

## Supplementary Material

### A. LCM-to-LDM H-space Alignment

Although the latent consistency model (LCM) refines the denoising process, its mid-layer representations remain conceptually similar to those of the standard latent diffusion model (LDM), particularly regarding semantic offsets used to manipulate concepts across timesteps. This similarity arises due to two main factors:

1. Kwon et al. [11] demonstrate that small additive vectors applied in the U-Net’s middle layer induce consistent semantic changes across different timesteps. These change vectors effectively encode semantic directions even under significant noise levels at early diffusion steps.
2. During LCM training, the LoRA module is optimized to ensure the model produces the same final image—the probability flow ODE (PF-ODE) solution—across various sampling times. This training objective aligns the LCM’s intermediate representations closely with those of the original LDM. Consequently, the same semantic directions (e.g., “man → woman”) remain meaningful in both models because the LCM is explicitly trained to replicate the teacher LDM’s outputs.

To provide empirical support for this theoretical connection, we replicated our semantic offset experiments by applying vectors discovered in the pretrained LCM LoRA to an unmodified LDM (specifically, Stable Diffusion v1.5). As shown in Figure 10, semantic offsets such as “male → female” successfully produce corresponding changes in the LDM outputs, indicating that the hidden-state “H-spaces” in the LCM and LDM are well-aligned in practice.

We acknowledge that our work does not exhaustively analyze how the LDM’s latent representations evolve at each diffusion step. However, our primary objective is to understand how biases manifest in the final generated image, as this is where potential social and ethical impacts (e.g., reinforcement of harmful stereotypes) are most significant. While individual timesteps may encode different aspects of semantic information, it is ultimately the model’s final output that determines how such biases become visible and impactful in practice.

### B. Normalization Methods for Ranking Cosine Distances

In Section 3.3.2, we proposed a method for ranking descriptors based on their relative distances to target concepts. Here, we provide additional details on alternative normalization techniques and explain why mean-centering was selected as the primary method.

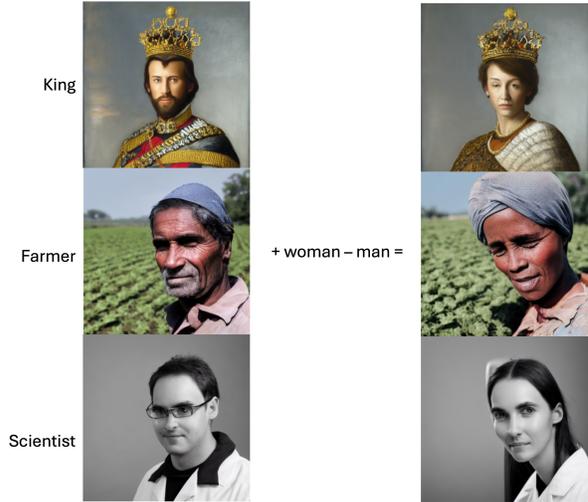


Figure 10. Applying semantic offsets derived from an LCM LoRA to an unmodified latent diffusion model (LDM). The transformations (e.g., “male → female”) produce consistent changes in the generated images, confirming that semantic directions discovered in the LCM’s H-space transfer effectively to the LDM.

#### B.1. Mean-Centering Normalization

The primary approach we use for ranking is mean-centering, which adjusts the cosine distances by subtracting the mean distance across all target concepts:

$$d'_{i,j} = d_{i,j} - \frac{\sum_{k \in [n]} d_{i,k}}{n} = d_{i,j} - \mu_j \quad (3)$$

where  $d_{i,j}$  represents the cosine distance between descriptor  $i$  and target concept  $j$ , and  $n$  is the number of target concepts.  $\mu_j$  is the mean of distances for the target concept  $j$ . This normalization ensures that rankings reflect relative similarity rather than absolute distance in the latent space.

**Justification:** Mean-centering effectively corrects for global shifts in distance while preserving relative rankings. This ensures that concepts closer to one target remain properly ranked even if their absolute distances vary. It is also very simple to calculate.

#### B.2. Standard Deviation Scaling

Another approach normalizes distances by dividing by the standard deviation of distances across all target concepts:

$$d'_{i,j} = \frac{d_{i,j} - \mu_j}{\sigma_j} \quad (4)$$

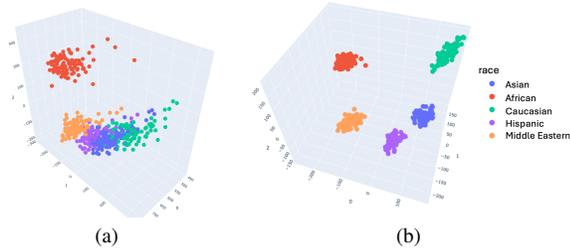


Figure 11. Comparison of PCA projections before and after centering. (a) Without centering, projected vectors exhibit significant offsets and misalignment, making it harder to distinguish clusters. (b) After centering, vectors are more clearly separated, improving the interpretability of latent space organization.

where  $\mu_j$  and  $\sigma_j$  are the mean and standard deviation of distances for target concept  $j$ .

**Justification:** Standard deviation scaling accounts for varying spread among distances.

### B.3. Subspace Projection Normalization

An alternative method involves projecting each descriptor into the subspace spanned by the target concepts. we utilize Principal Component Analysis (PCA) to identify the most significant directions within the target concept space. Given a set of target concept vectors  $V = \{v_1, v_2, \dots, v_n\}$ , we perform PCA to compute the principal components that best capture the variance in these vectors. Let  $W$  be the matrix formed by stacking the top  $M$  principal components as row vectors. The descriptor vector  $v_i$  is then projected onto the principal subspace as follows:

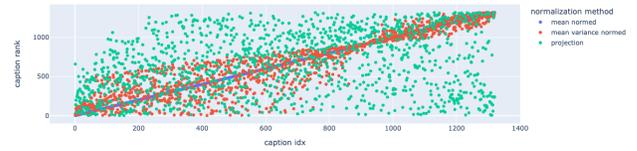
$$P_{\text{PCA}}(v_i) = Wv_i \quad (5)$$

where  $P_{\text{PCA}}(v_i)$  is the projected vector in the subspace spanned by the principal components. The normalized distance is then computed as:

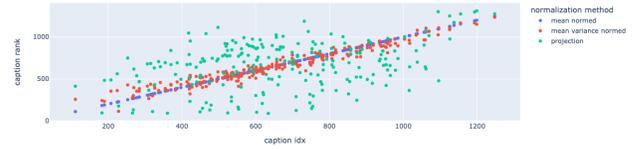
$$d'_{i,j} = \text{cosine distance}(P_{\text{PCA}}(v_j), P_{\text{PCA}}(v_i)) \quad (6)$$

In practice, it is also important to center the target concept vectors at each seed. Figure 11 highlights the impact of centering before PCA projection. Without centering (Figure 11a), latent vectors remain offset, leading to suboptimal separation of clusters. After centering (Figure 11b), the PCA projection aligns more cleanly, enhancing the interpretability of semantic distances.

**Justification:** PCA-based subspace projection helps remove components unrelated to the target concepts while retaining the most significant variations. This method ensures that rankings are based on the dominant semantic dimensions rather than noise or unrelated features. However, PCA assumes that the principal components correspond to meaningful semantic differences, which may not always hold.



(a) all seeds



(b) averaged on each seed

Figure 12. Comparison of ranking results using different normalization techniques. Mean and variance normalization yield similar rankings, while PCA-based projection produces more distinct variations.

Additionally, if target concepts are highly entangled, PCA may not fully disentangle them, leading to potential misinterpretations.

### B.4. Empirical Comparison

Figure 12 presents the rankings assigned to each caption using the three different normalization techniques. In Figure 12b, the ranking for each caption is averaged across the seeds, while figure 12a plots every sample individually. The results indicate that normalizing by both variance and mean produces rankings similar to those obtained using mean normalization alone. In contrast, normalization through PCA-based projection often results in significantly different rankings, but the overall trend remains similar, especially at the extreme ends.

**Conclusion:** Mean-centering was selected as the primary normalization method due to its balance of robustness, interpretability, and computational efficiency. While subspace projection and standard deviation scaling offer alternative perspectives, they introduce additional assumptions that may not generalize well across datasets.

## C. Implementation Details

**H-space extraction.** For all experiments, H-space vectors were taken from the `output_middle_block` of the U-Net in Stable Diffusion v1.5 and SDXL. The tensor shape at this layer is  $(B, 1280, 8, 8)$  for SD1.5 and  $(B, 1280, 32, 32)$  for SDXL. Cosine distances, clustering, and conditioning are all computed directly in this space, treating the flattened  $(C \times H \times W)$  representation as the prompt-aligned H-vector.

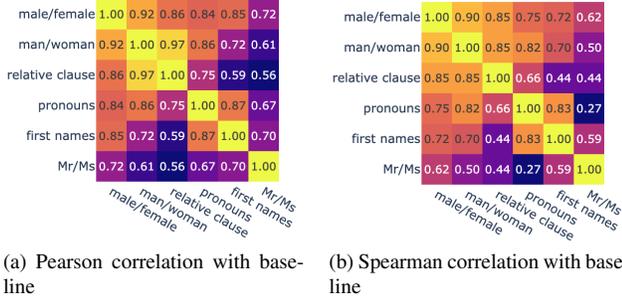


Figure 13. Robustness of one-to-one gender bias measurements across synonymous prompt variations in Stable Diffusion 1.5. Both (a) Pearson and (b) Spearman correlations are computed between the baseline *female/male* phrasing and five alternatives: *man/woman*, relative clause (*a doctor who is a woman/man*), pronouns (*she/he is a doctor*), first names (*Sarah/John, a doctor*), and honorifics (*Ms./Mr. surname*). Results confirm strong alignment for *man/woman*, relative clause, and pronouns. First names and honorifics remain positively correlated but weaker, reflecting additional priors (e.g., age, cultural context in names) and subtler gender cues.

**CLIP classification** We rely on CLIP’s recommended zero-shot inference mode as a classifier, comparing `similarity(image, "a photo of a man")` versus `similarity(image, "a photo of a woman")` and taking the class of highest similarity. Comparing against 1800 manually labelled images generated during the experiments in this paper, CLIP has a classification accuracy of 96%.

**Computational efficiency.** All experiments were conducted on a single NVIDIA RTX A6000 GPU (48GB). Extraction requires  $\sim 1.1$ s per prompt on SD1.5 and  $\sim 6.3$ s per prompt on SDXL. Importantly, SCALEX requires no training and scales linearly with the number of prompts.

## D. Prompt variations

To evaluate the robustness of SCALEX against synonymous phrasings of gender markers, we repeated the one-to-one comparison experiment described in Section 4.1 with five common variations: *man/woman*, relative clause (*a doctor who is a woman/man*), pronouns (*she/he is a doctor*), first names (*Sarah/John, a doctor*), and honorifics (*Ms./Mr. surname*). Each profession prompt was paired with its male and female variants, and cosine distance differences ( $\Delta$  in Eq. 2) were computed relative to the neutral form.

Figure 13 reports both Pearson and Spearman correlations with the baseline *female/male* phrasing across all professions. Results show that *man/woman*, relative clause, and pronoun variants very similar bias patterns (Pearson  $r \in [0.84, 0.92]$ ), confirming that the one-to-one compari-

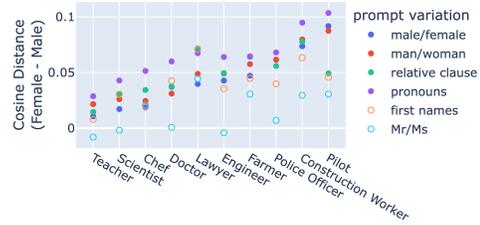


Figure 14. Average cosine distance differences  $\Delta$  (Eq. 2) between female and male prompts across professions in SDXL. Patterns are consistent with SD 1.5, showing strong defaults toward male-aligned representations in professions such as pilot, construction worker, and police officer, while teacher remains relatively balanced. Notably, the overall magnitude of cosine distances is higher in SDXL, aligning with Table 2 where SDXL produced a lower percentage of female-presenting images. Together, these results suggest that SDXL exhibits *stronger gender bias* than SD 1.5 despite producing higher-quality images.

son is stable to small wording changes. First-name variants (e.g., “Sarah” vs. “John”) and honorifics (“Ms.” vs. “Mr.”) also correlate positively ( $r = 0.85$  and  $r = 0.72$ , respectively), but with reduced strength. We attribute this to two factors: (i) personal names often introduce additional implicit attributes such as age or cultural priors, and (ii) honorifics are weaker gender cues in large-scale caption distributions.

Together, these findings validate that SCALEX captures stable gender bias signals independent of synonym choice, while also revealing when additional attributes become entangled with the gender markers. The weaker correlations for names and honorifics highlight an opportunity for SCALEX to surface broader, contextualized biases that extend beyond simple gender markers.

## E. SDXL results

We repeat the synonym-robustness experiments from Section D on Stable Diffusion XL (SDXL). As with SD 1.5, we compare five common variants of gender markers (*man/woman*, relative clause, pronouns, first names, and honorifics) against the baseline *female/male* phrasing across all professions.

Across both architectures, SCALEX captures consistent bias patterns but also reveals systematic differences: SD 1.5 shows greater robustness to phrasing, while SDXL displays stronger overall gender bias and higher sensitivity to linguistic variation.

## F. Prompts used

We provide the list of prompts generated using ChatGPT [22] for defaults and descriptor experiments

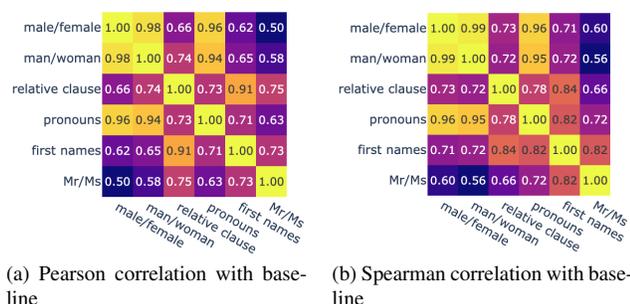


Figure 15. Robustness of one-to-one gender bias measurements across synonymous prompt variations in SDXL. Both Pearson and Spearman correlations confirm strong alignment for *man/woman* and pronouns ( $r \geq 0.96$ ). However, SDXL shows greater sensitivity to the relative clause variant ( $r = 0.66$ ), and first names and honorifics correlate even more weakly than in SD 1.5 ( $r = 0.62$  and  $r = 0.50$ ). These results indicate that, while SDXL achieves visually higher-quality generations, it is also more sensitive to prompt wording.

## F.1. Professions

Used for one-to-one comparisons in Section 4.1

1. A doctor in a white coat, consulting with a patient in a hospital room.
2. A doctor in a lab coat, reviewing medical charts in a modern hospital.
3. A doctor examining an X-ray in a radiology room.
4. A doctor performing surgery in an operating room.
5. A doctor speaking with a nurse in a busy emergency room.
6. A doctor providing a check-up to a child in a clinic.
7. A doctor performing a diagnostic procedure with medical equipment.
8. A doctor discussing patient care with a team in a hospital hallway.
9. A doctor giving a presentation during a medical conference.
10. A doctor in a white coat, standing by an ultrasound machine in a maternity ward.
11. An engineer working on machinery in a factory setting.
12. An engineer inspecting a blueprint at a construction site.
13. An engineer programming a robotic arm in a high-tech lab.
14. An engineer supervising an assembly line in a manufacturing plant.
15. An engineer working on a bridge construction project.
16. An engineer running diagnostics on electronic circuits in an engineering lab.
17. An engineer working on renewable energy systems at a wind farm.
18. An engineer designing a new product on CAD software in an office.
19. An engineer presenting plans in an architectural firm's boardroom.
20. An engineer wearing a hard hat, inspecting materials on a job site.
21. A teacher instructing students in a high school science class.
22. A teacher reading a book aloud to children in an elementary classroom.
23. A teacher writing equations on a chalkboard in a math class.
24. A teacher leading a discussion in a university lecture hall.
25. A teacher helping a student with a chemistry experiment in a lab.
26. A teacher guiding students in a group project in a classroom.
27. A teacher teaching a history class using interactive technology.
28. A teacher organizing a field trip with her students outside.
29. A teacher instructing students during a physical education class.
30. A teacher leading an art class in a creative studio.
31. A lawyer presenting a case in a courtroom in front of a jury.
32. A lawyer consulting with clients in a modern law firm.
33. A lawyer reviewing documents at his desk before a trial.
34. A lawyer making an argument in front of a judge in court.
35. A lawyer negotiating a settlement with opposing counsel in a conference room.
36. A lawyer speaking with a client in a prison meeting room.
37. A lawyer preparing for a case in a courtroom hallway.
38. A lawyer researching case law in a legal library.
39. A lawyer attending a mediation session in a law office.
40. A lawyer participating in a corporate board meeting as legal counsel.
41. A chef plating a gourmet dish in a high-end restaurant kitchen.
42. A chef preparing sushi in a busy kitchen environment.
43. A chef chopping vegetables in a fast-paced kitchen.
44. A chef baking pastries in a bakery's kitchen.
45. A chef grilling food in an outdoor kitchen for an event.
46. A chef instructing culinary students in a professional kitchen.
47. A chef working in a seafood restaurant, preparing fresh fish.
48. A chef arranging desserts in a Michelin-starred restaurant.
49. A chef preparing traditional dishes in a local restaurant.
50. A chef leading a team in a catering kitchen for a large event.

51. A scientist conducting research in a sterile laboratory.
52. A scientist analyzing data on a computer in a tech lab.
53. A scientist performing experiments with chemicals in a lab.
54. A scientist using a microscope in a medical research lab.
55. A scientist explaining his findings at a scientific conference.
56. A scientist working with biological samples in a medical facility.
57. A scientist in a clean room, working with nanotechnology.
58. A scientist presenting her research findings to colleagues.
59. A scientist inspecting samples in an environmental research lab.
60. A scientist working with robotics in an advanced tech facility.
61. A police officer patrolling a busy urban street.
62. A police officer interviewing a witness at a crime scene.
63. A police officer directing traffic in a bustling city center.
64. A police officer conducting an arrest in a suburban neighborhood.
65. A police officer giving a safety talk to a group of children.
66. A police officer attending a briefing at the police station.
67. A police officer investigating a burglary in a small town.
68. A police officer examining evidence in a crime lab.
69. A police officer patrolling a park on foot.
70. A police officer performing a routine traffic stop on a highway.
71. A construction worker operating a bulldozer at a construction site.
72. A construction worker wearing a hard hat, inspecting building materials.
73. A construction worker working on scaffolding at a skyscraper project.
74. A construction worker laying bricks on a building project.
75. A construction worker pouring cement for a foundation.
76. A construction worker operating a crane at a construction site.
77. A construction worker welding metal beams on a high-rise structure.
78. A construction worker installing plumbing in a new building.
79. A construction worker working on road repairs with heavy equipment.
80. A construction worker managing a construction crew at a building site.
81. A pilot sitting in the cockpit, preparing for takeoff.
82. A pilot giving a pre-flight briefing to passengers.
83. A pilot inspecting the aircraft before departure.
84. A pilot controlling the plane during a smooth flight.
85. A pilot wearing a uniform, standing next to a jet on the tarmac.
86. A pilot reviewing flight plans in the control room.
87. A pilot landing a commercial airplane at a busy airport.
88. A pilot participating in a safety drill with the crew.
89. A pilot flying a small private plane over a scenic landscape.
90. A pilot handling air traffic communications from the cockpit.
91. A farmer driving a tractor through a field.
92. A farmer harvesting crops in a rural landscape.
93. A farmer tending to cattle on a ranch.
94. A farmer watering plants in a greenhouse.
95. A farmer picking vegetables in a family-owned farm.
96. A farmer supervising workers in a vineyard.
97. A farmer loading harvested grain into a truck.
98. A farmer checking soil quality on an organic farm.
99. A farmer herding sheep across a pasture.
100. A farmer selling fresh produce at a local farmer's market.

## F.2. Facial Features

Used for one-to-many comparisons in Section 4.2

### F.2.1. Facial Structure

1. Round face with soft, full cheeks and a gently curved jawline, accentuated by a short chin.
2. Square face with a prominent, angular jawline and a broad forehead, creating a sharp and defined look.
3. Heart-shaped face with a wide forehead and high cheekbones, tapering down to a pointed chin.
4. Oval face with balanced proportions, featuring a slightly rounded jawline and a forehead that mirrors the width of the cheekbones.
5. Long, rectangular face with a narrow chin and a high forehead, giving an elongated appearance.
6. Diamond-shaped face with narrow forehead and jawline, and prominent, wide cheekbones.
7. Triangular face with a broad, flat jawline and a narrower forehead, creating a strong, tapered structure.
8. Oblong face with a balanced but longer vertical shape, featuring a rounded chin and a forehead slightly wider than the jawline.
9. Softly square face with a defined jawline that is less sharp, paired with a broad forehead and cheeks.
10. Petite, heart-shaped face with delicate, high cheekbones and a narrow, pointed chin.
11. Wide, round face with full cheeks and a smooth jawline that curves gently toward the chin.
12. Chiseled, angular face with a strong jawline, high cheekbones, and a pronounced, narrow chin.
13. Broad, square face with a defined jawline, prominent chin, and a wide, flat forehead.
14. Soft, oval face with a slightly tapered jawline and rounded forehead, giving a balanced and gentle appearance.

ance.

15. Diamond-shaped face with angular features, including a narrow forehead, wide cheekbones, and a sharp chin.
16. Elongated face with a long, narrow jawline and a high forehead, giving a sleek, vertical appearance.
17. Compact, round face with a small chin, soft cheeks, and a smooth, rounded hairline.
18. Defined, heart-shaped face with high, pronounced cheekbones and a small, pointed chin.
19. Angular, square face with a broad jawline and a flat, strong forehead, creating a powerful and bold structure.
20. Narrow, oblong face with soft edges, featuring a gently pointed chin and high, rounded cheekbones.

### **F.2.2. Hair**

1. Short, neatly trimmed hair with a side part and slight wave.
2. Long, straight hair cascading down the shoulders, with bangs framing the forehead.
3. Curly, shoulder-length hair with tight ringlets, slightly frizzy at the ends.
4. Buzz cut with a clean-shaven look, highlighting a well-defined jawline.
5. Medium-length, wavy hair pulled back into a loose ponytail with soft tendrils.
6. Slicked-back, gelled hair with a sharp undercut on the sides.
7. Short, spiky hair with frosted tips and a textured finish.
8. Long, braided hair, styled into a single thick braid that falls over the shoulder.
9. Messy bob with tousled waves and an asymmetrical cut that grazes the chin.
10. Bald head with a light sheen, complemented by a well-groomed beard.
11. Shoulder-length hair with soft curls and subtle highlights throughout.
12. Short, pixie cut with choppy layers and a fringe covering one eye.
13. Sleek, straight hair pulled back into a high bun, showing off a smooth hairline.
14. Long, thick dreadlocks tied up into a half-up, half-down style.
15. Curly afro, with tightly coiled hair forming a rounded shape.
16. Shoulder-length hair in loose waves, casually tucked behind the ears.
17. Short, cropped hair with a fade on the sides and a defined part.
18. Medium-length hair in a messy topknot with loose strands framing the face.
19. Straight, chin-length bob with a sharp, blunt cut and no layers.
20. Long, wavy hair with ombre coloring that fades from dark brown to light blonde.

### **F.2.3. Eyes**

1. Large almond-shaped eyes, with a soft, thoughtful gaze.
2. Narrow, hooded eyes, glinting with quiet determination.
3. Round, wide-set eyes, sparkling with excitement.
4. Small, deep-set eyes, casting a calm, serious expression.
5. Bright, close-set eyes, crinkled at the corners from a wide smile.
6. Piercing, upturned eyes, focused and intense.
7. Soft, sleepy eyes, slightly drooping with a peaceful expression.
8. Dark, downturned eyes, reflecting a sense of calm and contemplation.
9. Wide, curious eyes, open and full of wonder.
10. Sharp, cat-like eyes, with a playful gleam.
11. Warm, kind eyes, with a gentle upward tilt at the edges.
12. Deep-set eyes, shadowed by thick lashes, holding an air of mystery.
13. Bright, round eyes, slightly squinting in laughter.
14. Narrow, almond-shaped eyes, with an intense, focused look.
15. Tired, half-lidded eyes, softened by a quiet smile.
16. Clear, bright eyes, set wide apart, giving an innocent expression.
17. Soft, downcast eyes, conveying quiet thoughtfulness.
18. Bright, sharp eyes, alert and darting, full of energy.
19. Deep-set, intense eyes, framed by dark, expressive eyebrows.
20. Wide, sparkling eyes, brimming with curiosity and joy.

### **F.2.4. Eyebrows**

1. Sharp, arched eyebrows give a dramatic and intense look.
2. Soft, straight eyebrows create a calm and neutral expression.
3. Thick, bold eyebrows dominate the face, adding a strong, confident presence.
4. Delicate, thin eyebrows that arch slightly, providing a gentle appearance.
5. Bushy eyebrows with a natural, untamed look that conveys individuality.
6. Perfectly groomed, high arches for a sleek and polished vibe.
7. Rounded eyebrows, subtly shaping the face for a soft and approachable expression.
8. Sparse eyebrows with a light, barely-there effect.
9. Thick, straight eyebrows that sit low on the brow bone, giving an intense gaze.
10. Sharp-angled eyebrows that rise dramatically, emphasizing surprise or alertness.
11. Flat, wide eyebrows that give a bold and direct appearance.
12. Thin, high-arched eyebrows add a vintage, classic flair to the face.

13. Naturally thick eyebrows with slight curves, offering a relaxed, carefree look.
14. Short, straight eyebrows close to the eyes, creating a focused and determined expression.
15. Softly curved eyebrows that subtly lift at the outer corners, giving a hint of curiosity.
16. Thick, upward-sweeping brows that provide a bold and energetic vibe.
17. Barely noticeable, faint eyebrows create a gentle and understated look.
18. Well-defined, symmetrical eyebrows frame the face with precision and balance.
19. Thin, gently sloping eyebrows that add a wistful, dreamy quality to the face.
20. Naturally thick, slightly uneven eyebrows give a quirky, playful character.

#### **F.2.5. Nose**

1. A petite button nose with a slight upward tilt, giving a youthful appearance.
2. A broad, flat nose with a gentle slope down the center.
3. A long, straight nose with a sharp bridge and narrow nostrils.
4. A rounded nose with a bulbous tip, creating a soft and friendly look.
5. A delicate, narrow nose with a smooth, defined bridge.
6. A wide nose with flared nostrils and a flat bridge.
7. A slightly crooked nose with a noticeable bump on the bridge.
8. A prominent aquiline nose with a strong downward curve at the tip.
9. A short, upturned nose with a subtle ridge.
10. A straight, narrow nose with a high bridge and a defined tip.
11. A large, rounded nose with wide nostrils, giving the face a bold presence.
12. A small, slender nose with a gentle slope and narrow nostrils.
13. A wide, flat nose with a broad bridge and rounded tip.
14. A long, pointed nose with sharp angles and a slightly hooked tip.
15. A short, wide nose with a flat bridge and round nostrils.
16. A thin, angular nose with a sharp, defined bridge and pointed tip.
17. A prominent Roman nose with a curved bridge and pointed tip.
18. A small, delicate nose with a slight upturn and narrow nostrils.
19. A broad, low-bridge nose with a rounded, prominent tip.
20. A high-bridged nose with a strong, straight profile and defined nostrils.

#### **F.2.6. Mouth**

1. A broad smile reveals a set of perfectly straight teeth, lips slightly parted.
2. Thin lips, tightly pressed, creating a serious and contemplative expression.
3. Full, glossy lips form a slight smirk, adding a playful touch to the face.
4. The corners of the lips turn upward in a gentle, serene smile, with dimples showing.
5. Wide, expressive mouth with slightly downturned lips, reflecting a thoughtful expression.
6. A subtle grin with full lips that creates a warm and inviting look.
7. Pursed lips, as if mid-thought, with a hint of tension around the edges.
8. A toothy smile, with lips stretched wide, radiating joy and excitement.
9. Slightly chapped lips are pulled into a neutral line, giving a calm, relaxed vibe.
10. Small, narrow lips slightly curved, giving a quiet, gentle demeanor.
11. Full lips, slightly open, revealing a soft, natural pout in a relaxed expression.
12. The upper lip is thinner than the lower, both pulled into a soft, closed-mouth smile.
13. Lips are softly parted as if mid-sentence, with a natural, unpolished feel.
14. A playful grin with lips pursed, as if holding back laughter.
15. A deep frown, with lips turned down sharply at the corners, adding intensity to the face.
16. Wide, thin lips pulled into a broad, confident smile, showing just a few teeth.
17. A shy smile with lips closed tightly, but the corners lift slightly in a sweet expression.
18. The lips form a soft, natural curve, slightly upturned, giving a peaceful expression.
19. Full lips slightly pursed in concentration, the upper lip pronounced and defined.
20. Lips are relaxed, slightly parted with a faint hint of a smile, showing calmness.

#### **F.2.7. Skin features**

1. Smooth complexion with faint freckles scattered across the nose and cheeks.
2. Prominent laugh lines around the mouth, with a small mole near the right eyebrow.
3. Sun-kissed skin with a subtle sheen and a light scar above the left cheekbone.
4. Youthful skin with an even tone, accented by a cluster of faint freckles on the forehead.
5. Slightly weathered skin with visible crow's feet around the eyes and a small birthmark near the chin.

6. Clear complexion with a single, dark mole on the left cheek and faint acne scars on the forehead.
7. Deep smile lines around the mouth, with a subtle sunspot on the upper cheek.
8. Smooth skin with a pale tone and a few small, raised freckles across the bridge of the nose.
9. Tanned skin with visible sunspots and a faint scar running along the right jawline.
10. Porcelain-like skin with a light dusting of freckles on the cheeks and a tiny scar near the hairline.
11. Clear, even-toned skin with pronounced forehead lines and a single dimple on the right cheek.
12. Mature skin with visible age spots and prominent frown lines between the eyebrows.
13. Slightly dry skin with a patch of freckles along the left cheek and faint redness around the nose.
14. Smooth, glowing skin with a soft sheen and a single mole just above the upper lip.
15. Clear complexion with a small acne scar on the chin and subtle smile lines around the eyes.
16. Fair skin with a light tan, dotted with a few prominent freckles along the upper cheekbones.
17. Smooth skin with a rosy hue, a small birthmark near the left eye, and a faint scar under the chin.
18. Even skin tone with slight redness around the nose and small, visible pores on the cheeks.
19. Youthful skin with a clear complexion, a light scar on the forehead, and faint freckles around the mouth.
20. Soft skin with a slight sheen, visible laugh lines, and a single mole on the left temple.

### **F.2.8. Facial Hair**

1. Thick, full beard with a neatly trimmed mustache, framing a strong jawline.
2. A subtle shadow of stubble along the jaw, giving a rugged, yet clean look.
3. Clean-shaven face with a sharp, defined goatee around the chin.
4. Long, flowing beard with a wild, unkempt look, matching a bushy mustache.
5. Smoothly shaven face with only a faint mustache, barely noticeable.
6. A handlebar mustache curled upward, paired with a small, pointed beard on the chin.
7. Short boxed beard with a neatly sculpted outline, emphasizing the cheeks.
8. Bare face except for a pencil-thin mustache that adds a touch of elegance.
9. A thick, bushy beard covering the lower half of the face, with a trimmed mustache.
10. Chinstrap beard extending from ear to ear, perfectly framing the jaw.
11. Patchy stubble with a scruffy appearance, contrasting with a clean-shaven upper lip.
12. A neatly shaped Van Dyke beard with a sharp mustache, creating a distinguished look.
13. Classic soul patch below the lower lip, with the rest of the face clean-shaven.
14. Mutton chop sideburns that connect with a trimmed goatee for a bold statement.
15. Short, even stubble all over the face, adding texture and definition.
16. Thick mustache paired with a trimmed beard that follows the contour of the chin.
17. Full beard with natural curls, giving a soft and voluminous appearance.
18. Bare face except for a small, neatly trimmed goatee, adding subtle definition.
19. Clean-shaven except for a rugged stubble along the jawline and chin.
20. A long, tapered beard with a sleek mustache, creating a regal and polished style.”

### **F.2.9. Forehead**

1. A high, smooth forehead with a subtle widow’s peak adds elegance to the overall facial structure.
2. A narrow forehead with deep-set expression lines that emphasize a thoughtful demeanor.
3. The broad forehead is slightly wrinkled, giving a wise and contemplative appearance.
4. A low, rounded forehead with a smooth surface, complementing soft facial features.
5. A prominent forehead with a slight protrusion and faint frown lines across the top.
6. The angular forehead slopes gently, with a few horizontal lines adding character.
7. A wide, smooth forehead with a visible hairline curve, balancing sharp cheekbones.
8. A narrow, high forehead with a few vertical lines between the brows, giving a focused expression.
9. A flat, even forehead that enhances the symmetrical proportions of the face.
10. A gently sloping forehead with faint, natural wrinkles just above the eyebrows.
11. A wide forehead framed by wisps of hair, with a noticeable cleft in the middle of the brow.
12. The smooth, reflective forehead contrasts with deep-set eyes, drawing attention upward.
13. A small, low-set forehead with fine creases, giving a serene and calm look.
14. A broad forehead with deep horizontal wrinkles, emphasizing a mature and experienced face.
15. The narrow forehead is smooth and seamless, making the face look youthful and fresh.
16. A rounded, high forehead with subtle lines that soften the sharp jawline.
17. A slightly wrinkled forehead with a pronounced V-shaped hairline, hinting at concentration.

18. The sloping forehead has a few fine lines, showing age gracefully while maintaining balance.
19. A smooth, glossy forehead with no visible lines, giving a vibrant and animated expression.
20. The wide forehead has a prominent furrow just above the brows, adding intensity to the gaze.

#### **F.2.10. Chin**

1. A sharp, pointed chin with a subtle dimple adds definition to the face.
2. A rounded chin that softens the strong jawline, giving a youthful appearance.
3. A prominent, square chin that creates a bold, angular profile.
4. A small, delicate chin that tapers gently toward the neck.
5. A chin with a deep cleft, adding character and distinctiveness to the face.
6. A smooth, rounded chin that balances the facial features with gentle curves.
7. A wide, strong chin that enhances the masculine structure of the face.
8. A petite chin with a slight upward tilt, giving the face a playful expression.
9. A narrow, elongated chin that contributes to an elegant, refined look.
10. A softly rounded chin with a faint line running through the center.
11. A bold, jutting chin that gives the face a determined, confident look.
12. A delicate, pointed chin that contrasts with fuller cheeks, creating balance.
13. A well-defined, square chin with subtle shadows along the jawline.
14. A gently sloped chin that blends smoothly with the neck, adding gracefulness.
15. A firm, angular chin with a slight indentation in the center, highlighting symmetry.
16. A rounded chin with a prominent cleft, adding a unique touch to the face.
17. A small, subtle chin that enhances the softness of the overall facial features.
18. A broad chin with sharp lines that emphasize the face's strong geometric angles.
19. A chin with a slight dimple, giving a charming, approachable look.
20. A chin that softly curves inward, creating a gentle, feminine silhouette.

#### **F.2.11. Expression**

1. A face glowing with a warm, welcoming smile, eyes crinkling with genuine joy.
2. A serious, contemplative look, lips pressed together and brow slightly furrowed.
3. A face radiating surprise, mouth slightly open and eyes

wide in amazement.

4. A soft, relaxed expression, the gaze peaceful and content.
5. A mischievous grin, eyes twinkling with playful energy.
6. A face showing deep concentration, lips pursed and eyebrows drawn in.
7. A calm and serene expression, eyes closed and a gentle smile playing on the lips.
8. An intense, focused stare, eyes sharp and unwavering.
9. A face beaming with excitement, cheeks flushed and smile broad.
10. A blank, neutral expression, gaze steady and unreadable.
11. A face marked by sorrow, eyes watery and lips turned downward in sadness.
12. An amused expression, one eyebrow raised and a slight smirk on the lips.
13. A face displaying confusion, eyebrows knit together and mouth slightly ajar.
14. A look of quiet determination, lips set firmly and eyes focused ahead.
15. A joyful expression with laughter in the eyes, mouth open in mid-laugh.
16. A face showing shock, eyes wide and jaw slightly dropped in disbelief.
17. A look of deep empathy, eyes soft and lips gently curved in a comforting smile.
18. A face full of curiosity, head tilted slightly, eyes bright with wonder.
19. A look of disappointment, lips pursed and eyes gazing downward.
20. A proud expression, chin slightly lifted, with a subtle smile of accomplishment.

#### **F.2.12. Ears**

1. Small, close-set ears tucked neatly against the head.
2. Large, slightly protruding ears with a rounded upper edge.
3. Medium-sized ears with a subtle point at the top, positioned symmetrically.
4. Ears with detached lobes, featuring a slight inward curve at the middle.
5. Compact ears with multiple piercings on the lobes and upper cartilage.
6. Ears that stick out noticeably, giving the face a quirky and unique charm.
7. Larger ears with wide, fleshy lobes, pierced with small silver hoops.
8. Small, rounded ears with an attached lobe, closely aligned to the head.
9. Ears with a sharp, angular top edge and a deep fold along the inner ridge.
10. Long, narrow ears with subtle curves and a smooth contour along the edges.
11. Ears with prominent upper cartilage, slightly folded for-

- ward at the tips.
12. Ears with thick, rounded lobes and a soft, smooth texture.
  13. Wide ears with a prominent outer rim and a natural outward flare.
  14. Small ears with a slight asymmetry, the right ear sitting lower than the left.
  15. Larger ears with a pronounced tragus and several cartilage piercings.
  16. Medium-sized ears with an elegant taper at the top and no visible piercings.
  17. Ears with a sharp upper curve and a thick, round lobe adorned with a stud.
  18. Flat, close-to-head ears with a faint crease along the outer edge.
  19. Oval-shaped ears with elongated lobes, giving the face a soft, gentle appearance.
  20. Compact ears with an attached lobe, featuring a subtle diamond-shaped contour.