about the effects that the <u>"Hard" (H)</u> or the <u>"Softer" (S)</u> version of Message 1125 #4 could have on the receiver (the "employee" XX) are independently expressed, by each 1126 member of the sample, through answering to Questions #3 and #4. Answers are classified 1127 through the dummy variable "Expected effects" (possible values "+", if respondents point out that the message will solve the XX-YY conflict, or "-" in the opposite case). The 1128 1129 table shows, for the total sample and the two control sub-samples, that all the possible 1130 combinations of predictions are present. Distribution is clearly imbalanced (definite 1131 preference on "H-/S+" combination). Significance is checked through Chi-squared test 1132 (p=0.029, total sample; p=0.166, sub-sample "AGE"; p=0.038, sub-sample1133 "EMPLOYMENT") and Fisher's Exact test (p=0.043, total sample; p=0.219, sub-sample 1134 "AGE"; *p*=0.064, sub-sample "EMPLOYMENT").

	Tot	Cotal sample					Sub-sample "AGE"				Sub-sample "EMPLOYMENT"							
	"H' Cho		"S' Ch		Tot	als	"H' Cho		"S" ce	' Choi-	Tot	als	"H' Cho		"S' Ch		Tot	als
H+/S+	5	20.8%	13	17.6%	18	18.4%	4	26.7 %	4	9.8%	8	14.3%	4	22.2%	5	11.6%	9	14.8%
H+/S-	7	29.2%	2	2.7%	9	9.2%	3	20.0 %	1	2.4%	4	7.1%	5	27.8%	1	2.3%	6	9.8%
H-/S+	10	41.7%	52	70.3%	62	63.3%	7	46.7 %	31	75.6%	38	67.9%	8	44.4%	32	74.5%	40	65.6%
H-/S-	2	8.3%	7	9.4%	9	9.2%	1	6.7%	5	12.2%	6	10.7%	1	5.6%	5	11.6%	6	9.8%
Totals	24	100.0%	74	100.0%	98	100.0%	15	100.0 %	41	100.0%	56	100.0%	18	100.0%	43	100.0%	61	100,0%
Gen. Total	98						56						61					

1130

1138

#### 1139 Table S6: Combined predictions cross-checked with the final choice between the

1140 <u>"Hard" (H)</u> and the <u>"Softer" (S)</u> version of Message #4.

1141 In this table the combined predictions (see Table S5) about the effects that the "Hard" (H)

1142 or the <u>"Softer" (S)</u> version of Message #4 could have on the receiver (the "employee"

1143 XX) are crossed with the final choices of the respondents (all the variables are

1144 independent). Data shows the association (for the total sample and the two control sub-

1145 samples) between the "H-/S+" combination and the <u>S-version</u> (the "Softer" one) as final

1146 choice. In addition, some correlations between the two variables is underlined by Chi-

1147 squared test (*p*=0.001, total sample; *p*=0.035, sub-sample "AGE"; *p*=0.009, sub-sample

- 1148 "EMPLOYMENT") and Fisher's Exact test (*p*=0.002, total sample; *p*=0.027, sub-sample
- 1149 "AGE"; *p*=0.008, sub-sample "EMPLOYMENT").
- 1150
- 1151

- 1152
- 1153
- 1154 1155

	L (low coherence)	LM (low-medium c.)	MG (medgreat c.)	G (great coherence)
"H" choice	H-/S+	H- / S-	H+/S+	H+/S-
<b>"S" choice</b>	H+/S-	H- / S-	H+/S+	H-/S+

- 1156
- 1157 1158

#### Table S7: Plot of the coherence level scale.

1159 The table shows the scale of the coherence levels expressed through the coherence 1160 indicator; four levels of coherence are defined and ranked. The indicator rates the degree 1161 of coherence between two independent kinds of answers each respondent provided in 1162 his/her own questionnaire. On the one hand, the answers to Questions #3 and #4, 1163 reporting the respondent's predictions about the effects that the "Hard" (H) or the 1164 "Softer" (S) version of Message #4 could have on the receiver, the "employee" XX (the 1165 predictions are represented through the dummy variable "Expected effects" and labelled 1166 "+" if they indicate that the message will ease or solve the contrast between XX and YY, 1167 "-" in the opposite case). On the other hand, the answer to the Final question, reporting 1168 the final choice the respondent made indicating which, between the "Hard" and the 1169 "Softer" version of Message #4, was suitable to solve the case ending the XX-YY 1170 conflict.

- 1171
- 1172

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1175

"H" Choosers			"S" Choosers	"S" Choosers				
Coherence level	Values	%	Coherence level	Values	%	Values	%	
L (H-/S+)	7	46.7	L (H+/S-)	1	2.4	8	14.3	
LM (H-/S-)	1	6.7	LM (H-/S-)	5	12.2	6	10.7	
<b>MG</b> (H+/S+)	4	26.7	<b>MG</b> (H+/S+)	4	9.8	8	14.3	
<b>G</b> (H+/S-)	3	20.0	<b>G</b> (H-/S+)	31	75.6	34	60.7	
Total	15	100.0	Total	41	100.0	56	100.0	

1176

1177 **LEGEND:** L = Low; LM = Low-medium, MG = Medium-great, G = Great level of coherence

between predictions and choice; H/S = Versions of Message #4; +/- = type of predicted

effect (resolution or escalation of the conflict) of the messages on XX.

1180

## 1181 Table S8: Sample distribution with respect to coherence levels and expressed choice

1182(Sub-sample "Age").

1183 The table displays (for the sub-sample "Age", >29yy-old people only) the distribution of 1184 participants with respect to the coherence between, on the one hand, the predictions about

1185 the effects on XX of the <u>"Hard" (H)</u> and the <u>"Softer" (S)</u> version of Msg #4; on the other

1186 hand, the final "H-or-S" choice. Data is displayed separately for "H" and "S" choosers

1187 and highlights a clear correlation between the two variables coherence and choice; Chi-

squared test and Fisher's Exact test return high significance (p < 0.001).

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1194

"H" Choosers			"S" Choosers	Total			
Coherence level	Values	%	Coherence level	Values	%	Values	%
L (H-/S+)	8	44.4	L (H+/S-)	1	2.3	9	14.8
LM (H-/S-)	1	5.6	LM (H-/S-)	5	11.6	6	9.8
<b>MG</b> (H+/S+)	4	22.2	<b>MG</b> (H+/S+)	5	11.6	9	14.8
<b>G</b> (H+/S-)	5	27.8	<b>G</b> (H-/S+)	32	74.4	37	60.7
Total	18	100.0	Total	43	100.0	61	100.0

1195

1196 LEGEND: L = Low; LM = Low-medium, MG = Medium-great, G = Great level of coherence

between predictions and choice; H/S = Versions of Message #4; +/- = type of predicted

effect (resolution or escalation of the conflict) of the messages on XX.

1199

#### 1200 Table S9: Sample distribution with respect to coherence levels and expressed choice

1201

#### (Sub-sample "Employment").

1202 The table displays (for the sub-sample "Employment", people with a regular employment

1203 only) the distribution of participants with respect to the coherence between, on the one

hand, the predictions about the effects on XX of the <u>"Hard" (H)</u> and the <u>"Softer" (S)</u>

1205 version of Msg #4; on the other hand, the final "H-or-S" choice. Data is displayed

1206 separately for "H" and "S" choosers and highlights a clear correlation between the two

1207 variables coherence and choice; Chi-squared test and Fisher's Exact test return high

1208 significance (*p*<0.001).

1200

1209

Blocks	"H" Choosers				"S" Choosers				
	"H" Evaluation		"S" Ev	"S" Evaluation <sup>(*)</sup>		"H" Evaluation		"S" Evaluation <sup>(*)</sup>	
	+	-	+	-	+	-	+	-	
1	0	0	0	0	0	1	1	0	
2	16	13	6	10	13	75	23	4	
3	6	1	7	5	5	6	50	4	
4	3	1	7	1	4	16	52	0	
5	0	0	1	0	0	1	7	0	
TOTAL	25	15	21	16	22	99	133	8	

1213 <sup>(\*)</sup> The sequence of the blocks belonging to <u>Message "H"</u> is the original one (as it appears in the actual 1214 message); the sequence belonging to <u>Message "S"</u> is *converted* (see SI, <u>Section 12</u> and <u>Note 6</u>, for details). 1215

#### 1216 Table S10: Block preference analysis (I) – Amount of expressed REFERENCES.

1217 [Legend: +/- = type of predicted effect (resolution or escalation of the conflict) of the

1218 <u>"Hard" (H)</u> and the <u>"Softer" (S)</u> version of Msg #4 on XX.]

1219

1220 The table displays the "preference" for different blocks, expressed through the amount of

1221 references to each block. Data is disaggregated for H/S choice and for type of expressed

1222 predictions (+/-) on Message "H" and Message "S" effects. Respondents, while

1223 evaluating the "H" message, seem to be mainly focused on the same block (the Block

1224 <u>#2</u>), regardless of their H/S choice. On the opposite, while evaluating the "S" message,

1225 they mainly focus on different blocks, depending on the choice they expressed.

General Totals	Means		
Total references to Msg "H" blocks	161	1,59 references/participant	
Total references to Msg "S" blocks	178	1,76 references/participant	
Total references expressed by "H" choosers	77	2,96 references/participant	
Total references expressed by "S" choosers	262	3,49 references/participant	
General total	339	3,36 references/participant	

1229<sup>°</sup> 1230

#### Table S11: Block preference analysis (I) – Additional data.

1231 The table displays some additional information about data displayed in previous <u>Table</u>

1232 <u>S10</u>. Additional data consists of total expressed references and mean values about

1233 references per participant.

1236									
	Blocks	"H" Choosers				"S" Choosers			
		"H" Evaluation		"S" Evaluation <sup>(*)</sup>		"H" Evaluation		"S" Evaluation <sup>(*)</sup>	
		+	-	+	-	+	-	+	-
	1	0	0	0	0	0	1	1	0
	2	13	9	6	10	10	43	18	4
	3	5	1	7	3	3	5	34	3
	4	3	1	4	1	4	15	35	0
	5	0	0	1	0	0	1	7	0
	TOTAL	21	11	18	14	17	65	95	7

1237 <sup>(\*)</sup> The sequence of the blocks belonging to <u>Message "H"</u> is the original one (as it appears in the actual 1238 message); the sequence belonging to <u>Message "S"</u> is *converted* (see SI, <u>Section 12</u> and <u>Note 6</u>, for details). 1239

#### 1240 Table S12: Block preference analysis (II) – Amount of PARTICIPANTS expressing

1241	references.
	i erer enecesi

1242 [Legend: +/- = type of predicted effect (resolution or escalation of the conflict) of the

1243 <u>"Hard" (H)</u> and the <u>"Softer" (S)</u> version of Msg #4 on XX.]

1244

1245 The table displays the "preference" for different blocks, expressed through the amount of

1246 participants that refer to each block. Data is disaggregated for H/S choice and for type of

1247 expressed predictions (+/-) on Message "H" and Message "S" effects. Respondents, while

1248 evaluating the "H" message, seem to be mainly focused on the same block (the <u>Block</u>

1249 <u>#2</u>), regardless of their H/S choice. On the opposite, while evaluating the "S" message,

1250 they mainly focus on different blocks, depending on the choice they expressed.

General Totals	Means			
Total people referring to msg "H" blocks	114	1,13 referred blocks/participant		
Total people referring to msg "S" blocks	134	1,33 referred blocks/participant		
Total "H" choosers' block evaluations	64	2,46 referred blocks/participant		
Total "S" choosers' block evaluations	184	2,45 referred blocks/participant		
General total	248	2,46 referred blocks/participant		

### 1255 Table S13: Block preference analysis (II) – Additional data.

1256 The table displays some additional information about data displayed in previous <u>Table</u>

1257 S12. Additional data consists of total people expressing references and mean values about

1258 referred blocks per participant.