

SUPPLEMENTARY MATERIAL

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MORE GENERATED IMAGES BY FAST DIRECT FOR COMPRESSIBILITY, INCOMPRESSIBILITY, AND AESTHETIC QUALITY

We present the images generated for compressibility, incompressibility, and aesthetic task.

From Fig. 1 to Fig. 16 we present the generated images using the 16 **unseen prompts** by each algorithm in the compressibility task; from Fig. 17 to Fig. 32 we present for incompressibility task; from Fig. 33 to Fig. 47 we present aesthetic task.

From Fig. 48 to Fig. 50 we present 32 randomly generated images by Fast Direct for compressibility, incompressibility, and aesthetic task, respectively.

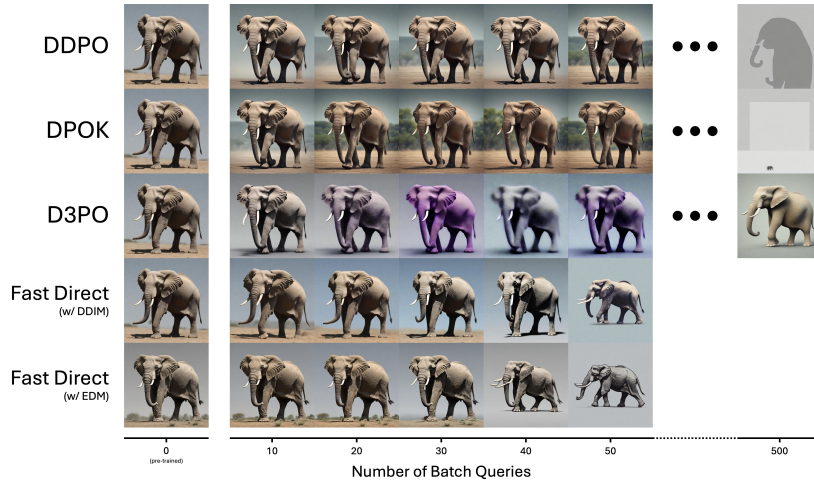


Figure 1: The generated images using the unseen prompt "elephant" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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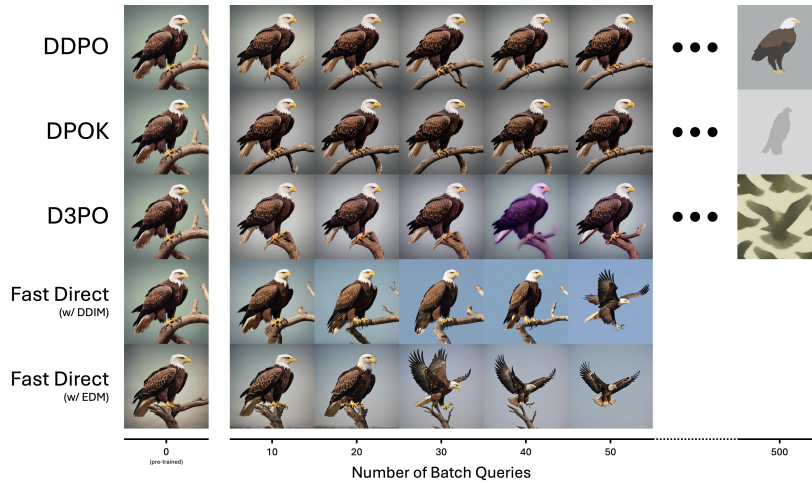


Figure 2: The generated images using the unseen prompt "eagle" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

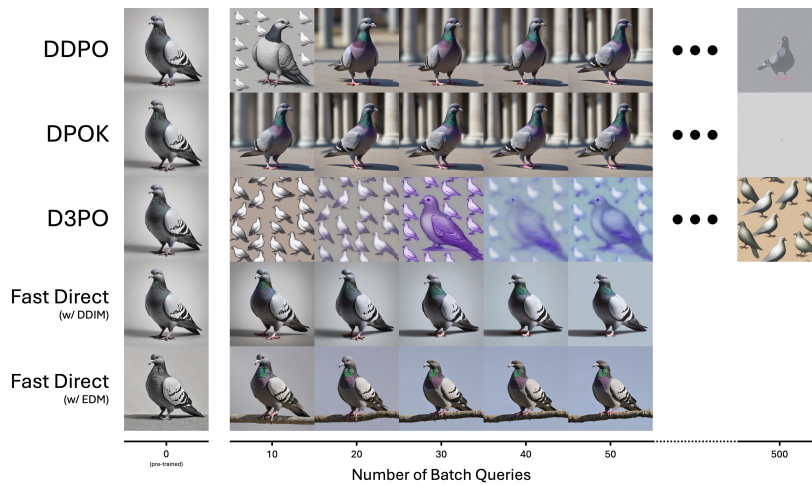


Figure 3: The generated images using the unseen prompt "pigeon" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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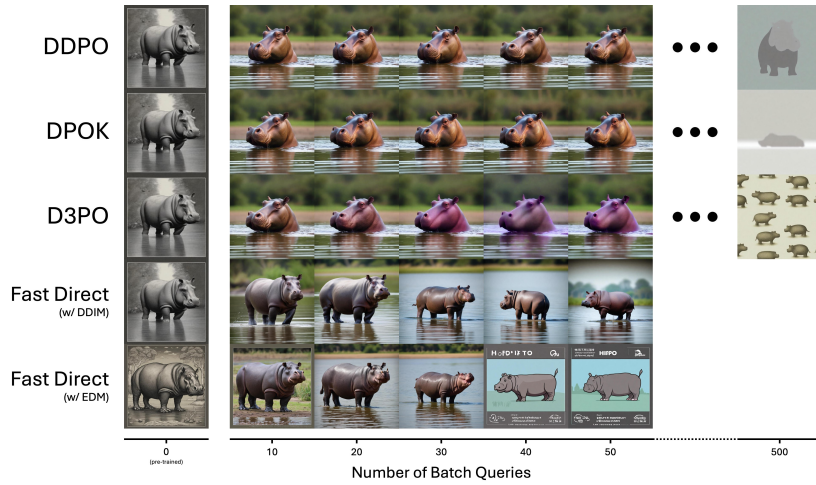


Figure 4: The generated images using the unseen prompt "hippo" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

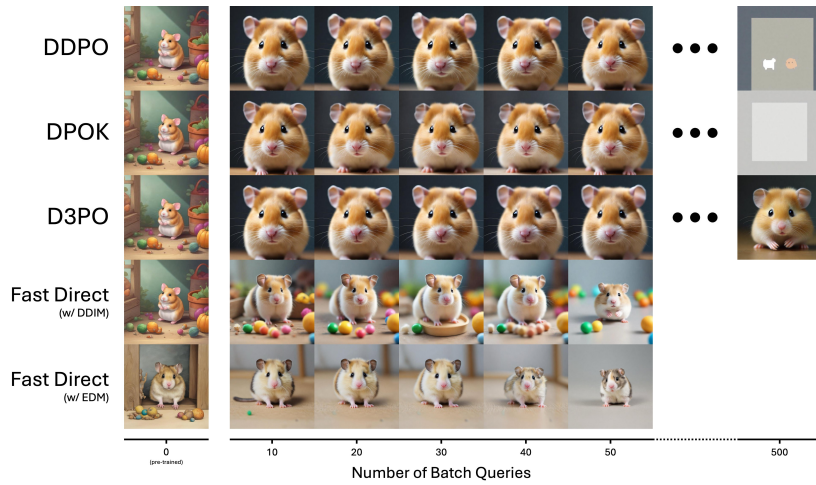


Figure 5: The generated images using the unseen prompt "hamster" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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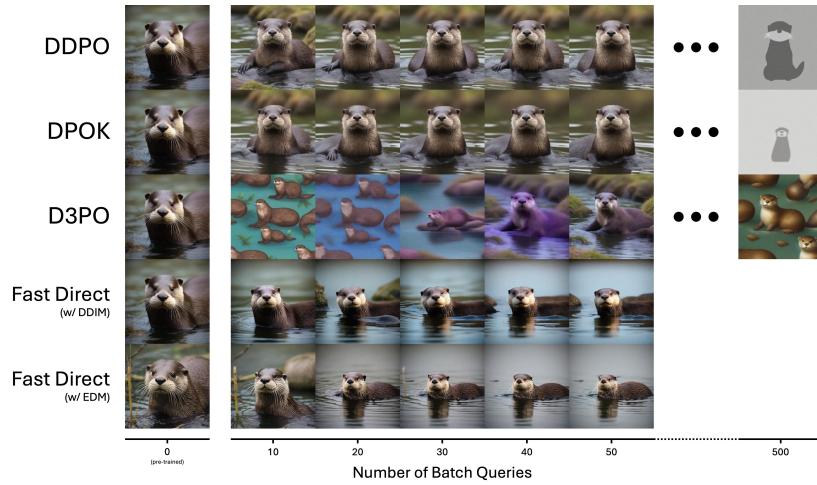


Figure 6: The generated images using the unseen prompt "otter" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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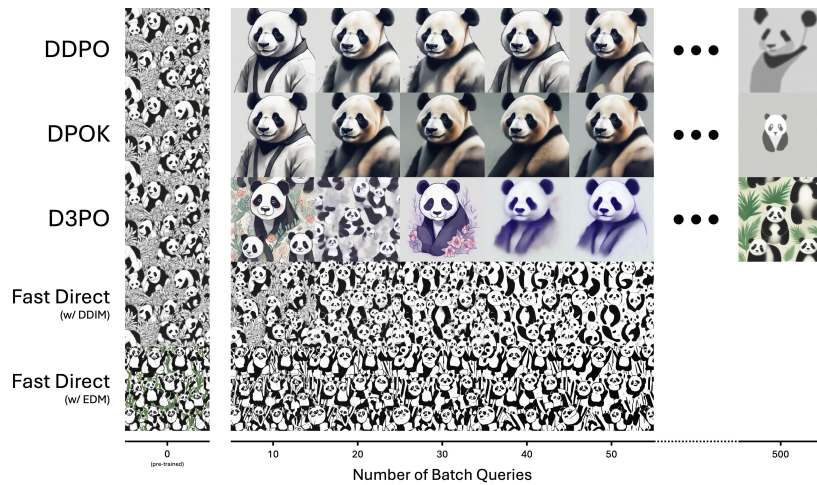
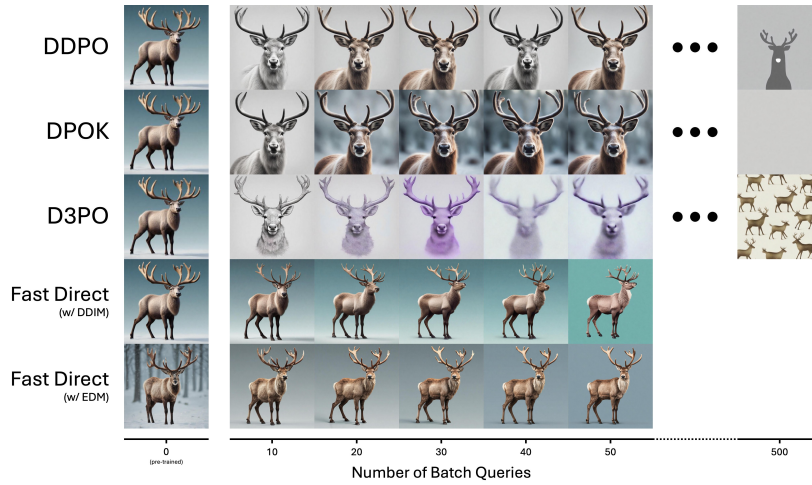


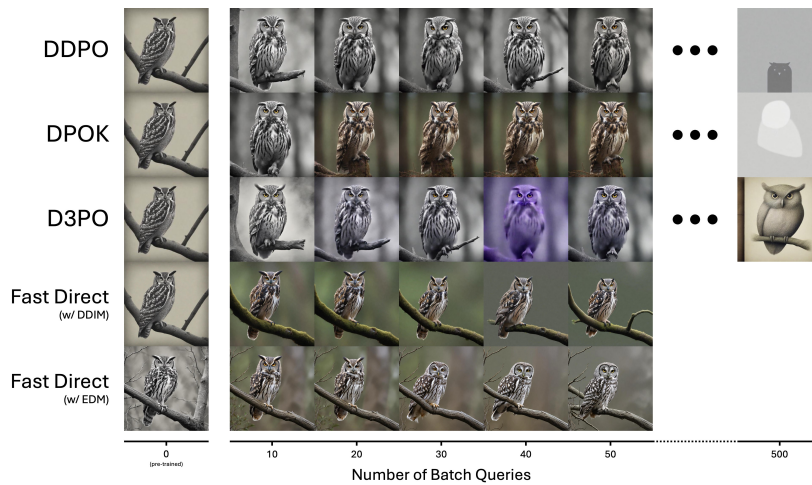
Figure 7: The generated images using the unseen prompt "panda" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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238 Figure 8: The generated images using the unseen prompt "reindeer" in compressibility task, extra
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266 Figure 9: The generated images using the unseen prompt "owl" in compressibility task, extra batch
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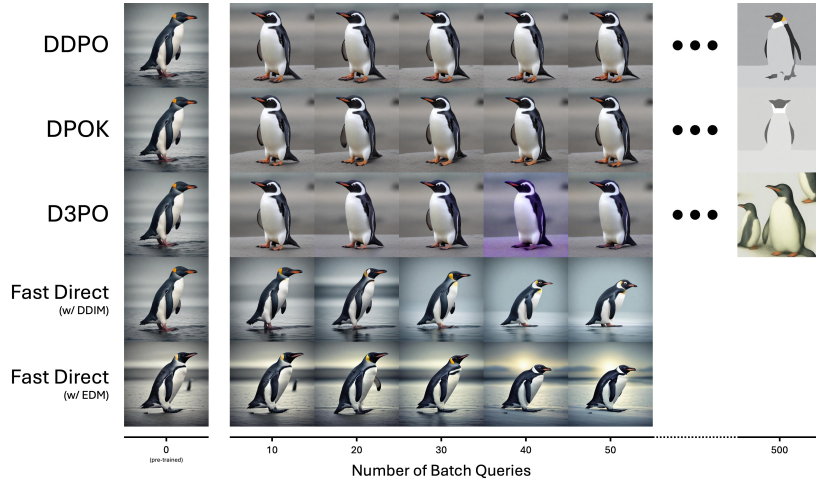


Figure 10: The generated images using the unseen prompt "penguin" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

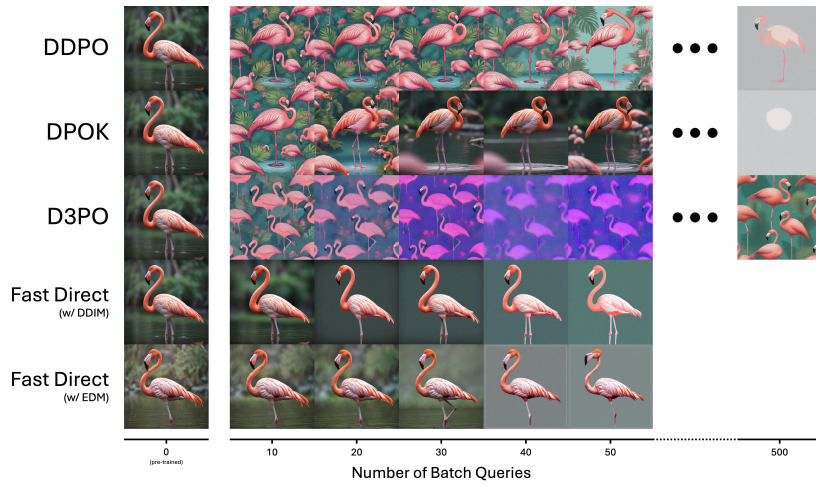


Figure 11: The generated images using the unseen prompt "flamingo" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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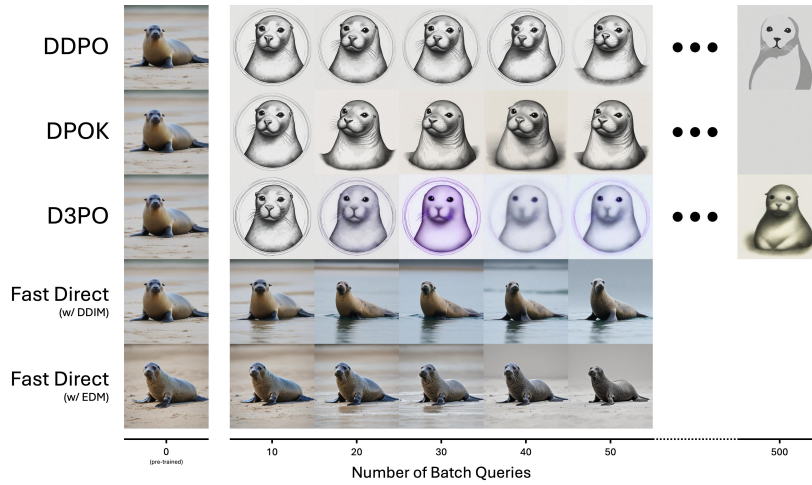


Figure 12: The generated images using the unseen prompt "seal" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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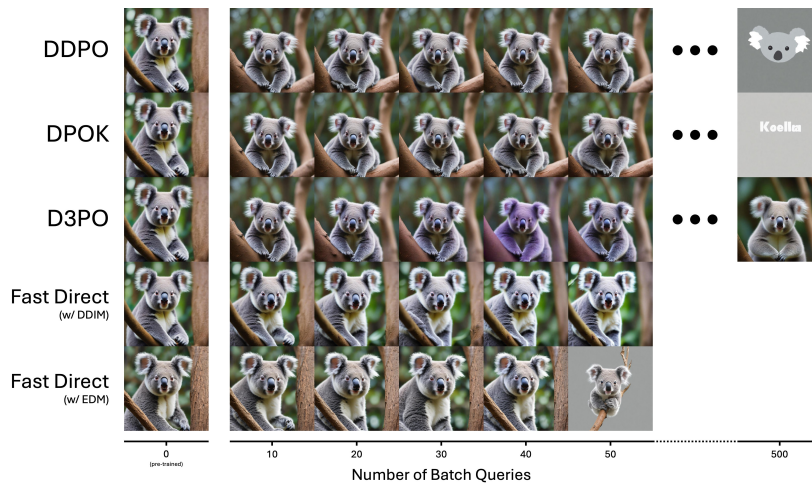


Figure 13: The generated images using the unseen prompt "koala" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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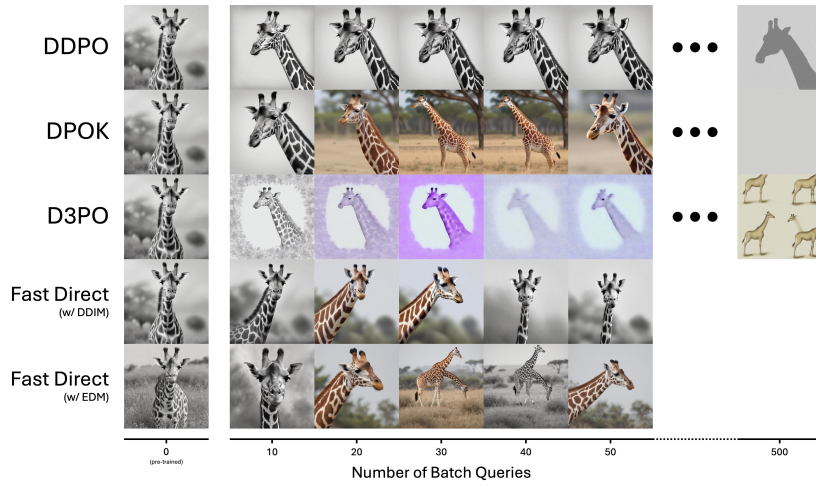


Figure 14: The generated images using the unseen prompt "giraffe" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

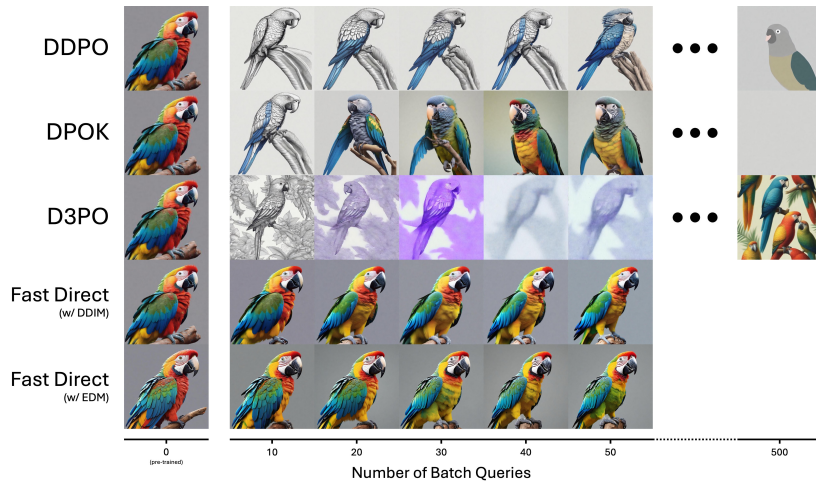


Figure 15: The generated images using the unseen prompt "parrot" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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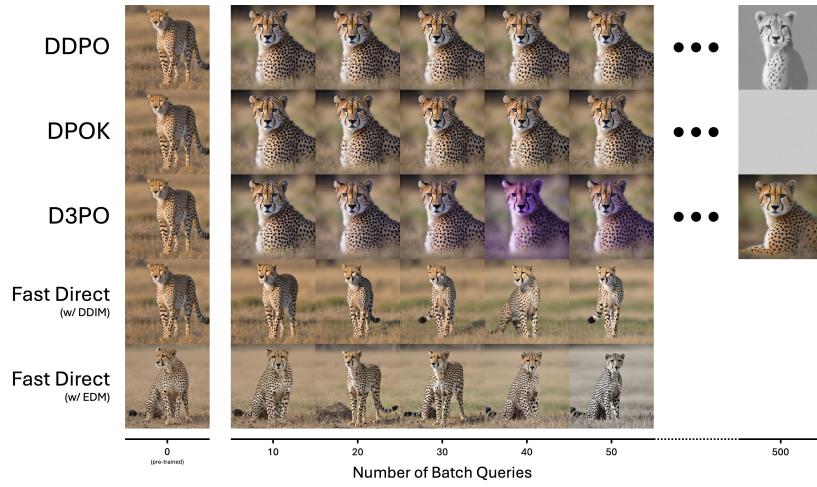


Figure 16: The generated images using the unseen prompt "cheetah" in compressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

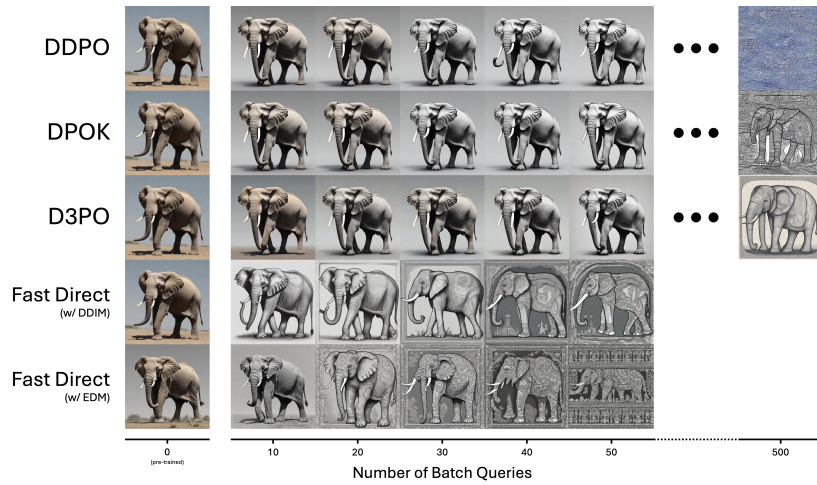


Figure 17: The generated images using the unseen prompt "elephant" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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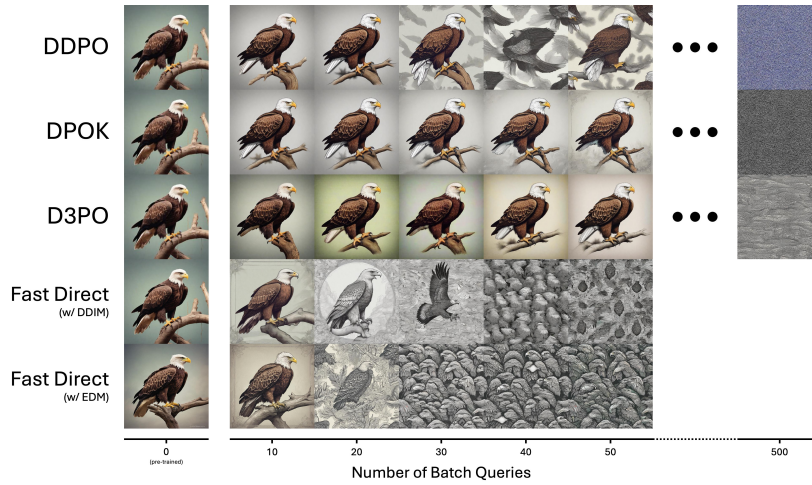


Figure 18: The generated images using the unseen prompt "eagle" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

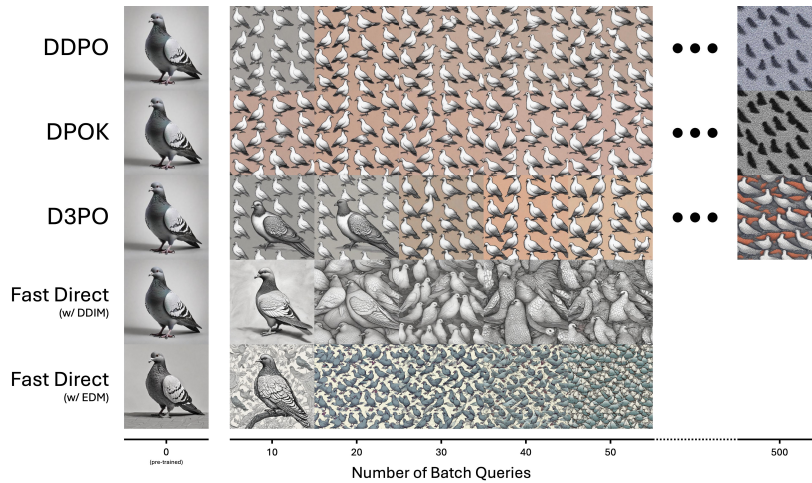


Figure 19: The generated images using the unseen prompt "pigeon" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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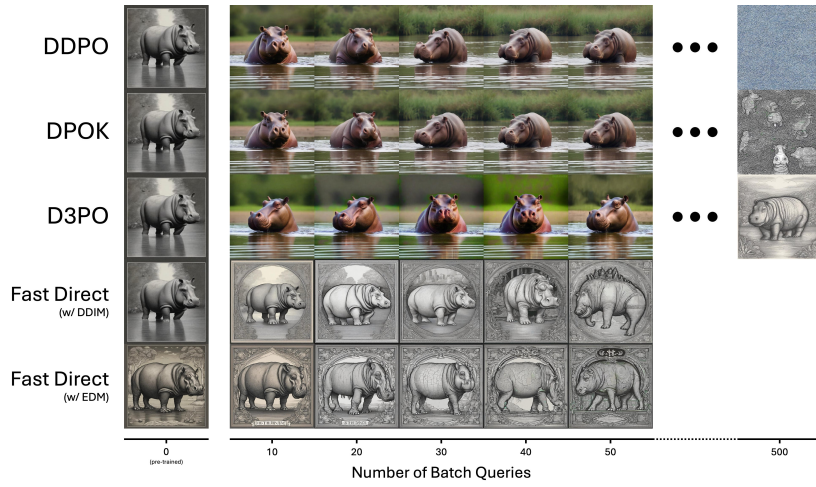


Figure 20: The generated images using the unseen prompt "hippo" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

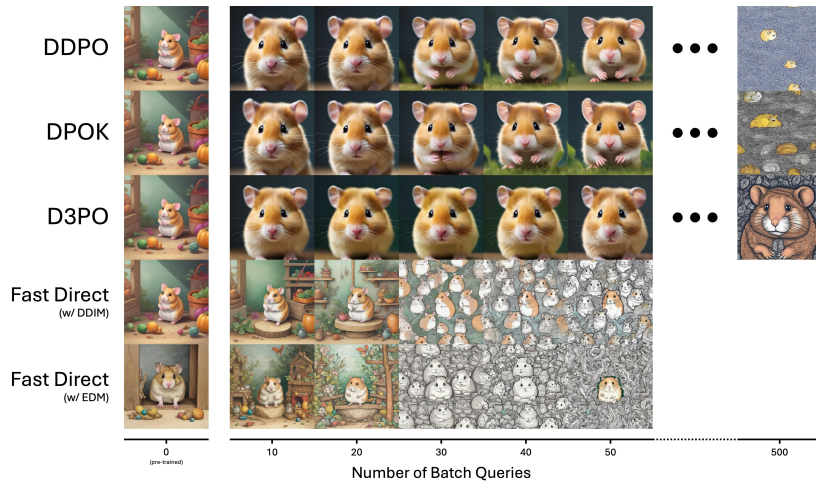


Figure 21: The generated images using the unseen prompt "hamster" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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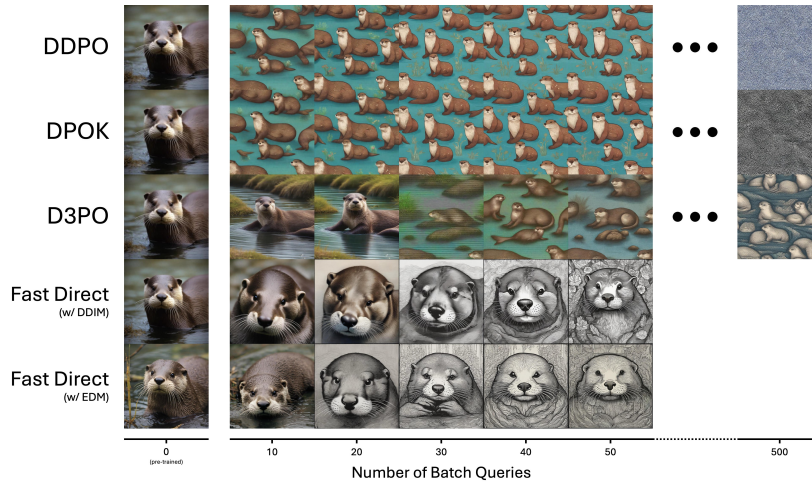


Figure 22: The generated images using the unseen prompt "otter" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

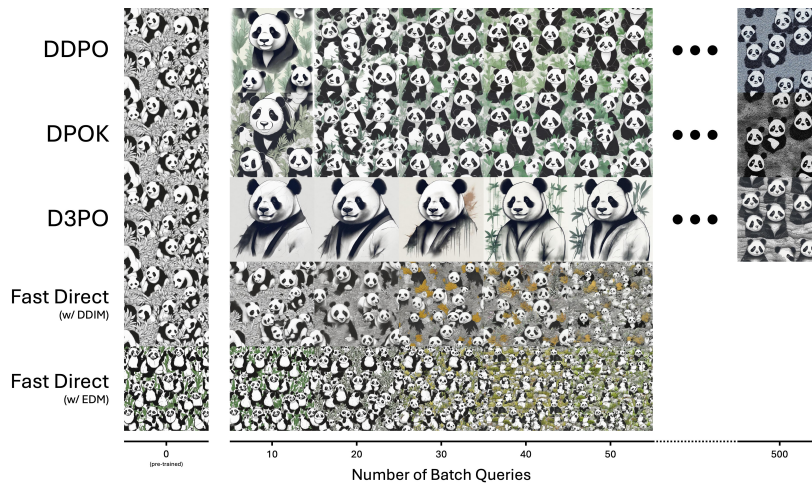


Figure 23: The generated images using the unseen prompt "panda" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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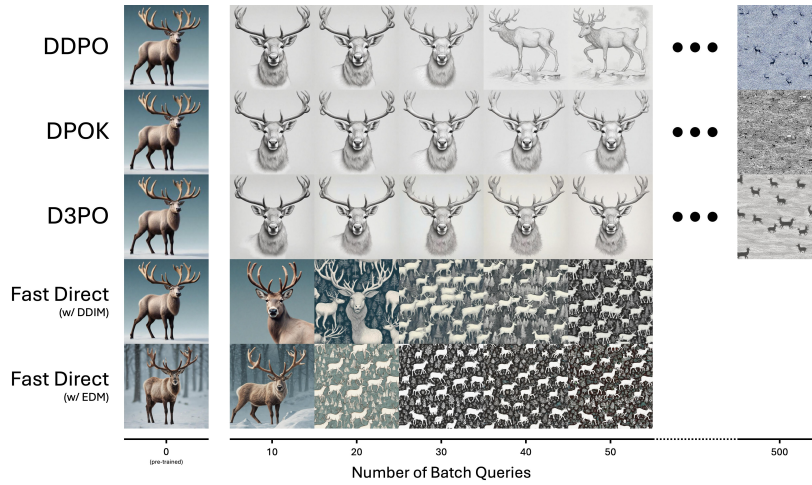


Figure 24: The generated images using the unseen prompt "reindeer" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

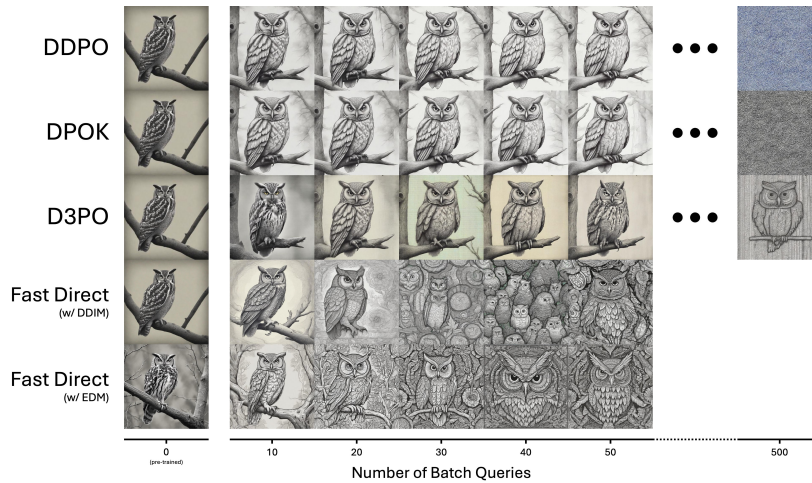


Figure 25: The generated images using the unseen prompt "owl" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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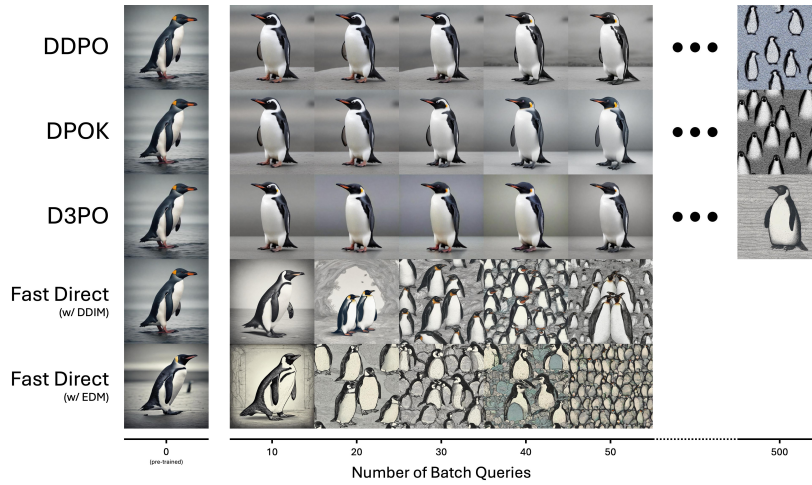


Figure 26: The generated images using the unseen prompt "penguin" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

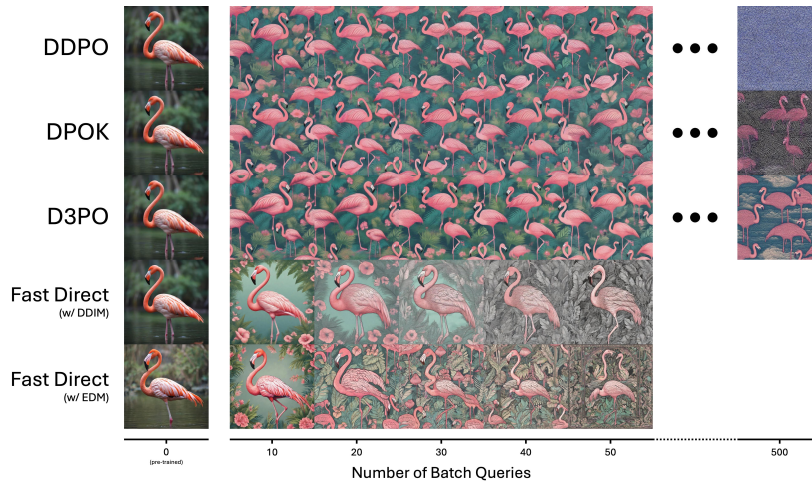


Figure 27: The generated images using the unseen prompt "flamingo" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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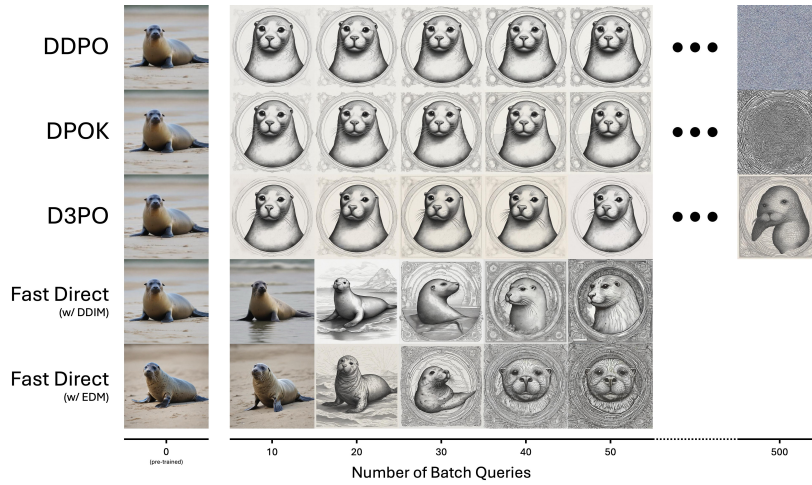


Figure 28: The generated images using the unseen prompt "seal" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

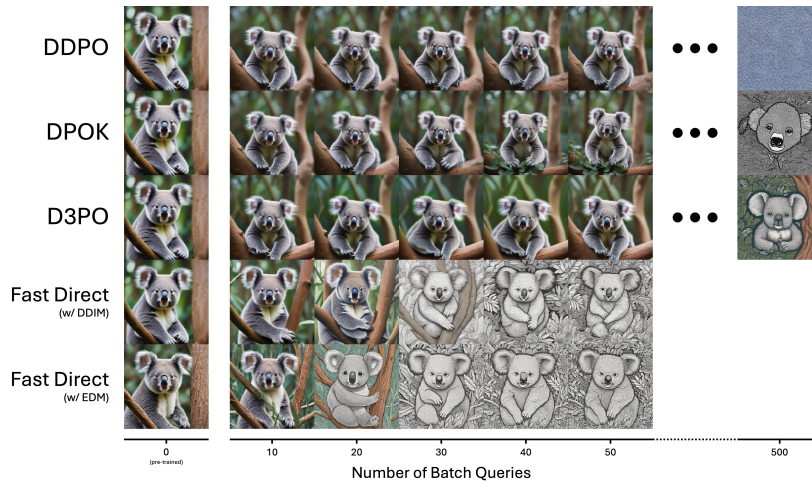
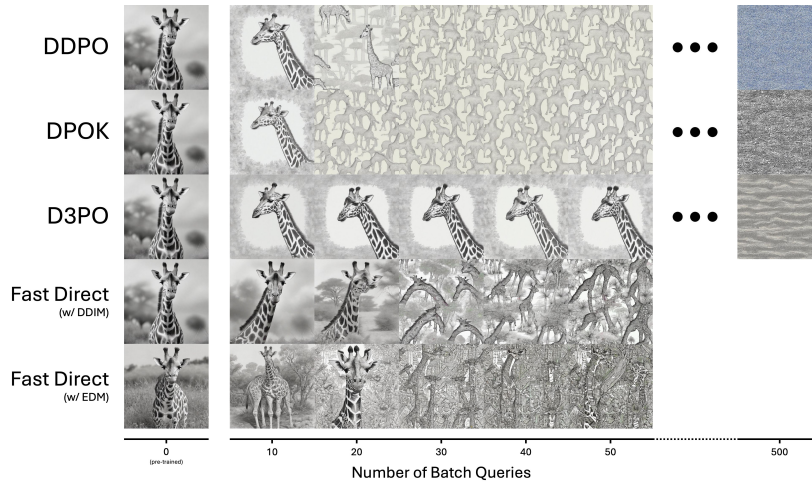


Figure 29: The generated images using the unseen prompt "koala" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

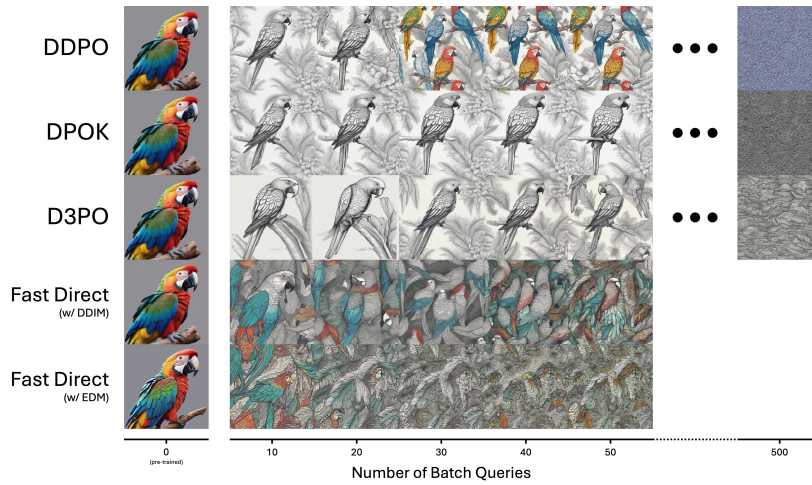
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Figure 30: The generated images using the unseen prompt "giraffe" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

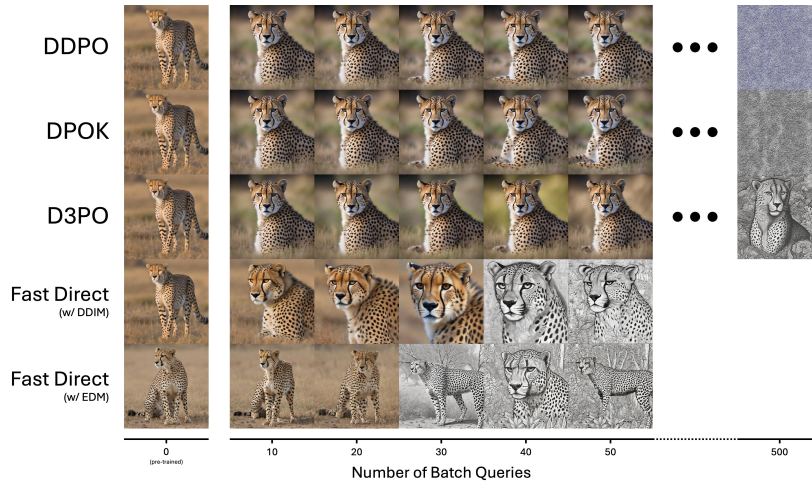
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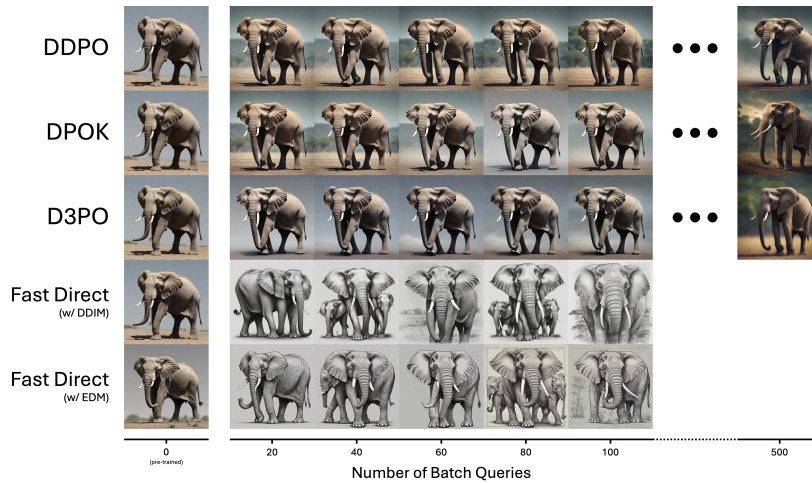
Figure 31: The generated images using the unseen prompt "parrot" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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886 Figure 32: The generated images using the unseen prompt "cheetah" in incompressibility task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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913 Figure 33: The generated images using the unseen prompt "elephant" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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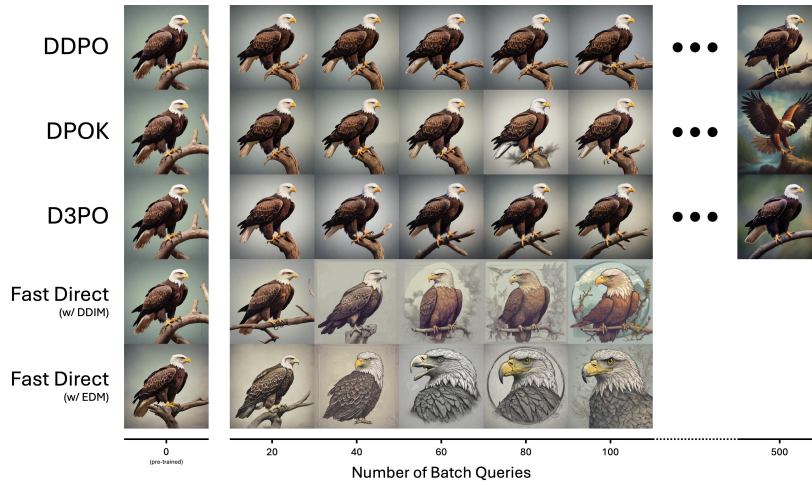


Figure 34: The generated images using the unseen prompt "eagle" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

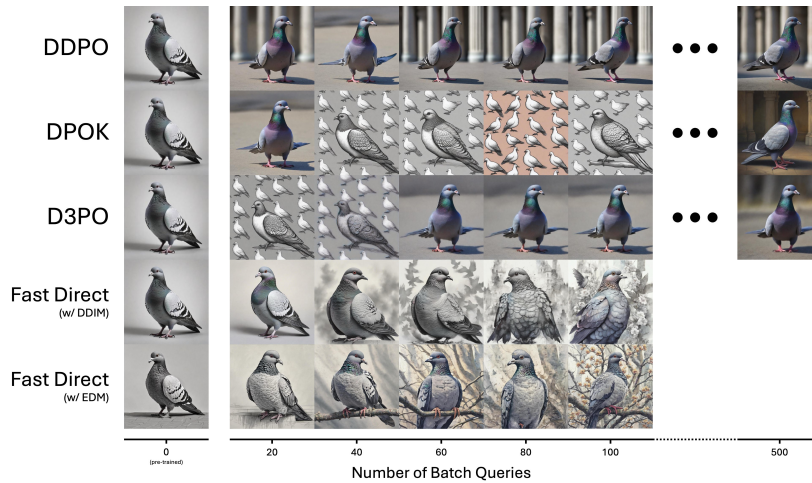


Figure 35: The generated images using the unseen prompt "pigeon" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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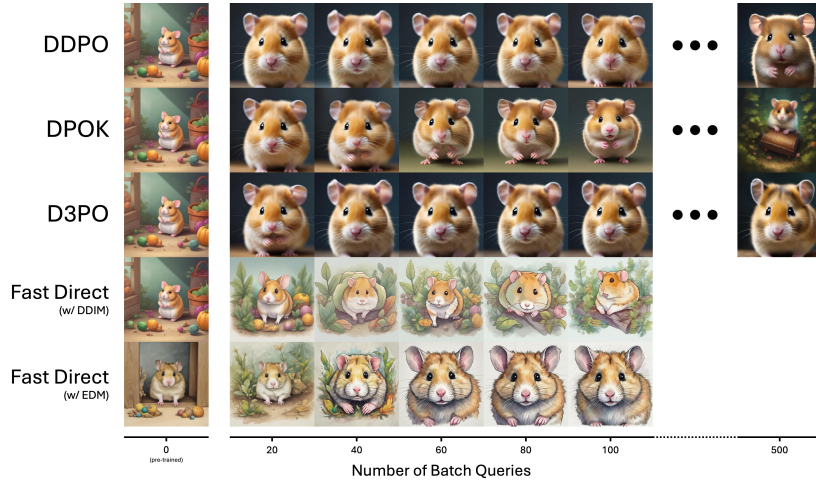


Figure 36: The generated images using the unseen prompt "hamster" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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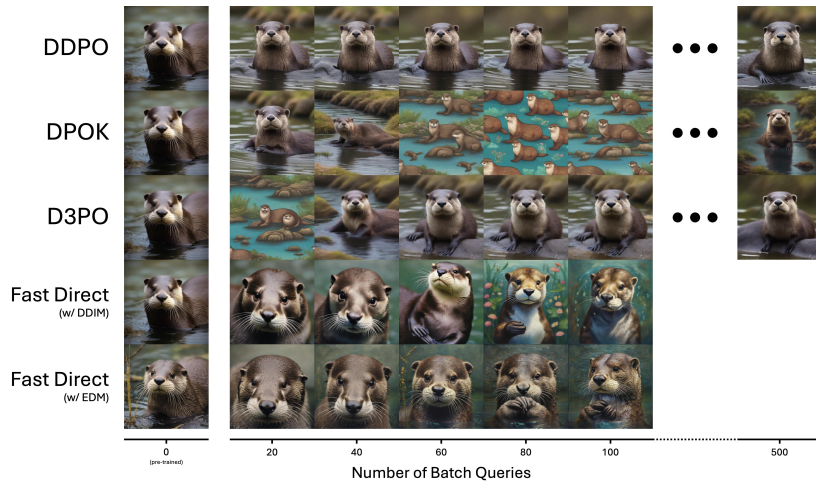


Figure 37: The generated images using the unseen prompt "otter" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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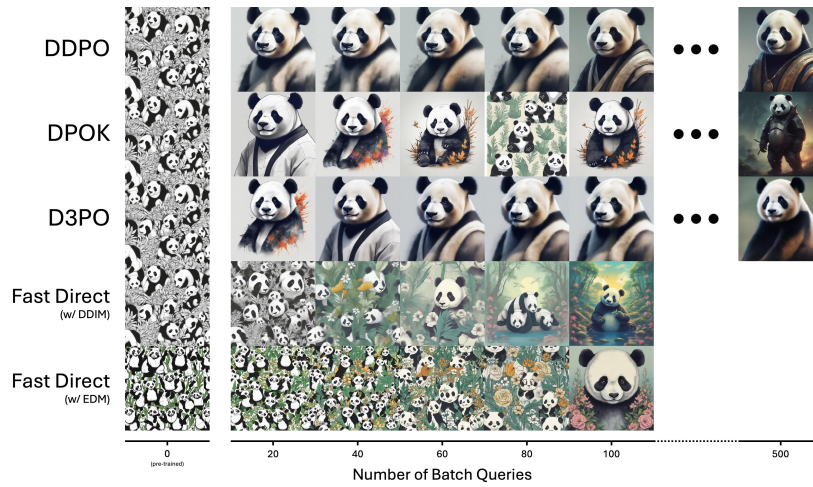


Figure 38: The generated images using the unseen prompt "panda" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

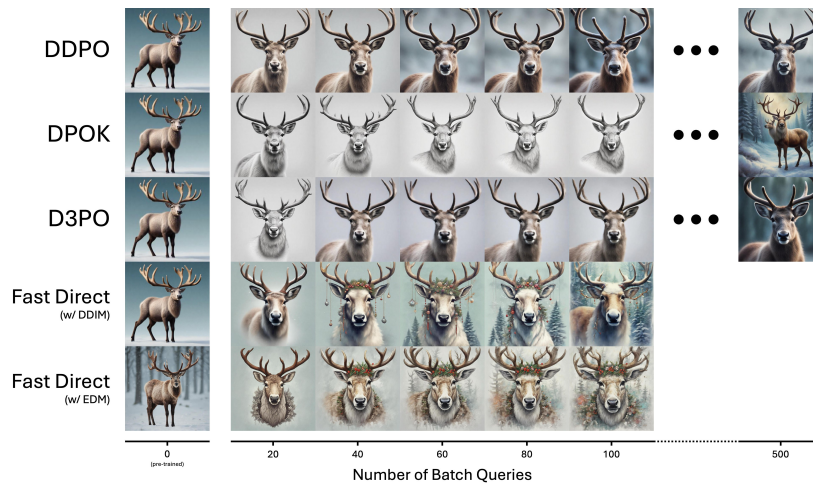
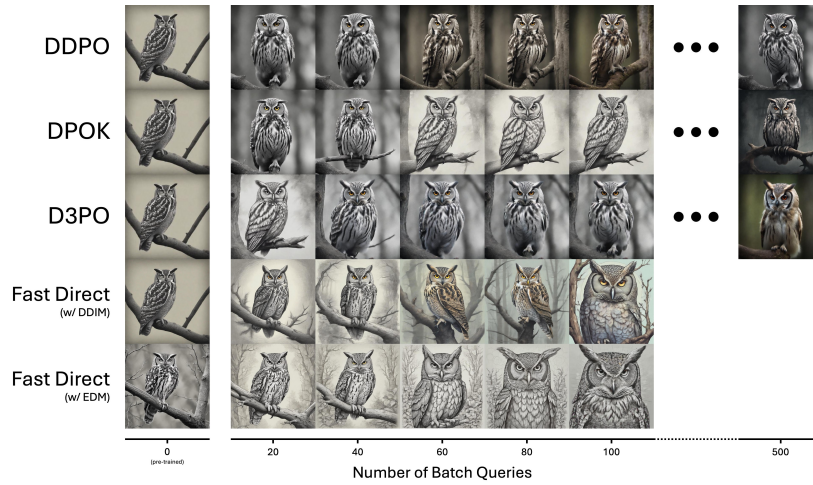


Figure 39: The generated images using the unseen prompt "reindeer" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

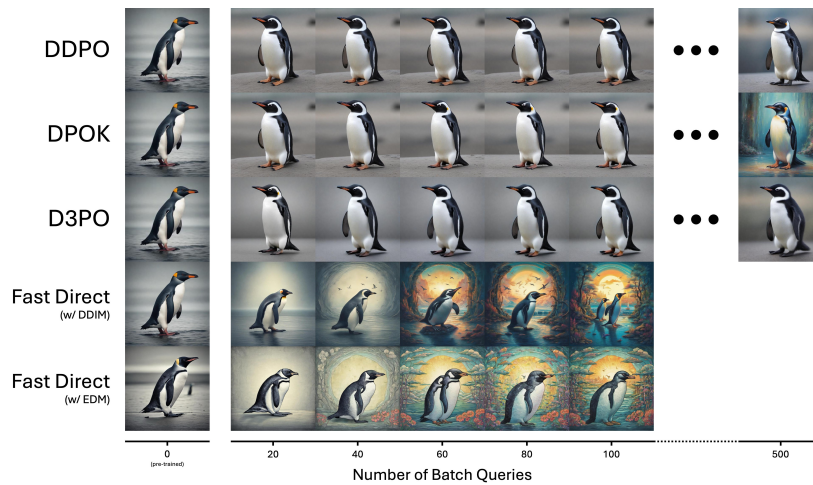
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Figure 40: The generated images using the unseen prompt "owl" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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Figure 41: The generated images using the unseen prompt "penguin" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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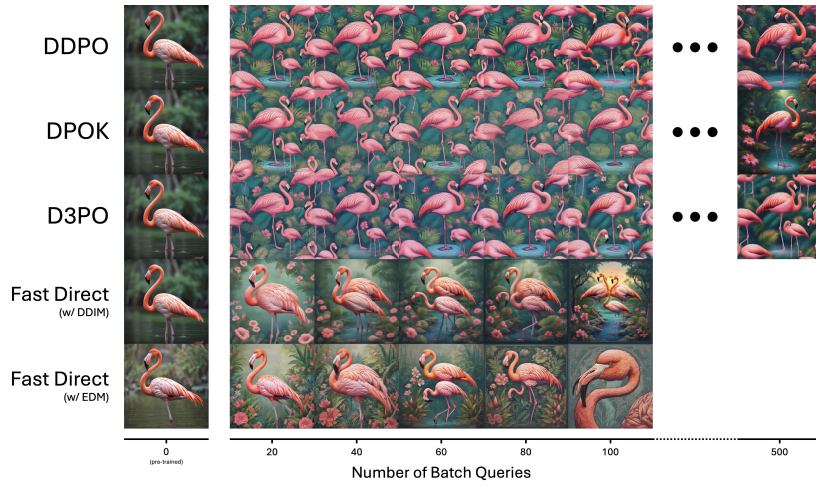


Figure 42: The generated images using the unseen prompt "flamingo" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

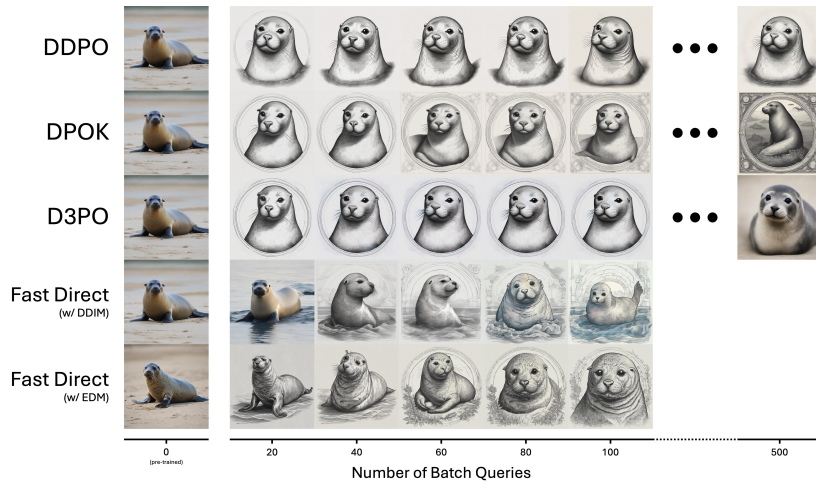


Figure 43: The generated images using the unseen prompt "seal" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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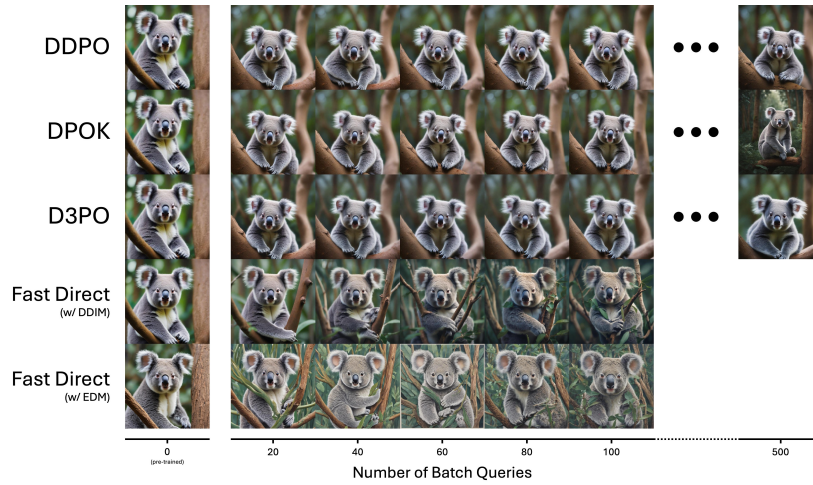


Figure 44: The generated images using the unseen prompt "koala" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

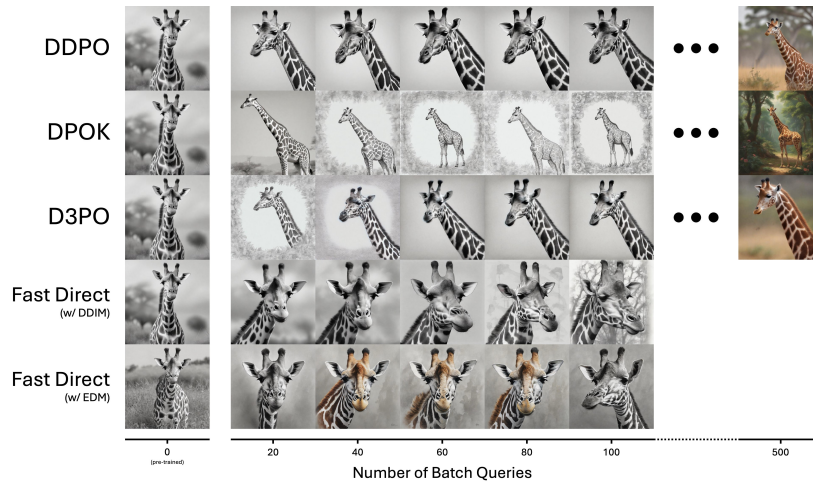


Figure 45: The generated images using the unseen prompt "giraffe" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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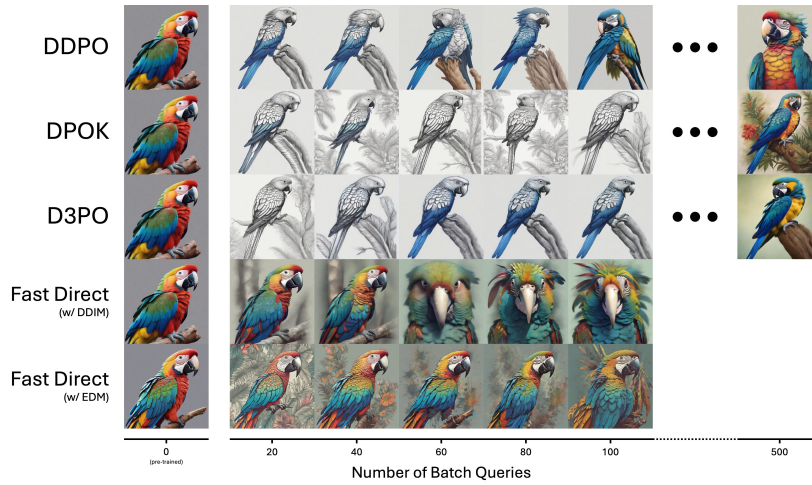


Figure 46: The generated images using the unseen prompt "parrot" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

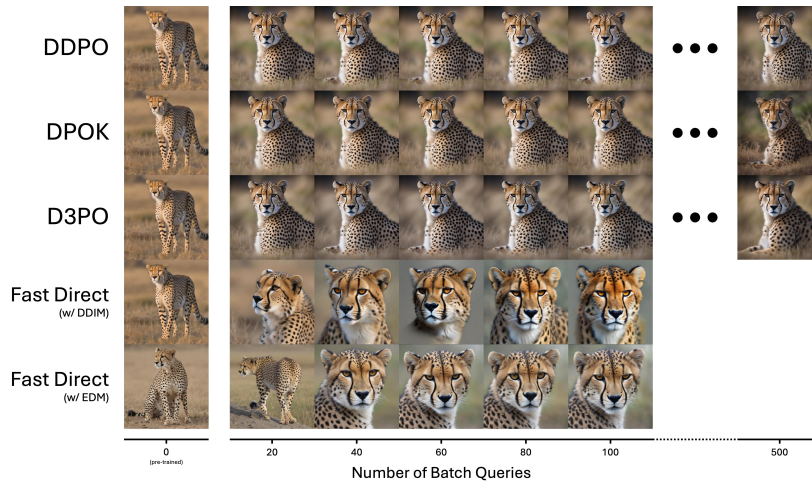
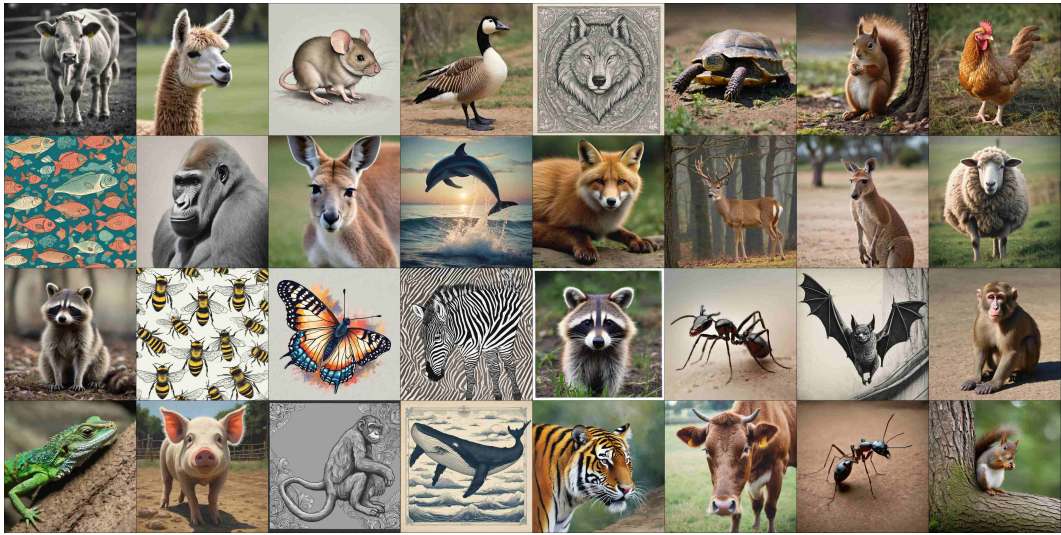
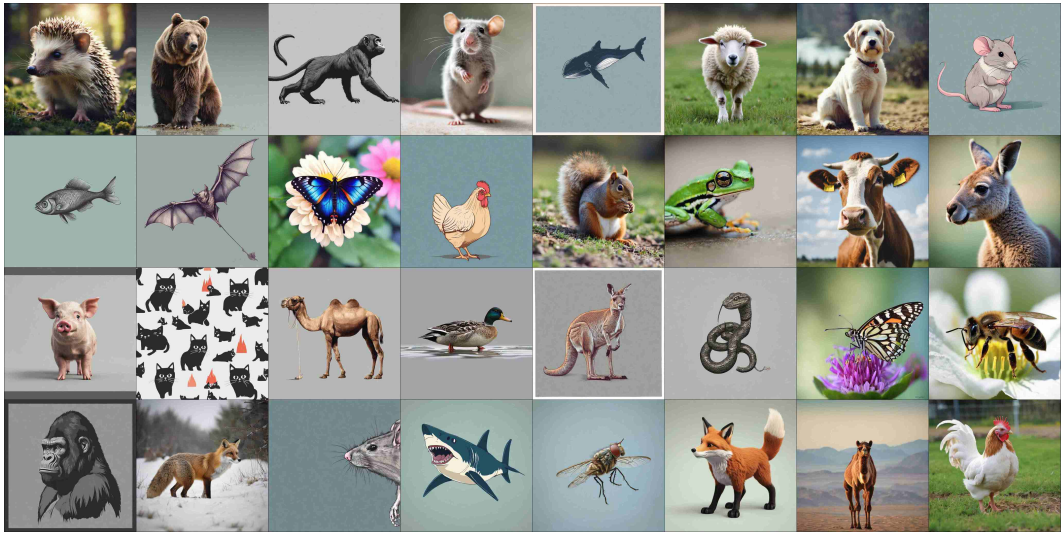


Figure 47: The generated images using the unseen prompt "cheetah" in aesthetic task, extra batch queries budgets (until 500) are given to the baselines methods for demonstration.

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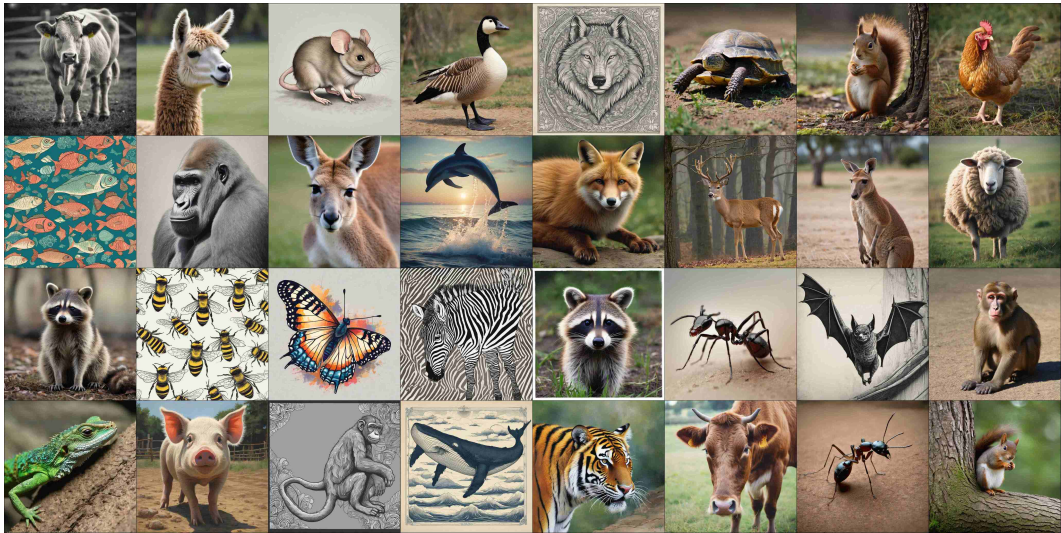
(a) Pre-trained



(b) Fast Direct

Figure 48: The 32 randomly generated images for the compressibility task by Fast Direct utilizing 50 batch queries budget.

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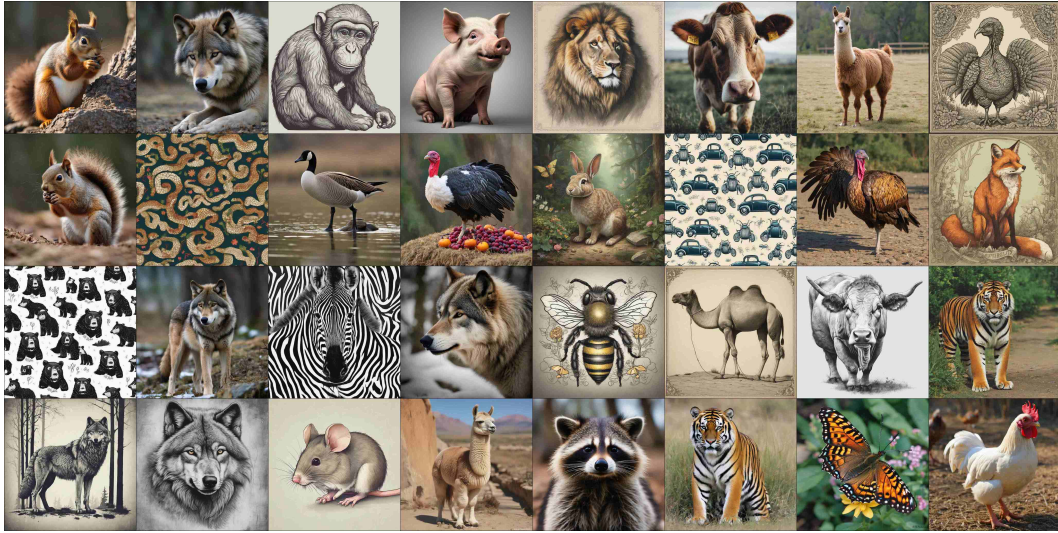
(a) Pre-trained



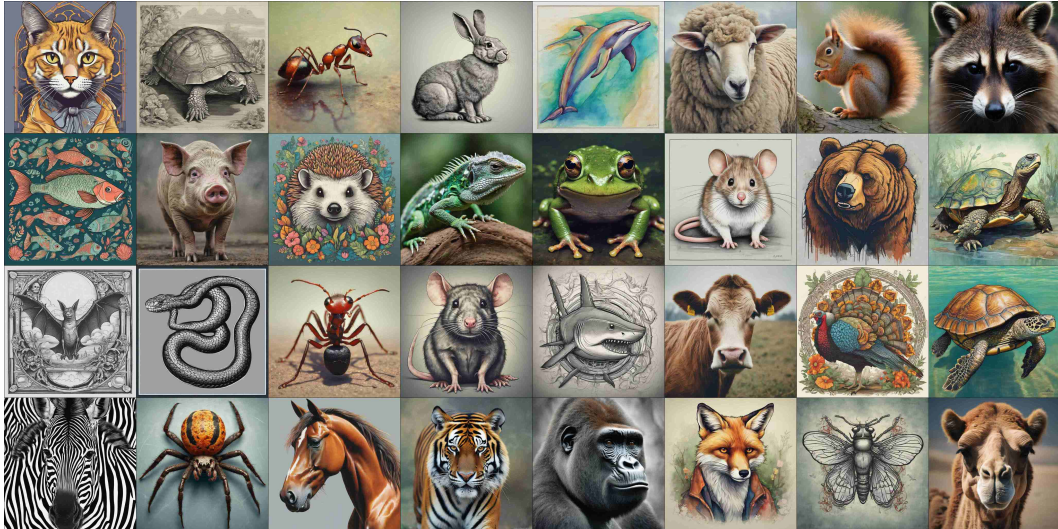
(b) Fast Direct

Figure 49: The 32 randomly generated images for the incompressibility task by Fast Direct utilizing 50 batch queries budget.

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(a) Pre-trained



(b) Fast Direct

Figure 50: The 32 randomly generated images for the aesthetic task by Fast Direct utilizing 100 batch queries budget.