

Persuasive gaze in political discourse

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Abstract. The paper investigates the use of gaze in political communication. A study is presented on the electoral debates of two politicians in Italy and France. Fragments of their verbal discourse were analysed in terms of their hierarchy of goals, and their gaze communication was described and classified in terms of the persuasive strategies they pursue, *logos*, *ethos* or *pathos*. The results show that the pattern of gaze persuasive strategies is coherent with the hierarchy of goals pursued in the verbal discourse.

1 INTRODUCTION

The field of Persuasive technology includes the “design, research and analysis of interactive computing products created for the purpose of changing people’s attitudes or behaviours” Fogg [1]. Persuasive systems are presently being designed for interaction in several domains, from health Mazzotta [2] to politics, and they use various kinds of interfaces, from those using Natural Language Generation only in the written verbal modality, to those that exploit Embodied Conversational Agents, that communicate through synthetic voice, and display gestures, head movements, body postures and gaze. But, what can be seen as persuasive in gaze behaviour? Are there some uses of gaze that are specifically aimed at persuading? If we think of some human behaviours which do, in fact, have a goal of influencing others, like, for instance, flirting or seduction, we can well say that some uses of gaze have a somehow “persuasive” import. However, for sure one could not use a seductive glance during a political talk show. In this paper, we explore the issue whether gaze can be used in a specific persuasive way in political discourse: after presenting a study that answered the question for gesture, and an overview of the semantic potentialities of gaze, we analyse gaze behaviour in an Italian and a French politician. Finding the features that give gaze a persuasive import can help to build Embodied Conversational Agents to be used in Persuasive technology by exploiting also gaze communication with a persuasive function.

2 RHETORICS AND BODY COMMUNICATION

The importance of bodily behaviour in persuasive discourse has been acknowledged back since the ancient Roman treatises of Rhetorics, like Cicero [3] and Quintilian [4]. In the rhetorical tradition, gestures and head movements have been studied as an indispensable part of “Actio” (discourse delivery), since they were credited with the capacity of fulfilling various communicative functions. By gestures and other body movements we can summon, promise, exhort, incite, approve, express apology or supplication, display emotions like regret, anger, indignation, adoration, depict or point at objects. For example, Quintilian [4] in his work provides detailed hints,

mainly with a normative intent, about which movements may be more or less effective in portraying a particular image of the orator, which make him more similar to a comic actor, which can excite the audience or so.

In recent literature, some studies overview various aspects of the body's relevance in political communication Atkinson [5], like the use of pauses and intonation to quell the applause Bull [6], or facial expression and other bodily behaviours Frey [7], Bucy & Bradley [8]. Other studies that can give hints as to which nonverbal behaviours are ineffective or even prevent persuasion, are those concerning the detection of deceptive behaviours, like Ekman [9] and DePaulo et al. [10]. For example, self-manipulation, talking faster, averting eyes have a negative effect on persuasion in that they are felt as – and may be in fact – a cue to deception. Two recent studies directly concerned with the impact of gestural communication on political discourse are Calbris [11] and Streeck [12]. The former analyses the gestures of Lionel Jospin as a way to understand the intimate expression of his political thought: for example, the metaphors exploited by his manual behaviour – whether he uses the left or right hand, and with which shape – can express abstract notions like effort, objective, decision, balance, priority, private or public stance; but they also fulfil discourse functions: they can delimit or stress, enumerate or explicate the topics of discourse.

Streeck [12] in analysing the gestural behaviour of the Democratic candidates during the political campaign of 2004 in USA, shows how important bodily behaviour may be in the political persuasion: as to the transmission of factual information he observes how the tempo of body movements and their relation to speech rhythm provide information about discourse structures, distinguishing background from foreground information; but as to the very persuasive effect he even attributes the defeat of Howard Dean to the frequency of his “finger wag”, a “hierarchical act” that might have given an impression of presumption and contempt toward the audience. Also among the gestures analysed by Kendon [13] some are used with a persuasive intent: for example, the “ring” gestures, that bear a meaning of ‘making precise’ or ‘clarifying’, and are used every time this clarification is important “in gaining the agreement, the conviction or the understanding of the interlocutor” (p. 241).

If gesture is so important in conveying information that is effective in persuasion, also facial behaviour could be relevant in this connection. For example, in Italian political talk shows, while a politician is talking in a talk show, often the cameras record the facial expressions of his opponents, which are sometimes very communicative and may have a counter-persuasive role. Yet, not so much literature has been devoted to the persuasive impact of facial expression and gaze in persuasion.

3 COMMUNICATIVE GAZE

In this work we focus on the use of gaze in political discourse. Eyes are used firstly for vision and then possibly to help thinking, for instance during memory retrieval or when thinking before speaking; but they are also used for communicating. Gaze as a communicative behaviour has been studied mainly since the seventies Kendon [14]; Argyle & Cook [15]; Duncan & Fiske [16], but it is presently an emerging topic of research, and its functions are studied in depth. As is clear from literature, gaze plays an important role in the management of face-to-face interaction, first in the very moment of deciding whether to engage in interaction, since it indicates the level of interest to interaction, then in establishing the focus of shared attention, and finally in managing the flow of conversation: it signals turn-taking manoeuvres Goodwin [17]; Rossano [18] provides rich and articulated feedback Allwood et al. [19], Heylen [20]; helps people's own communication management Allwood et al. [21]. Moreover, the importance of gaze is witnessed in mother-child interaction Trevarthen [22] and in classroom interaction Rosenthal & Jacobson [23]; Taeschner et al. [24] that are both sustained by joint attention and mutual gaze. Even, hypotheses about the physical structure of human's eyes, with a white sclera so different from non-human primates, have been put forward, as a way to allow eye detection and enhance shared attention Tomasello et al. [25].

Actually, this body of research is in general focused only on one aspect of gaze communication: eye direction. But this is not the only pertinent dimension of the gaze signal; many other aspects of gaze behaviour and of the whole eye region are relevant from a communicative point of view. This region can be distinguished into different sub-regions – eyebrows, eyelids, eye-sockets, wrinkles – and each of these parts has a role in conveying meanings; so much that an “optology” – a “phonology” of gaze – can be written down Poggi [26]; Poggi & Pelachaud [27] by finding out the parameters of gaze, in the same way as it has been done for the signs of sign language of the deaf and the symbolic gestures of the hearing.

Also on the meaning side, the function of gaze is not only to establish the setting for interaction, but to *tell things*: gaze does convey specific meanings, that can be discovered and listed in a systematic way.

Research also in these domains has been done; see for example the conversational and emotional signals of the eyebrows studied by Ekman [28]; the syntactic role of eye-gaze in Sign languages Baker & Padden [29]; the repertoire of gaze meanings of Kreidlin [30] founding an “Oculusics”, and the analogous attempt of Poggi [26], Poggi [31] to write down a lexicon of gaze. All of these attempts have had a resonance in the construction of Embodied Agents, which have started to exhibit realistic communicative gaze behaviour Pelachaud & Poggi [32]; Maatman [33]; Heylen [20].

Notwithstanding this emerging research about gaze, its function in persuasive discourse has not been studied. Here we investigate the persuasive role of gaze in political discourse.

In the next sections we present a model of persuasion based on the notions of goal and belief and a research on the persuasive import of gesture in political discourse. Then we present an annotation scheme to describe and classify gaze in persuasive discourse, and we analyse some fragments of political discourse as to its gesture and gaze, aiming to find out different patterns of gaze communication in persuasive discourse.

4 PERSUASION AS A HIERARCHY OF GOALS

The model we adopt for the analysis of persuasion is one in terms of a goal and belief view of mind, social interaction and communication Castelfranchi & Parisi [34]; Conte & Castelfranchi [35]; Poggi [36]; Miceli et al. [37]. Persuasion is an act aimed at social influence, with social influence defined as the fact that an Agent A causes an increase or decrease in the likelihood for another Agent B to pursue some goal GA. In order to have B more likely pursue a goal GA, A must raise the value that GA may have for B, and does so through having B believe that pursuing GA is a means for B to achieve some other goal GB that B already has, and considers valuable. This definition encompasses different kinds of social influence, ranging from education to threat, promise, the use of strength and so on. Persuasion is a type of influence that 1) is pursued through communication, and 2) leaves B free of either pursuing the goal GA proposed by A or not. To persuade B to have GA as a goal of his, A must convince B, that is, induce B to believe with a high degree of certainty, that GA is worth pursuing since it is a sub-goal to some goal GB that B has. In order to do so, A can make use of three different strategies, as already stated by Aristotle [38] : *logos* (the logical arguments that support the desirability of GA and the link between GA and GB); *ethos* (A's personality, his intellectual and moral reliability); and *pathos* (the extent to which A, while mentioning the pursuit of goal GA, can evoke the possibility for B to feel pleasant emotions or to prevent unpleasant emotions).

In order to persuade other people we produce communicative acts by exploiting different modalities – we can use written texts, graphic advertisement, words, intonation, gestures, gaze, facial expression, posture, body movements: we thus make multimodal persuasive discourses, that is, complex communicative plans for achieving communicative goals. Any discourse can be analysed as a hierarchy of goals: a communicative plan in which each single communicative act (either verbal or non verbal) aims at a specific goal. And each goal may also aim at one or more super-goals in turn: further goals for which the first goal is a means. For example, if I say “Are you going home?” my literal goal is to ask you if you are going home, but through this I may aim at the super goal of asking for a lift. Two or more communicative acts may have a common super goal. For example, saying “I am here with this face” plus saying “this is the face of an honest person” may aim at the super goal of implying “I am an honest person”. A discourse (both a unimodal and a multimodal one) is a sequence of communicative acts that all share a common super goal. For example, in a pre-election discourse, all the sentences, gestures, face and body movements aim at one and the same common super goal: “I ask you to vote for me”. In a persuasive multimodal discourse, not only sentences, but also gestures, gaze, head movements and other signals may pursue, through their literal goals and their intermediate and final super goals, a *logos*, *ethos* or *pathos* strategy.

5 PERSUASIVE GESTURES

In a previous work, Poggi & Pelachaud [39] have investigated the impact of gestures in persuasive discourse. Some fragments of persuasive multimodal discourse were analysed as to their global meaning and their persuasive structure, and the gestures

performed during discourse were annotated. For each gesture, the signal side was analysed in terms of its parameters of handshape, orientation, location and movement, including its expressivity parameters Hartmann [40]: temporal extent, spatial extent, fluidity, power and repetition. It was found that there are not gestures whose meanings we can utterly define “persuasive”; rather, some gestures, or sometimes simply some parameters in their expressivity, convey some kinds of information that are typically contained in the cognitive structure of persuasive discourse. Types of information necessarily conveyed in persuasion are those somehow linked to the communicative strategies of *logos*, *ethos* and *pathos*: in particular, the following meanings.

1. *Importance*. If something is important, to obtain it will be a high value goal that you want to pursue. Gestures that convey the meaning “important” mention the high value of a proposed goal, to convince the Addressee to pursue it. This meaning is typically contained in gestures that convey performatives of incitation or request for attention, or other gestures like in [40]: “*the finger bunch*”, that convey a notion of importance as their very meaning; but “important” is also the meaning of *beats*, since every beat stresses a part of a sentence or discourse, communicating “this is the important part of the discourse I want you to pay attention to and to understand”. Finally, this can be the meaning of irregularity or discontinuity in movement.
2. *Certainty*. To persuade you I must convince you, that is, cause you to have beliefs with a high degree of certainty, about what goals to pursue (their value, importance) and how to pursue them (means-end relations). To induce certainty in you, I may need to show self-confident and certain about what I am saying. This is why gestures that convey high certainty, like in Kendon [41]: “*ring*”, may be persuasive.
3. *Evaluation*. To express a positive evaluation of some object or event implies that it is a useful means to some goal; thus, to bring about that event or to obtain that object becomes desirable, a goal to be pursued. In a marketplace, to convince someone to buy a food, a “*cheek screw*” (rotating the tip of the index finger on cheek), that means “good”, “tasty”, made by a grocer, would be a good example of persuasive gesture.
4. *Sender’s benevolence*. In persuasion not only the evaluation of the means to achieve goals is important, but also the evaluation of the Persuader: the Sender’s *ethos*. If I am benevolent to you – I take care of your goals – you can trust me, so if I tell you a goal is worthwhile, you should pursue it. A gesture driven by the ethos strategy of showing one’s moral reliability is the gesture, quite frequent in political communication, of *putting one’s hand on one’s breast* to mean “I am noble, I am fair”: Serenari [42].
5. *Sender’s competence*. Trust implies not only benevolence but also competence. If I am an expert in the field I am talking about, if I am intelligent, efficient, you might join with me and pursue the goals I propose. A politician, in talking of quite technical things concerning taxes, uses his right hand curve open, with palm to left, rotating rightward twice, meaning that he is passing over these technicalities, possibly difficult for the audience; but at the same time the relaxed appearance of his movement lets you infer that he is smart because he is talking of such difficult things easily, and unconstrained. This provides an image of competence.

6. *Emotion*. Emotions trigger goals. So A can express an emotion to affect B by contagion and thus induce him to do or not to do some action. In talking about his country an Italian politician, moving his forearm with short and jerky movements of high power and velocity, conveys the pride of being Italian in order to induce the goal of voting for him.

7. Among these types of information, Emotion (n.6) typically makes part of a pathos strategy; the Sender’s benevolence and competence (n.5 and 4) and certainty (n.2), are clearly ethos information; while the elements of importance and evaluation (n. 1 and 3) are generally conveyed through a logos strategy. Nonetheless, these categories can merge with each other: for example, expressing an emotion about some possible action or goal may imply it is an important goal for me, and should be so for you. In this case, at a first level there is a pathos strategy – the goal of inducing an emotion, but this pathos is aimed at demonstrating the importance of the proposed goal, thus conveying a logos strategy at the indirect level.

6 PERSUASIVE GAZE

We present an observational study that investigated the persuasive impact of gaze in political discourse.

6.1 Hypothesis

Our working hypothesis, like in the study above, is that the persuasive import of gaze, just as that of words and gestures, depends on the meanings it conveys. Therefore, to assess how persuasive the gaze exhibited in a discourse can be, you have to assess its meanings.

But what are the meanings of gaze? According to the semantic typology proposed by Poggi [43], any communicative signal of any modality can provide one of three types of information concerning: 1. the World: concrete and abstract events and entities (objects, persons, animals, times and places); 2. the Sender’s Identity: stable characteristics of the Sender (sex, age, culture, personality, image and self-image); 3. the Sender’s Mind: his/her mental states (beliefs, goals, emotions) concerning the content and structure of the discourse s/he is delivering. Thus every gaze signal can be classified as to the type of information it bears. As to Information on the World, directing our eyes to a different direction from that pointed by our face, we may perform a deictic gaze, that is, point at an object or person; by squeezing eyes we may refer to something physically of conceptually “small”, thus conveying a concrete or abstract property of something, for example, a “little” object or a “subtle” concept.

Other gaze items inform about the Sender’s Identity (ethnic or cultural roots, personality): both the identity one cannot help showing – see the shape of the eyelids that distinguishes a Chinese from an Italian woman – and the identity one deliberately wants to project – see the *eyebrows raised with half-open eyelids* that show you are haughty Poggi & Roberto [44]. Finally, many gaze items are “Mind Markers” Poggi [45], signals conveying Information about the Sender’s Mind: beliefs, goals and emotions referred to what we are talking about. Within Belief markers, we can inform about the degree of certainty of the beliefs we are mentioning: a *light frown* tells that I am serious, not kidding in saying what I say, while *raising eyebrows with not very open eyes* means I am a bit uncertain. Other signals

provide metacognitive information, i.e. they inform about the source of what we are saying (*looking downward leftward* tells the information we are going to provide is to be retrieved from our long-term memory); or else they inform of the mental state we are in (*staring out into space* or closing the eyelids means I am in concentration).

Within “Goal Markers”, some express a performative, that is, the act a Sender has the goal to perform by his communication: a long lasting stare in the eyes of the Addressee is a defying gaze. An eyebrow raising marks the comment of our sentence, thus distinguishing what we want to stress vs. what we take for granted. Again, we define as metadiscursive gaze a light closing of the eyelids, which means I am going to skip a topic in my discourse; or a raising of the eyebrows that corresponds to saying “but”, signalling a contrast between two beliefs. Finally, to manage turn-taking in conversation we gaze at the Speaker to take the floor; in providing backchannel we can frown to show we don’t understand or we don’t agree, or slightly close eyelids to say we are following the Interlocutor’s discourse.

Finally, some gaze items, like the raised eyebrows and wide open eyes of surprise or the bright eyes of enthusiasm, are Emotion Markers, informing about the Sender’s emotions.

Moreover, according to Poggi [45]; Poggi [43], all signals may have, beside their literal meaning, an indirect meaning, one that the Sender wants the Addressee to understand through automatic or context dependent inferences, and that can be very different from the literal one. Also a gesture or gaze can be classified in one of the types above both as to its literal meaning and to its indirect meaning, with the two classifications possibly being different. For example, *raising eyebrows with wide open eyes* showing surprise is an Emotion Marker at the literal level, but its indirect meaning can tell “I can’t believe it”, thus working as a backchannel Heylen [20].

6.2 Method

To assess the role of gaze in the persuasive structure of political discourse, we analysed some fragments of electoral debates held, respectively, by Romano Prodi, who won the elections in Italy in 2006, and by Ségolène Royal, who was defeated in France in 2007. For some fragments of both debates, the verbal communication was analysed in terms of their hierarchy of goals, aiming to find the structure of goals and supergoals and to detect the use of *logos*, *ethos* and *pathos* strategies. For other fragments, the Speaker’s gaze behaviour was described and classified in an annotation scheme.

6.3 Analysis in terms of hierarchy of goals

Figure 1 shows the analysis of a fragment of one minute drawn from Ségolène Royal’s debate. It was held in the studios of the French channel France 2, after the first round, when she came second with 25,87%, after Nicolas Sarkozy. In the political show “A vous de juger”, Arlette Chabot interviews Mrs. Royal about her political vision and projects for France. Here is the fragment.

“Voilà, je n’ai aucune revanche à prendre, je n’ai aucune revendication, je n’ai pas d’enjeu personnel dans cette affaire, je ne suis liée à aucune puissance d’argent, je n’ai personne à placer, je ne suis prisonnière d’aucun dogme, et au même temps je sens que les Français ont envie d’un changement extrêmement profond. Et mon projet c’est eux, ce n’est

pas moi, mon projet. Mon projet ce sont les Français et aujourd’hui le changement que j’incarne. Le changement, le vrai changement c’est moi”

(Look, I’ve got no revenge to take, I’ve got no claiming, no personal stake in this affair, I’m not bond to any financial power, I’ve got no one to place, I’m not prisoner of any dogma, and in the same time, I feel that the French people desire an extremely profound change. And my project it’s them, my project it’s not myself. My project is the French people and the change I embody today. The change, the real change, is me).

To analyse a fragment in terms of its hierarchy of goals means to figure out what are the communicative intentions of the Speaker. In this case, since we are analysing verbal behaviour, its hierarchy of goals is assumed as fairly aware, that is, the result of a somewhat conscious deliberation; in such a way that you could confirm your guess by asking the subject. Further, this is typically an analysis of the Speaker’s intention, and does not take into account the actual effect of the persuasive efforts on the possible audience. When analysing a discourse as a hierarchy of goals, one has to put himself into the Speaker’s mind, not into the mind of the Hearer.

According to Poggi’s theory [36], we segmented the verbal discourse into its speech acts (written in italics), then we wrote down their literal goals and super-goals (i.e., the inferences each communicative act aims to induce, numbered as G1, G2 etc.), and we singled out the final goal of the fragment, by using arrows to represent their means-end relations.

In this fragment, Royal explains to the electors that she hasn’t got any revenge to take (Speech Act SA1), any personal claim or benefit in this affair (2, 3, 5), nor is she bound to any financial power (4), thus implying (G7) that she does not work in her own interest; the only reason why she runs for President is for the sake of the French who wish for a change (SAs 7, 8, 9, that aim at G8). By implying G7 and G8 she aims at demonstrating that she is altruistic (G6). At the same time, indirectly acknowledging (through SA 11) the good things done by her opponent (G10), she implies that she is fair (G5), with fairness and altruism bearing on an image of *benevolence* (G2), whose projection makes part of an *ethos* strategy. Meanwhile SAs 6 and 9, implying G9 (“I’m not prisoner of any dogma”, and “I am the change”) provide an image of flexibility, novelty, intelligence (G3): the *competence* side of the *ethos* strategy. Moreover, through SAs 10 and 12, she implies G11 (“Sarkozy is incapable to run France”), while through 13 and 14 she indirectly communicates G12 (“He is a coward”). So, symmetrically with the positive evaluations of competence and benevolence she implied about herself, she now provides two negative evaluations (G11 and G12) of her opponent both on the *competence* and on the *ethical* side. Further, that Sarkozy does not want to confront the balance of what he did (14) implies that the balance of what the political right side has done is negative (G13), so it is necessary to vote for the change (9), for the left (G4), for Royal (G1). The chaining of events and consequences from SAs 13 and 14 to G13 and from G13 to G9 and G4 may be seen as a *logos* strategy. Only the *pathos* strategy does not show so much in this fragment of discourse.

In her persuasive structure, Royal identifies the French people’s desire for an extremely deep change (SA7) and she hooks her own goal of being elected to this goal, by communicating, through inference or explicit words (SAs 8 and 9) that *she* is the change: so voting for her (G1) is the means to their goal of bringing about change.

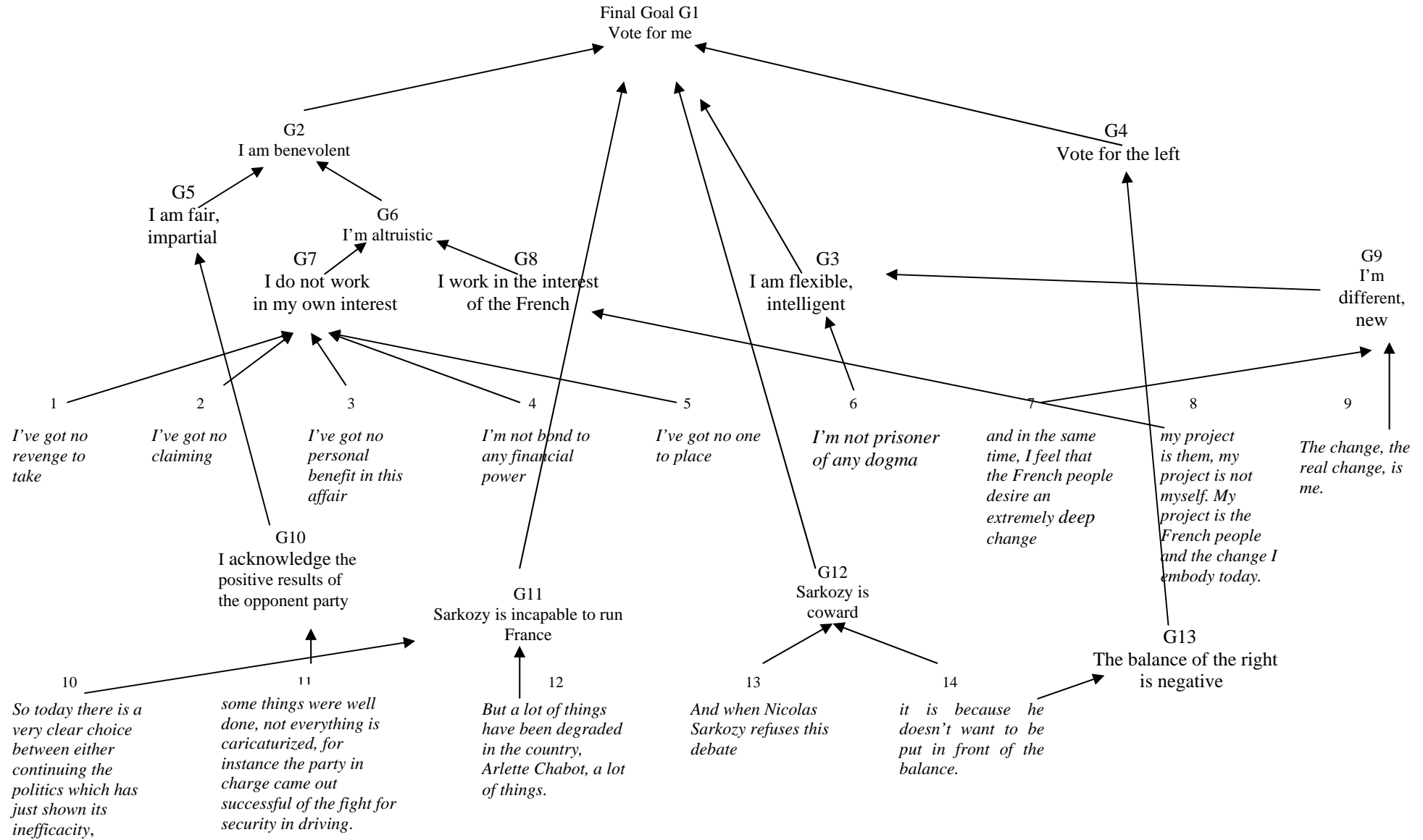


Figure 1. The persuasive strategy of a political discourse

6.4 Qualitative analysis of gaze

To analyse gaze in fragments of Royal's and Prodi's discourse we built an annotation scheme that describes and classifies each gaze item in terms of its signal, its meaning and its persuasive function (See Table 1). Specifically,

- Column 1 contains the time in the video;
- col. 2, the speech parallel to the gaze item under analysis;
- col. 3, a description of the gaze item in terms of its parameters Poggi & Roberto [43], like eyes direction (generally with respect to the direction of the head), actions of the eyebrows, position of the eyelids;
- col. 4, the literal meaning of the gaze item;
- col. 5: a classification of the meaning in col.4 according to the semantic typology above and possibly to its persuasive function, distinguished according to the persuasive strategy (*logos*, *pathos*, *ethos* benevolence, *ethos* competence);
- in cols. 6 and 7, the same analysis of cols.4 and 5 for possible indirect meanings of the gaze item.

Also in this case we write down the meanings we attribute to the Speaker's uses of gaze, on the basis of the lexicon of gaze hypothesised by Poggi [43]. They are the meanings and persuasive functions we think the Speaker has the goal (not necessarily a conscious goal) to convey, and we make no assumption as to whether they are in fact persuasive for the real audience. The difference from the meanings and functions we attribute to the Speaker as to the verbal fragment above, is that in gaze may be "meant" at a lower level of awareness.

Table 1 shows the analysis of two gaze items in Royal's discourse.

In example 1, while talking of the top managers who ruin the enterprises, like Mr. Forgeat (Col.2), Royal looks at the Interviewer, Arlette Chabot, with a fixed gaze (col.3) which

means "I am serious, I do not let you avert gaze"(4): an information about Royal's personality, her being serious and determined, aimed at a strategy of *ethos competence* (col. 5), and possibly to indirectly conveying that she is one who struggles against injustice: again information on her personality, bearing on the moral side of *ethos*. Then Royal, leaning her head on the left, looks at the Interviewer obliquely and with half-closed eyelids, an expression of anger and indignation: information about her emotion, which she possibly wants to induce in the audience, thus pursuing a *pathos* strategy.

In 13, Royal refers to a proposal made by Sarkozy, that the unemployed should be induced to choose a job out of no more than two, and if they don't do so, they should lose their unemployment subsidy; she is arguing that this choice can only be acceptable if the conditions of the two jobs are not very punitive. So, while saying "you have to accept this job", she *looks down, first on the right then on the left*, as if looking at two things before deciding, thus referring to the choice between the two jobs. This is an iconic use of gaze, providing information on the World, namely an action of choice, by miming it. After that, she *raises her eyebrows while keeping her eyelids in the default position*: one more iconic gaze that means "order", miming the expression of someone who orders to the unemployed to make their choice. With these two gaze items Royal is playing the roles of both, the unemployed and the job proposer, thus dramatising the scene of Sarkozy's proposal. On the basis of the following argumentation, in which Royal is very critical about it, we can interpret her dramatisation as a parody, a way to make fun of Sarkozy's proposal.

In this way she conveys a negative evaluation of her opponent through a *pathos* strategy.

What this analysis shows is how coherent is the use of gaze with the whole of a Speaker's argumentation and persuasive plan.

n.	Speech	Gaze	Literal. M	Type	Indirect M.	Type
1 48.10	<i>Et aux hauts dirigeants qui abiment l'entreprise en faillite comme M. Forgeat</i> And what about the top managers who ruin the enterprises, like Mr. Forgeat,	Fixed gaze to Interviewer leaning head leftward, looks at her obliquely, with half-closed eyelids	I'm serious, I feel anger and indignation	ISI Personality ETHOS Competence ISM Emotion	I struggle against injustice I want you to feel indignation	ISI ETHOS Benevolence ISM PATHOS
13 49.10	<i>"Non, là, il faut... Il faut accepter cet emploi,</i> No, you have... you have to accept this job	She looks down, first right then left as if looking at two things to decide between them Eyebrows raised, Eyelids default	Choice, choose a job I order you (to choose one)	IW Action ISM Performative	I am ridiculing Sarkozy's proposal → His proposal is too punitive	ISM Emotion PATHOS ISM Negative evaluation of opponent LOGOS

Table 1. Analysis of Royal's gaze items

6.5 Quantitative analysis

Out of the fragments analysed of Prodi's and Royal's discourse, we finally selected a sample of 20 items of gaze per each politician, and computed their persuasive functions. Table 2 and Figures 2 and 3 show the different distribution of gaze communication across the four different strategies: *logos*, *pathos*, *ethos competence* and *ethos benevolence*.

	Prodi	Royal
Length	53''	1'20''
Gaze items	20	20
Communicative units	25	25
Persuasive units	16	22
Logos	4	12
Pathos	2	3
Ethos competence	10	6
Ethos benevolence	0	1

Table 2. Prodi's and Royal's gaze

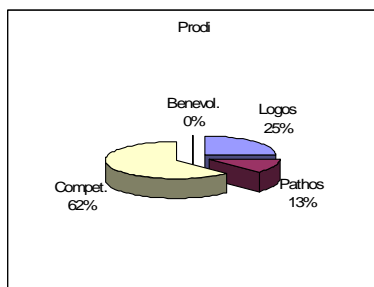


Figure 2. Persuasive strategies in Prodi's gaze

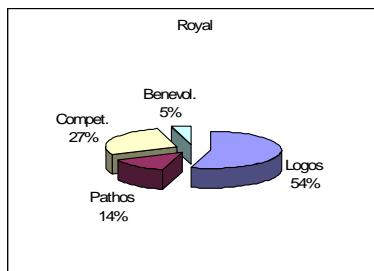


Figure 3. Persuasive strategies in Royal's gaze

6.6 Discussion

From the analysis of Prodi's and Royal's gaze, it results that the two differ as to the persuasive strategies of their gaze. Prodi's most frequent strategy (62%) is to show his competence to elicit the electors' trust, while he does not aim at showing his benevolence. He uses a logos strategy in 25% of his gaze, and pathos in 13%. Quite striking, instead, the frequency of logos strategy in Royal's gaze (54%) and then the appeal to her own competence (27%) which, however, does not rule out benevolence (5%). Finally, the pathos strategy is used slightly more than in Prodi's discourse (14% as opposed to 13%). The high incidence of the *competence* and total lack of the *benevolence* strategy in Prodi's gaze is coherent with his need to enhance more his image of skill and political intelligence than that of an honest and altruistic person. Between Prodi and his opponent Berlusconi, the latter had the image of one who deals with politics more for the sake of his own financial interests than

for Italians. On the other hand, the propaganda of the right would often ridicule Prodi by comparing him to a "mortadella" (a salted meat typical of his hometown, Bologna): a fat, cheap, not so tasty, not luxurious food, evoking someone who is over-soft, not very strong, skilled and determined. As for the high incidence of the *logos* strategy in Royal's gaze, two tentative accounts could be the goal to contrast stereotypes of feminine irrationality, or the French *esprit de géométrie*.

7 CONCLUSION

We have analysed some examples of the discourse and gaze of two politicians, and we have found out that the persuasive use of their gaze is coherent with the persuasive goals they pursue in their political communication.

This is only a first step in studying the persuasive impact of gaze in political discourse. A limitation of our work is that we did not study the effect of certain items of gaze, but only their goals. What we analysed here are the meanings that the Speaker has the (conscious or unaware) goal of communicating by his/her gaze items, and their persuasive import, without any consideration as to whether those meanings are effective in terms of real persuasive impact on the Addressee. Subsequent research could address this issue, by assessing if the meanings conveyed according to the Speaker's hierarchy of goals are actually persuasive for the audience. Moreover, through copy-synthesis or straightforward implementation, the face and gaze behaviour of humans – both the parameters that result in specific gaze items, and their corresponding meanings – could be reproduced in Embodied Conversational Agents. Evaluation studies could be carried on to assess both how humanlike and how effective the simulated is on the persuasion side, and their findings could help to build Embodied Conversational Agents that convey more persuasive messages.

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