# STRATEGIES FOR THE VISUAL SELF-REPRESENTATION OF SPANISH PARLIAMENTARIANS:
## Study of Profile Images on Social Network X

JOAN-GABRIEL BURGUERA-SERRA [1]
burguera@ub.edu
JAVIER SANZ-AZNAR [1]
javier.sanz@ub.edu
[1] University of Barcelona, Spain

| KEYWORDS | ABSTRACT |
|---|---|
| *Political communication*<br>*Social media*<br>*Self-representation*<br>*Spanish MPs*<br>*Portrait*<br>*Photography*<br>*Image* | *Reviewing the profile images on social network X of 300 Spanish parliamentarians, common technical-aesthetic patterns were identified in designing their portraits. Among other aspects, the predominance of individual photographs, centred and with unrecognisable backgrounds, was detected. This trend reflects a preference for simple images, aiming to focus attention and retain it on the portrayed. Additionally, combinations appear depending on whether the subjects are smiling or serious. If they smile, they appear frontally looking at the camera in closer shots, seeking emotional proximity. On the contrary, if they appear serious, they can appear in profile and in low angle, reflecting authority.* |

## 1. Introduction

L The importance and centrality of images in social communication is a commonly accepted premise, especially since the emergence of audiovisual media and, more recently, the digital revolution (Sartori, 1998). Human culture today is a predominantly visual culture (Veneti, A. et al. 2019), where images act as raw material in almost every area of social practice, and politics, understood as the set of activities aimed at achieving and maintaining the representation and management of the public sphere, is no exception. Moreover, it shapes a context in which the graphic image, especially the portrait, whether of political power, the leader or the authority, can be considered, to varying degrees, a constant in recent human history (Arroyo, 2013).

The pre-eminence of the visual also derives, on the one hand, from the undeniable and widespread social use that digital transformation has achieved in recent years, whether through the proliferation of camera phones or easy access to editing software (Messaris, 2019), and, on the other hand, from the rise of new public forums (especially social media) which, despite frequently sharing textual content, have ended up establishing the sovereignty of the image over writing, fundamentally because, according to Joo et al. (2014), human beings "believe our own eyes [and] know well that people are manipulative, [therefore] we tend to be verbally sceptical and visually gullible" (p. 217).

The combination of these premises has had a direct impact on political communication, especially on the channels that politicians use to reach the final recipient-citizen. With the once inevitable intervention of traditional media now a thing of the past, today's political actors (individuals, but also organisations) can (and, in terms of electoral gain, must) reach their target audience without the need for mediation, using the ubiquitous communication platforms that facilitate this task. This direct, unmediated and potentially bidirectional communication has given rise to new needs, among which the creation and development of a digital identity stand out (Bullingham et al. 2013; Feher, 2021). At this point, some authors point out that such a (digital) identity has ended up surpassing the framework of the political parties themselves (Karvonen, 2010) to the point of displacing them to a secondary position. This premise, which may be acceptable in presidential or single-constituency contexts, is more questionable in other environments where the 'party' brand continues to coexist with the 'individual' brand. In this regard, Poulakidakos and Giannouli , based on Bennett (2012), point out that:

> The 'me generation', which should be seen as the aftermath of social fragmentation and the weakening of group loyalties, has inaugurated 'an era of personalised politics in which individual expression displaces collective action frames in the embrace of political causes'. (Poulakidakos & Giannouli, 2019, p. 188).

All of this converges in the 'personalisation' of politics (Balmas and Sheafer, 2015), a key idea that constitutes one of the central postulates of what has come to be called 'the fourth era of political communication' (Bennett & Pfetsch 2018). Broadly speaking, this 'personalisation' refers to the fact that politicians are no longer mere standard-bearers or spokespersons for their own parties but rather personify their parties through their personal lives and characters (Olsson, 2017). This includes everything from humanising strategies (the politician as a citizen with whom to empathise) to leadership consolidation practices based on individual traits (both professional and biographical). Be that as it may, what all these strategies have in common is that image ends up playing a key role, the planned management of which is subordinated to the logic of politics in social media environments. And within the multiplicity of content that the image allows, the portrait is not only the epicentre of such personalisation, but also the constant anchor that accompanies all *face work (*Goffman, 1959) based on the visual.

### 1.1. Technical and aesthetic characteristics of the photographic portrait

A portrait is a cultural artefact that seeks to create a representation of the subject portrayed, not necessarily in terms of physical similarity, but based on the relevant attributes of their identity (Maes, 2015). The photographic portrait is one of the most common types of photography from a professional perspective, a fact that can be seen in the many manuals that address how various technical and aesthetic aspects influence the perception of the content by the final recipient (Clarke, 1912; Lewinski & Magnus, 1982; Wilkinson & Dyer, 2018; Fernández, 2020). Camera height, frontality, pose, scale, and

frame composition are some of the recurring aspects that ultimately guide portrait representation strategies.

Camera height refers to the angle of the camera lens in relation to the horizontal axis, either upwards or downwards. It is linked to the concept of 'height', as it is based on the premise that the camera is at the same height as the subject when it is not tilted; above, when it is tilted upwards; and below, when it is tilted downwards. A basic categorisation of camera height based on the feeling conveyed by the portrait allows us to talk about notions such as 'superiority', when a low angle is used; 'insignificance', when a high angle is used; and 'parity', when the photograph is taken without tilting, i.e. at the same height as the subject (Hanmakyugh, 2023; Kraft, 1991). The latter value derives from the way the subject is viewed and creates a sense of equality between the viewer and the subject, promoting an emotional connection (Hanmakyugh, 2023). When the camera is at the same height as the subject, a balance of power between the viewer and the subject tends to create a more positive and trustworthy perception (Baranowski and Hecht, 2018). Conversely, a high angle makes the subject appear smaller, more vulnerable, weaker and more passive, reinforcing ideas of submission, humiliation or powerlessness (Hanmakyugh, 2023). It also tends to diminish the viewer's perception of trust (Baranowski & Hecht, 2018). By diminishing the sense of dominance and power, it improves the perception of sociability and the compatibility of their character with the viewer (McCain et al., 1977). This means that the high angle generates a perception of positive interpersonal relationships (social attraction), creating the feeling that it is easy and productive to work with the person portrayed (task attraction). The low angle, on the other hand, conveys ideas of strength, dominance and power to the subject, identifying them with concepts such as authority and prestige (Hanmakyugh, 2023). As a result, the feeling of compatibility between their character and the viewer is reduced (McCain et al., 1977), as are levels of social attraction and task attraction (McCain et al., 1977). With regard to physical attraction, there are studies that indicate that it improves slightly in low-angle shots (McCain et al., 1977) and others that indicate that it has no effect whatsoever (Baranowski and Hecht, 2018).

The frontality of the portrait refers, in another order of things, to the position of the camera with respect to the 360° of space around the subject, with the subject's gaze coinciding with the camera lens at the point of maximum frontality (0°). In this regard, studies indicate that when comparing the detection of an emotion of happiness or sadness in photographs taken frontally or at 3/4 (45°), although it is true that the emotion is recognised indifferently, the time needed to identify it is shorter in frontal portraits (Hanaya, 1993). In portraits of virtual characters, expression is also evaluated with greater accuracy and confidence in frontal positions than in lateral positions (Courgeon et al., 2011).

Paying attention to the eye fixation of the person viewing the portrait, it tends to be longer in frontal faces than in those looking outside the frame (Kaisler et al., 2020), thus favouring attention retention. Unlike frontal portraits, those in which the subjects look outside the frame trigger neural patterns aimed at understanding the direction of the observed person's gaze (Watanabe et al., 2002). Furthermore, detecting the emotion of happiness in frontal portraits is significantly faster than detecting sadness, while in portraits taken at 45°, there is no significant difference in the detection of one emotion or the other (Hanaya, 1993).

With regard to the subject's gaze, when they look at the camera, the tendency is to perceive them as more attractive and trustworthy (Kaisler & Leder, 2016). This could be because their gaze evokes interest or closeness (attractiveness) and, at the same time, openness or sincerity (trustworthiness). Conversely, looks outside the frame could give an image of the person portrayed in terms of disinterest, evasion or distraction. The observer is more likely to feel that the subject is looking at them if this is associated with positive facial expressions (Lobmaier et al., 2008). The possible explanation is that this positive bias could reflect an adaptive mechanism that promotes social reinforcement and self-esteem.

In this sense, subjects with positive emotions convey similar levels of positivity, whether they are looking at the camera or outside the frame, but this is not the case with subjects who reflect negative emotions (Hess et al., 2007). Fear can be inferred from gazes directed towards the environment as a warning of possible dangers (Lobmaier et al., 2008). If the subjects reflect anger or fear, they are perceived with greater anxiety and repulsion if they looked at the camera, while in portraits that convey fear, they are perceived with greater anxiety and repulsion if they looked outside the frame (Hess et al., 2007). This is interpreted as the result of mechanisms to protect self-esteem in the face of anger directed towards the observer and to ensure survival in the face of the perception of fear directed towards areas

of space outside the observer's field of vision. At the same time, happy faces are perceived as looking towards the observer, while angry and fearful faces are perceived as looking away (Lobmaier et al., 2013). This condition reflects how the observer tends to connect with the positive emotions of the person portrayed, while tending to perceive negative emotions as alien. Furthermore, faces with happy expressions tend to be evaluated as more attractive and trustworthy than those with angry expressions (Kaisler et al., 2020).

In portraits, the most important aspect of the face, apart from the eyes and gaze, is the smile. Its presence can be associated with positive characteristics such as self-confidence, elegance and good humour; however, it can also convey negative characteristics such as arrogance, complacency and insincerity (Lengyel, 2011). Smiles have been shown to be effective in the political contexts of culturally distant countries such as Japan and Australia and have demonstrated voters' preference for candidates who smile more broadly (Horiuchi et al., 2012). This response could be due to the fact that smiles are perceived as signs of reward, generating positive responses in voters. On the other hand, smiling with white enamel and straight teeth has become an ideal promoted by consumer culture (Kettle & Warren, 2024). Therefore, smiling can reflect economic and social inequalities, thus allowing an ideal smile to be associated with social status.

It may be the case that, due to certain circumstances (e.g. sunglasses), a frontal portrait may conceal some facial features (Kotsia et al., 2008). In this sense, when the subjects' eyes are covered, they are perceived as less emotional and more neutral, and their emotions are perceived with less intensity and clarity, which can lead to problems in judging the perceived emotion (McCrackin et al., 2023).

With regard to the scale of the shot, close-ups tend to generate empathy by increasing the feeling of proximity to the subjects (Katz, 2005). In addition, this type of shot allows for better visualisation of the face and a more simplified composition, reducing the points of attention in the image (Lankhuizen et al., 2022). Conversely, wider shots reduce the size of the face to give more importance to contextual elements and even to other characters portrayed (Katz, 2005). Frames that cover a larger spatial area imply less focus on emotions and give greater relevance to the context surrounding the subject.

The pose of the person portrayed is an aspect that has two essential strategies in photographic portraiture, namely the natural portrait (Cartier-Bresson, 2023; Gibson, 2021) and the posed portrait (Fernández, 2020; Valenzuela, 2014). The latter is one in which the subject is aware and proactive in the photographic act and the capture, thus intervening in the construction of their own representation. Posing involves establishing a deliberate form of presentation of the body, which generates tensions between authenticity and artificiality (Debaene, 2021). In this process, the posed portrait captures an appearance conditioned by the self-image that the subject wishes to project (Sontag, 1977). However, expressions resulting from posing, such as smiling, are clearly distinguishable from natural expressions (Ackerman et al., 1998; Saito et al., 2021), and this prevents the observer from feeling a full sense of authenticity.

The arrangement of volumes in the frame or composition refers to how the elements are visually distributed within the photographed area (Nieto, 2017; Prakel, 2007). A study that analysed 500 portrait paintings from the 17th to 19th centuries concluded, among other things, that there was a tendency to represent the subject in the centre of the image, with poses that sought to appear natural and dynamic, avoiding rigid or forced positions (Zhang et al., 2018). According to Arnheim (1983), in a frame, composing by placing volumes in the central area offers a stable and harmonious composition that clearly captures attention. These types of compositions convey authority, importance, and power. In contrast, compositions with volumes located on the periphery are charged with dynamic tension. These types of compositions generate a feeling of instability, movement, dynamism and marginality.

In addition to the aspects mentioned above, studies focusing on official photographic portraits also pay close attention to the symbolic value of the visual context that accompanies the subject in the photograph (Guixà, 2016). In official portraits, everything present in the frame has been intentionally chosen to represent values or attributes associated with the subject. It is common in institutional photographs for elements such as flags to appear to represent belonging, or institutional spaces and official events to represent legitimacy (Ahn & Jacobs, 2018).

## 1.2. Research objective

The aim of this research is to identify the technical and aesthetic patterns in the forms of visual self-representation of Spanish parliamentarians, as well as to understand the communicative intention that

can be inferred based on the trends identified, through the analysis of their profile image on social network X.

To analyse the visual self-representation of Spanish parliamentarians, we used the profile images that members of the Congress use on their official personal accounts on social network X. This social network is considered suitable for analysis, as 86.57% (303 out of 350) of the members of parliament who were part of Congress on the date of data extraction (March 2024) had an active account on social network X and, together, had a total of 12,054,638 followers (M = 39,784.28, *Mdn* = 4,574, *Min* = 4, *Max* = 1,853,104, *SD* = 154,359.7). Of the parliamentarians with social network X, 167 were men (55.12%) and 136 were women (44.88%). Profile images were taken as the corpus for analysis because, unlike the more ephemeral and transient nature of *posts,* profile images tend to be more constant over time, while also representing the prototypical and central content in the process of configuring digital identity in visual terms.

## 2. Methodology

The images in the sample were extracted throughout the month of March 2024 and analysed using deductive coding with categorical variables. The variables defined were as follows: (a) frontality, (b) looking at the camera, (c) camera height, (d) angle of the shot, (e) scale of the shot, (f) background, (g) attitude, (h) movement, (i) composition, (j) typology, (k) text, (l) logo, (m) colour or black and white, (n) company, (o) spatial location, (p) use of institutional colours, (q) presence of flags, (r) mouth, and (s) eyes. The visualisation of how each portrait is analysed according to the different variables can be consulted via the link provided in section 6 *Supplementary material* (AnálisisRetratos.pdf).

The variable 'frontality' (Courgeon et al., 2011; Hanaya, 1993) can take the values 'frontal', when the portrait is taken at approximately 0°; 'diagonal', reflecting around 45°; 'profile', around 90°; or 'back', around 180°. The variable 'looking at the camera' (Kaisler & Leder, 2016; Lobmaier et al., 2008) can take the values 'yes' when the gaze coincides with the camera lens or 'no' when the gaze is directed outside the frame. Both variables include the option of defining as 'not applicable' those cases in which the parliamentarian does not appear.

For its part, the variable 'camera height' (Hanmakyugh, 2023; Kraft, 1991) can take the values 'eye level' when there is no vertical tilt, 'high angle' when the frame is taken from a position above the subject with a vertical tilt, and 'low angle' when the image is taken with a vertical tilt, framing from below upwards. The variable 'plane tilt' refers to whether the vertical lines are reflected vertically or whether the camera is tilted, giving a sense of imbalance (Prakel, 2007). This variable can take the values 'stable' or 'tilted'. If it does not refer to a figurative image, it is indicated with the value 'not applicable'.

The variable 'plane scale' defines the proportion of the character included in the frame (Katz, 2005; Lankhuizen et al., 2022). It can take values ranging from closer and more open scales to more distant ones, namely 'extreme close-up', 'medium close-up', 'general close-up', 'short shot', 'medium-short shot', 'medium shot', 'full medium shot' and 'full shot'. It can also take the value 'not applicable' when no human figures appear.

The variable 'background' refers to the context surrounding the character, and can take the values 'natural', when the context is plausible in real life, 'studio', when the photograph was taken in a studio, 'modified', when modifications have been made to the context through image editing, and 'not applicable' when they are not photographs.

The variable 'attitude' (Fernández, 2020; Gibson, 2021) indicates whether the subjects were photographed in real situations ('natural' label) or whether they posed for the photograph ('posed' label). If no human figure is portrayed, it is defined as 'not applicable'. The variable 'movement', meanwhile, refers to whether the subject displays natural and dynamic attitudes (Zhang et al., 2018). This variable can take the values 'no' if it does not refer to movement; 'yes, static' if it reflects movement but the subject is not moving; and 'yes, dynamic' if it represents the subject moving. Again, when no human figure appears, it is indicated as 'not applicable'.

The variable 'composition' (Prakel, 2007; Arnheim, 1983) indicates the distribution of the main volumes of the photographic composition and the focus of attention. This variable can take the values 'centre' and 'periphery'. If the volumes occupy the entire space, it is labelled 'not applicable'. The variable 'typology' defines the nature of the work. It can take the values 'photography', 'screen capture', 'drawing', 'graphic design', 'photography and graphic design' and 'artistic work'. The variable 'text'

indicates whether the image contains text. If it does not contain text, it is labelled as 'does not contain'. If it contains text, it can be defined as 'slogan', 'informative' or 'slogan and informative'. Complementarily, the variable 'logo' identifies whether the party logo appears in the image. The values it can take are 'no' if it does not appear, 'yes, added' if it has been added as a graphic design, or 'yes, photographed' if it is a natural part of the photograph. The variable 'colour or black and white' can take the values 'colour' or 'black and white'.

The variable 'company' refers to the relationship between the people portrayed. When the parliamentarian appears alone, they are categorised as 'individual'; when they appear with other people in the background as context, they are categorised as 'individual integrated'; when they appear with a recognisable group of people with different visual hierarchy (e.g. by size or position) it is categorised as 'collective hierarchical'; when all the people represented have the same importance, it is categorised as 'collective homogeneous'; when the parliamentarian does not appear in the image, it is categorised as 'does not appear'; and finally, if no human figures appear, it is categorised as 'not applicable'.

The spatial context was analysed using the variable 'spatial location'. This variable could take the values 'politically recognisable', when a recognisable context linked to politics appears (such as parliament or a rally), 'locally recognisable', when a location linked to the parliamentarian is identified, 'non-own location', when it represents a location not linked to the parliamentarian, 'unrecognisable', when the background cannot be identified, and 'not applicable' when no spatial context is represented (e.g. a graphic background design).

The variable 'use of institutional colours' is dichotomous, taking the values 'yes' or 'no'. This variable refers to contextual symbolism (Ahn & Jacobs, 2018; Guixà, 2016), as does the variable 'presence of flags'. The variable 'use of institutional colours' indicates whether colours associated with the political group to which the person portrayed belongs appear in the representation. The coding of this association can be consulted via the link provided in section 6 *Supplementary material* (ColoursParties.pdf).

The variable 'presence of flags' can take the values 'no' if no flags appear, 'yes, local' if it refers to specific regions, 'yes, national' if it is the Spanish flag, or 'yes, international' if it refers to a country or international group. If several flags appear, the exact combination will be indicated (e.g. 'yes, national and local').

With regard to the face, the variables 'mouth' and 'eyes' were established. The variable 'mouth' (Horiuchi et al., 2012; Kettle & Warren, 2024) can have the values 'smile' when the person depicted is smiling but with their mouth closed; 'smile with teeth' when the smile shows the teeth; 'serious' when not smiling; 'not applicable' when no human appears or no smile is visible; and 'mask' when a mask prevents the mouth from being seen. Finally, the 'eyes' variable refers to the concealment of the eyes by some element (Kotsia et al., 2008; McCrackin et al., 2023). The values it can take are 'visible' when nothing prevents them from being seen, 'naturally hidden' when it is natural not to be able to see the eyes due to the pose (e.g. the person has their back turned), 'sunglasses' when sunglasses are the obstructing element, and 'not applicable' when no human representations appear.

For the statistical analysis of the variables, the Chi-square independence test was applied to determine the significance of the relationship and Cramer's *V* measure of association to calculate the strength of the relationship. The significance threshold for Chi-square results was set at p-value ≤ 0.05. The evaluation of the results obtained by Cramer's V was interpreted as follows: 0 to 0.1 as a very weak relationship, 0.1 to 0.3 as a weak relationship, 0.3 to 0.5 as a moderate relationship, and 0.5 to 1 as a strong relationship. In cases where the contingency tables resulted in two rows by two columns, instead of applying Cramer's V, the phi coefficient was applied, maintaining the same significance thresholds. The statistical analysis was programmed with Python (version 3.9.13 together with the SciPy library version 1.12.0) and the cross-tabulations were generated with IBM SPSS Statistics (version 27.0.1.0).

## 3. Analysis of results

Of the 303 parliamentarians who had an account on social network X, 300 had a profile picture (99.01%). Among the parliamentarians who posted a profile picture, 166 were men (55.33%) and 134 were women (44.67%). Of the 300 images analysed, only one (0.3%) did not contain a representation of the parliamentarian associated with the account from which it had been extracted. In the rest of the accounts analysed (99.7%), self-representations were chosen to define the profile picture. Table 1 breaks down the profile pictures grouped by parliamentary groups.

**Table 1**. Profile images associated with each parliamentary group

| Parliamentary group | Profile |
|---|---|
| Euskal Herria Bildu Parliamentary Group | 6 (2%) |
| Junts per Catalunya Parliamentary Group | 6 (2%) |
| Mixed Parliamentary Group | 3 (1%) |
| Plurinational Parliamentary Group SUMAR | 30 (10%) |
| Popular Parliamentary Group in Congress | 106 (35.33%) |
| Republican Parliamentary Group | 7 (2.33%) |
| Socialist Parliamentary Group | 111 (37%) |
| Basque Parliamentary Group (EAJ-PNV) | 3 (1%) |
| VOX Parliamentary Group | 28 (9.33%) |
| TOTAL | 300 (100%) |

Source: Own elaboration, 2024.

As can be seen in Table 1, more than 70% of the profile images belonged to parliamentarians from the two major parties. Of the remaining parliamentarians, almost two-thirds belonged to the VOX Parliamentary Group or the SUMAR Plurinational Parliamentary Group. This situation implies that the results obtained carried a sampling bias associated with the parliamentary group. In other words, the Popular Parliamentary Group in Congress and the Socialist Parliamentary Group had greater weight, followed (with a large difference in representativeness) by the VOX Parliamentary Group and the Plurinational SUMAR Parliamentary Group.

In order to detect common trends among all parliamentarians when designing the portraits used as profile pictures on social network X, the frequencies of the different variables analysed were counted without taking into account the political affiliation of the parliamentarians to whom they corresponded. This analysis responds to the main objective of the research. The results of the study of each portrait based on the variables considered can be consulted via the link provided in section 6 *Supplementary Material* (AnálisisRetratos.pdf). Table 2 shows the frequency analysis of all the variables applied to the profile images of the parliamentarians.

**Table 2**. Frequencies of the variables analysed on all profile images

| | Results sorted from highest to lowest frequency | | | | | | |
|---|---|---|---|---|---|---|---|
| **Frontality** | Frontal (52%) | Diagonal (37%) | Profile (10.3%) | Back (0.3%) | Not applicable (0.3%) | | |
| **Gaze** | Yes (52.3%) | No (47.7%) | | | | | |
| **Height** | Eyes (60.7%) | Low angle (25%) | | High angle (14%) | Not applicable (0.3%) | | |
| **Tilt** | Stable (86%) | Tilted (14%) | | | | | |
| **Scale** | Medium-short (39.7%) | Short (28.7%) | Close-up (12.7%) | Medium shot (7.3%) | Medium close-up (6%) | Full medium shot (2.7%) | Rest ≤1.3% |
| **Fund** | Natural (84.7%) | Plateau (13.7%) | Modified (1.3%) | Not applicable (0.3%) | | | |
| **Attitude** | Posed (66.3%) | Natural (30%) | Selfie (3.3%) | Not applicable (0.3%) | | | |
| **Movement** | No (80%) | Yes, static (17%) | Yes, moving (3%) | | | | |
| **Composition** | Centre (82.3%) | Periphery (17.7%) | | | | | |
| **Type** | Photography (97.3%) | Photography and graphic design (1.7%) | Other ≤ 0.3% | | | | |
| **Text** | Does not contain (88%) | Informative (7.7%) | Slogan (4.3%) | | | | |
| **Colour/B&W** | Colour (96.3%) | Black and white (3.7%) | | | | | |
| **Company** | Individual (78.7%) | Integrated individual (17.7%) | Homogeneous collective (1.7%) | Hierarchical collective (1.7%) | | | |
| **Location** | Unrecognisable (78.3%) | Politically recognisable (17.7%) | Recognisable locally (3.3%) | Not applicable (0.7%) | | | |
| **Colours** | No (81.7%) | Yes (18.3%) | | | | | |
| **Events** | No (99%) | Yes (1%) | | | | | |

| **Flags** | No (94.7%) | Yes, national (2.7%) | Yes, national and international (1%) | Yes, international (0.7%) | Yes, national and local (0.7%) | Yes, local (0.3%) |
| **Logo** | No (90.3%) | Yes, photographed (8.7%) | Yes added (1%) | | | |
| **Mouth** | Smile with teeth (43.7%) | Serious (33.3%) | Smile (22%) | Not applicable (0.7%) | Face mask (0.3%) | |
| **Eyes** | Visible (94%) | Naturally hidden (3.7%) | Sunglasses (2%) | Not applicable (0.3%) | | |

Note: The variable 'shot scale' does not include frequencies for 'not applicable', 'full shot' and 'extreme close-up', but it is indicated that all have a frequency less than or equal to 1.3%.

Source: Own elaboration, 2024.

Some of the variables analysed showed clear results in terms of preferences when designing the images used by parliamentarians as profile pictures. More than 90% preferred colour photographs and to be portrayed with their eyes visible, without flags or logos. In 96.4% of the portraits, the subject was the sole focus, appearing alone in 78.7% of cases and with other unidentifiable people in the background in 17.7% of cases. In addition, 92.7% of the images analysed were framed on a scale between medium shot and medium close-up, with 68.4% between medium shot and medium close-up. More than 80% chose a centred composition, without any tilt in the frame, with a natural background that did not reflect movement in the subject, without including text or reflecting in any way the colours of the political group to which they belonged. 78.3% of the images analysed had an unidentifiable background, followed by images with recognisable backgrounds associated with a political context (17.7%).

The rest of the variables did not show such a marked trend. 52.35% of those portrayed looked at the camera, compared to 47.7% who looked outside the frame. 66.3% of the parliamentarians had their photograph taken posing, while 30% were captured in real activities. In terms of the camera height chosen, 60.7% were photographed with the camera at the height of the subject, 35% from below and 14% from above. 43.7% of those photographed appeared smiling, showing their teeth, and 22% smiling without showing their teeth. In contrast to this 65.7% of subjects smiling, 33.3% appeared serious. With regard to frontality, 52% were photographed from the front, 37% at a 45° angle, and 10.3% in profile.

To analyse whether there are variables that behave in a dependent manner, a Chi-square analysis was performed between all of them. The statistical report for each combination is accessible via the link provided in section 6 *Supplementary Material* (StatsCross.xlsx). Table 3 shows a summary of these comparisons, indicating in orange when the p-value is < 0.05 and in blue when it is equal to or greater than this threshold.

**Table 3**. Summary table of significance of comparisons between variables using Chi-square

| | Camera height | Flat scale | Depth | Frontality | Attitude | Composition | Movement | Typology | Company | Spatial location | Inclination | Mouth | Eyes | Text | Flags | Colour/B&W | Logo | Split colour |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Looking at the camera** | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟦 | 🟧 | 🟧 | 🟦 | 🟧 | 🟧 | 🟦 | 🟦 | 🟦 | 🟦 | 🟧 |
| **Camera height** | | 🟧 | 🟧 | 🟧 | 🟧 | 🟦 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟦 | 🟦 | 🟦 | 🟦 |
| **Shot scale** | | | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟦 | 🟧 | 🟧 | 🟦 | 🟦 | 🟦 | 🟦 | 🟦 |
| **Background** | | | | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟦 | 🟦 | 🟦 | 🟦 | 🟦 |
| **Frontality** | | | | | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟦 | 🟧 | 🟧 | 🟧 | 🟦 | 🟦 | 🟦 | 🟦 |
| **Attitude** | | | | | | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟧 | 🟦 | 🟧 | 🟦 | 🟦 |
| **Composition** | | | | | | | 🟧 | 🟦 | 🟧 | 🟧 | 🟦 | 🟧 | 🟧 | 🟦 | 🟦 | 🟦 | 🟧 | 🟦 |
| **Movement** | | | | | | | | 🟦 | 🟧 | 🟧 | 🟦 | 🟧 | 🟧 | 🟦 | 🟦 | 🟦 | 🟦 | 🟧 |
| **Typology** | | | | | | | | | 🟧 | 🟧 | 🟦 | 🟧 | 🟦 | 🟧 | 🟦 | 🟧 | 🟧 | 🟦 |
| **Company** | | | | | | | | | | 🟧 | 🟦 | 🟧 | 🟦 | 🟧 | 🟦 | 🟦 | 🟦 | 🟦 |
| **Spatial location** | | | | | | | | | | | 🟦 | 🟦 | 🟧 | 🟧 | 🟦 | 🟧 | 🟦 | 🟦 |
| **Inclination** | | | | | | | | | | | | 🟦 | 🟦 | 🟦 | 🟦 | 🟦 | 🟦 | 🟦 |
| **Mouth** | | | | | | | | | | | | | 🟧 | 🟦 | 🟧 | 🟧 | 🟦 | 🟦 |
| **Eyes** | | | | | | | | | | | | | | 🟧 | 🟦 | 🟦 | 🟦 | 🟦 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Text** | | | | | | | | | | | | | 🟦 | 🟦 | 🟧 | 🟧 |
| **Flags** | | | | | | | | | | | | | | 🟦 | 🟦 | 🟦 |
| **Colour/B&W** | | | | | | | | | | | | | | | 🟦 | 🟦 |
| **Logo** | | | | | | | | | | | | | | | | 🟧 |

Note: Indicated in orange when p-value < 0.05 and in blue when p-value ≥ 0.05.
Source: Own elaboration, 2024.

Taking into account the variables in which a greater number of dependent relationships were detected in Table 3 and those with a less concentrated frequency distribution in Table 2, we sought to define more precisely what dependencies existed between 'looking at the camera', 'camera height', 'background', 'frontality', 'attitude', 'spatial location' and 'mouth'.

To analyse whether there was a dependency between the chosen variables, multilevel contingency tables were created, comparing each target variable with the rest of the nested variables. The multilevel contingency tables can be consulted via the link provided in section *6 Supplementary Material* (RelacionesVariablesMultinivel.pdf). This strategy made it possible to analyse how the dependent values were combined between different variables.

When the subject was looking at the camera, 68.15% of these images were taken from the front, posing and smiling, either showing teeth (45.22%) or not showing teeth (22.93%). Of these, 33.76% were taken at eye level, with a natural background and in an unrecognisable location. However, when they were not looking at the camera, the most repeated trend was, with 39.86% of these images, showing seriousness, photographed in an activity without posing and at a 45° angle (26.57%) or in profile (13.29%).

Of the portraits taken from a low angle, 40% were taken with a natural background, looking outside the frame, with a serious expression and at a 45° angle (24%) or in profile (16%). This percentage rose to 17.3% when the subject was also engaged in a natural activity with an unrecognisable background, and to 13.3% with the same characteristics but with a recognisable background associated with the political context. When the camera was at eye level, 34.07% of the images were frontal with a natural background, looking at the camera and smiling, showing teeth (22.53%) or not showing teeth (11.54%). This percentage fell to 29.1% if the image was also a posed shot with an unrecognisable background.

Analysing the images according to the background, both on set (56.1%) and with a natural background (20.9%), the highest percentage was accumulated in images looking at the camera, at eye level, frontal, posing, with an unrecognisable background and smiling, whether showing their teeth or not.

With regard to the position of the subject, when the image was frontal, 34% of these were posing, looking at the camera, with a natural background, at eye level, in an unrecognisable location and smiling, either showing teeth (23.1%) or not showing teeth (10.9%). When the subject was in profile, 61.4% of these images were looking away from the frame, with a natural background, in an activity without posing, serious, with an unrecognisable background (22.6%) or in a political context (38.8%) with a low-angle shot (32.3%) or at eye level (29.1%). When the subject was at a 45° angle, the trend was similar to that of the profile, with a total of 25.1% looking outside the frame, with a natural background, engaged in an activity without posing, serious, with an unrecognisable background (15.3%) or in a political context (10.8%) with a low-angle shot (11.7%) or at eye level (14.4%).

Regarding the attitude shown by parliamentarians when posing for portraits, 80.9% were smiling, either showing their teeth (54.8%) or not showing them (26.1%). Specifically, 26.6% of these images were portraits looking at the camera, frontal, at eye level, with a natural, unrecognisable background, whether they were smiling, showing their teeth (18.09%) or not showing them (8.54%). On the other hand, when parliamentarians were photographed in activities without posing for the portrait, 67.8% appeared serious. Of these, 33.33% appeared looking outside the frame, with a natural background, with a body position at 45° to the camera and at a low angle (15.55%) or at eye level (17.78%).

With regard to the facial expression of the parliamentarians portrayed, when they appeared serious, 51% of the cases were portraits at eye level and 37% of the cases were low-angle shots. In addition, 51% of the cases were photographed at a 45° angle from the subject, 26% were frontal and 23% were in profile. Sixty per cent of the images showing the parliamentarian looking serious were taken with the subject looking outside the frame, captured during an activity without posing, with a natural but

unrecognisable background (30%) or recognisable within a political context (30%). In cases where the subjects smiled without showing their teeth, 71% of the photographs were taken at eye level. Analysing the position of the subject in front of the camera, 65.2% were taken from the front and 28.8% at a 45° angle. When the subjects posed smiling, showing their teeth, 63.4% of the photographs were taken at eye level and 21.4% from a low angle. In these cases where the parliamentarian smiled showing their teeth, 66.4% of the images were taken from the front and 28.8% at a 45° angle. The most repeated combination, both when smiling showing their teeth (38.17%) and without showing them (39.4%), is looking at the camera, posing, at eye level, from the front, in an unrecognisable location, with a natural background (showing teeth 27.48% and without showing them 25.76%) or on a set (showing teeth 10.69% and without showing them 13.64%).

With regard to the background, when it was not recognisable, there was a wide dispersion of results. The highest frequencies were accumulated for portraits looking at the camera, frontal, posing, at eye level, with a natural background and a smile showing teeth (15.32%) or without showing them (7.23%). The next most frequent combinations were exactly the same, but on a set (5.96% smiling with teeth and 3.83% smiling without showing teeth). In contrast, when the background was identifiable as a political context, 54% of the images were taken in action without posing and serious, with the parliamentarian looking outside the frame, the background natural and in profile (22.64%) or at 45° (32.07%). Of these, when taken at 45°, 7.55% were taken from a low angle, 9.43% from a high angle and 15.09% at eye level. Of the portraits taken in profile, 11.32% were taken from a low angle and another 11.33% at eye level. Of the set of images with a recognisable background in a political context, 100% were taken in action without posing, 79.2% did not look at the camera and 62.3% appeared serious.

In terms of shot scale, interesting variations were detected with respect to location ($\chi^2$ (33, N = 300) = 248.47, $p$ = <0.001, Cramer's $V$ = 0.16) and facial expression ($\chi^2$ (55, N = 300) = 180.35, $p$ = <0.001, Cramer's $V$ = 0.10). With regard to space, ordering the scale from most closed to most open, when the space was not recognisable, it tended to be represented in general close-up (15.3%), short shot (32.8%) and short medium shot (35.30%), while if the context was identifiable as associated with politics, it tended to be represented by close-up (13.2%), medium close-up (62.3%) and medium shot (11.3%). With regard to facial expression, if the candidate was serious, they tended to be represented by close-up shots (25%), medium close-up shots (48%) and medium shots (11%). When smiling, if they did not show their teeth, they tended to be represented by medium close-up shots (10.6%), extreme close-ups (19.7%), close-ups (22.7%) and medium close-ups (36.4%), and when they smiled showing their teeth, they tended to be represented by extreme close-ups (13.7%), close-ups (35.1%) and medium close-ups (34.4%).

## 4. Discussion

The images analysed followed a marked strategy of simplifying the technical and aesthetic design to facilitate the reception of the image of the subject. A clear focus of attention was established on the subject, using strategies such as representing them mostly alone, centred in the frame (Arnheim, 1983), with unrecognisable backgrounds that divert attention and in a frontal position looking towards the camera, thus increasing attention span (Kaisler et al., 2020). Unlike pictorial portraits (Zhang et al., 2018), other types of photographic portraits (Guixà, 2016) and institutional photographs (Ahn & Jacobs, 2018), the profile portraits analysed tended to eliminate all contextual or symbolic information to facilitate the focus of attention on the person portrayed (Prakel, 2007). This was reflected in the fact that it was not common to include flags, logos, texts, colours associated with the party or recognisable locations. In addition, the shot scale chosen mostly corresponded to the types included between medium shot and medium close-up, focusing attention on the subject's face by increasing the proportion of the frame occupied by the subject in these types of shot scales (Lankhuizen et al., 2022). Furthermore, these types of shot scales generate a sense of emotional closeness and trust between the subject and the observer (Katz, 2005) and facilitate the recognition of emotions, as is also the case when the eyes are not hidden (McCrackin et al., 2023). In this sense, it is consistent that in cases where recognisable backgrounds appeared in the images, the shot scale was slightly more open than with unrecognisable backgrounds, as the context of the subject acquires value and identification must be facilitated (Katz, 2005).

One reason that may favour this set of characteristics is the very nature of the profile image display offered by social network X, especially on mobile devices. This image is limited to a resolution of

400x400 pixels (X, 2024), so, considering that the display system has been implemented under a *responsive* design*,* these images are intended to occupy no more than 20% of the screen. Furthermore, the fact that they are most commonly displayed as thumbnails accompanying a post can influence their design, leading to simplification strategies and focal planes focused on clearly showing the candidate's face.

The most relevant aspect when designing the portrait of the parliamentarian is associated with the smile. This variable determines two different strategies when designing the photograph. When the subject was smiling, they mainly did so showing their teeth, looking at the camera with their body facing forward, at eye level, with an unidentifiable background and in shot scales ranging from the general close-up to the medium close-up. Smiling is perceived as a sign of reward by the observer (Lobmaier et al., 2008) and has been shown to be effective in different electoral contexts (Horiuchi et al., 2012). This circumstance is consistent with the fact that the majority of those portrayed were smiling. Smiling in portraits is often associated with self-confidence and good humour, although it can also convey arrogance and insincerity (Lengyel, 2011). To avoid conveying negative aspects, low-angle shots, which favour a feeling of superiority and dominance, were avoided (Hanmakyugh, 2023). For this reason, the subjects were portrayed at eye level, promoting a sense of hierarchical equality between the observer and the subject that favoured an emotional connection (Hanmakyugh, 2023; Kraft, 1991) and, at the same time, enhancing interpersonal attraction (McCain et al., 1977). These emotions were enhanced by the use of frontal poses (Courgeon et al., 2011), which also promote a perception of openness or sincerity (Kaisler & Leder, 2016). This feeling of emotional closeness was reinforced by the shot scale, which tended to be smaller when the subject smiled. Close-up shots promote better perception of the face and foster a sense of closeness and empathy (Katz, 2005). As for the difference between smiling with or without showing teeth, there is an ideal smile with white, perfect teeth, denoting a socioeconomic status associated with success (Kettle and Warren, 2024).

Conversely, when the subject appeared serious, their gaze tended to be directed outside the frame, with a 3/4 or profile body position, at eye level or from a low angle, in unidentifiable locations or in a political context, and with shot scales ranging from close-up to medium shot. While positive expressions tend to be perceived as linked to the observer, negative expressions are perceived as alien to the observer (Lobmaier et al., 2013). When subjects look seriously at the camera, they generate greater anxiety and rejection in the observer than when they look outside the frame (Hess et al., 2007). This situation could be due to the fact that a serious gaze towards the observer damages their self-esteem, while a serious gaze outside the frame is interpreted as being directed towards third parties (Lobmaier et al., 2008). These perceptual conditions are consistent with a tendency for portraits of serious parliamentarians to be taken looking outside the frame and avoiding frontal positions. At the same time, to reduce emotional intensity (Katz, 2005), the shot scales tended to be slightly more open than when they appeared smiling. In cases where the space was recognisable as being linked to politics, this combination was particularly powerful, as a serious face is interpreted as being oriented towards third parties (Lobmaier et al., 2008), reinforcing the feeling of combativeness and aggressiveness towards political adversaries or potential threats. Furthermore, the inclusion of the parliamentarian in a political context, especially if it is institutional, helps to generate a sense of belonging and legitimacy (Ahn & Jacobs, 2018). In terms of camera height, eye level predominated, along with low-angle shots. Low-angle shots were especially used when they were shown in recognisable political locations in unposed attitudes. This may have been an attempt to generate a sense of strength, superiority, and authority (Hanmakyugh, 2023) in their public interventions, as well as a greater sense of realism in these attitudes, thus eliminating tensions between authenticity and artificiality (Debaene, 2021).

In both cases, for both serious and smiling subjects, the centred composition (Arnheim, 1983) and the non-tilted framing (Prakel, 2007) favoured a sense of stability and security in the subject, although they reduced the sense of dynamism. Furthermore, while pictorial portraits tend to seek dynamic poses in order to capture the naturalness of the subject (Zhang et al., 2018), the profile images analysed tended to use poses that avoided movement. This condition could encourage the observer to perceive tensions between authenticity and artificiality (Debaene, 2021), thus preventing a full sense of authenticity on the part of the observer (Ackerman et al., 1998; Saito et al., 2021).

## 5. Conclusions

This research has achieved its main objective of identifying the predominant trends and strategies in the forms of self-representation of Spanish parliamentarians and interpreting the communicative intentions associated with profile images on social network X. Figure 1 summarises the technical and aesthetic characteristics associated with the most common representation strategies.

**Figure 1.** Common aesthetic and technical characteristics associated with the predominant self-representation strategies
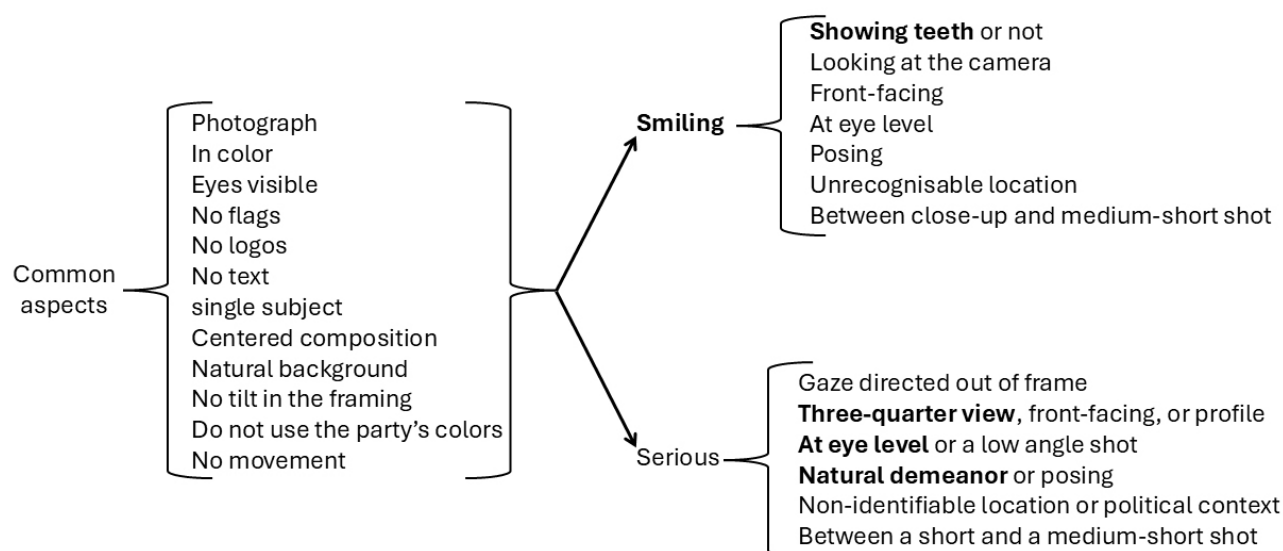


Note: When two possible options appear, the most common one is marked in bold if it can be defined.
Source: Own elaboration, 2024.

As shown in Figure 1, the most common characteristics of the profile pictures of parliamentarians on social network X were that they were colour photographs; framed without tilt; where the subject appeared with their eyes visible; alone; without movement; centred in the frame; with a natural background; without contextual symbols such as a flag, logo, text or colours linked to the party affiliation. All these aesthetic and technical characteristics seek to minimise the contextual information in the image, focusing attention on the figure portrayed.

Beyond these characteristics common to most of the images used by parliamentarians as profile pictures, two strategies emerged for self-representation depending on whether they chose to portray themselves smiling or not smiling. This decision was based on constructing an image focused on *engagement* and emotional proximity, which was the focus of the rest of the aesthetic and technical decisions associated with smiling images; or seeking a tougher and more combative image, conditioning the rest of the aesthetic and technical decisions linked to images with a serious face.

In this sense, the smiling images (mainly showing teeth) were taken looking at the camera, posing frontally, with the camera at eye level, in an unrecognisable location and with a shot scale ranging from a general close-up to a short medium shot. In contrast, in images where the parliamentarian was portrayed with a serious expression, the gaze was directed outside the frame, with a 3/4 or profile body position, with the camera at eye level or from a low angle, posing or engaged in a real activity, in an unidentifiable space or in a political context, and with a shot scale ranging from close-up to medium shot.

## 6. Supplementary material

Supplementary material is available at the following link:
https://osf.io/2uwcq/?view_only=d2ebb2a45ae445a4a8873c084f01c1fd

# References

Ackerman, J. L., Ackerman, M. B., Brensinger, C. M., & Landis, J. R. (1998). A morphometric analysis of the posed smile. *Clinical orthodontics and research, 1*(1), 2-11. https://doi.org/10.1111/ocr.1998.1.1.2

Ahn, P. & Jacobs, K. (2018). Using photographs in interpreting cultural and symbolic meaning: A reflection on photographs of the Korean Association for Government Accounting. *Accounting Forum, 42*(1), 42-152. https://doi.org/10.1016/j.accfor.2017.08.002

Arnheim, R. (1983). *The Power of the Center: A Study of Composition in the Visual Arts*. Univ of California Press.

Arroyo, L. (2013). *El poder político en escena. Historias, liturgias y estrategias de la comunicación política*. RBA Editores.

Balmas, M. & Sheafer, T. (2015). Personalization of politics. En G. Mazzoleni (Ed.), *The international encyclopedia of political communication* (pp. 1–9). John Wiley and Sons, Inc.

Baranowski, A. M. & Hecht, H. (2018). Effect of camera angle on perception of trust and attractiveness. *Empirical Studies of the Arts, 36*(1), 90-100. https://doi.org/10.1177/0276237417710762

Bennett, W. L. & Pfetsch, B. (2018). Rethinking political communication in a time of disrupted public spheres. *Journal of communication*, *68*(2), 243-253. https://doi.org/10.1093/joc/jqx017

Bennett, W. L. (2012). The personalization of politics: Political identity, social media, and changing patterns of participation. *Annals of the American Academy of Political and Social Science, 644*(1), 20–39. https://doi.org/10.1177/0002716212451428

Bullingham, L, & Vasconcelos, A. C. (2013). The presentation of self in the online world': Goffman and the study of online identities. *Journal of information science, 39*(1), 101-112. https://doi.org/10.1177/0165551512470051

Cartier-Bresson, H. (2003). *Fotografiar del natural*. Gustavo Gili.

Clarke, G. (1912). *The portrait in photography*. Doubleday.

Courgeon, M., Clavel, C., Tan, N., & Martin, J. C. (2011). Front view vs. side view of facial and postural expressions of emotions in a virtual character. En: Z. Pan, A.D. Cheok, & W. Müller (Eds.), *Transactions on Edutainment VI. Lecture Notes in Computer Science, vol 6758* (pp. 132-143). Springer. https://doi.org/10.1007/978-3-642-22639-7_14

Debaene, A. J. (2021). The Truthful Portrait: Can Posing Be a Tool for Authenticity in Portraiture?. *The Journal of Aesthetics and Art Criticism, 79*(4), 440-451. https://doi.org/10.1093/jaac/kpab042

Feher, K. (2021). Digital identity and the online self: Footprint strategies–An exploratory and comparative research study. *Journal of information science, 47*(2), 192-205. https://doi.org/10.1177/0165551519879702

Fernández, J. A. (2020). *Sin miedo al retrato*. JdeJ Editores.

Gibson, D. (2021). *Manual fotografía de calle*. Blume.

Goffman, E. (1959). *The presentation of self in everyday life*. University of Edinburgh.

Guixà, R. (2016). El carácter emblemático de la fotografía: el retrato oficial y la producción de presencia. *Emblemata, 22*, 207-230.

Hanaya, M. (1993). Perception of Facial Expressions: Effect of Facial Angle on Emotion Category Effect. *Tohoku psychologica folia, 51*, 33-36.

Hanmakyugh, T. T. (2023). The Psychology of Camera Shots: A Determinant for Audience Perception of Film Images. *Ama: Journal Of Theatre And Cultural Studies, 14*(1), 104-113.

Hess, U., Adams, R. B., & Kleck, R. E. (2007). Looking at you or looking elsewhere: The influence of head orientation on the signal value of emotional facial expressions. *Motivation and Emotion, 31*, 137-144. https://doi.org/10.1007/s11031-007-9057-x

Horiuchi, Y., Komatsu, T., & Nakaya, F. (2012). Should candidates smile to win elections? An application of automated face recognition technology. *Political Psychology, 33*(6), 925-933. https://doi.org/10.1111/j.1467-9221.2012.00917.x

Joo, J., Li, W., Steen, F. F., & Zhu, S. C. (2014). Visual persuasion: Inferring communicative intents of images. En *Proceedings of the 2014 IEEE Conference on Computer Vision and Pattern Recognition* (pp. 216–223). IEEE. https://doi.ieeecomputersociety.org/10.1109/CVPR.2014.35

Kaisler, R. E. & Leder, H. (2016). Trusting the looks of others: Gaze effects of faces in social settings. *Perception, 45*(8), 875-892. https://doi.org/10.1177/0301006616643678

Kaisler, R. E., Marin, M. M., & Leder, H. (2020). Effects of emotional expressions, gaze, and head orientation on person perception in social situations. *Sage Open, 10*(3), 2158244020940705. https://doi.org/10.1177/2158244020940705

Karvonen, L. (2010). *The personalization of politics: A study of parliamentary democracies*. ECPR Press.

Katz, S. (2005). *Plano a plano*. Plot ediciones

Kettle, J. & Warren, L. (2024). Capturing the smile: Exploring embodied and social acts of smiling. *Sociology of Health & Illness, 46*(8), 1626-1646. https://doi.org/10.1111/1467-9566.13815

Kotsia, I., Buciu, I., & Pitas, I. (2008). An analysis of facial expression recognition under partial facial image occlusion. *Image and Vision Computing, 26*(7), 1052-1067. https://doi.org/10.1016/j.imavis.2007.11.004

Kraft, R. (1991). Light and mind: Understanding the structure of film. En R. R. Hoffman & D. S. Palermo (Eds.), *Cognition and the symbolic processes: Applied and ecological perspectives* (pp. 351-370). Psychology Press. https://doi.org/10.4324/9781315807263

Lankhuizen, T., Bálint, K. E., Savardi, M., Konijn, E. A., Bartsch, A., & Benini, S. (2022). Shaping film: A quantitative formal analysis of contemporary empathy-eliciting Hollywood cinema. *Psychology of Aesthetics, Creativity, and the Arts, 16*(4), 704. https://psycnet.apa.org/doi/10.1037/aca0000356

Lewinski, J. & Magnus, M. (1982). *The Book of Portrait Photography*. Ebury Press

Lengyel, G. (2011). How Do the Rich Smile? A Study in Visual Sociology. *Acta Universitatis Sapientiae. Social Analysis, 1*(1), 9.

Lobmaier, J. S., Tiddeman, B. P., & Perrett, D. I. (2008). Emotional expression modulates perceived gaze direction. *Emotion, 8*(4), 573. https://psycnet.apa.org/doi/10.1037/1528-3542.8.4.573

Lobmaier, J. S., Hartmann, M., Volz, A. J., & Mast, F. W. (2013). Emotional expression affects the accuracy of gaze perception. *Motivation and emotion, 37*, 194-201. https://doi.org/10.1007/s11031-012-9295-4

Maes, H. (2015). What is a portrait?. *British Journal of Aesthetics, 55*(3), 303-322. https://doi.org/10.1093/aesthj/ayv018

Messaris, P. (2019). The digital transformation on visual politics. En A. Veneti, D. Jackson, & D. G. Lilleker (Eds.), *Visual Political Communication* (pp. 17-36). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-18729-3_2

McCain, T. A., Chilberg, J., & Wakshlag, J. (1977). The effect of camera angle on source credibility and attraction. *Journal of Broadcasting & Electronic Media, 21*(1), 35-46. https://doi.org/10.1080/08838157709363815

McCrackin, S. D., Provencher, S., Mendell, E., & Ristic, J. (2023). Decoding the Silent Language of the Eyes: Occluding the Eye Region Impacts Understanding and Sharing of Emotions With Others. *Social Cognition, 41*(4), 365-389. https://doi.org/10.1521/soco.2023.41.4.365

Nieto, F. (2017). *El arte de la composición*. JdeJ Editores.

Olsson, E.-K. (2017). How journalists portray political leaders: The personalization of prime ministers and the connection to party affiliation in Swedish news coverage. En B. Kjos Fonn, H. Hornmoen, N. Hyde-Clarke & Y. B. Hågvar (Eds.), *Putting a face on it: Individual exposure and subjectivity in journalism* (pp. 99–119). Cappelen Damm Akademisk.

Poulakidakos, S. & Giannouli, I. (2019). Greek Political Leaders on Instagram: Between "Soft" and "Hard" Personalization. En A. Veneti, D. Jackson, & D. G. Lilleker (Eds.), *Visual Political Communication* (pp. 187-206). Palgrave Macmillan. http://dx.doi.org/10.1007/978-3-030-18729-3_10

Prakel, D. (2007). *Composición*. Blume.

Saito, C., Masai, K., & Sugimoto, M. (2021). Classification of spontaneous and posed smiles by photo-reflective sensors embedded with smart eyewear. En R. Wimmer (Ed.)*, Proceedings of the Fourteenth International Conference on Tangible, Embedded, and Embodied Interaction* (pp. 45-52). Association for Computing Machinery. https://doi.org/10.1145/3374920.3374936

Sartori, G. (1998). *Homo videns: la sociedad teledirigida*. Taurus.

Sontag, S. (2021). *On photography*. Farrar, Straus and Giroux.

Valenzuela, R. (2014). *El posado perfecto. El arte de posar para fotógrafos y modelos*. PhotoClub.

Veneti, A., Jackson, D., & Lilleker, D. G. (2019). Introduction: Visual Political Communication, En A. Veneti, D. Jackson, & D. G. Lilleker (Eds.), *Visual Political Communication* (pp. 1-13) Palgrave Magmillan. https://doi.org/10.1007/978-3-030-18729-3_1

Watanabe, S., Miki, K., & Kakigi, R. (2002). Gaze direction affects face perception in humans. *Neuroscience letters, 325*(3), 163-166. https://doi.org/10.1016/S0304-3940(02)00257-4

Wilkinson, M. & Dyer, M. (2018). *El retrato fotografico*. Promopress.

X. (2024). *Common issues when uploading profile photo*. Recuperado el 8 de enero de 2025, de https://help.x.com/es/managing-your-account/common-issues-when-uploading-profile-photo

Zhang, X., Li, Z., Constable, M., Chan, K. L., Tang, Z., & Tang, G. (2018). Pose-based composition improvement for portrait photographs. *IEEE Transactions on Circuits and Systems for Video Technology, 29*(3), 653-668. https://doi.org/10.1109/TCSVT.2018.2817231