

Models, Mannequins, Dolls and Beautified Faces: A Semiotic and Philosophical Approach to the Sense of Beauty

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Abstract

The goal of this paper is to contrast the representation of models in photography (fashion and fine art photography), as well as certain kinds of inanimate beauty (Barbie dolls, mannequins), with the average faces constructed by algorithms serving to identify and reproduce beauty. What are the similarities and differences between inanimate objects, characterized by faces devoid of singularities and comparable to sorts of angelic faces, and the algorithmic parameters through which beauty and attractiveness are calculated and predicted? This paper will apply an enunciative semiotic analysis to photographic corpora, propose philosophical reflections on the categories of beauty, and will show that the conception of beauty changes from corpus to corpus and from one cultural domain to the other (fine art, advertising, entertainment and so on). The end of the paper states that beauty has to do with a perfect gradation between stillness and movement in the case of the models seen in fashion photography, between neutrality and expressivity for mannequins, and between singularity and multiplicity for dolls such as Barbie, and that, in the algorithmic fabrication of beautiful faces, it is linked with an enhancement of the compactness of the structure of the face.

Keywords Visual semiotics · Semiotics · Language sciences · Philosophy of the face · Image theory

1 Introduction

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The current and abundant literature on algorithmic beauty leads us to rethink some prototypical forms of popular beauty such as those embodied by the models of the fashion world, by mass-market dolls such as Barbie which purport to propose a variety of everyday activities, and of mannequins which, beyond their everyday function, occupy a privileged place in fine art photography.

Beauty has always been linked to spirituality, as demonstrated by the history of art but also by philosophy. In fact, we cannot forget that for Plato, beauty is the only terrestrial sensation, the exclusive one, that allows us to reach the hyperuranion—the sphere of ideas. Beauty is the only sensation and the only perceptual judgment linked to a sort of experience that allows us not to remain nailed to the ground, but to discover a truth that is an adaptation to appropriate models, which coincide with the models of truth. As Indian philosopher Ananda K. Coomaraswamy says in Bellezza e verità and taking up Plato's philosophy, "works of art are reminders, supports for contemplation" (Coomaraswamy 2017, p. 10) of ideal models, archetypes. The question of beauty as the adaptation to a model will return later in our reflection on Western beauty as opposed to the Chinese view of beauty, and specifically the one that has come down to us via François Jullien's (2010) reflections.

In this paper, I will examine small corpora of photos belonging to various cultural domains (advertising, fine art and so on) in order to justify the different kinds of beauty that it is possible to impute to all such subjects depicted in the photos (models, mannequins, dolls, algorithmic faces). I selected my corpus according to the following parameters:

- (1) Beautiful face types, such as those of models, of the Barbie doll, of mannequins, and of artificial and computed beauty, because of the variety of models of beauty within the public opinion they represent;
- The necessity to compare singular beauty (the model), generalized beauty (Barbie), uncanny beauty (the mannequin), and, finally, the beauty obtained in the Arti-

¹ See on this topic the production of the photographer Eugène Atget.



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- ficial Intelligence domain by producing averages over massive collections of data.
- (3) The necessity to take into account different kinds of social domains and statuses of photographic production: fine art photography (mannequins), artistic and fashion advertising photography (models), commercial photography, photos without any artistic ambition (Barbie), and the very trivial photos of the face used as an experimental field in scientific research (algorithmic beauty).

I will study this corpus through a representational filter, that is, through the *enunciative level* of discourse. The theory of "uttered enunciation" has its roots in Benveniste's work (1974, 1981) and has been developed in Greimasian semiotics (Greimas and Courtés 1982). It coincides with the reflective, metasemiotic level inscribed in every discourse (verbal, visual, musical or audiovisual). It can be described as the level in language where the conceptions regarding the objects and themes of the discourse are revealed. In the field of images, this is accomplished through markers such as texture, the combination of light and darkness, blurring, perspective, and also through the orientations of the gazes and of the faces portrayed.² My corpus analyses will be associated with some reflections regarding the philosophical perspective on beauty, especially those contributed by contemporary philosophers Emanuele Coccia and François Jullien, as well as by some other philosophers or psychologists who are experts in the study of the face.

2 The Divine Model (on Bettina Graziani's Photos)

I would like to begin this reflection on the beauty of faces in photography by quoting some passages from a minor article by Emanuele Coccia, written in Italian in 2015 under the title of: "La morale della fotomodella. La mostra su Bettina Graziani alla Galleria Alaia", which is illustrated with some photos of the famous model Bettina. (Figs. 1, 2).

This article by Coccia, which is very short and perhaps not aimed at resolving sharp theoretical questions, nevertheless fascinated me because it ascribes great importance to the spirituality of models. He states:

that of the model is the only form of *magic* that our society knows and tolerates. And like any other form of magic, it attracts suspicion, contempt or insolent

² On uttered enunciation in the field of image science, see Marin (1993), Fontanille (1989), Beyaert-Geslin (2017), Dondero (2020).





Fig. 1 Georges Dambier, Bettina Graziani for ELLE, 1953. Graduated scale of grey



Fig. 2 Jean-Philippe Charbonnier. *Bettina devant la vitrine de Van Cleef & Arpels, place Vendôme*, 1953. Jean-Philippe Charbonnier/RAPHO/GAMMA. Graduated scale of grey

indifference. One is accustomed to consider the model as the most obvious symptom of the moral decadence of our age, its materialism and its predilection for superficiality. Yet it would be difficult to find a more spiritual individual than a model (n. pag., my translation and italics).

The first step carried out by Emanuele Coccia is therefore to link the model with spirituality, while attempting to dissociate her from the preconceptions attached to her figure, such as decadence and emptiness. He continues, going deeper into the description of this magic:

Each model is a master of disguise. She does nothing but multiply her images and yet her face is always impossible to recognize. Her job, one might say, is to generate situations, positions, possibilities—in a word, to generate selves, but selves that are universal. If each of us can identify with them, it is because the model is capable of identifying with every other person. She is an ascetic in the daily exercise of emptying herself [...], she knows how to transform identity into a common and anonymous possibility instead of making it private property. (n. pag., my translation and italics).

The model would be a concentration of spirituality because she empties herself of herself, of the *weight of her identity*, as do the ascetics who turn away from the desires and needs of their bodies. Coccia goes even further and affirms that models represent a morality superior to that of saints because the latter are engaged with their singular personality and because their name and personal history are perpetuated and sacralized by the institution, whereas the model only has the task of distancing herself from herself in order to produce a *possible identity*, a form of life, to be *anonymously offered* to all of us:

Unlike the saints, who make perfection a matter of personal possession and private property, the model tries to transform aesthetic and moral perfection into a *common good*, possible for everyone and therefore, ephemeral and *impersonal* and which they themselves cannot fully enjoy. (n. pag., my translation and italics).

The fact that the model, according to Coccia, unlike the saint, cannot really enjoy the good that she herself produces for the benefit and delight of others makes her a very distant presence. It's this distance from herself that makes her almost a divinity, an indifferent divinity whose varied bodily positions and gestures open a large range of possible experiences.

This kind of changing beauty ("her face is always impossible to recognize") opens the door to multiple experiences of identity and forms of life. In a sense, Coccia is stating that a model such as Bettina sacrifices her own identity to become an *identity reservoir* to be offered to the observers who, through her changing and non-recognizable face, can wander and multiply in imagination their attitudes towards life ("situations, positions, possibilities").

It is in fact the portrait of beauty as distance and as multiplicity that Coccia tries to trace. A figure of a benevolent, generous, ample distance. Her "leggiadria" (which may be somewhat loosely translated as "gracefulness") makes her into a multi-faceted presence. Her levity entails a volatile presence, one such as that of the angels, diffusing her grace all around.

She builds a *prêt-à-porter* identity that everyone can wear. In her body, the ego becomes a ready-made capable of coinciding with any of us [...] opening [her] face to welcome all the faces of the world [...] [b] ringing *universal beauty* to her skin. *Being a model means pushing the limits of individuality and humanity a little further* (n. pag., my translation and italics).

In a certain sense, the model, in Coccia's view, is someone whose moral attitude consists in losing herself and who acquires an anonymity that coincides with universal beauty, as the beauty of an always other, possible, alternative, form of life.

Let's look at the photos that inspired Coccia to make these comments, and notably at their enunciative level. They are black and white photos which play on a graduated scale of grey. The eyes of Bettina are never directed towards the observer, even when her face is depicted frontally: the veil of a hat or a shadow is always interposed between her face and the observer. In the famous picture by Jean-Philippe Charbonnier titled Bettina devant la vitrine de Van Cleef & Arpels, place Vendôme (1953) (Fig. 2), there is no veil or shadow, but a shop window thwarts any possible dialogue with her and sets her at a distance. In any case, her look is not concentrated; it is something of a vague gesture directed towards the air. This kind of gesture is totally unproductive—it is an entirely self-reflexive gesture that aims at nothing. A non-recognizable face associated with unproductive gestures which open onto a multitude of life possibilities and virtualities: such is the portrait of beauty (with respect to spirituality) in this kind of fashion photography.

3 Models as Mannequins. The Case of Valérie Belin's Fine Art Photographs

In order to analyze the photos of Bettina Graziani, Coccia starts with a statement of Bettina about the fact that she says not recognizing herself in her photos. In his article, Coccia states that the photos are a way to visualize the positions of the model's body, each position opening onto a reservoir of forms of life, onto a universe of possible lives. The specificity of these corporeal positions and attitudes is that Bettina's gestures are always fixations of a movement in progress, a movement that is perfect as a representation of transition and not as an absolute.

While Coccia's corpus is made by various attitudes captured at the moment of photographic fixation, that is, the quality of suspension which the photographic medium confers to the living model, I will take into account in the following lines another kind of model, the *immobile* model found in store windows, the so-called mannequins, which may be immobile in two senses: immobile first as objects and then as photographed objects. Two kinds of immobility have been stratified in these photos.

Let's examine some photographs of mannequins by a French artist, Valérie Belin, who produced a series of mannequin faces entitled *Mannequins* (Fig. 3).

In these photographs, we perceive a catalogue of face positions: positions of women's frozen faces—frozen not

³ The mannequin has already caused great amounts of ink to flow, especially in commentaries regarding the myth of the automaton: we can only think of the book considered by some to be the first science fiction novel, *The Future Eve* by Villiers de l'Isle Adam, published as a novel in 1886.









Fig. 3 Valérie Belin, series *Mannequins*, 2003, Courtesy Galerie Jérôme de Noirmont, Paris

only because they are inanimate faces (and, moreover, photographed faces), but because their very distant and artificial gaze is solely directed towards nothingness. Each mouth, nose, strand of hair or eye shape is clearly produced by an average that excludes any specificity from the represented faces.

In these photographs, the balance between black and white is very different from the gradations of grey used in Bettina's photographs by Charbonnier. The strong chiaroscuro effect makes these women look like statues made of an artificial material. The effect of artifice is also given by the background of the faces, which is non-situated and totally neutral.

We realize that this effect of likeness to artificial materials is mostly produced because of the serialization of the faces, as this series looks more like a catalogue of face positions than as showing facial expressions and individual dispositions. These photos are certainly not portraits, even if the women are not involved in any other action or in any other scenario than that of partaking in an exchange of gazes, just as in traditional portraits: in fact, these faces are not addressed to anyone; their distant gazes liken them to dolls.

These photographs remind us of an *ambiguity between* presence and absence that Ernst Jentsch wrote about in 1906 in a text entitled "On the Psychology of the Uncanny", and after him, Freud (1919), in a text called "the Unheimlich"—the Disturbing Familiar:

Among all the psychical uncertainties that can become a cause for the uncanny feeling to arise, there is one in particular that is able to develop a fairly regular, powerful and very general effect: namely, doubt as to whether an apparently living being really is animate and, conversely, doubt as to whether a lifeless object may not in fact be animate—and more precisely, when this doubt only makes itself felt obscurely in one's consciousness (Ernst Jentsch 1906, p. 8).

The chiaroscuro effect in the photographic series *Mannequins* indeed creates a sense of uncertainty: might these mannequins be able to move? And if so, using what kind of movement? Certainly not the kind of movement available to

Bettina, who was enveloped in existing environments. These human mannequins are locked in a totally abstract and artificial space where any possible movement could only be repetitive and mechanical.

4 Barbie's World

In the book *Vissuti di significazione* (2008), Pierluigi Basso revisits Rilke's work on the doll, which is considered as a kind of angel, as a silent presence, one before which the child tests its first affective experience, and its first deception. As stated by Rilke:

At a time where everybody made an effort to give us quick and soothing answers the doll was the first who made us suffer *this immense silence* which later on would often breathe at us out of space whenever we stepped on the *limits of our existence*. Facing her as she stared at us we experienced for the first time (or am I wrong?) that certain hollowness in our feeling, this *pause of the heart* in which one would perish if not the whole, soft, far-reaching Nature would carry us like a lifeless thing across the abyss. Are we not strange creatures that we obey and let ourselves be instructed to invest our first tender inclinations where they must remain unsatisfied? (Rilke 2013, my translation and italics)⁴

Taking roots on these suggestions of Rilke about the doll embodying a form of terrestrial angelicalness, I will focus my attention on a singular kind of doll angelicalness, that of Barbie, who puts forth a perfect body and displays a vast range of social activities. In fact, according to Basso Fossali: "Barbie exemplifies an angelic life because she preserves an *impenetrable*, *self-contained environment*." (Basso Fossali 2008, p. 111, my translation and italics). In fact, the world of Barbie is at the same time offered and available, while remaining impenetrable, private, and exclusive.

Barbie, in a sense, is a *universal* model because, potentially, she is everything—she embodies every social activity: "a bricolage of *pre-processed* and predominant forms, a *the-saurus* of aesthetic experiences, and her world is *hyperreal*, *hyper-defined*, *available*" (Basso Fossali 2008, p. 111, my translation and italics) (Fig. 4).



⁴ See Simms comments on Rilke's theory on dolls: "The great fear which the doll inspires is the fear of a silence and emptiness at the heart of our existence. It grasps the possible absence of transcendence, the possible unreality of a spiritual invisible realm, the possible meaninglessness of our life beyond the fragile clearing of the present. While in Rilke's work the angel affirms existence beyond and without human beings, the doll, in her small and silent way, denies being itself." (Simms 1996).



Fig. 4 Various kinds of barbie from B&M stores, https://www.bmstores.fr/poupees-et-accessoires/8076-barbie-fashionistas.html

In these anonymous photographs taken from the online catalogue advertising the doll, Barbie's face always has the same expression but her activities and outfits are always different, because for each occasion, she changes her costumes and prototypical tools: a white coat and a blood pressure monitor when in the guise of a doctor, a ballerina's tutu when posing as a dancer, and so on.

As Basso states: "[Barbie] is a space of *infinitely varied availability*, [one] bounded by Barbie's wardrobe, ranging from the office dress to the appropriate Hawaiian vacation outfit and ending with the space suit." (Basso Fossali 2008, p. 112, my translation and italics). Barbie's world indeed offers us:

all hairstyles, all clothing outfits, all performances: everything is indifferent to her because her identity is metastable. [...] In front of the Barbie world, one feels all virtualities resonating, [...] everything is [...] available [...] there is nothing to say but this statement of availability, while the soul of the doll remains ineffable. [...] Barbie is untouchable, hers is a body that *does not allow any promiscuity*, but at the same time it is a *public body*, informed by an *aesthetic of fitness* that operates on the body subtracting any contingency in order to achieve the impersonality of the model (Basso Fossali 2008, p. 112, my translation and italics)

The availability of Barbie and the multiplicity of her identity performances may remind us of the multiplicity of Bettina's positions and of Valérie Belin's catalogue of faces. What are the differences between these three different kinds of diffuse or impersonal identities, between the anonymity associated with the multiplicity of selves of the model Bettina, the artificial and neutral impersonality of mannequins, and the universality of Barbie? What kind of beauty is related to these three types of impersonality?

Bettina's impersonality almost implies a sacrifice, the sacrifice of giving up embodying a singularity, in order to offer a face open to all forms of life. In a sense, her multiple faces coincide with offerings. The beauty embodied by Bettina is the beauty of multiple individualities and of openness to other possible forms of life to be offered to the observer. Bettina's photos remind us of the definition of beauty by François Cheng: "true beauty is that which goes in the direction of the Way, it being understood that the Way is nothing else than the *irresistible march towards open life*, in other words, a principle of life *which keeps all its promises open*." (2006, p. 31 my translation and italics).

In Valerie Belin's series *Mannequins*, the multiplicity of individualities does not prevail: on the contrary, it is rather the mysterious uncertainty between absence and presence, or between stillness and mechanistic repetitive movement that prevails in the faces that are indifferently looking towards no direction in particular. This kind of beauty is anonymous like that of models such as Bettina, but in this case, anonymity coincides with the repetition of sameness, as in a *catalogue* of face positions and directions—and not with the multiplicity of open possibilities.

Barbie's anonymity is of another kind. She is the stereotype of every common situation; she embodies with her outfits and her hairdressings every standard situation in a very organized capitalistic life. Basso goes even so far as to talk about angelic porn, and the fact that Barbie tricks us with the staging of all-around comfort. What she proposes us is a dazed life attitude. In Barbie's world, another kind of life is not possible, because everything has already been planned: in this sense, such beauty can be defined as kitsch: everything is already pre-packaged. This kind of kitsch is not specifically esthetic, but ethical⁵: all the attitudes Barbie endorses are irrelevant with respect to our livesevery activity is exemplary and too perfect, that is: without meaning. Through Barbie's beautiful face and body, life is reduced to a continuous reproduction of the identical disguised as being distinctive.



⁵ On ethical kitsch, see Dondero (2007).

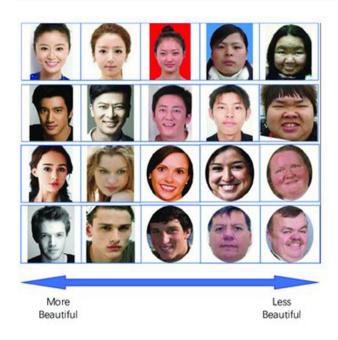


Fig. 5 From top to bottom, four kinds of facial images for prediction are presented: Asian Female (AF), Asian Male (AM), Caucasian Female (CF), and Caucasian Male (CM). From left to right, the predicted ranks are decreased gradually. See Cao et al. (2020)

5 The Beauty Score Through Algorithmic Ratings

If we now take into account the contemporary production and evaluation of beauty through algorithmic systems, we realize that the joint challenges of several disciplines (psychology, computer science, evolutionary biology) concern notably two objectives: the beauty prediction and the facial morphing. In this section, we are going to examine photos—specifically photos analyzed through algorithms and compared with the human judgment of beauty in scientific papers.

The first one focuses on facial beauty prediction (FBP) and especially on the concordance between the way beauty is rated in different communities and by machine. In the paper "Deep Learning for Facial Beauty Prediction" by Cao et al. (2020), the authors try to teach the machine the human conception of face beauty. The authors construct, through convolutional neural networks (CNNs), a global schema of beautiful faces from the features extracted from photographs that have been rated by human viewers. In fact, after extraction, beautiful face features are explored and summarized for *aggregate* analysis. ⁶ This analysis uses SCUT-FBP5500,

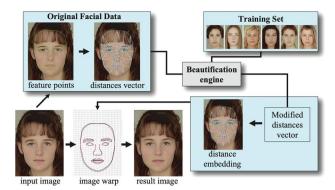


Fig. 6 Beautification process according to Leyvand et al. (2008)

one of the most popular open benchmarks used for beauty evaluation which contains an important set of pictures of both male and female faces, from ages 15–60.

We can observe in this graph (Fig. 5) that the faces that are best rated, namely those in the first column, do not necessarily present, in all cases, the most prototypical features we would generally associate with the categories of "AF," "AM," "CF," and "CM." We discover what we already knew: that the calculated beauty cannot really manage to build different models of beauty for each category of person: in a way, all the faces we see in the first column are faces that we would want to classify as "Hollywood faces" even if the first two are Asian and the other two are Caucasian... The differences between Asians and Caucasians finally fade in those who are noted as the most beautiful of their "race".

A second kind of paper takes inspiration from facial morphing studies where the goal is to produce a continuous transformation between two very different faces. In this universe, the data-driven approaches to the aesthetic enhancement of facial shapes are particularly interesting. The paper entitled "Data-Driven Enhancement of Facial Attractiveness" by Leyvand et al. (2008) focuses on the practices of enhancing the aesthetic appeal of human faces in frontal photographic portraits, while maintaining close similarity with the original face. In this experience, an automatic facial attractiveness engine trained on datasets of photographed faces is used to compare the latter with facial attractiveness ratings collected from groups of human raters. In other words, a global facial schema, a high-dimensional "face space", made of a set of facial feature locations and their relative distances, is compared with the face to be enhanced in order to manage the possible "superposition" of the model onto the singular face (Fig. 6). The facial schema of the model is thus overlaid onto the original face and serves as a

transmission flow between the input (the real face) and the output images (the beautified face).



⁶ This paper explains how to reach an aggregate analysis of the features extracted through multi-level skip connections in order to produce a better transmission of information from shallow layers to the deeper layers of the network system and to devise a better gradient

Footnote 6 (continued)

matrix for defining a 2D warp field which maps the original facial features onto their adjusted locations. During such experiments, it is necessary to find the possible corresponding features between the two faces (the model and the singular face), and to define an appropriate warp.

The beautification process is well explained through the graph: Given a frontal portrait as input, the authors firstly (semi-automatically) identify a set of facial landmarks (feature points). Using a schematization with these feature points as vertices, the authors extract a vector of distances corresponding to the lengths of the edges in the schematization. Secondly, this vector is fed into the beautification engine, which yields a modified vector of distances, possessing a higher predicted beauty score than that of the original vector. Thirdly, the new vector is re-embedded into the first schematization, attempting to make the new edge lengths as close as possible to the beautified distances. The resulting new positions of the feature points define a 2D warp field that is used to warp the input portrait into its beautified version. This process appears more successful and impressive when the input face has a neutral expression.

Between the input image and the result image, the changes are minimal in terms of humanly measurable features but the perceivable global appearance has totally changed. It's not simply a matter of modification of the lines of the eyebrow or of a more outlined mouth, or a matter of other singular features: it is notably a matter of compactness and tonicity of the totality of the face that the authors call "space face" in the paper. Moreover, the girl in the result image appears not only as someone having more harmonious facial correspondences, but the emotion which characterizes her also changes: the girl's gaze is more active in the final image and, in a sense, more available for entertaining a dialogue with the observer.

The image warp, obtained through an aggregate analysis, is a very sophisticated architecture of measurements that is, on one side, the result of a multiplicity of faces studied and noted as beautiful, and, on the other, the tentative of singularizing this aggregation of previously analyzed faces to perfectly fit with the singularity of the face of the original photograph. On the one hand, we are faced with a model that has been produced through the extraction and aggregation of features from a training set of face images and, on the other, we have the uniqueness of a face that has to be manipulated according to this model without, of course, losing its specificity. The implantation of the model—made of an average

between a multiplicity of faces—has to be modulated to fit the singularity of the original face. Of course, the more the reticulation of distances between feature points is dense and the more the feature points are connected in a systematic triangulation, the more it will be possible to control the fitting of the triangulation with the original face.

We can state that this process resembles the one described by Nelson Goodman (1986) under the concept of diagrammaticality. This concept emerges in the attempt to explain the relations between autographic symbolic systems (the singularity of the inscription) and allographic symbolic systems (the instructions and the rules for producing something repeatable, i.e. a notation). More precisely, allography implies: (1) pertinent features being singled out and selected, (2) stable syntagmatic rules, and (3) instructions allowing the process to be executed many times within a consistent category. The utterance produced through this allographic procedure is disengaged from its singular enunciation, and it no longer evinces any relation to a unique or irreplaceable recording medium (in our case, every single photographed face that has been rated and from which the pertinent features have been extracted). Thus, the model produced through the processes of rating, selection, extraction and aggregation of features becomes something general and consequently applicable to new instances.

When the model and the singular face converges at the end of the process, a diagram is thus structured around anticipated commensurability and reciprocal dependence between autography and allography. For the diagram makes use of the properties of figurative density and the singularity of the original face (autography), and at the same time it reconfigures the relations between the features of this singular face through the model (allography). Diagrammaticality does not just pertain to visual representations per se, i.e., to entities which are isolatable and objectified (these characteristics being typical of autographic textuality), but is a kind of process leading to transpose some general relations present among a large number of cases onto a new one. The diagram is therefore a way of mediating between a self-contained world (here, the singularity of a marked face, which falls under the order of autographic systems) and the extendibility of proof, the generalization process leading to the production of repeatable models, such as in allographic systems.

It is certain that computed beauty is very different from the kinds of beauty we have previously examined. Through algorithms, the machine tries to follow and to adapt to human raters, but in doing so, every specificity and every unicity, even races, which are very large and comprehensive

contrast, in the beautification process, the objective is to find the adequate target shape into which the source image is to be warped.



⁷ This kind of beautification process is very different from the image morphing that can be used for producing fake faces: such a technique performs a continuous transformation between two different faces while identifying their corresponding features in order to define an appropriate warp. Regarding the device that is the mask, which, in the context of deepfake generation, designates a mediating figure between one face and another and which is characterized by blurring, see Dondero (2021) addressing the issue of "becoming the other". In

Footnote 7 (continued)

categories, are almost equalized: At the end of the process, it's apparently difficult to distinguish the original face or the ethnic group to which these faces belong. The fact that the beautification process is successful specifically in the case of input photographs presenting neutral facial expressions means that there is no possibility for beauty in movement or for a kind of beauty which does not respect the proportions established through the averages produced by triangulation. Faces become surfaces which can be easily manipulated: the result is that the expression of life experiences is removed from them: the deepness of the face, its stratification of experiences, is nullified.

Fortunately, in some studies, such as Zhan et al. (2020),⁸ it has been demonstrated that, against popular belief, the most attractive faces are not average faces. In such kinds of studies, the experimental parameters and the corpora differ and are more complex. As regards corpora, it is clear that a corpus made of 2D photos in frontal view is inadequate because of the loss of sensitivity in capturing the information pertaining to 3D depth. Instead of 2D portraits, the facial model used in such studies of attractiveness is the generated face set in a 3D space—in the experiment, the generated 3D face is displayed according to one of three possible viewpoints (-30° , 0° or $+30^{\circ}$ rotation in depth). These studies also highlight the influence of environmental and social factors on the perception of facial attractiveness. Zhan et al. (2020) found that different cultural norms exist for West European and East Asian viewers: a pouty mouth, darker skin and redder cheeks are preferred by Westerners, while a high nose bridge, a pointy chin, a prominent forehead and high contrast eye regions are preferred by East Asians. These features are two face shape features that are popular in plastic surgery choices in each respective culture. The preference for a darker skin tone among West Europeans and for a lighter one among East Asians is also consistent with women's cultural cosmetic choices.

Finally, at the end of the study, even if the generated 3D model allows to take into account the volume of the face and not only the frontal 2D view, my observation is that it would probably be more adequate, for the sake of the research, to use real cultural objects as experimental corpora, such as, for instance, series of photographs or film sequences. In cinematographic productions, it would be possible to discover other characteristics of beauty that depend on the rhythm of the glance, the rhythm in changing eye expressions, and the modulation of passion during a dialogue.

We are, with computed beauty, at the opposite of the Bettina Graziani's photos in which the great range of the model's positions and gestures shows the directions, that is,

 $^{^{8}}$ Many thanks to Marco Viola for alerting me to the relevance of this paper.



the future of the gesture—or its possible development. In the case of algorithmic beauty, no direction is possible because the face remains something static. The face is only seen as a manipulable object which does not embody the multiple possibilities of life but only provides multiple possibilities for tests and experimentations (See Roelens 2017)

6 Conclusion

In this paper, I drew a path between different kinds of instituted beauty: the model, the mannequin, the blond adult doll Barbie and, finally, the beauty mathematically produced to be in accordance with human preferences and ratings. If the mannequins of store windows and of Valerie Belin's catalogue are interesting cases because they raise the question of the mystery and of the uncanny in human beauty, Barbie is a crucial case of the kitschification of beauty, that is, the result of the multiplication of flat identitary roles that is nothing else than a reiteration of the same, and a gadgetification of features deemed beautiful (blond hair, perfect body).

The examples of Bettina Graziani's photographs and the modelization of facial attractiveness form the extreme points of this path. The modelization of beauty features postulates a discrepancy between average and singular beauty that reminds us of the European concept of Beauty as the mediation between the Sensible and the Ideal World in Plato and which is described by sinologist François Jullien as the foundation of our Western metaphysics. "It is through beauty that we exercise ourselves towards the detachment from the senses as well as towards the abstraction-absolutization of the idea" (p. 41, my translation).

Jullien describes the sources of Western metaphysics as the passage from the adjective "beautiful" to the substantive "Beauty" (from "beau" to "le beau"). This substantification had for consequence the isolation of beauty and the avoidance of a horizontal path "from token to token (d'une occurrence à l'autre)" (Jullien, p. 14, my translation).

The case of the model Bettina is exactly the opposite. It is not even relevant to describe it in terms of Western beauty. It is more fitting to describe Bettina's case in the terms of the Chinese landscape, characterized as a place where the mountains never cease to interact with the waters, in an enduring balance. According to the comments by François Jullien on aesthetic and existential thinking in China,

The embellishment is but a *moment*, the one when, in the figure, the soft factor (*yin*–) blends itself into the hard factor (*yang*–) to keep it from hardening; then, the hard factor (*yang*) in turn comes to restrain the soft factor so as to prevent it from further softening and from becoming excessive. [...] What is the lesson to be drawn from this "embellishment"? It is that of a

delicate balancing act through diffuse "impregnation" [...] and "subduement" [...], all of which avoids garishness (l'éclat). (Jullien, 2010, p. 28, my translation)⁹

It is in the landscape genre that we can find this sort of composite figure which tries to express the relation between the "prominent" (flourishing) and the "scattered", a distributed composition of "here and there" ("ça et là"). It is a kind of "beauty" that is diffuse and difficult to precisely locate in space and that is perfectly flowing. Beauty thus conceived probably explains why, in Chinese painting, landscapes have always been privileged over portraiture: portraiture always tries to outline the exemplary moment of an identity, while the landscape traces the here and there of fugitive concentrations of natural forces becoming forms and of forms becoming forces. So, the perfect picture of a face would have to display a kind of beauty resembling that of a watery mountainous landscape.

Having reached the end of our trajectory, we can state that beauty has always something to do with spirituality. With models such as Bettina, spirituality coincides with anonymity, that is, with the model's sacrifice of self, with the impossibility for her to fully identify the subject portrayed as being herself. In the mannequin's face, spirituality recovers the mystery of movement and stillness, the instability between the animate and inanimate which positions the mannequin in a singular place between God and the machine. Dolls have been compared to silent angels who position humanity face to all the unanswered questions of our existence; in this domain, Barbie occupies a special place because, through her availability and her pre-fabricated lives, she is likened to a kitsch angel.

Finally, if algorithmic beauty, on the one hand, and the case of Bettina on the other represent opposite ideas of beauty, the calculable vs. the always unpredictable, erratic and constantly different, non-recognizable facets of face, we can state that the first expresses well Plato's idea of Beauty as a multitude of cases with the ambition to become one, e.g. a model, whereas Bettina is an example of the always changing beauty of Chinese landscapes, and of the distributed Sacredness of life.

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⁹ Original version: « L'embellissement n'est qu'un *moment*, celui où, sur la figure le facteur souple (*yin*–) se mêle au facteur dur (*yang* –) pour l'empêcher de se durcir; puis où le facteur dur (*yang*) vient à son tour à barrer la route au facteur souple pour l'empêcher de s'amollir et de devenir excessif. [...] Quelle est donc la leçon à tirer de cet « embellissement» ? Elle est celle d'un délicat équilibrage par « imprégnation» diffuse [...] et « estompement» [...], le tout évitant l'éclat. »