Gender at work: Eavesdropping on communication patterns in two token teams

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Abstract In a national research project we assessed gender-related communicative patterns in 20 teams from diverse organizations. The sub-sample for this study consisted of two teams with one gender token each: a female token in an industrial team of eleven persons and a male token in a kindergarten team of eight persons. We focused on dominance and support-related behavior in verbal and nonverbal communication. More specifically, we assessed patterns of talking times, back channeling, gaze behavior, affect display, and movement qualities. Results suggest patterns within and between verbal and nonverbal codes. The female token showed more nonverbal behavior patterns than the male token. In addition, the female leader of the kindergarten team showed more nonverbal behavior in the interaction with the token man, but not with other team members. In the selected sequence, where tasks are negotiated with some underlying conflict potential, we observed that independent of status and token position, women used more nonverbal communication, regarding dominance, support and defensive behavior. Defensive behavior is used when the self image of a person is threatened. This seems to apply not only to the female gender-token in the male-dominated team situation, but to a certain degree also to the female leader when interacting with the male gender-token. Self- and other ratings of gender-tokens were biased toward stereotypic perception. Our case studies support and exemplify research findings that gender-token status frequently has negative consequences for women only.

Keywords: gender, groups, tokenism, language, nonverbal communication, social interaction, video analysis, pattern analysis.

1. Introduction

Team work in organizations has been the focus in a number of recent studies [1][2]. However, not many of them have placed an emphasis on communication patterns of men and women. Even studies on homogeneity and heterogeneity in teams have mainly focused on social categories other than gender [3][4]. In interviews men and women quite clearly report gender differences in communication at the workplace [5][6]. But can these perceived differences be confirmed by
behavioral data? Our research project\(^1\) has set out to investigate such differences in behavior as well as perception, and according constructive effects in gender communication.

There are many interesting research questions about gender communication in work teams. Are there differences in communication dependent on speaker’s gender? Are there differences dependent on target’s gender? Does team leader or team member status of men and women influence communicative patterns? Are there communicative differences in same-sex vs. mixed sex teams? Are there differences in pure male vs. pure female teams? Are there differences in male-dominated vs. female dominated teams? Are there differences in mixed-sex teams vs. token teams where one gender is in the absolute minority?

In an attempt to answer some of these questions, we generally work with qualitative and quantitative methods from linguistics and psychology. In this study, we analyzed the communicative patterns in two token teams in order to find out whether the gender tokens have a special position within the teams and whether their gender-role is more salient than that of non-tokens.

2. Gender tokens in work teams

In her pioneering work on tokenism, Kanter, 1977 [7], described tokens as persons who belong to a social category that constitutes less than 15% of the entire group composition. This criterion applied to a man and to a woman in two out of 20 teams we observed in our current project. The token-situation is supposed to make gender more salient and thus evoke more pronounced gender-role behavior than in teams with a balanced gender ratio. It also has implications for self-image and role-expectations. Kanter [7] reported that token women are more likely to have their mistakes amplified, to be socially isolated, and to be found in roles that undermine their status. These results have been documented not only in women managers but also in women police officers, construction workers, fire fighters, military cadets, and law students [8]. While early token research assumed that gender-tokens of both genders would experience negative consequences, recent results indicate that only women are affected by negative outcomes [8]. Researchers found that token women experienced increased visibility, a sense of social distance and isolation from their co-workers, increased stereotypic self-perception and behavior (assimilation into stereotypes), and heightened pressure to perform well when they are members of a male-dominated work group. Token men generally do not have the same negative outcomes, on the contrary, they may benefit from their token status, for example by being promoted without actively pursuing promotion [9].

This tendency not only affects actual experiences reported on rating-scales, but also expectations of men and women for token situations [10]. Cohen and Swim [10] found that token women (particularly those low in self-confidence) had more negative expectations about working in a male-dominated group than did non-token women, whereas gender-token men and non-token men did not differ in their expectations. McDonald et al. [8] experimentally raised the social status of gender-token women and found out that this reduced some of token women’s negative expectations. Yoder, Schleicher and McDonald [11] showed that with increasing leadership legitimacy the female token leaders improved group performance and reduced some of the negative consequences associated with tokenism. Thus, status seems to play an important part for token women.

In particular, we were interested in the following research questions: Do the observed interactions in the context of team meetings point to a more pronounced gender-role in gender-tokens? Do the self-ratings and interview data of male and female gender-tokens point in the direction of a more stereotypic gender-role? Do third person ratings point in that direction? Do men

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and women show different patterns? In order to answer these questions we have considered verbal and nonverbal indicators of typical male and female attributes such as dominance as a stereotypical male attribute falling in the domain of agency, and support as a stereotypical female attribute falling in the domain of communality [6].

3. Behavioral categories

3.1 Gaze Behavior
Gaze is the most important nonverbal dominance signal particularly when related to talking mode [12][13]. Gaze has an important function in the regulation of social interaction as a correlate of power- and influence-related behavior [14]. Differences in influence are reflected in communication patterns that lead to the development of hierarchies [15][16][17]. Dovidio and Ellyson [13] operationalize the influence of person A in a dyad as the ratio of the time A talks and looks at B (looks while talks, lwt) and the time, in which A listens and looks at B (looks while listens, lwl). This value is called the Visual Dominance Ratio (VDR). The higher the VDR of person A in relation to person B, the greater is the influence of person A over person B [13]. Persons with relatively little power or status look longer while listening to their partner than while talking, whereas more powerful persons look approximately for the same amount of time both while listening and while talking. Overall, less powerful persons look longer at more powerful persons especially while in the role of the listener than vice versa [12][18]. In this study we coded looks while listens (lw), looks while talks (lwt) along with actor and target of the observed behavior.

3.2 Talking times
Talking time is a widely used and validated indicator of dominance [16][17][19]. In the present study, talking time was selected as the verbal dominance measure. In the THEME behavior coder we coded actor and target of speech. We coded talking onset when a person started vocalizing and talking offset when the person stopped, without taking into account one-word sentences, feedback particles or other brief vocalizations such as laughter (whereas talking times computed from the transcripts included all utterances. In addition, words and turns were counted; see Tables 1 and 2). Furthermore, for purpose of external validation, we collected group members' reports about how dominant they perceived themselves and each other with the SYMLOG adjective short scale [20]. Results are reported in Tables 1 and 2.

Another frequently used verbal dominance measure are interruptions. They represent a violation of the basic turn-taking rule in conversations [21]. Many research findings show that interruptions are closely linked to the concept of dominance [22][23]. However, as Schmitt-Mast [17] points out, alternative interpretations of interruptions must be considered as well. Interruptions may, for example, be a consequence of a highly involved conversational style and may thus reflect interest in the discussion topic or the interaction partner, serve as a means to create connections, or indicate feeling at ease with an interaction partner [14]. Because it is still in question whether interruptions are an adequate indicator of dominance, we did not use interruptions as explicit codes here. However, interruptions were coded from transcripts and from action patterns [24] for the statistical analysis.

3.3 Feedback/Back-channel Behavior
Feedback can be regarded as a signal of social support of a current speaker [25][26]. In the research literature it has also been termed back-channel behavior [27][28]. We define feedback behavior as short utterances of the listener that either expresses understanding or non-understanding. Feedback
can be either verbal, nonverbal or both. It encourages the speaker to continue or further elaborate on a topic. It is given in speaking pauses or simultaneous without claiming a turn. It can operate at different levels of automaticity and interactivity [27][28][29]. Feedback or back-channel behavior is a signal of interest, involvement and particularly in its positive form of social support. However, missing feedback or back-channeling can also be a signal of social dominance. We coded positive and negative feedback (without distinguishing verbal and nonverbal channel), actor and target.

3.4 Affect Display
Evaluative affect display (EAD) is a nonverbal expression of agreement or disagreement that signals support or non-support of a current speaker. EAD is conceptualized as the expressive component of an attitude. Research findings support the idea that in many cases attitudes are communicated nonverbally, particularly if they are negative and the target of evaluation has a higher status position than the actor [30][31][32].

Evaluative affect is an important source of communicating attitudes and thus support in face-to-face interaction [33]. It is mostly communicated non-consciously. Even though facial reaction can be better controlled than any other body reactions [34][35], the degree of non-deliberateness is much higher than it is for responses on rating scales. We coded positive, neutral and negative affect, affordance for affect expression (directly preceding stimuli), actor and target.

3.5 Movement Qualities
The four measures just exemplified (two for support and two for dominance, one verbal and one nonverbal each) capture merely quantitative information. In addition, we coded movement qualities with the Kestenberg Movement Profile (KMP) [34][36]. The KMP is a movement analysis tools with a high degree of differentiation in the assessment of nonverbal behavior. It takes into account more than 72 motion parameters, and is organized in eight profiles, each of which provides a different perspective in a meaning area. For our analysis we used two out of eight profiles: efforts, and preefforts [36][37].

Efforts are full movement qualities that indicate mastery of the environment in the dimensions of space, weight and time. The effort profile falls into the observational categories of direct use of space vs. indirect use of space, strong use of weight vs. light use of weight, quick use of time vs. sustained use of time [36][37]. Preefforts are a pre-stage of efforts and indicate insecurity, and problems with the environment, the sub-dimensions provide information about learning styles and ego-defenses. The preeffort profile falls into the observational categories of channeling use of space vs. flexible use of space, vehement/straining use of weight vs. gentle use of weight, sudden use of time vs. hesitant use of time [36]. We coded all 12 sub-categories (six efforts and six preefforts), actor and target.

Rater reliability for all observational measures was good, except for Kappas of the effort and preeffort ratings. Reliabilities for talking times, back channeling and gaze observations were very good with Cohen’s Kappa >.80 [38]. For evaluative affect they were good with Cohen’s Kappa between .64 and .79. For efforts and preefforts reliabilities were not satisfactory (with Kappa <.45). We attributed this lower Kappa to the higher number of categories used and to the heterogeneous KMP training background of the two main raters. Rater 1 corresponded high to a lay rater (Kappa >.70) who coded the material in addition. We, therefore, used only the ratings of rater 1 and not of rater 2 for movement qualities.

4. Pattern Analyses
We analyzed Teams K and O, the only teams who fulfilled the requirements of gender-tokens according to Kanter [7]. Teams were taped during two of their regular team meetings at work. The two teams met about every two weeks. We selected, transcribed, and analyzed 15 minutes out of the entire material from one team. The duration of the selected sessions was four hours for Team K and 1 1/2 hours for Team O. Selection criteria for scenes were good general visibility and audibility, the typicality of the interaction for the meeting, and the involvement of as many team members as possible. Additionally, we selected sequences with a definable beginning and end. Within each team persons were labeled alphabetically, starting with the team leader, who was A, and from there continuing clockwise alphabetically around the table. Analyses were all done with the pattern analysis software THEME 4.0 [39] (see Figure 1 for the coding surface).

**Figure 1:** Screenshot of Team O with Effort/Preeffort Codings (Movement Qualities) in the THEME behavior coder [40]

Note: The predefined coding scheme appears in the lower half of the screen. Actors were coded with letters a to h/k. The beginning of an action was coded with beg, the end with end (the end was only used for coding of talking times). Efforts were coded by the three variables space, weight and time, preefforts were coded by the three variables prespace, preweight and pretime; flow was additionally coded but not analyzed (subcategories were coded as explained under 3). Coding was done by mouse clicks on the according categories on the screen. A time-based coding protocol emerged that can be seen in the upper right window.

4.1. **Female gender-token (in a male context)**

4.1.1 **Team description**: Team K consisted of one woman (K) and 10 men. It was a team in an industrial setting of an international corporation in Southern Germany with a male leader (A). The boss was an assertive and dynamic mid-age family-father. The gender-token was a self-confident mid-age mother. Both were in their 40ies. Both had an academic educational background and were high status team members. The other persons in the team were mostly managers (mostly also high status) from different parts of the corporation. The group planned a joint project with boss A’s
The role of the boss was to coordinate, and to point out potential problems. The role of the gender-token was to represent environmental concerns regarding the industrial affordances and necessities. The atmosphere was quite conflict-loaded as there were many different interests. We selected a scene from the first session where the involvement of the gender-token was particularly high. The involvement in this scene was generally high with many passages of simultaneous talk and many gesture-posture mergers [41] of the main protagonists, indicating involvement and authenticity on the nonverbal level.

Table 1: Simple statistics for Team K

<table>
<thead>
<tr>
<th>Measure</th>
<th>A (male boss)</th>
<th>K (female token)</th>
<th>Others (approx. mean of full team members)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking time (min) a</td>
<td>3.3 (16.6)</td>
<td>6.1 (3.5)</td>
<td>1.9 (3.5)</td>
</tr>
<tr>
<td>Turns (#)</td>
<td>60.6</td>
<td>149.4</td>
<td>37.0</td>
</tr>
<tr>
<td>Interruptions (#)</td>
<td>2.7 (7)</td>
<td>16.2 (11)</td>
<td>2.0 (2)</td>
</tr>
<tr>
<td>Feedback / Back channel (#) b</td>
<td>3.6 / 10.8nv</td>
<td>7.2 / 18.9nv</td>
<td>1.0 / 4.0nv</td>
</tr>
<tr>
<td>kgH (control yields; #)</td>
<td>11</td>
<td>25</td>
<td>4.7</td>
</tr>
<tr>
<td>K_neut (neutral speech acts; #)</td>
<td>7</td>
<td>15</td>
<td>6.8</td>
</tr>
<tr>
<td>kbH (control claims; #)</td>
<td>27</td>
<td>29</td>
<td>8.0</td>
</tr>
<tr>
<td>kbH+ (strong control claims; #)</td>
<td>14</td>
<td>19</td>
<td>3.0</td>
</tr>
<tr>
<td>Lwt to group (frames)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lwl to A (frames)</td>
<td>n.a.</td>
<td>36</td>
<td>2000</td>
</tr>
<tr>
<td>Ratio %/wl : %/lwt (%)</td>
<td>70:30</td>
<td>70:30</td>
<td>90:10</td>
</tr>
<tr>
<td>DomValue (-18 to 18) c</td>
<td>13.1</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Dom_Self (-18 to 18)</td>
<td>14.5</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>CompValue (-18 to 18)</td>
<td>15</td>
<td>5.0</td>
<td>10.5</td>
</tr>
</tbody>
</table>

a talking time: values in parenthesis indicate the talking times in a longer, more representative sequence; b back channel frequencies: first value from transcript, second value from Theme codings (including nonverbal cues), third value from analysis of action patterns ([24], also interruption value in parenthesis); c DomValue= mean of all other team member’s ratings for participant’s dominance (on a rating scale from -18 to 18) [20], followed by self-ratings of dominance and mean of all other team member’s ratings for participant’s competence on the same scale.

While in the selected sequence K dominates the talking time, A dominates the talking time in the longer more representative sequence (here of 53 min, not including the selected 15 min). Within the 15 minutes sequence K interrupts a lot more than anyone else in the team including the boss. K talks twice as fast as the boss (words per seconds) and faster than the other team members. K gives more feedback and displays more control yields than the others. However, she also shows more control claims and more strong control claims than the boss in this sequence which applies to no other person of the team. K’s and A’s visual dominance ratio is almost identical, i.e. she looks a lot at others while talking, while she does not look at the boss very much while listening (lwl to A).

4.1.2 Pattern analysis (female token): We conducted a pattern analysis with THEME 4.0. Patterns were taken from data processing without randomization. 46 patterns resulted altogether, 13 patterns included the interaction between A and K. Those were mostly patterns of talking times and preefforts (defensive movement). Most of them were of low frequency, so care must be taken with the interpretation. The following patterns resulted:

Figure 2, Pattern 30: Appeasing gesture. At the beginning of the speech act K tends to gesture. In this case she displays an appeasing, calming gesture five times before she starts to talk, four times this gesture lies in between two turns. The sequence is: K ends to talk (K, end, t), K displays a gentle gesture (K, beg, gentle), and K begins to talk (K, beg, t).
Note: This form of presentation is taken from the graphic output of the THEME analysis module [40]. Single actions are indicated by the codes in the upper left field and as dots on the corresponding line in the upper right field. Here the lines indicate the time line (from left to right; unit = frames) and the dots on the lines the occurrence of the single actions. Actions that form patterns are indicated by the vertical lines. In the lower field a “side-view” of the hierarchical patterns is given also on a time line.

**Figure 3,** Pattern 41: *Nervous gesture “I do not mean to say you are wrong…”* At the beginning of three other speech acts K shows a vehement gesture as a defense (usually either strength drawn back or an ineffective form of strength such as in temper tantrums). Similar to the gentle gesture, she uses this gesture in order to appease the other team members. The gesture says: “yes, yes, yes, you are right, we have to talk about this, but we do not have to do this now; let’s talk about this when we have more time”.

**Figure 4,** Pattern 14: *Nonverbal indicators of subsequent turns.* In two out of the five cases, pattern 30 is directly followed by pattern 41 (twice the vehement and the gentle quality are displayed subsequently within one movement phrase). It becomes clear that the movement qualities of K are directly related to the on- and offsets of her talking turns.
Figure 5, Pattern 34: K reacts defensive towards A. In the beginning of the scene there is a first hint that the behavior of K may be related to the behavior of the boss. When A ends to talk, K reacts with a sudden movement quality, usually either indicating flight or running into danger as a defense mechanism. In this case the latter happens twice: K appears insecure, but she starts out with her professional arguments against what has been talked about.

Generally, patterns in Team K need to be interpreted with care as in some cases there are only two repetitions of the behavior in question, whereas some definitions of a pattern include, e.g., a minimum of three repetitions. Taking this into account, across all situations above, K displays defensive gestures of different types (mostly gentleness, an appeasing gesture in the context of conflictive talk; altogether 14 preefforts that are part of patterns mostly between A and K: 6x gentle, 3x vehement/straining, 3x sudden, 2x hesitant). When employing defensive behavior, she frequently uses palm presentation, which is a culturally rather rare gesture in Germany. The KMP-theory assumes that defensive behavior is displayed when there is a threat for the person, for example, face-saving behavior in threat of a face-loss. From our observer-perspective the threat for the
gender-token here could either result from her role as a control instance for the engineers or it could result from her role as a gender-token. It would therefore be interesting to observe her in a variety of different interaction contexts with boss A. In the entire sequence boss A behaves rather protective toward K. He also used preefforts quite frequently, but they do not result in patterns between A and K. K states in the interview (see below) that A behaved as always in the session. A at one point puts his hand softly up to K’s upper arm actually touching her; this was the only incident of touch we observed in the entire data of all 20 teams; since it is only one incident it does not result in a pattern, however, because it is so rare it can be seen as a nonverbal cue of special importance, potentially signifying protectiveness or patriarchic behavior of A towards K [15]. However, there is no possibility to validate our interpretation from just one observation.

While some team members state that K has the highest emotional warmth and that they have a good relation with her, she is also attributed the lowest influence. Interestingly, she is being called the scapegoat by three of the four team members that completed the extra questionnaire about roles in the team. Except for with the gender-tokens, the category scapegoat was hardly ever employed by the 130 participants of our project. But what does Mrs. K say herself about her role in the team?

4.1.3 Interview statements Mrs. K, Team K

K reports that she has been working for the organization for 10 years, A has been working there for five years; the team experience of both is high. On rating scales from 1 (very low) to 5 (very high), she rates her work content with 3 out of 5 (all other team members with 4 or 5), the team atmosphere with 3 (all others with 4), the identification with the organization with 3 (all others with 4 or 5). She characterizes herself as feminine in terms of gender-typicality (high expressivity, low instrumentality; as measured with the Gender Typicality Scales (GTS) [42]). A characterizes himself as androgynous.

K describes the team as often involved in emotional discussion, the boss is blocking, conflicts are present (none of the men made any comments on this topic), specifically, after having been asked for more information, she talks about derailments, inappropriate behavior, personal attacks. K states that gender has an influence on the team communication, but also training background of the persons. She differentiates that within the organization gender does not play a role in the hiring policies, but in promotion she experiences career opportunities for women as being lower. K states that gender is not an explicit topic in the team, but has a clear implicit influence: K receives comments about her contributions, “macho, ironic, boorish remarks that have nothing to do with the content”. She states that a man would never receive such comments, that they unconsciously slip through (‘sie rutschen unbewusst nach’). If there were only women in the team, she does not believe that things would change much. If a woman comes into a team of only men, she thinks that one woman would probably not make a difference in the team’s communication style, but if there were two women or more some things might change. For example, topics such as team climate, relationships and personal well-being would maybe enter the team’s communication.

4.2 Male gender-token (in a female context)

4.2.1 Team description: Team O consisted of 7 women and one man (H). It was a typical female-dominated kindergarten team with a female leader (A). The setting was a full time kindergarten by a public administration of a South German town. Boss as well as gender-token, were both in their 40ies with partner but without kids. They both had a non-academic educational background. The other members of the team were all kindergarten teachers or interns. They planned activities and coordinated the daily business. The role of the boss was to take care of topic initiation, structuring and decision making (e.g., task distribution). The role of the gender-token – like of all other persons – was to cooperate and contribute their opinion, articulate their needs and take on some of the task
responsibilities. In the first session of Team O, the male gender-token did very much self-related impression management by talking directly into the camera, waving, etc. We decided to select a sequence from the mid-part of the second session we had taped. Before the second session, we had explicitly asked the gender-token not to interact directly with the camera, but to act as if the camera was not present. We selected a typical sequence in terms of A’s and H’s involvement.

Table 2: Simple statistics for Team O

<table>
<thead>
<tr>
<th>Measure</th>
<th>A (female boss)</th>
<th>H (male token)</th>
<th>Others (approx. mean of full team members)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking time (min)*</td>
<td>5.1 (19.3)</td>
<td>1.5 (6.1)</td>
<td>0.4 (3.7)</td>
</tr>
<tr>
<td>Turns (#)</td>
<td>175</td>
<td>62</td>
<td>40</td>
</tr>
<tr>
<td>Interruptions (#)</td>
<td>8.6 (12)</td>
<td>5.7 (11)</td>
<td>0.9 (6.5)</td>
</tr>
<tr>
<td>Feedback / Back channel (#) b</td>
<td>17.1 / 15.7nv (13)</td>
<td>9.9 / 4.3nv (7)</td>
<td>9 / 10nv (7)</td>
</tr>
<tr>
<td>kgH (control yields; #)</td>
<td>13</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>K_neut (neutral speech acts; #)</td>
<td>84</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>kbH (control claims; #)</td>
<td>20</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>kbH+ (strong control claims; #)</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Lwt to group (frames)</td>
<td>4393</td>
<td>1233</td>
<td>170</td>
</tr>
<tr>
<td>Lwt to A (frames)</td>
<td>n.a.</td>
<td>3860</td>
<td>2950</td>
</tr>
<tr>
<td>Ratio %Lwt : %Lwt (%)</td>
<td>40:60</td>
<td>43:57</td>
<td>93:07</td>
</tr>
<tr>
<td>DomValue (-18 to 18)*</td>
<td>11.5</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Dom_Self (-18 to 18)</td>
<td>15</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>CompValue (-18 to 18)</td>
<td>7.1</td>
<td>9.0</td>
<td>9</td>
</tr>
</tbody>
</table>

* talking time: values in parenthesis indicate the talking times in a longer, more representative sequence; b back channel frequencies: first value from transcript, second value from Theme codings (including nonverbal cues), third value from analysis of action patterns ([24], also interruption value in parenthesis); ° DomValue=mean of all other team member’s ratings for participant’s dominance (on a rating scale from -18 to 18) [20], followed by self-ratings of dominance and mean of all other team member’s ratings for participant’s competence on the same scale.

H, the gender-token, talks about 1/3 of the time the boss talks, but has longer talking times than any other team member. This is representative for the entire team meeting (as measured by the longer, more representative talking times within 60 min). H shows average back channel frequencies, but quite pronounced interruption counts. Compared to A, H shows less control yields and less control claims, but almost as many strong control claims. The visual dominance ratio of A and H are almost identical, others are lower. H talks quite often to the entire group, whereas others in the group do this rarely. H is also particularly attentive to A (lwt to A). Interestingly, Team O is the only team out of 20 where the boss does not have the highest dominance value attributed by the team members. Here, the gender-token has a higher value than the boss. H is also rated higher on competence than the boss by the other team members (means of all other team members).

4.2.2 Pattern Analysis (male token): Looking at communicative patterns with Theme 4.0, randomized data with 2-3 actors and 1-3 actor switches, 76 patterns resulted. Most of them covered gaze, efforts, preefforts and talking time.

Figure 6, Pattern Ob: A reacts to H. While H talks A reacts four times with a direct, light and quick gestures. She seems to feel the need to structure the session more. Additionally A reacts directly verbally to H addressing him with lwt, while in half of the cases H looks away, when directly addressed by A (no graphic display for the latter pattern).
**Figure 7**, Pattern Oc: *H reacts to A: Nonverbal sensitivity of H*. A initiates a gesture and H ends his turn. This happens six times during the entire sequence. She uses indirect and light, two indulgent qualities that include the entire team and are non-threatening. Even though H talks more than other team members, he seems to be attentive to these nonverbal stopping signals of A.

**Figure 8**, Pattern Od: *The boss shows more vehemence in order to structure speaking turns*. This action is possibly a more direct sign of A to H in order to stop his turn. She initiates a defensive movement (vehement) and he ends his talk to the entire group, yet, in three out of five cases with a considerable time lag (which may be just be the time it takes H to actually end his turn).
Figure 9, Pattern Oe: Reclaiming the boss’s leadership. Do others in the group reclaim the leadership of the boss by gaze behavior? D looks at A while H talks to A. She might be looking for A’s reactions toward H.

Figure 10, Pattern Of: A reacts to H, when he takes over the lead initiating a topic. H begins to talk to A, looking at her and A reacts with hesitation. Hesitation indicates the defensive tendency to procrastinate. She seems to be procrastinating stopping him again in order to claim her turn. Whereas in the last incidence of this behavior, she seems to be procrastinating the initiation of other topics, mentally moving them to the next session due to lack of time.
In addition to verbal cues, movement qualities seem to play an important part in the face-to-face interaction in Team O. The boss frequently uses nonverbal cues in order to initiate her contributions, to intervene or to react to the male token. The male token talks, or stops talking. All patterns include verbal and nonverbal cues (in action and reaction), for example, the end of H’s talk following the gesture of A in Pattern Oc, or the hesitation of A following H’s direct talk to her, four times toward the end of the selected sequence. Defensive gestures are more frequent on the side of the leader (six times vehemence - five of which in interaction with H - and seven times hesitation - the first four in interactions with H). Defensive movements are usually displayed when there is a threat to the ego. This gives us reason to assume that A needs to defend her self-image vis-à-vis H.

Most team members agree that H makes the longest contributions and is the one who can talk much without saying something (‘gockeln’). While he is estimated as the team member with the highest professional competence and pragmatism, he is also attributed low support and is called scapegoat by one out of five participants who completed the role questionnaire. A is attributed the most frequent turns and the most high quality contributions. Both, A and H, are attributed highest influence by one person only. But what do the protagonists say themselves?

4.2.3 Interview Statements (Mr. H, Team O)
H and A have both been working in the team for more than four years, i.e., longer than anybody else. On rating scales from 1 (very low) to 5 (very high), they are both content with their job (4 of 5), rate the team atmosphere as good (4 of 5) and are highly identified with their work (both 5). Other team members mostly have similar or lower values. H rates himself highly androgynous (high expressivity, high instrumentality) and A rates herself as prototypically feminine (high expressivity, low instrumentality), whereas third persons rate her as androgynous.

A and H agree on the team atmosphere being good with a good amount of openness, that allows to address all sorts of topics and conflicts. Yet, H adds that some members hold back with their opinion which makes conflict resolution difficult at times. A sees herself as active and demanding, yet, if she does not lead the team session she also catches herself drawing herself back and become uninvolved. Both state that there are conflicts in the team, but that they are openly
resolved. H describes his role as partner-like and responsible. People come to him if they need advice. A describes herself as “bitchy”, honest and direct.

Asked for the influence of gender, H states that in his opinion gender does not play a role in the team and also in the entire job of a kindergarten teacher. A states that gender has an influence in the team, that the only man is very dominant, he is rarely interrupted and that he receives more attention than the other team members. In fact, all eight team members with the exception of the gender-token state that gender is an important factor in their team, that “their” man is dominant, chauvinistic, determining, authoritarian, talks a lot, and that the other team members feel oppressed by him; but also that he is short and precise, rational, direct and that he promotes quick decision-making. As the only team member, H states that gender is not a topic in the team. A states that gender is sometimes a topic in a humorous manner. Another team member adds: “the man does the joking and we get most of the time interrupted if we try to joke”. However, the male token also receives a lot of empathy from other team members, “for a man it is hard to work here, because this is a female-dominated profession”; “as a man I would not work here, because it is women’s work, a man might have to bring more initiative and work more”.

Asked if something would change if there were only men in the team, H states that “yes, women specific personal topics would vanish, but the professional communication would not be affected”. Asked for changes, if the team was purely female, others state that “decisions and discussions would take longer”, “he brings about quick decisions, he is rational, structured, dominant and reliable.” A states that “he gets rarely interrupted… I would perceive it more as one level in a women-only team. He brings diversity to the team…this is enriching, but also challenging. It forces us to face more confrontations”.

5. Discussion

To be a gender-token seems to play an important role in team communication at the workplace. While our case studies suggest that the behavior of the gender-token was not consistently biased towards the more stereotypical gender-role behavior, results from self and other ratings mostly confirmed token research findings. For the male token, stereotypicality was seen in some aspects of behavior and in other-ratings. For the female token, stereotypicality was rather seen in self- and other-ratings and only somewhat in behavior.

Results from the behavior observations showed that regarding dominance behavior there is more bias towards the typical gender-role in the male gender-token only. He displays dominance by talking and interrupting more than the other team members. He also makes more power claims than the other team members, but not than the leader. The female token many times signals the wish to take the talking turn by a nonverbal indicator first, yet, she also interrupts much and displays many power claims in her speech, partly more than her team leader. She clearly outnumbers the male gender-token with her dominance displays. Regarding support behavior the female token shows more gender-typicality. She displays many more control yields and back channels than the male token and thus seems to be more supportive. Regarding defensive behavior the female gender token, but also the female boss showed more patterns including preefforts. The female gender-token was attributed the role of the scapegoat three times, the male gender-token once.

Results from self-ratings also showed that gender of token seems to play an important part. K was less satisfied with her job, with the quality of the team atmosphere, and was not as identified with the organization (commitment measure) as any of her colleagues. Furthermore, K rated herself as typically feminine. As this self-observation was not confirmed in behavior observation as well as third person ratings of K, it might have been a potential contrast effect to the male peer group. K’s
interview utterances regarding team improvement also concerned communal qualities. An experienced lack of authenticity can be inferred from K’s utterance that in a group with more women the interaction might be more “natural” (3x). O was at least as satisfied with his job and the team atmosphere as the other team members were, and he was highly committed. He rated himself as highly androgynous.

In the ratings by the other group members O was described as more dominant but also as more competent than A by all other team members. In his self-description he emphasized his responsibility and his communal traits. K emphasized communal intentions and goals in the interview as well (caring about group wealth and work efficacy). However, she was rated as little dominant and competent by her peers. From the analysis of self- and other-ratings in our study, the female token of Team K was seen as more gender-stereotypic and experienced more negative consequences than the male token of Team O.

Results from the pattern analysis showed the more pronounced use of nonverbal communication patterns in women. There even seemed to be a parallel in behavior as well as self-perception in the female token of Team K and the female boss of Team O. Both used more nonverbal signals to initiate turns, both used more defensive movement patterns than the male boss and the male gender-token. In brief, defenses are used when our self-image is threatened. This seemed to be true for our female gender-token in a male team and for our female-boss in the interaction with a dominant male gender-token. In addition, the frequency data for both women was quite similar.

In sum, much more egalitarian structures have been achieved regarding gender in organization in western societies by the beginning of the 21st century. When it comes to tokenism, however, structures are still characterized by inequality. In our study, gender-tokens partially acted more in line with their gender-role than other team members. The female gender-token perceived herself more in line with her gender-role and was perceived more in line with her gender-role by the other team members. The male token perceived himself as more communal and androgynous and was perceived as more dominant and competent, thus his self-perception was non-stereotypical, whereas perception by others was in line with stereotypes. Generally, behavioral outcomes were not particularly in line with stereotypes. In fact, gender typicality of tokens emerged rather from the pattern analysis than from the frequency counts of behavior. The use of pattern analysis enabled us to see ongoing patterns at the interface of verbal and nonverbal interactions that we would have been missing otherwise. Pattern analysis can therefore be evaluated as a gain within our multi-methodological approach. The findings have implications for the construction of gender in our two teams: obviously gender-roles are rather anchored in self-image and image of the others than taken from direct behavior in the scenes. In line with token research, and independent of the gender-tokens’ displayed behavior, the actual gender of group members seems to influence whether the token status opens or closes perspectives for them, with women reporting and being affected by negative career-related consequences and men reporting and being affected by no or positive consequences.

References

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