



# Welkom !

## *Adobe Generative AI*

*Peter Villevoye*



# Wat gaan we doen ?

- Samen bekijken en uitproberen wat *Generative AI* zoal behelst en hoe Adobe het aanpakt.



Oefenbestanden: <https://we.tl/t-iGXxxVGkmb>

# Wat is een *Generative AI-model*?

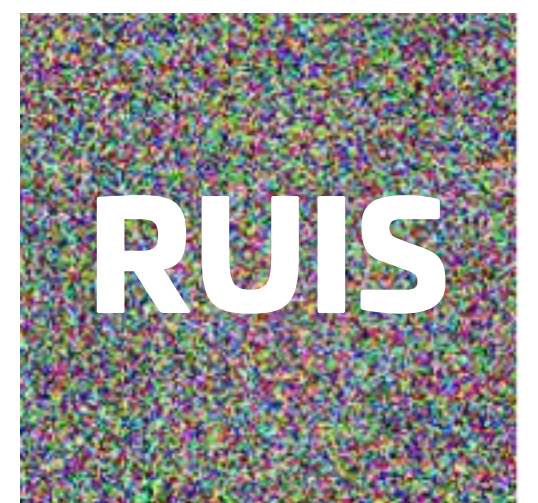


*A generative model is a statistical model of a joint probability distribution  $P(X,Y)$  on given observable variable  $X$  and target variable  $Y$ .*

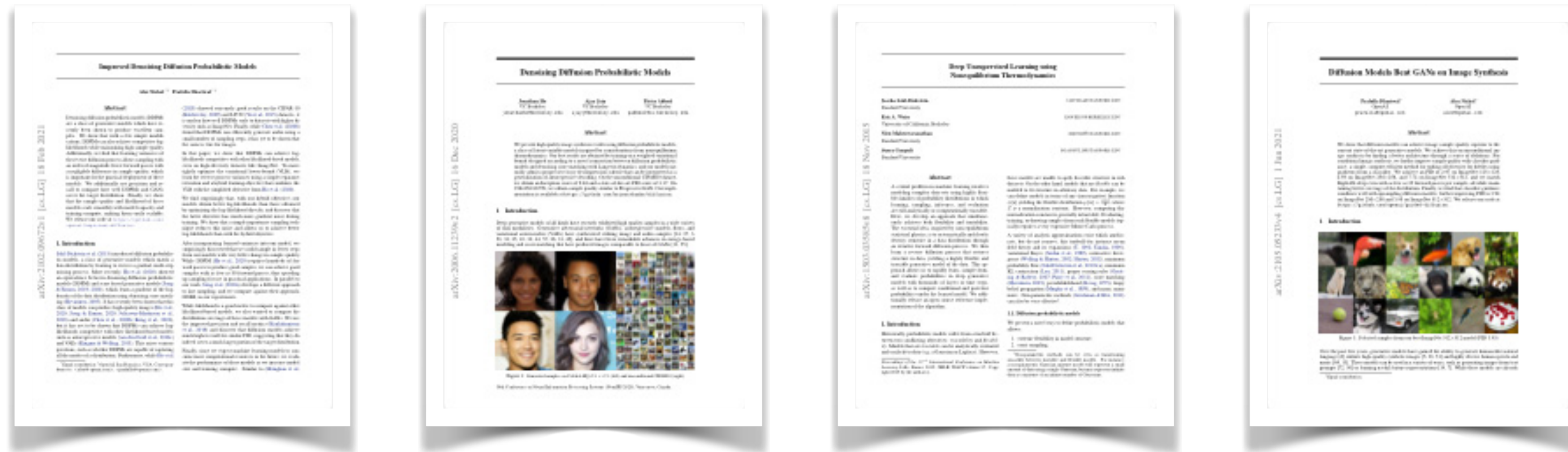
**Fijn.** Nou weet je het. Maar hoe werkt het ?

**In ieder geval níét met *Copy & Paste* !**

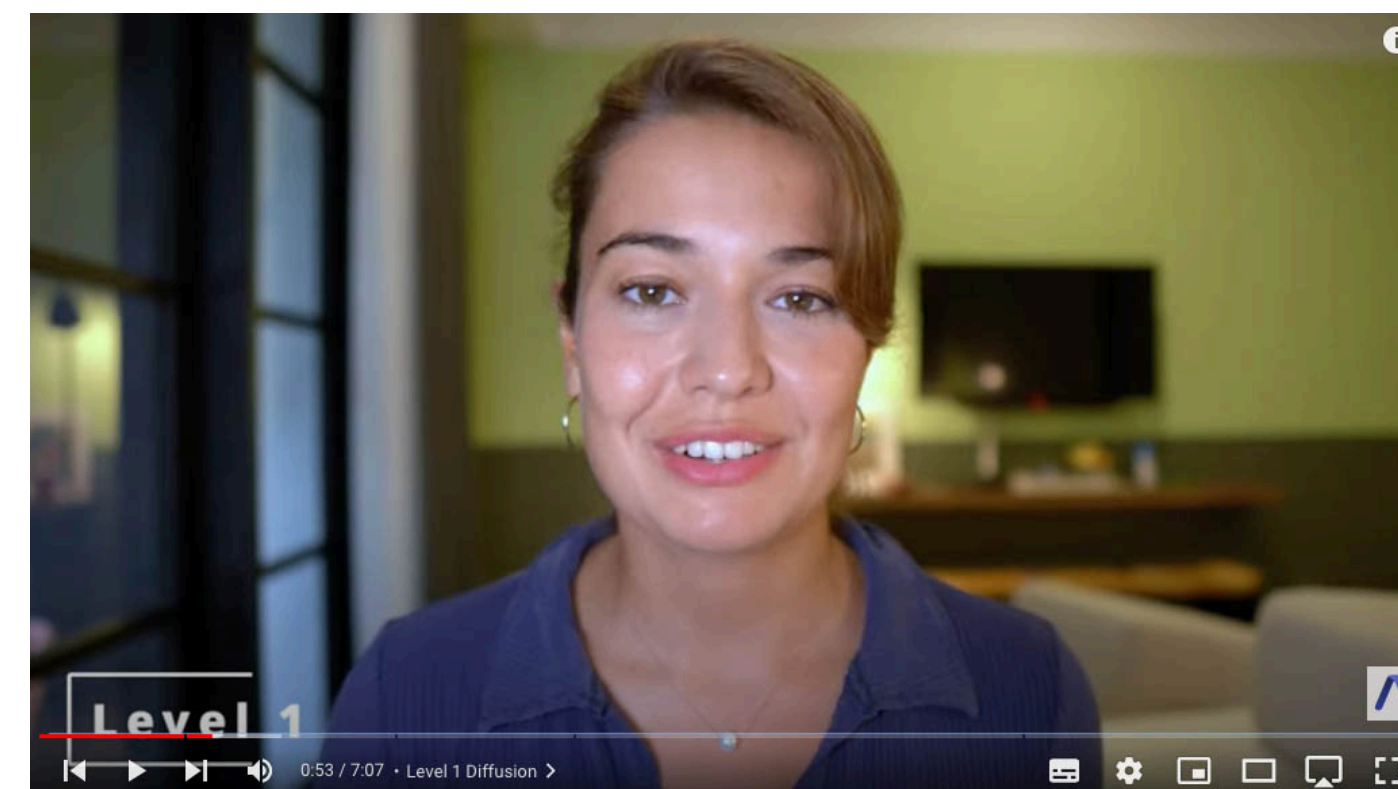
Een *Generative AI-model* is getraind in het **genereren** van compleet nieuwe **content**, a.h.v. wat waarschijnlijk/aannemelijk is en...

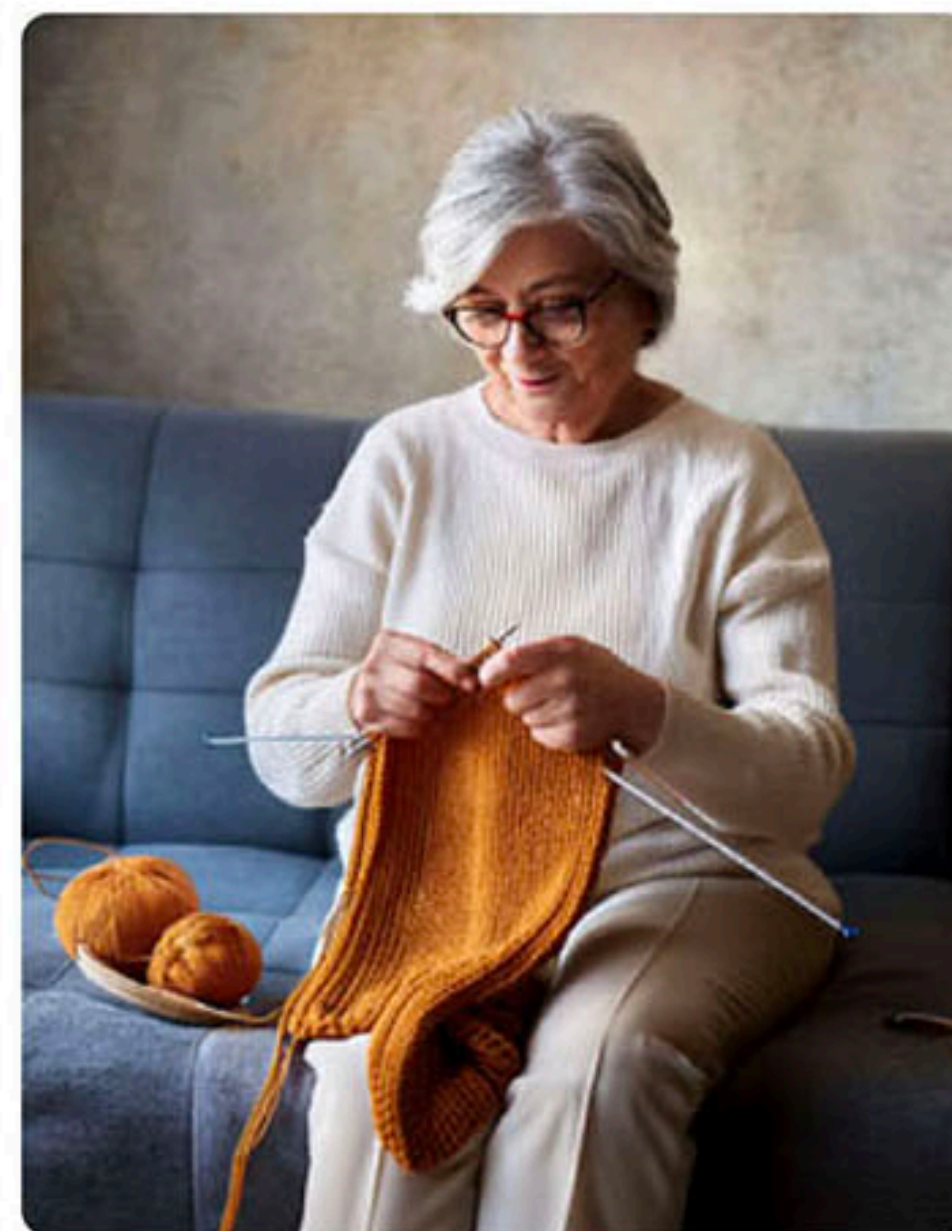
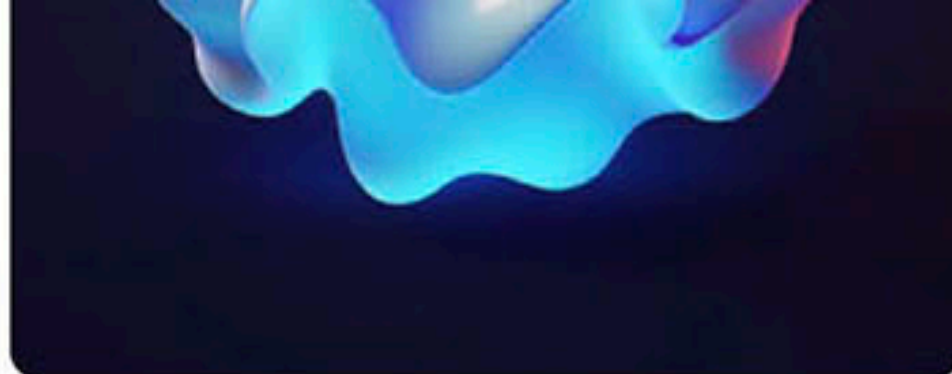
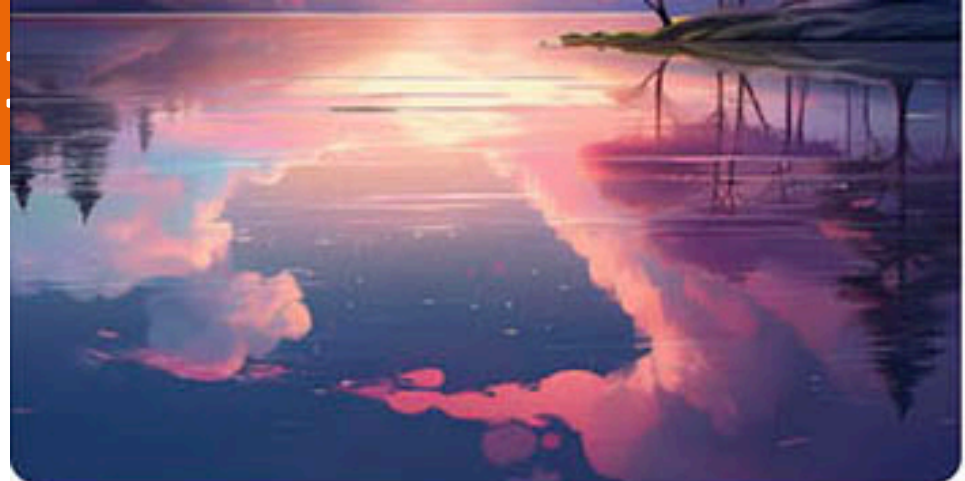


# Wetenschappelijk onderzoek



- <https://arxiv.org/pdf/1503.03585.pdf>
- <https://arxiv.org/pdf/2006.11239.pdf>
- <https://arxiv.org/pdf/2102.09672.pdf>
- <https://arxiv.org/pdf/2105.05233.pdf>
- <https://www.youtube.com/watch?v=yTAMrHVG1ew>





1001  
mooie  
beelden...

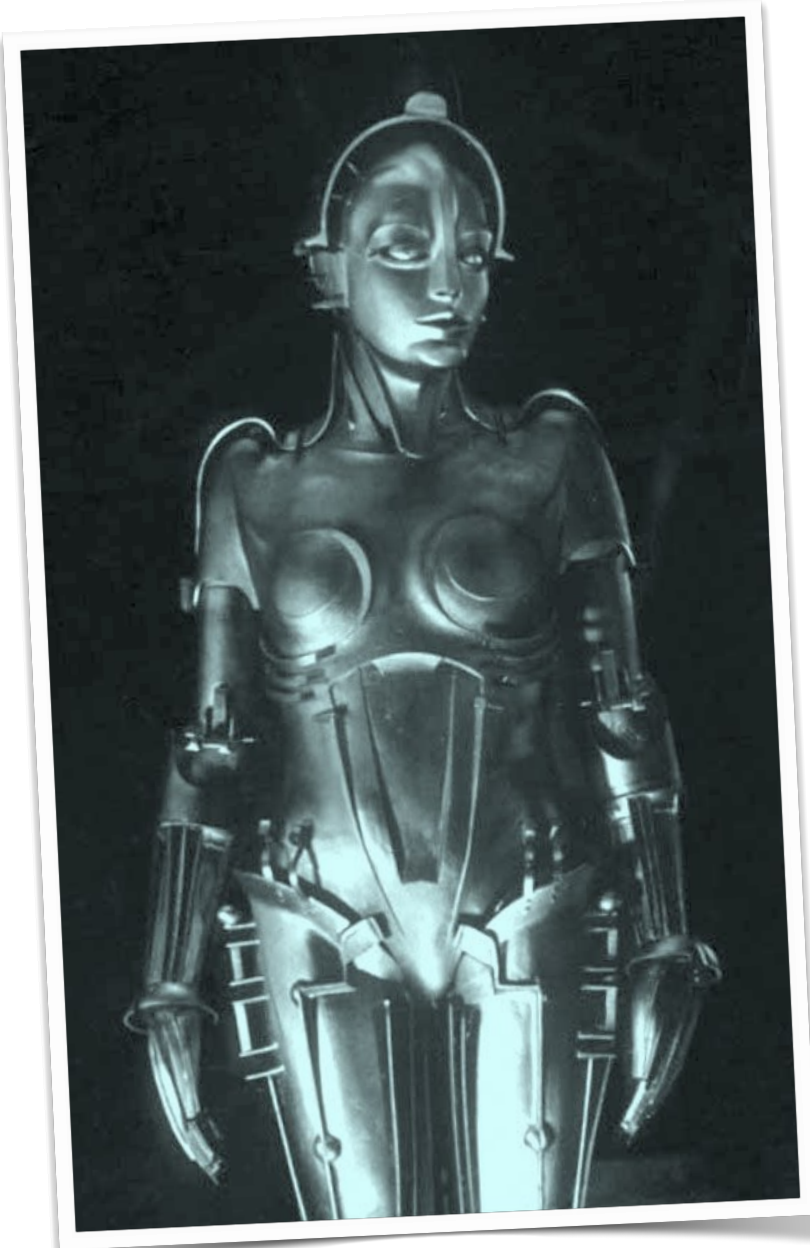
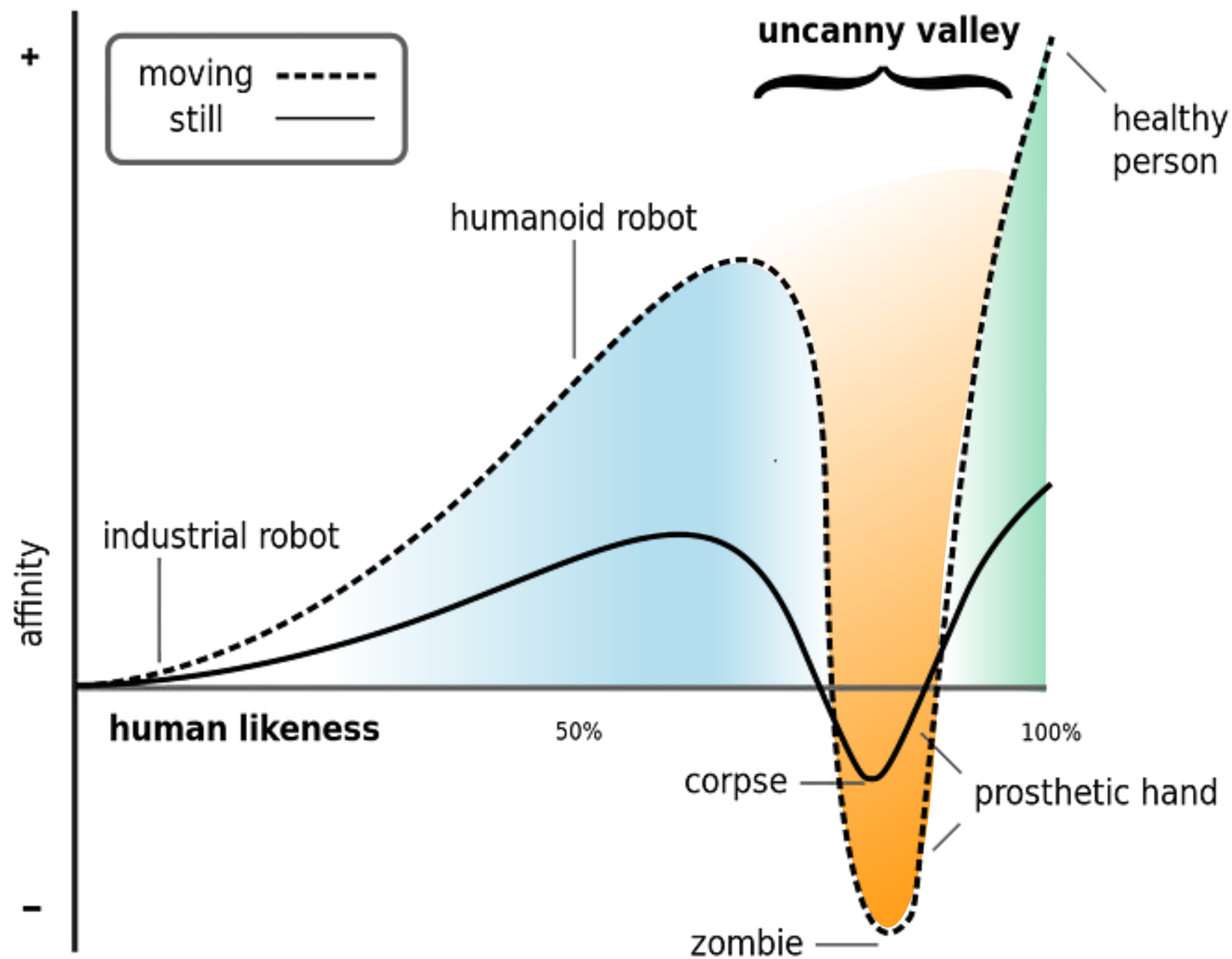
# Alle begin is moeilijk...

Text Prompt an armchair in the shape of an avocado. . . .

AI Generated  
images



# *Van zombie, via uncanny naar real*





## Generative AI...

Zal altijd nieuwe content genereren.

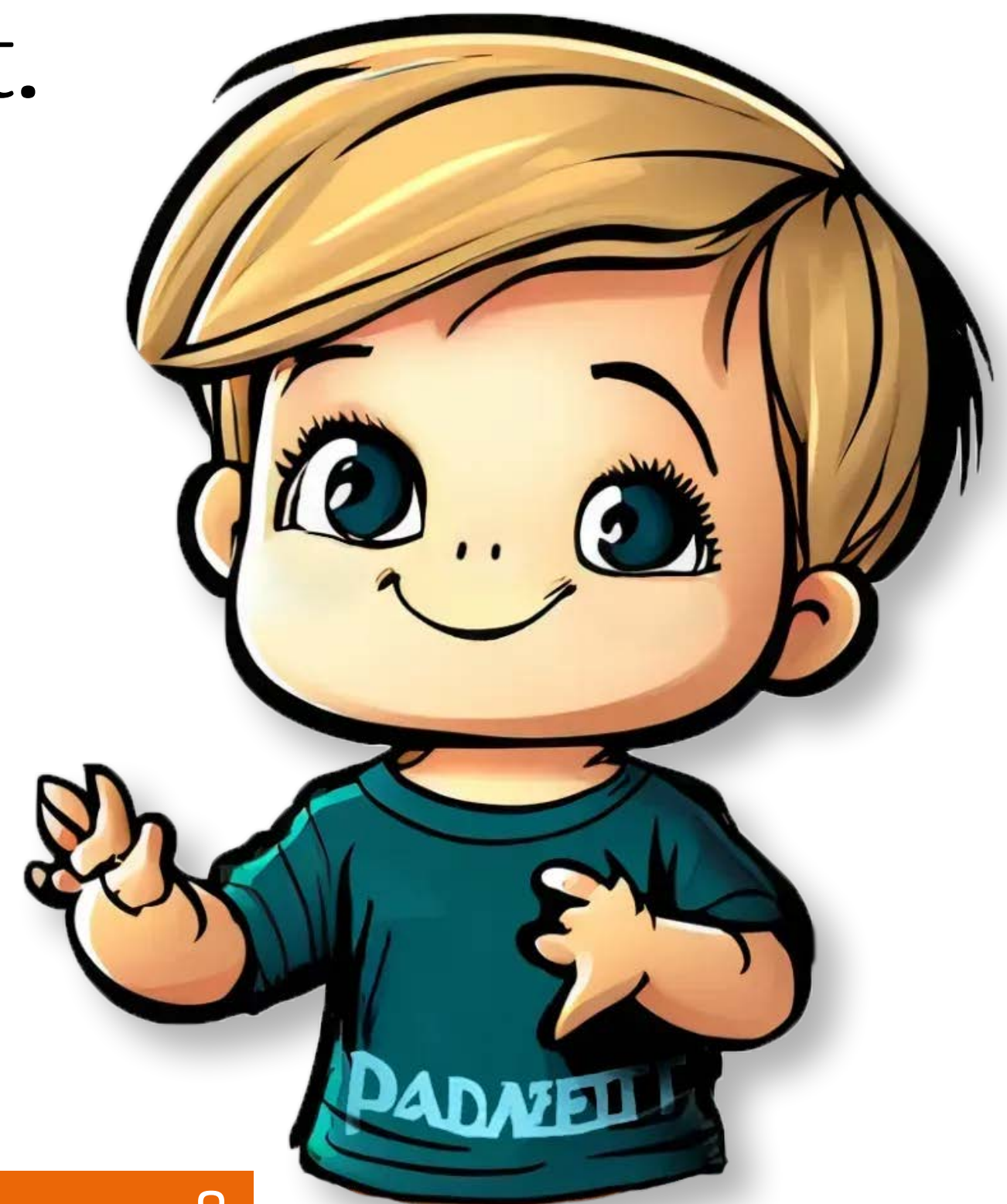
*Dus verse, authentieke content blijft nodig !*

*Generative AI* leert zoals een kind iets leert.

Het is momenteel een **geniale kleuter**.

Maar dingen gaan (soms, nog) fout:

- de kleuter is nog niet zo goed in **tellen**,
- nog niet zo goed in lezen en **schrijven**,
- mist nog het fijne gebruik van **vingers**,
- snapt het concept van "**niet doen**" niet...



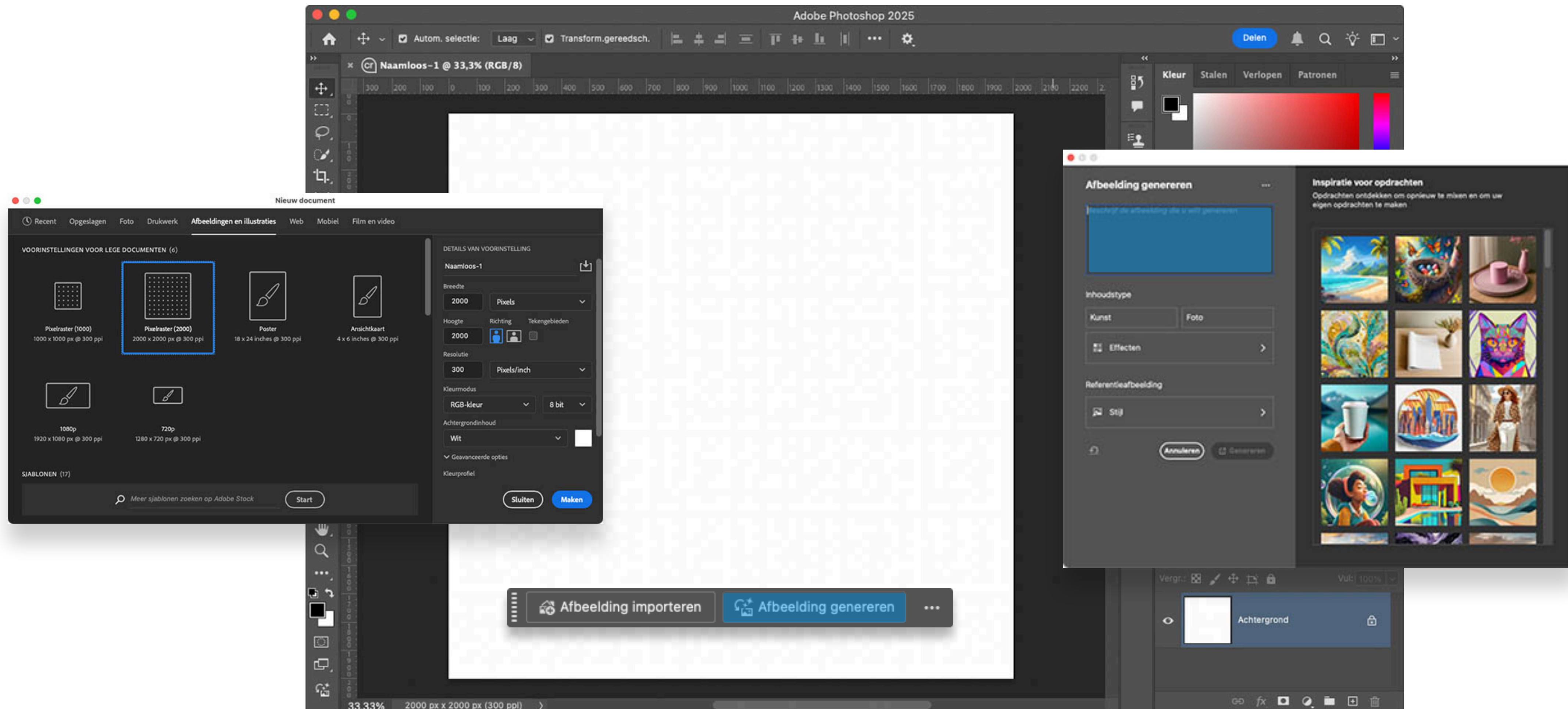
# Aannemelijke interpretaties

- Schaduwpartijen die objecten blijven eisen.
- Ongevraagde doch aannemelijke elementen.

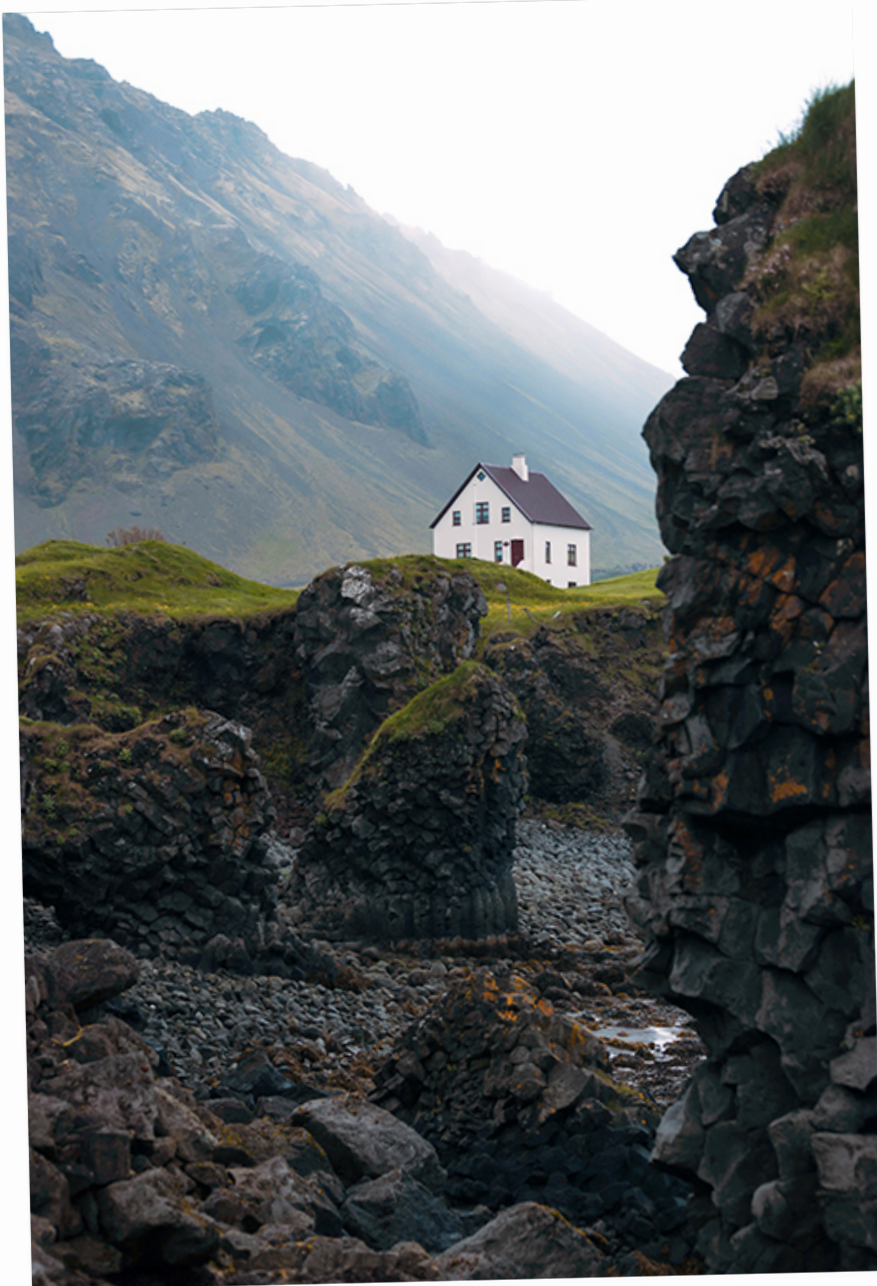


*Aan de slag !*

# Oefening blanco canvas



# Oefening *Iceland*



# Oefening *Modellen*



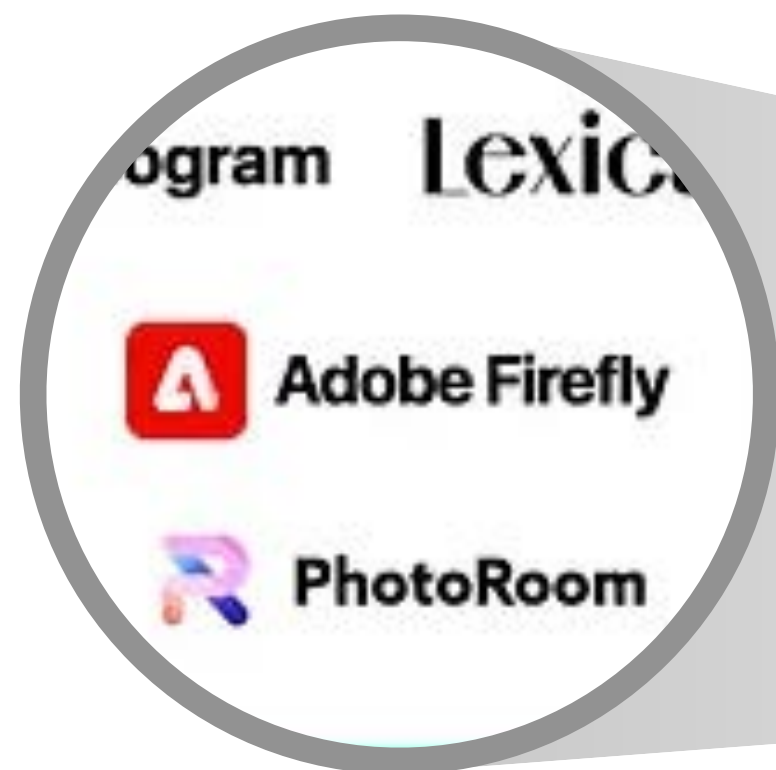
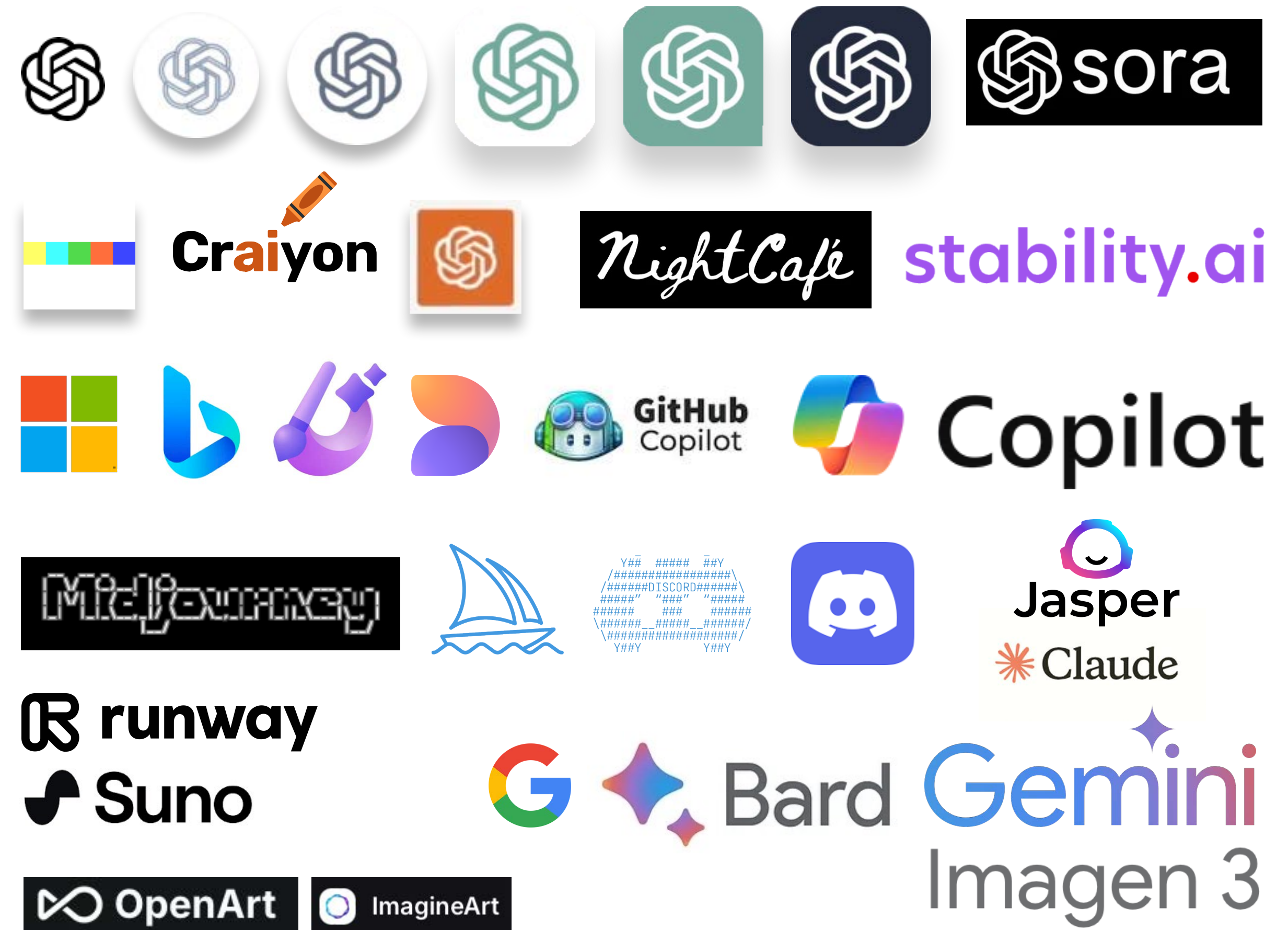
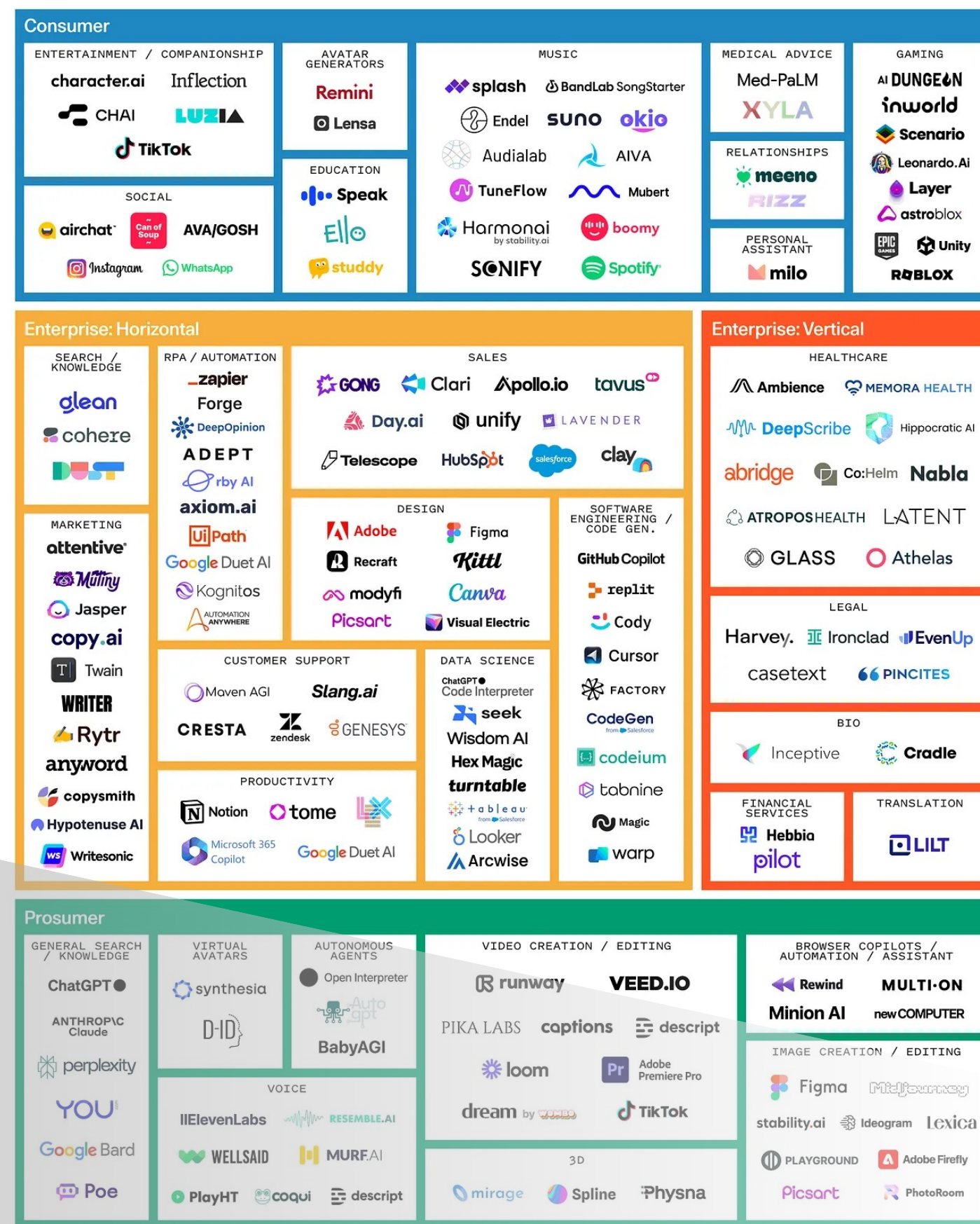
# Oefening *Verwijder*-tool

- Kabels, draden, mensen, m.b.v. CAW en/of Gen. AI





# The Generative AI Market Map

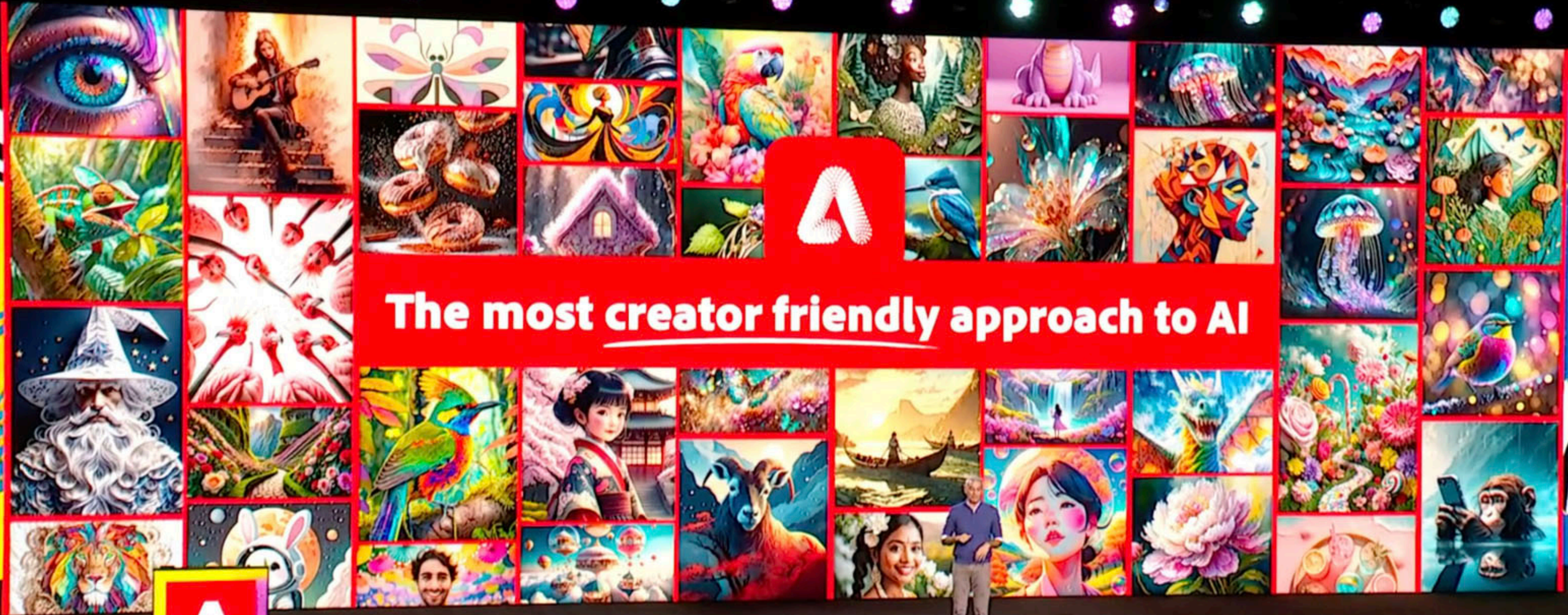


<https://medium.com/@maximilian.vogel/>



**Adobe Firefly**





**The most creator friendly approach to AI**



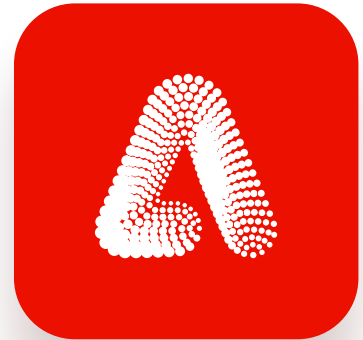


## Adobe Firefly

1. Deeply integrated into our tools
2. Designed to be commercially safe
3. Transparent with training data
4. Support for Content Credentials



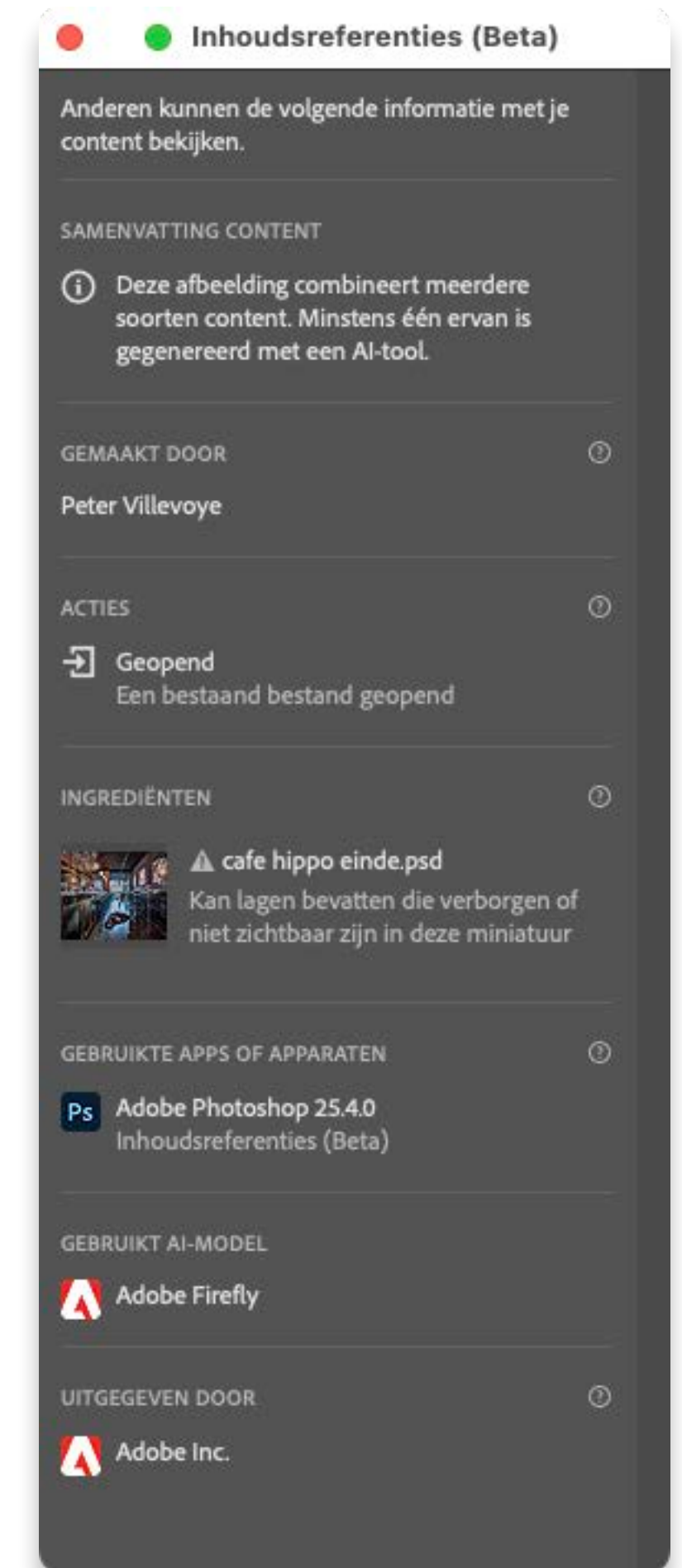
# Samengevat en vertaald



- Firefly* is gebaseerd op 4 uitgangspunten:
- goed geïntegreerd in oude en nieuwe tools;
  - openheid over alle gebruikte trainingsdata;
  - ondersteuning voor zgn. *content credentials*;
  - voor professionele/commerciële doeleinden.

Adobe's aanpak om juridisch 'safe' te zitten, zal een groot voordeel en voorbeeld blijken. Professionele creatieven en uitgevers willen geen dreigende advocaten voor hun deur...

*an angry lawyer with a huge letter in his hand,  
standing in front of a door, in dark cartoon style*



# Content Authenticity Initiative

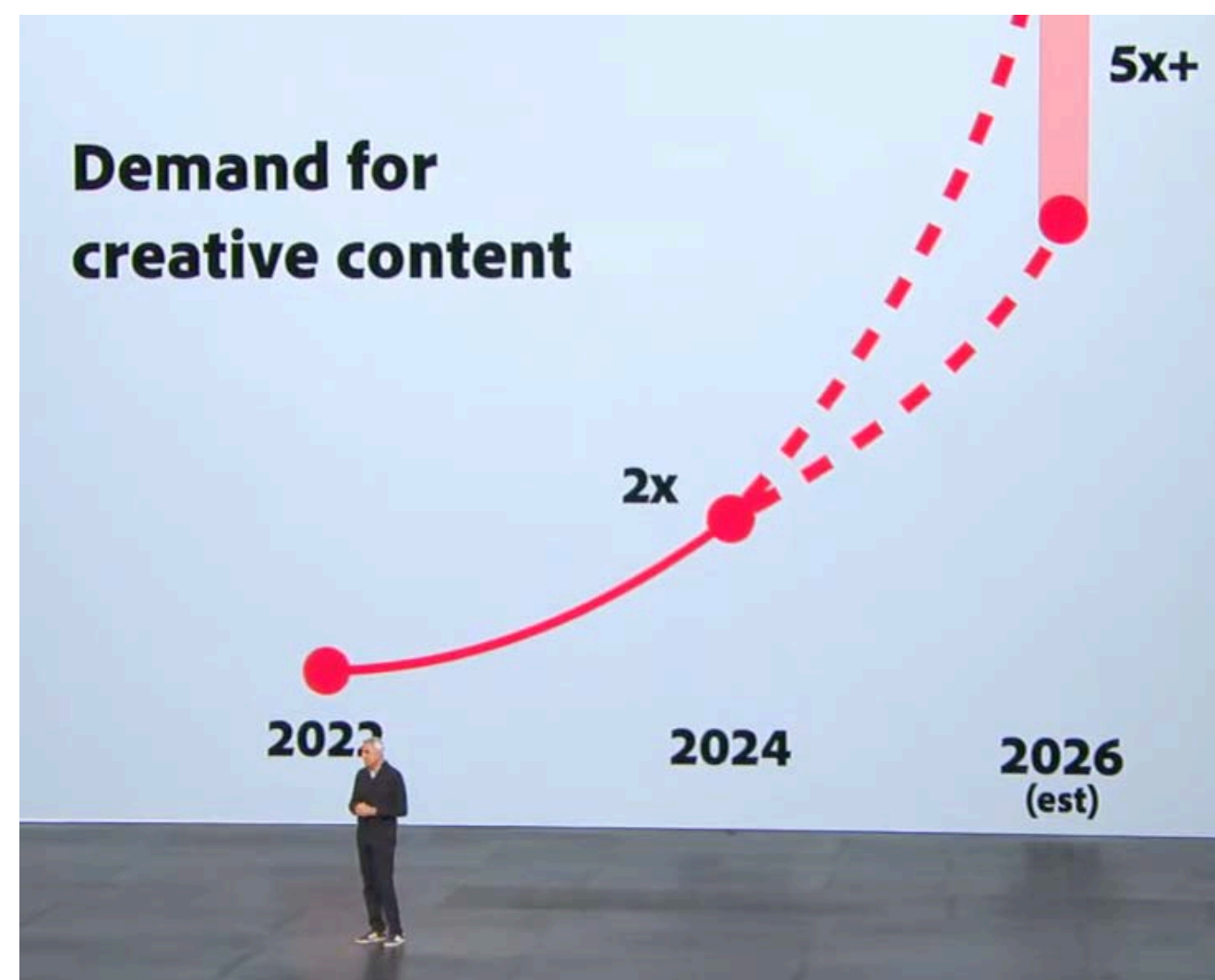


- Al bijna 900 aangesloten leden,
- uit allerlei branches en regio's...



# Hoe gaat het met mijn baan ?

Er is een steeds sterker toenemende vraag naar content (teksten, beelden, video. etc.)  
Men verwacht een verdubbeling per jaar !





Adobe Firefly



Adobe Creative Cloud



Adobe Express

We hebben die AI  
gewoon hard nodig !

Spend more time on what you want to do, and less time on what you have to do...







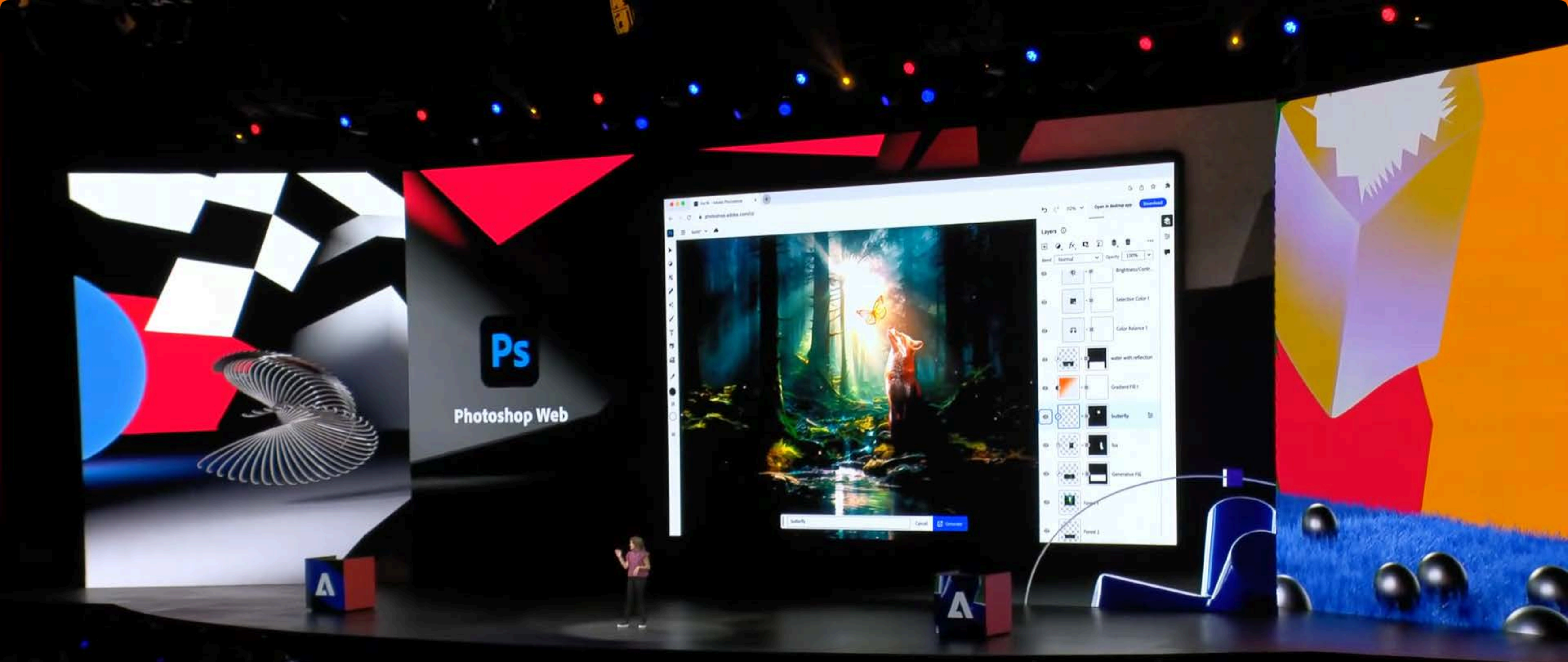
style

inspo



simplify





Er blijft een idee en fine-tuning nodig.

# Wees gerust...

To replace graphic designers with AI, clients will need to accurately describe what they want.

**We're safe.**

# Voordelen aanpak *Photoshop*

- Gebieden in een bestaand beeld selecteren.
- Geen prompts nodig voor plaats, sfeer, stijl.
- Laag op laag, gestapeld en altijd wijzigbaar.  
Dus níet: *everything, everywhere, all at once*.
- Technisch, financieel en juridisch voordeel:  
snelle en zuinige werkwijze;  
inbegrepen in je abonnement;  
duidelijkheid over copyrights.
- Géén "*copyrighted*" of "*sensitive*" materiaal.



# Samenvatting, tips, etc.

- Niets intikken als je iets wilt weghalen, dus eigenlijk niks nieuws wilt genereren. Je krijgt wat aannemelijk is a.h.v. context.
- Houd rekening met ruimte voor generatie van schaduwen, lichtval, reflecties, etc.
- Genereer lagen van achteren naar voren, anders verschijnen er rare overlappings. Je genereert geen objecten maar 'lapjes'.
- Denk aan upscalen (resolutie) en CMYK.
- **Verloochen je *Photoshop*-kennis niet...**





dynamic high energy dragon

**Firefly Image Model**



a cute kawaii tiger

**Firefly Vector Model**



a dance party post

**Firefly Design Model**

Maar er is méér...



dynamic high energy dragon

**Firefly Image 2  
Model**



a cute kawaii tiger

**Firefly Vector  
Model**



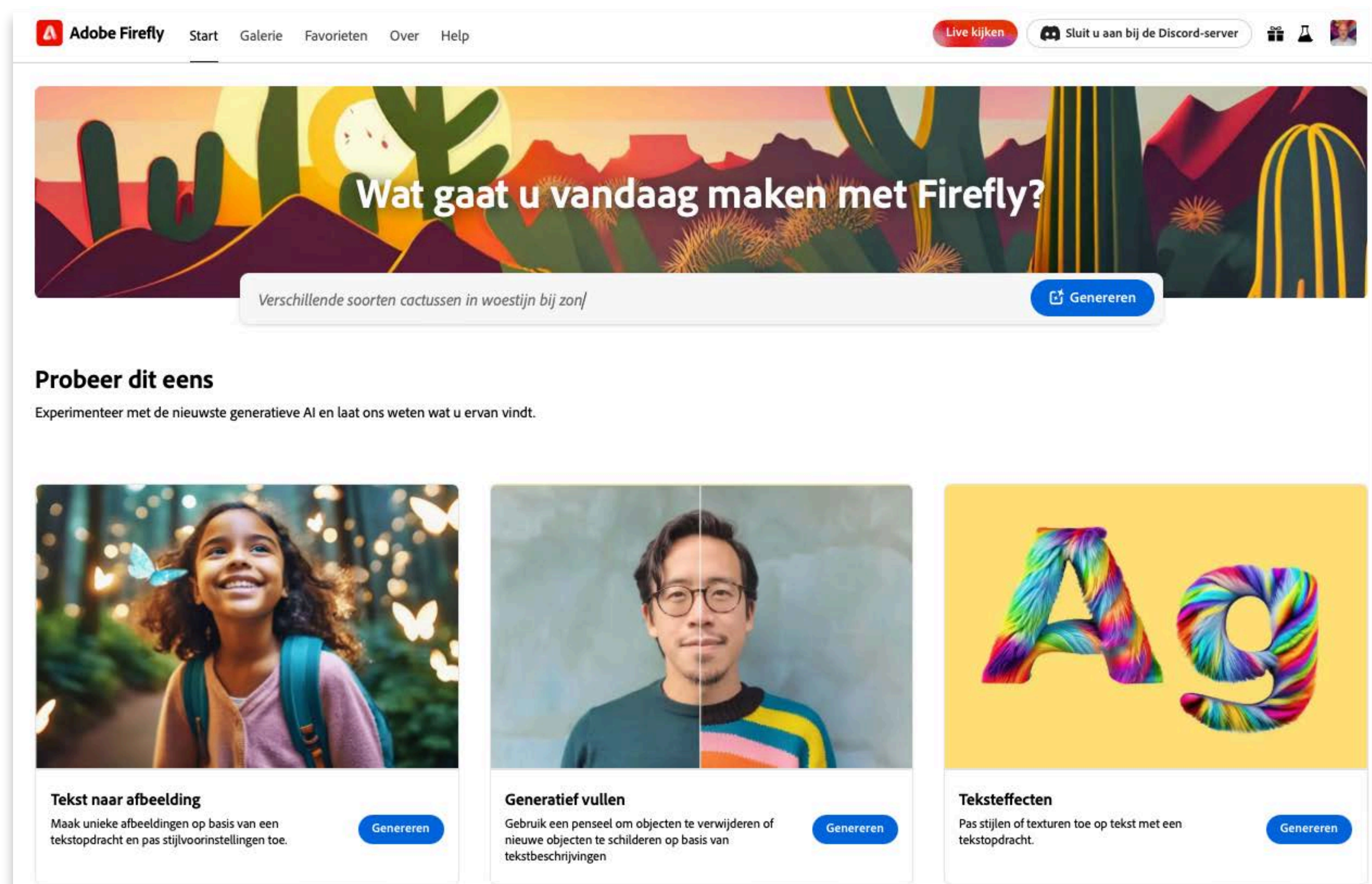
a dance party post

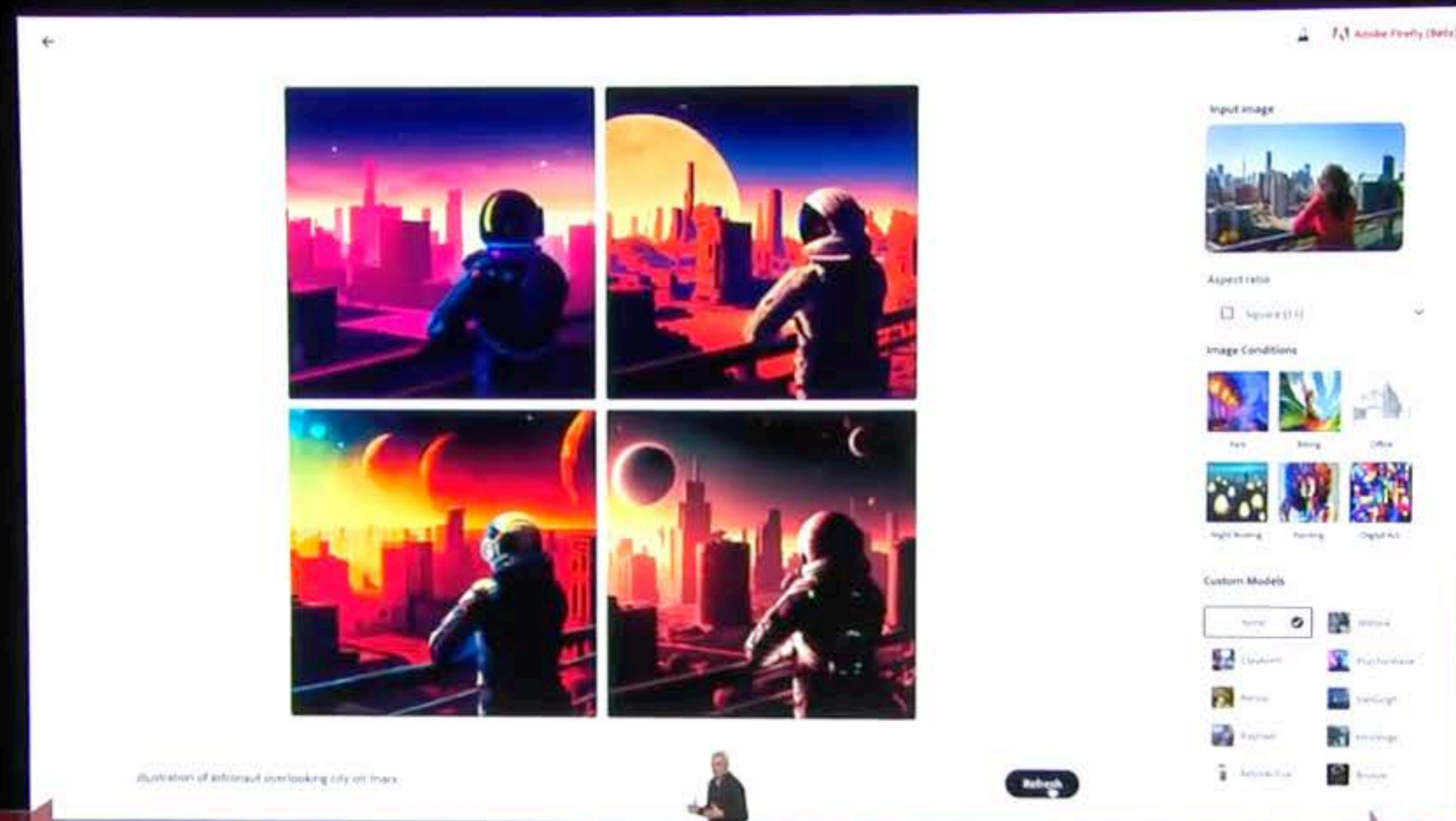
**Firefly Design  
Model**

3

*Meer resolutie  
Beter kwaliteit  
Referentie Beelden*

# Firefly web-app (website)





## *Composition Reference*

# Gemak dient de visuele mens

*Ik weet wáár iets moet maar hoe zeg ik dat ?*

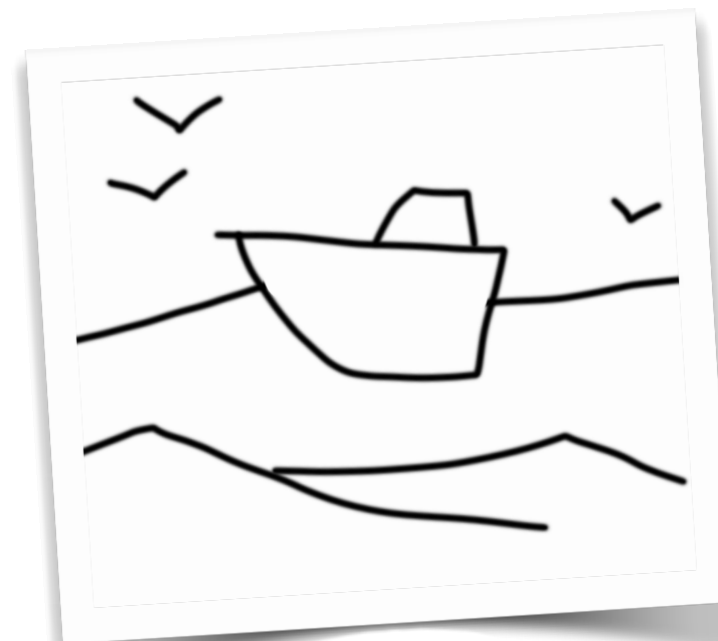
- Een schets of foto als compositie-referentie.

*Ik weet niet hoe het heet wat ik qua stijl wil...*

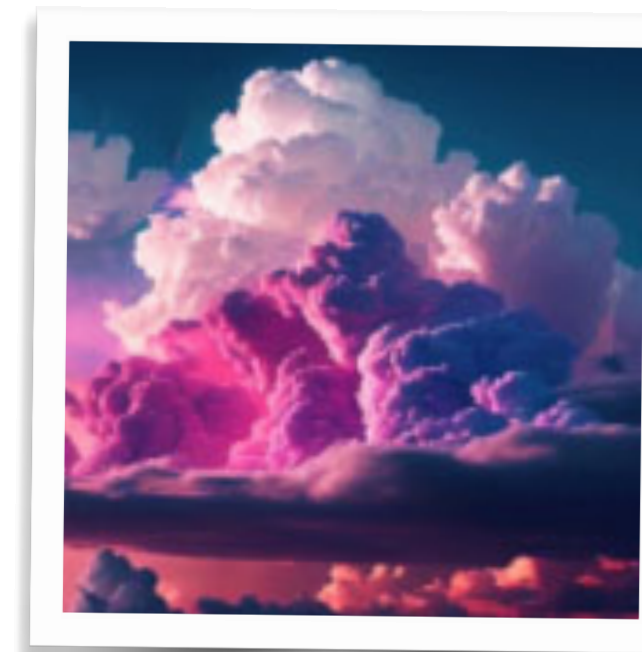
- Voorbeeld of eigen beeld als stijl-referentie.

surreal boat  
in a desert  
with seagulls

+



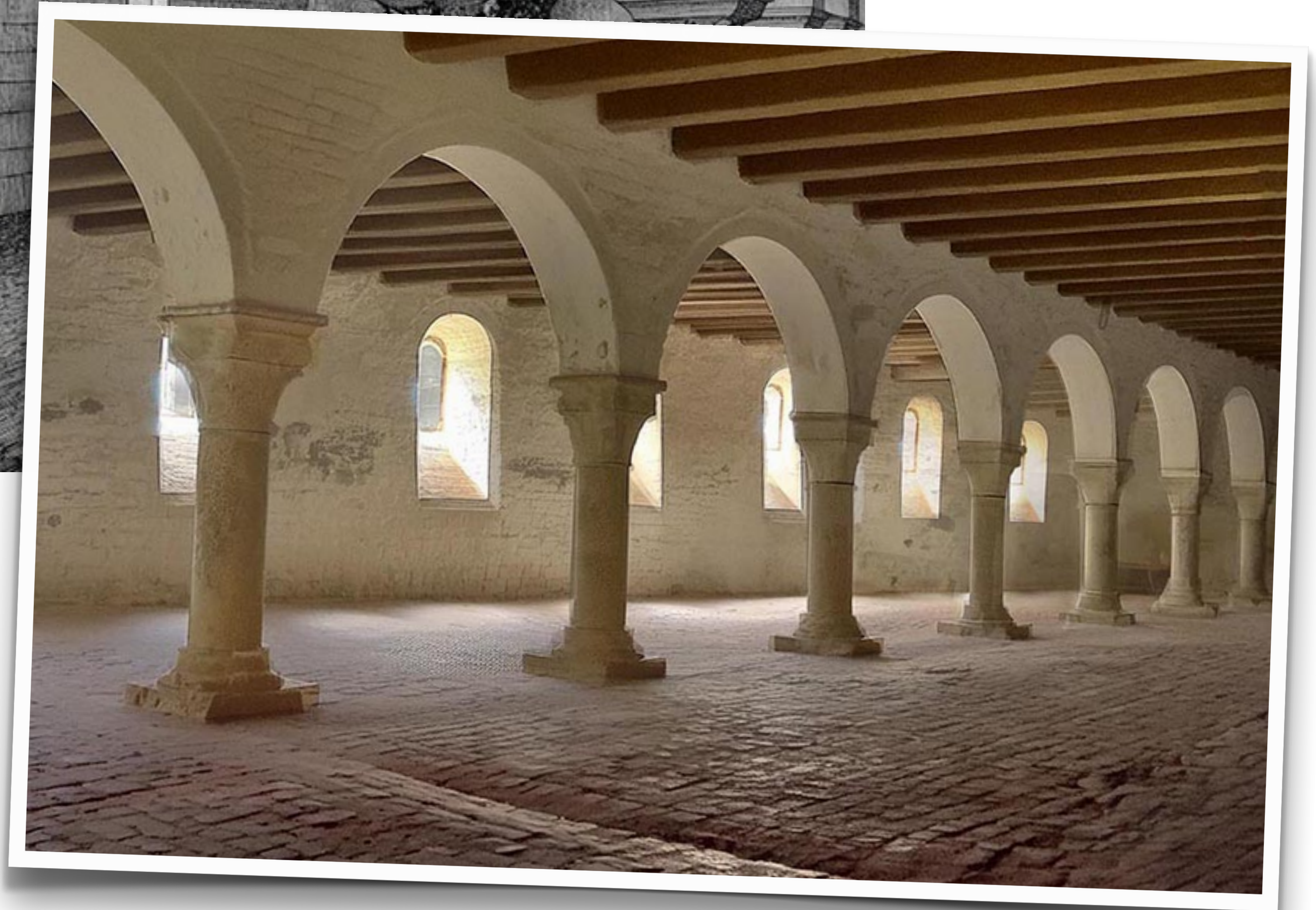
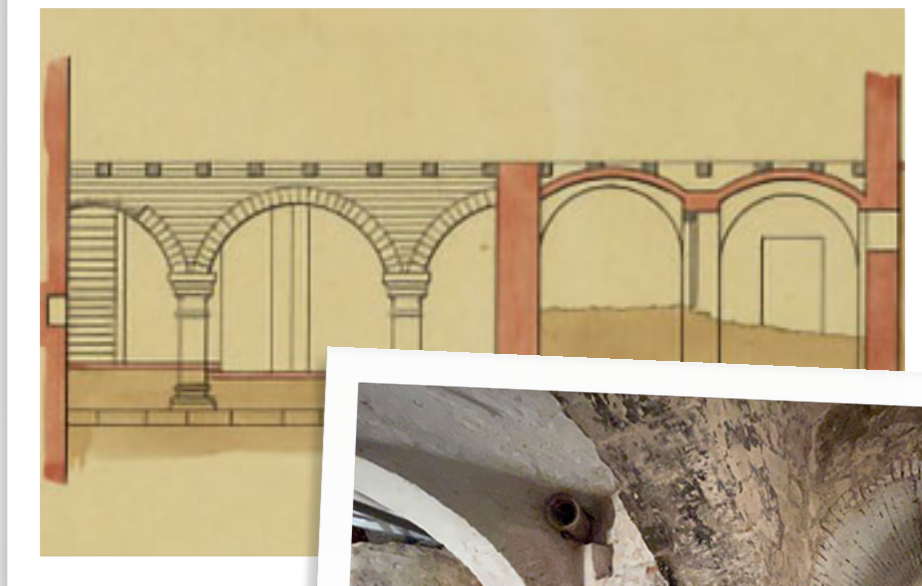
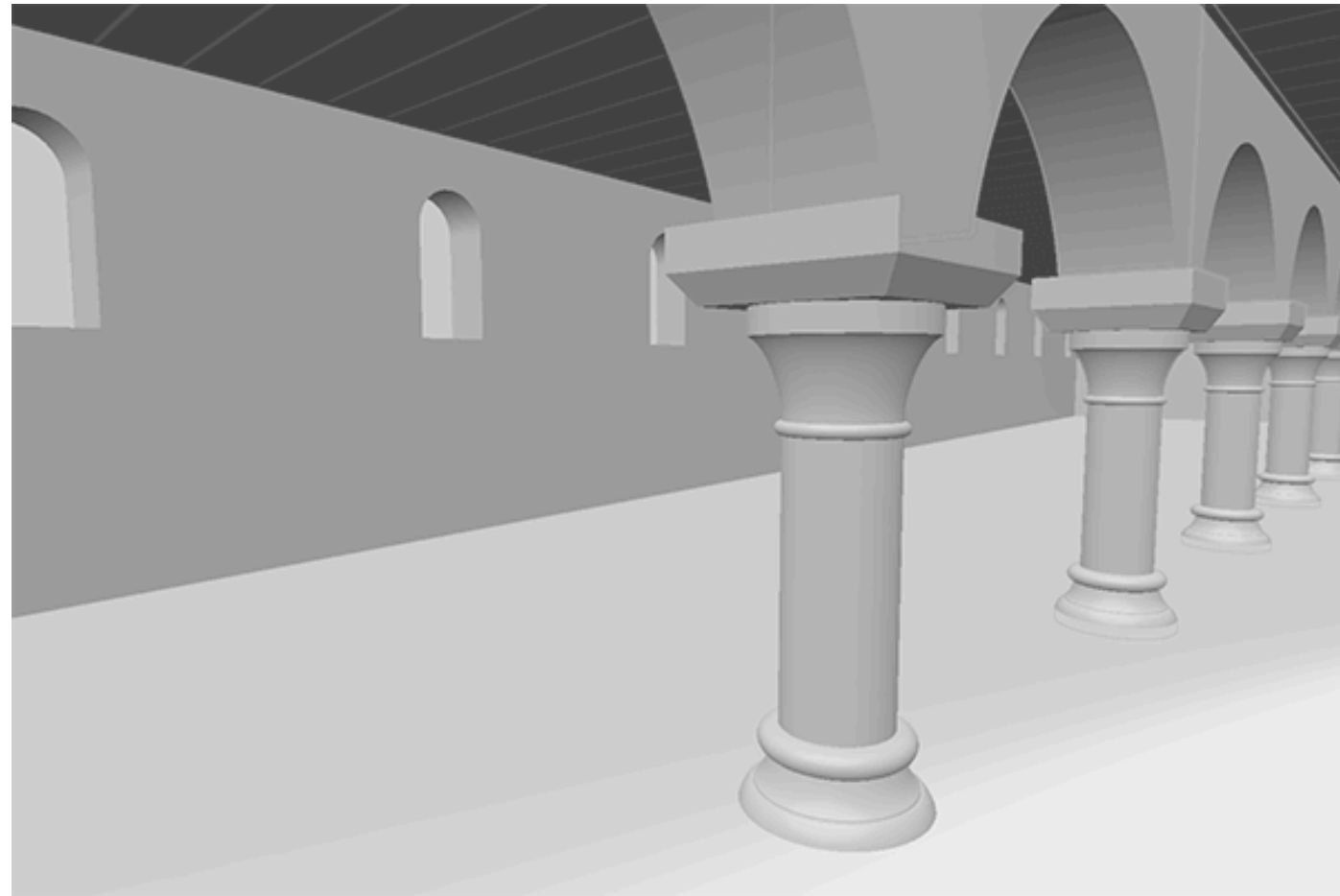
+



=



*Aan de slag !*

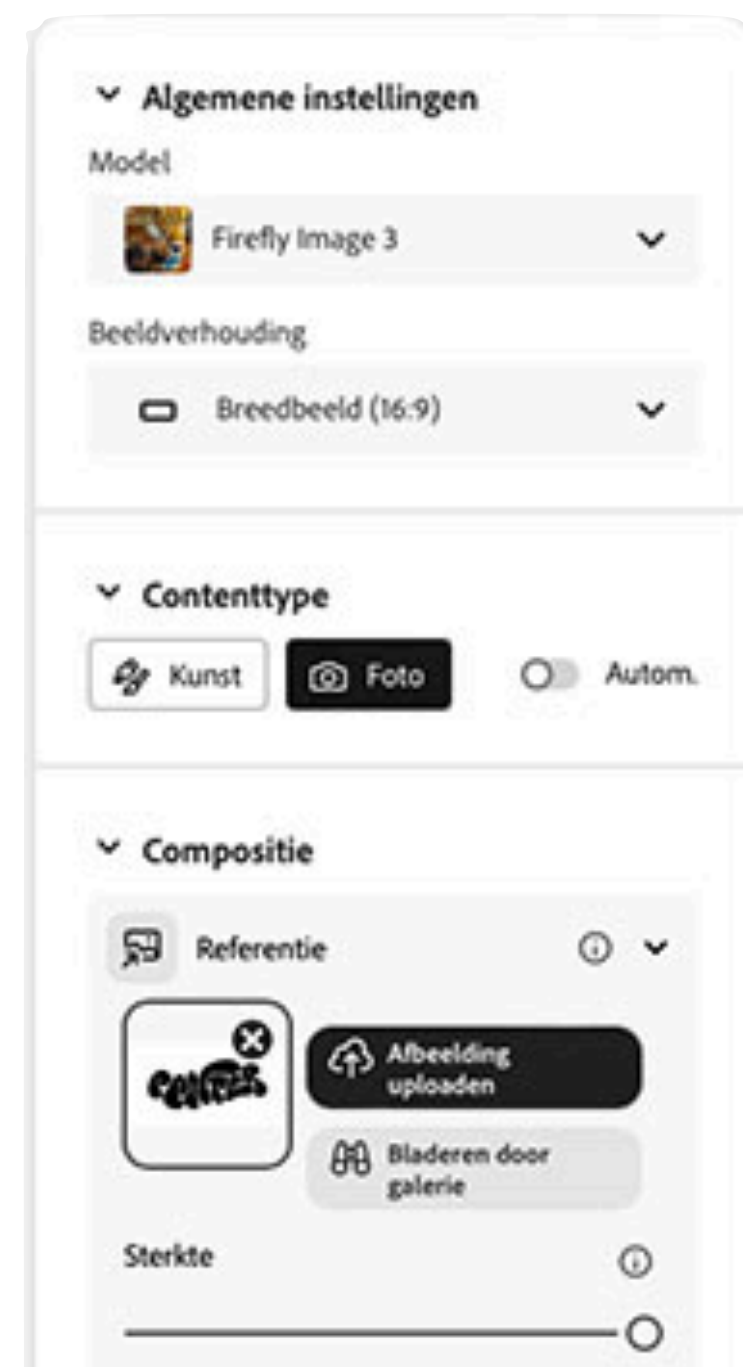


# Voorbeelden prompts in *Firefly*

- **Verhouding** moet overeenkomstig zijn !
- *Construction Reference* met **Strength 100%**

liquid, reflective, shiny chrome material, polished, 3d, isolated on black background

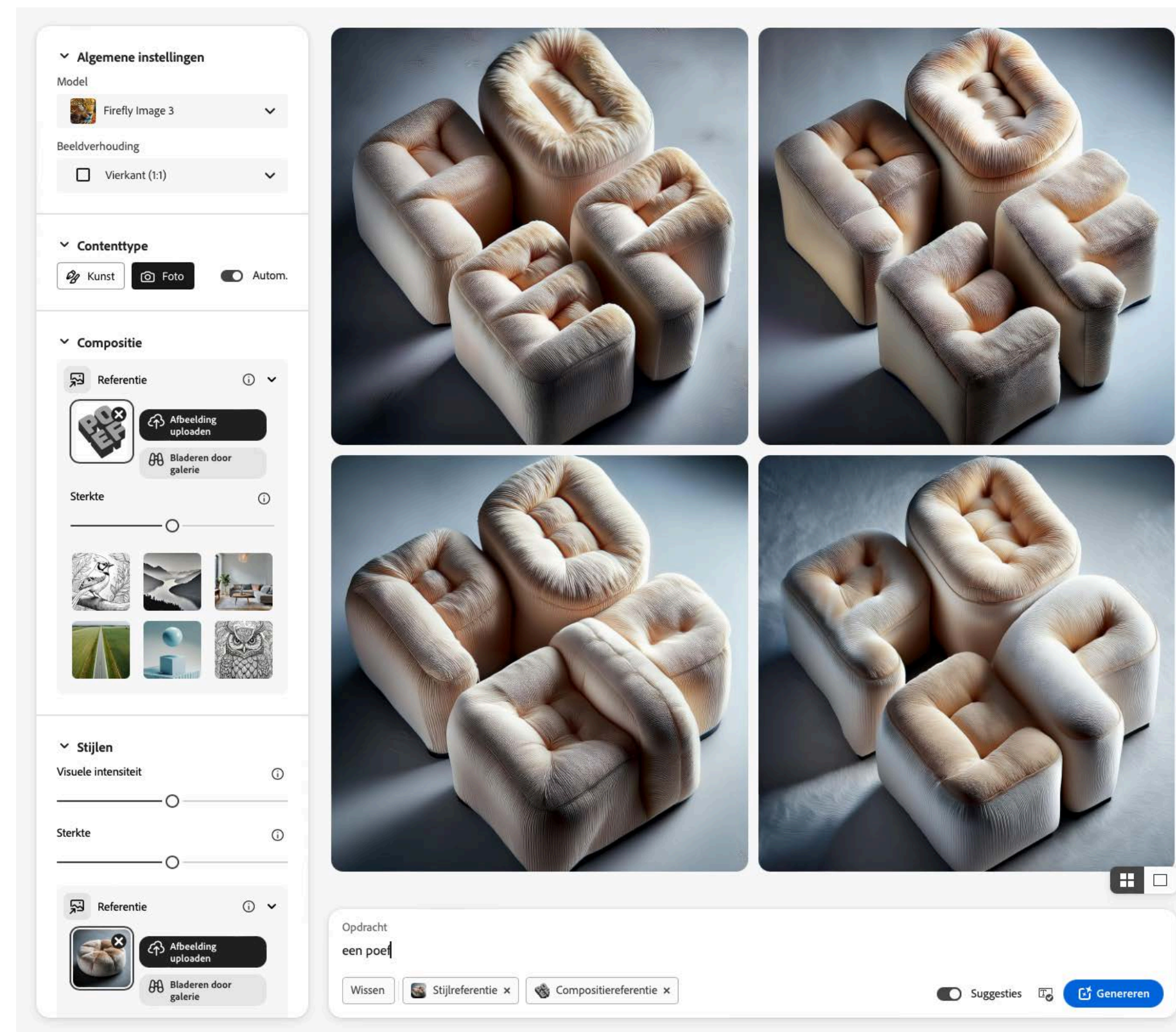
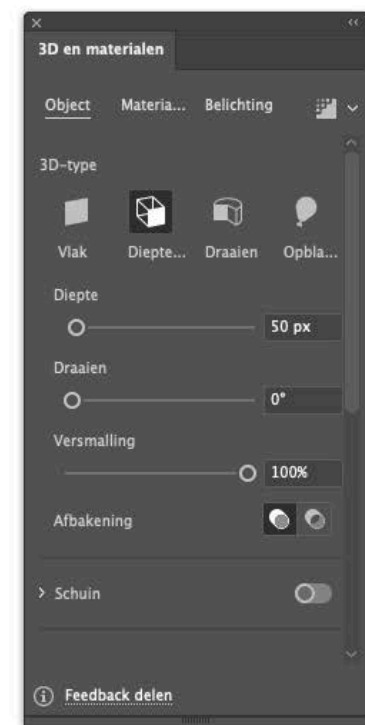
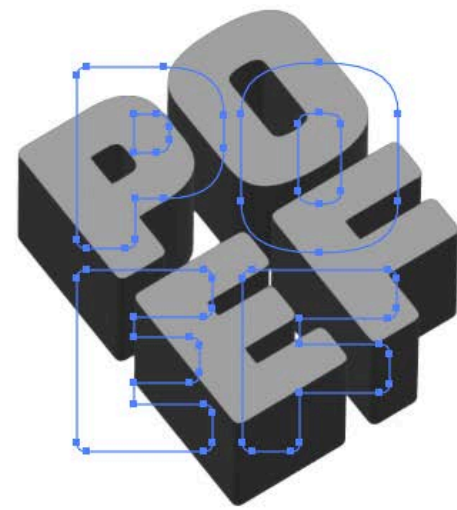
**PANZER**



<https://www.youtube.com/watch?v=Wvj6fZZWo20>

# Voorbeelden prompts in *Firefly*

PO  
EF



# Voorbeelden prompts in *Firefly*

large lit ice cube  
in the snow, in  
night setting with  
bright colorful  
northern light



**LUMINOUS**

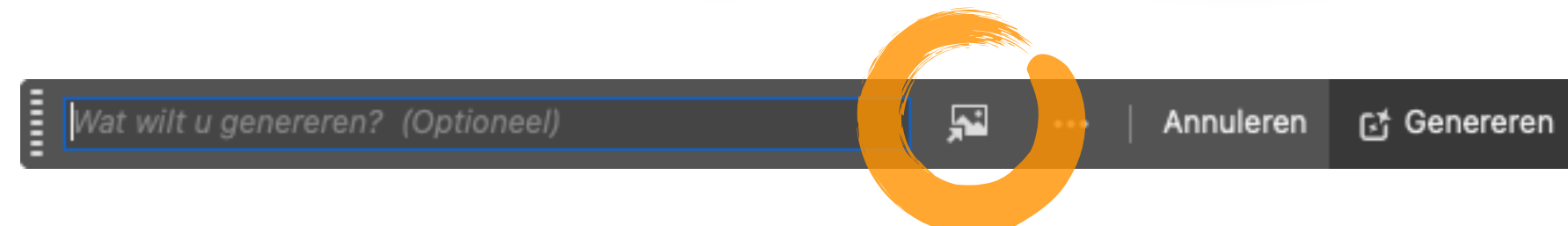
ice cube lettering in the snow, in night setting  
with bright colorful northern light



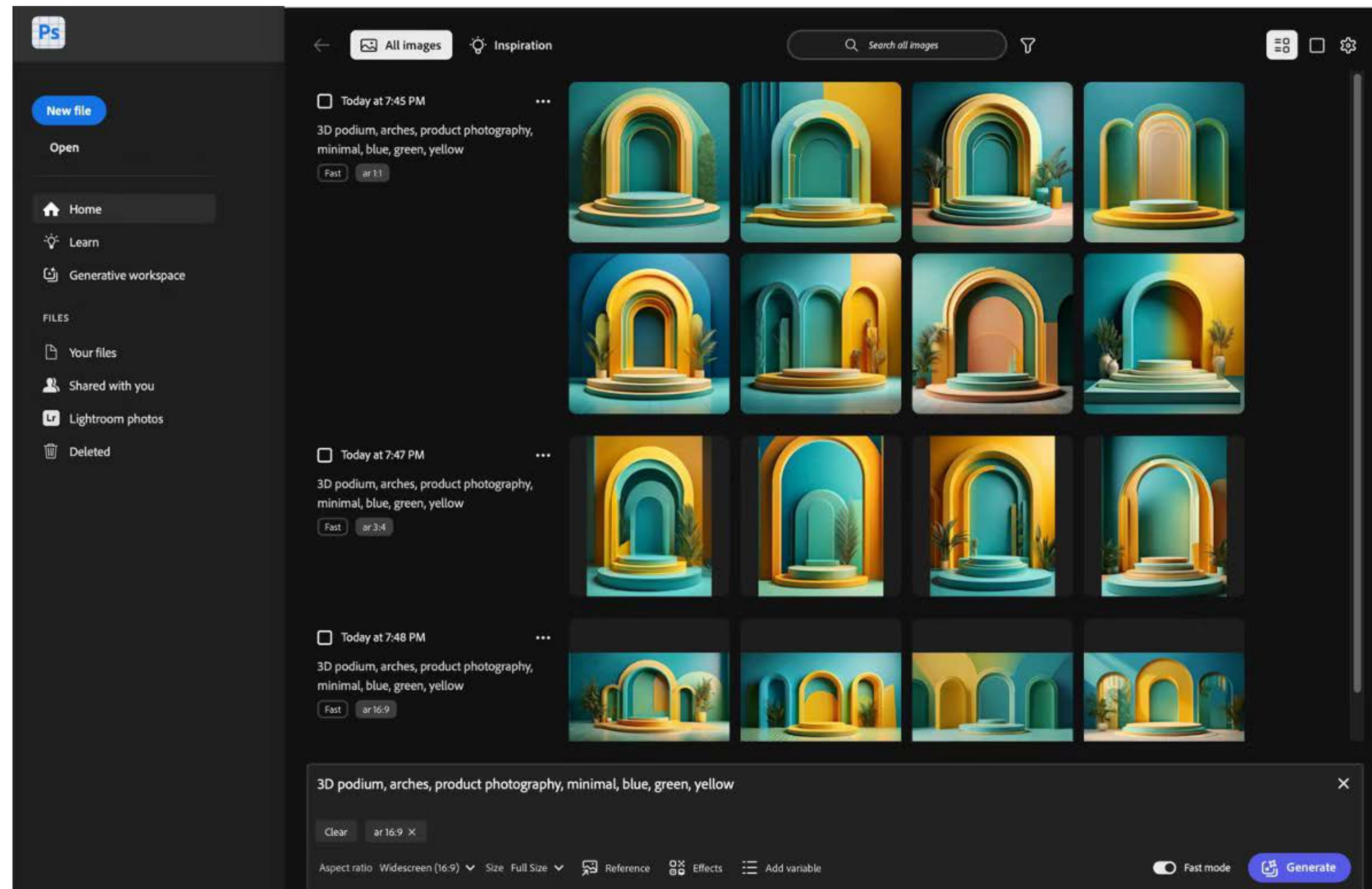
<https://www.adobe.com/learn/firefly/web/ai-generated-text-effects-with-reference-image>

# Bèta Content-referentie

- Een bontjack, bierpul, etc.



# Bèta Generative Workspace



# Bestaand beeld stileren met AI

*Aan de hand van een 'zachte' (40%) selectie.*

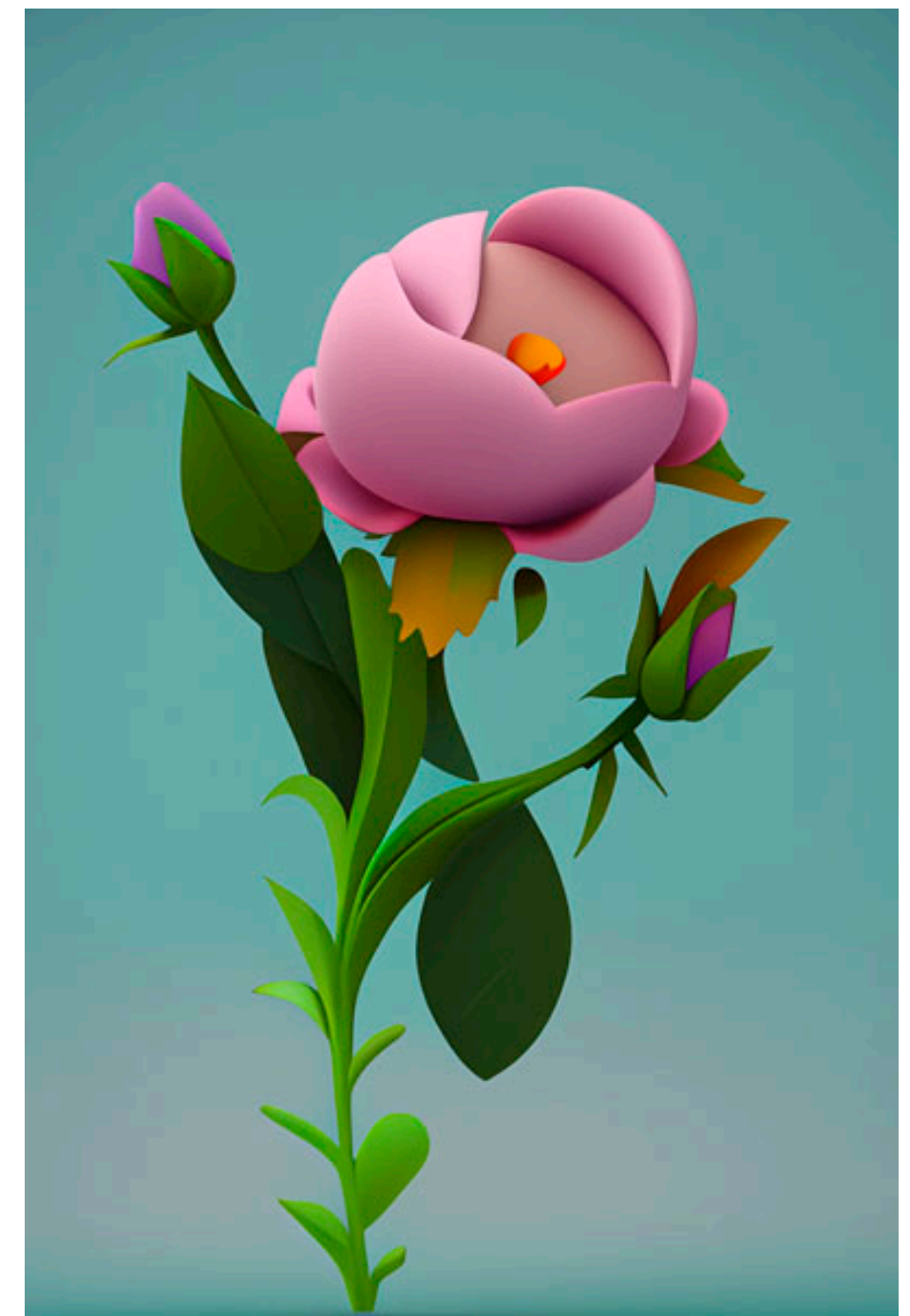
- Open het originele beeld
- Ga in de *QuickMask*-modus
- Vul met  $H = 0^\circ$ ,  $S = 0\%$ ,  $B = 40\%$
- Ga uit de *QuickMask*-modus
- Generatief vullen met prompt

*Meer uitleg en voorbeelden van termen:*

<https://nicolesy.com/2023/09/25/50-art-style-prompts-photoshop...>

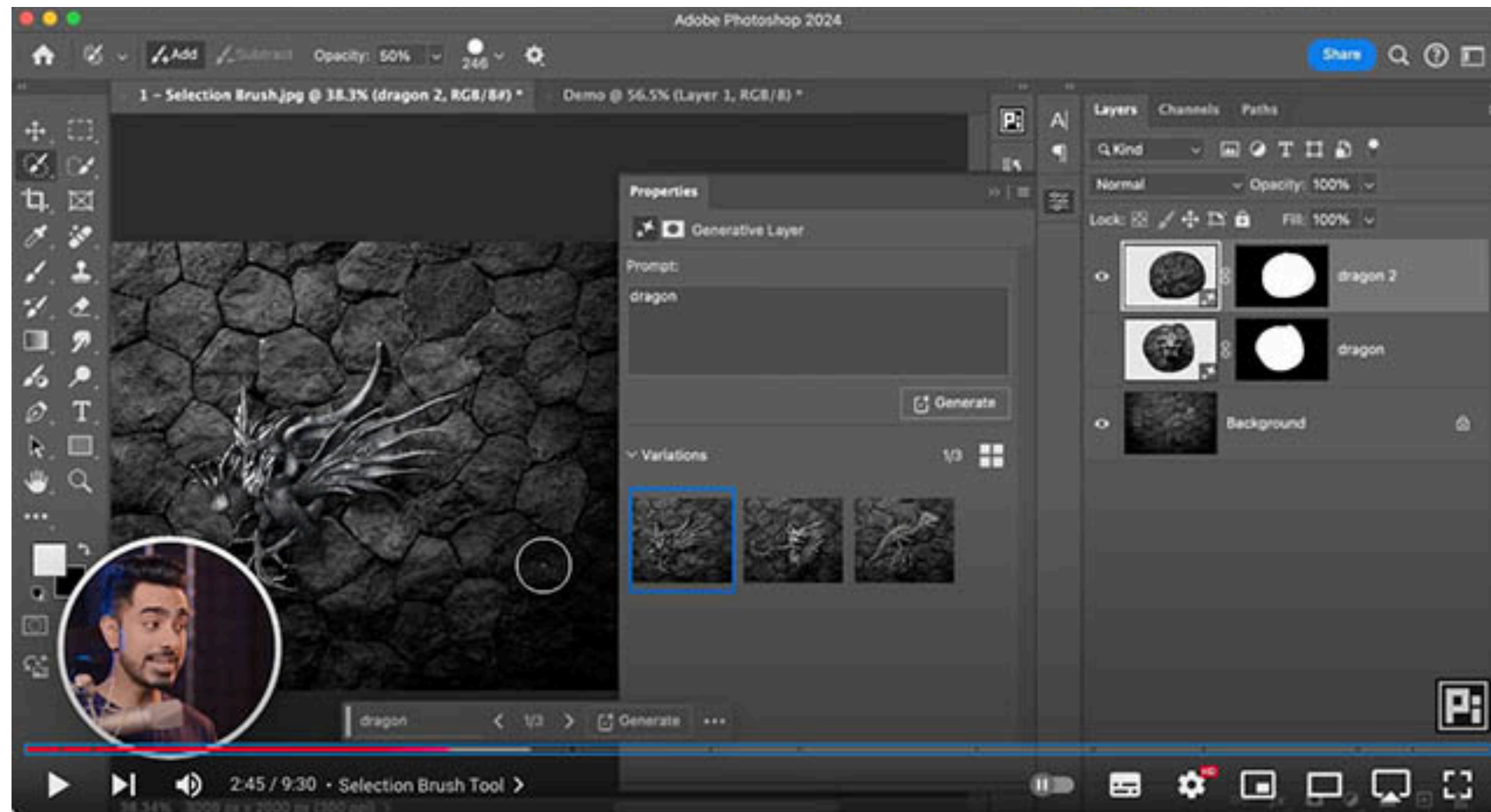


*originele foto*



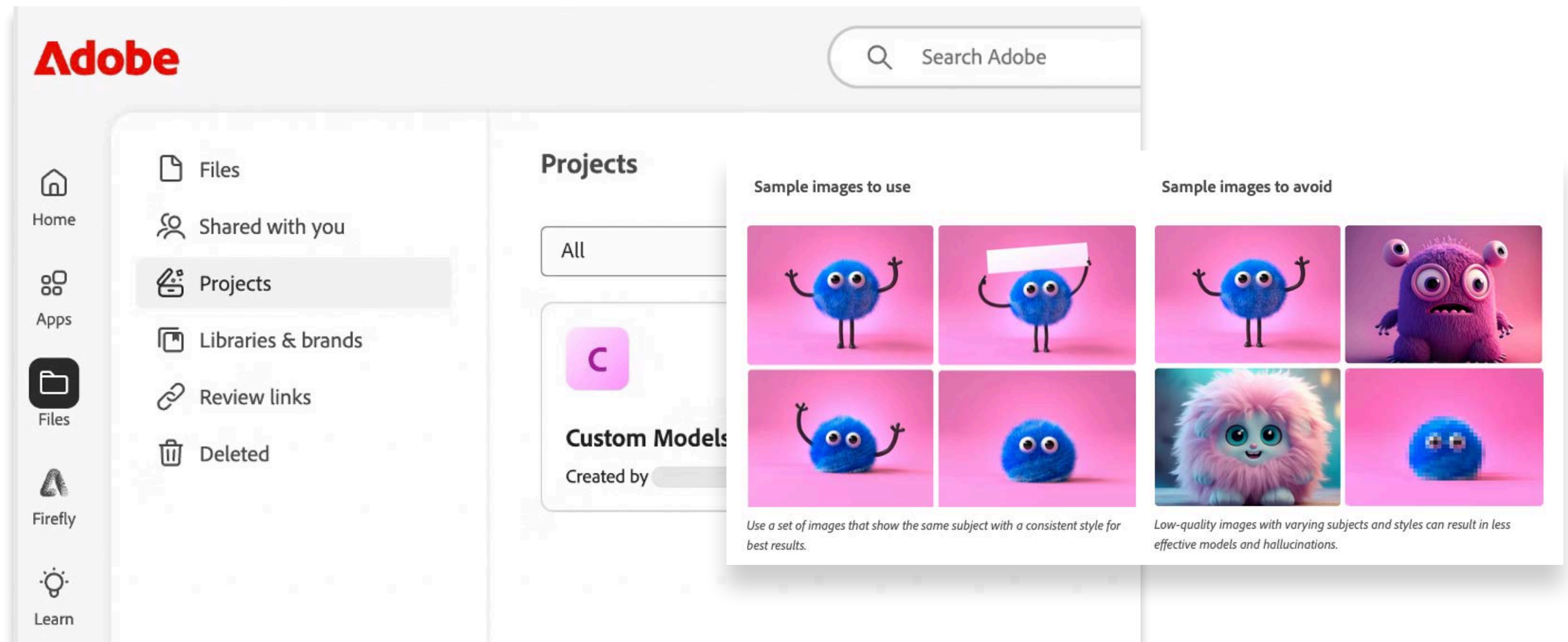
*prompt: cartoon art*

# Stileren met nieuwe *Selectie*-kwast



Werken met zachte selecties: <https://www.youtube.com/watch?v=o9O3tapf6mM>

# Je eigen "model" opbouwen



*Exclusief in speciale "Enterprise" contracten.*





**Firefly Image 2  
Model**



**Firefly Vector  
Model**



**Firefly Design  
Model**



**Firefly Audio  
Model**



**Firefly Video  
Model**



**Firefly 3D  
Model**



# Firefly-modellen



Firefly Image Model

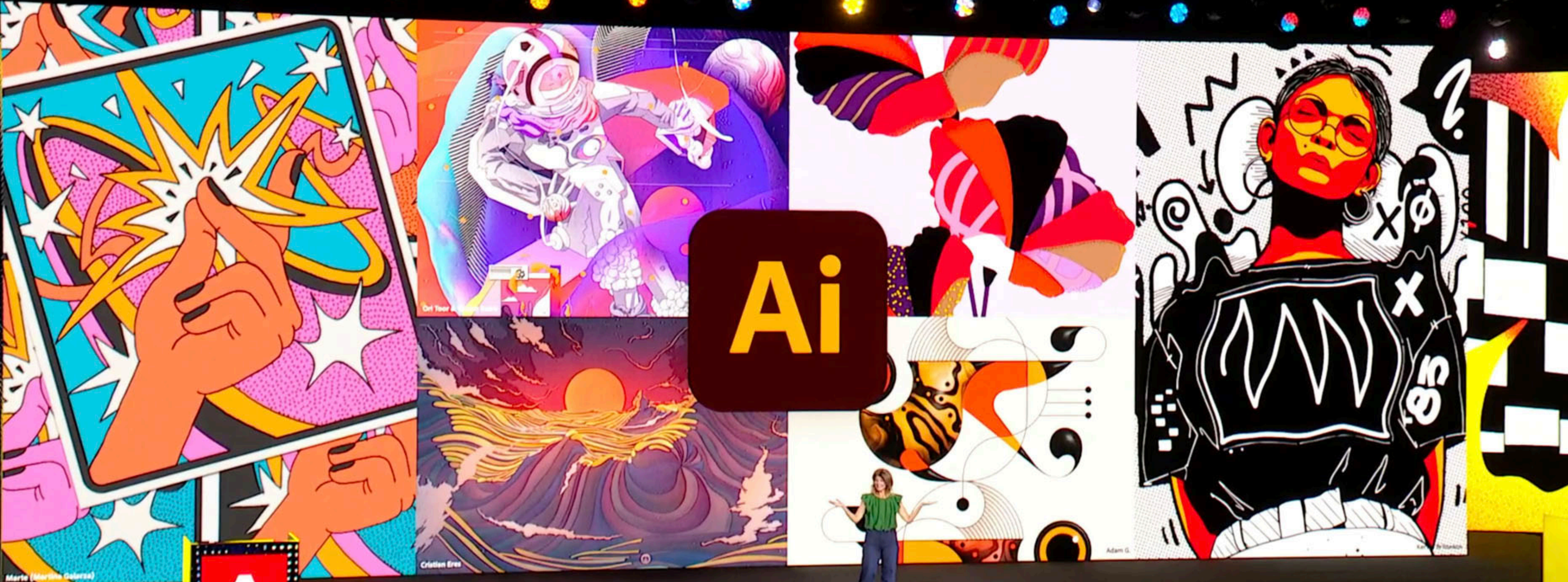


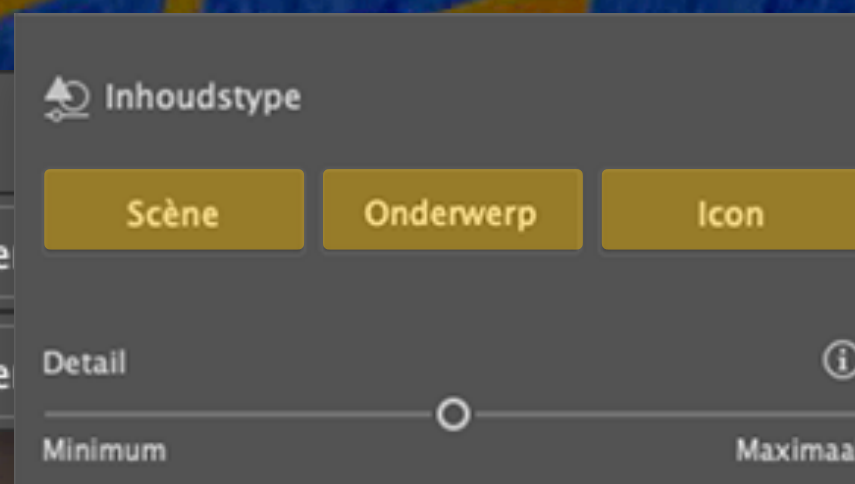
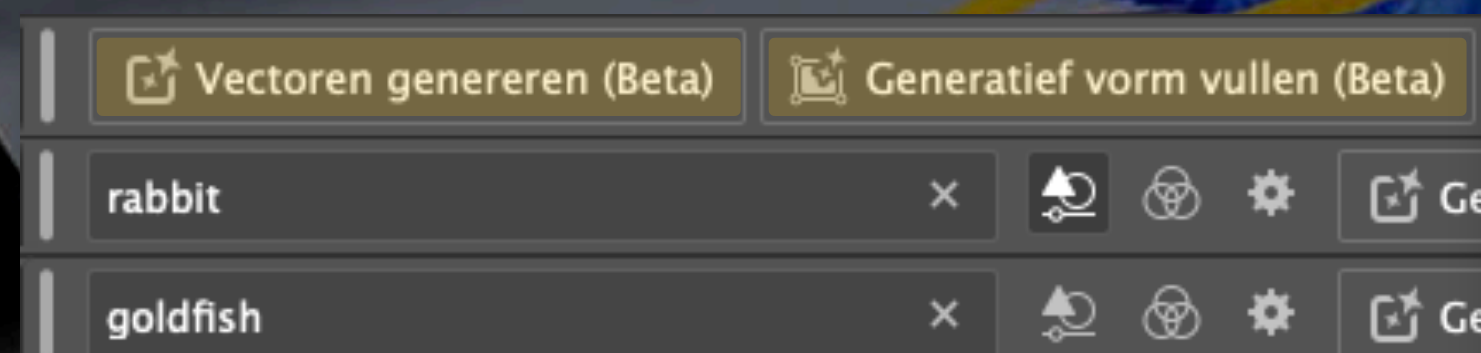
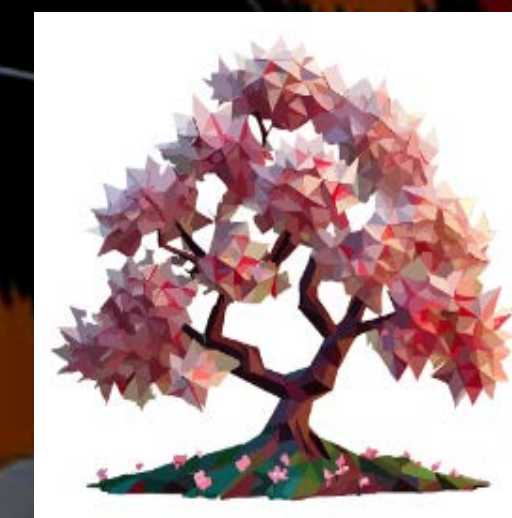
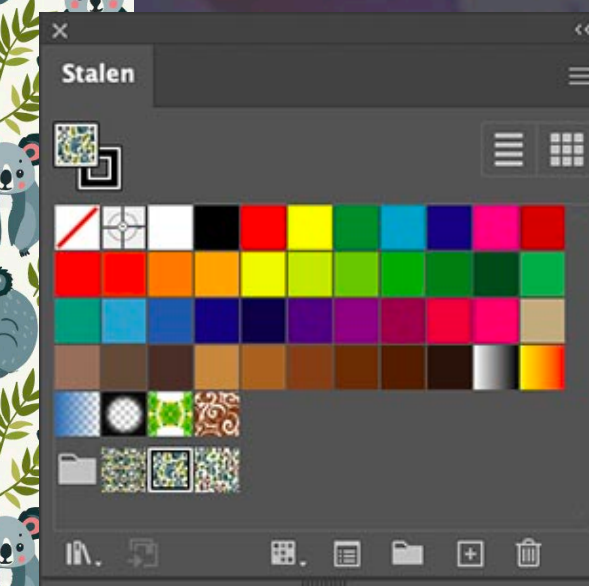
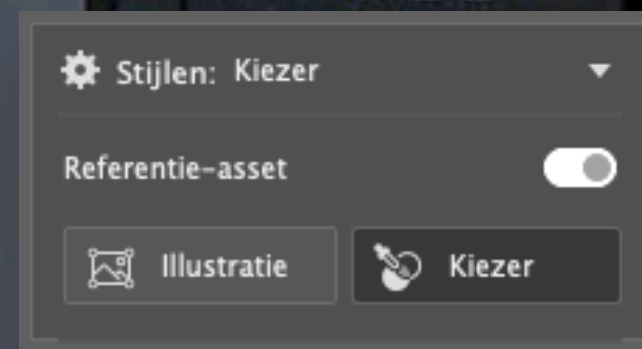
Firefly Vector Model



Firefly Design Model

Bèta  
Bèta  
Bèta





FLAVOR LIST



MATCHA  
MILK TEA



BROWN  
SUGAR  
MILK TEA



TARO  
MILK TEA



STRAWBERRY  
MILK TEA



PASSION FRUIT  
MANGO  
FRUIT TEA

YUM

FLAVOR OF THE WEEK

FLAVOR OF THE WEEK

FLAVOR OF THE WEEK

FLAVOR OF THE WEEK

FLAVOR OF THE WEEK

FLAVOR OF THE WEEK

Ai

Properties Layers Libraries

TRAVEL JOURNAL DESIGN

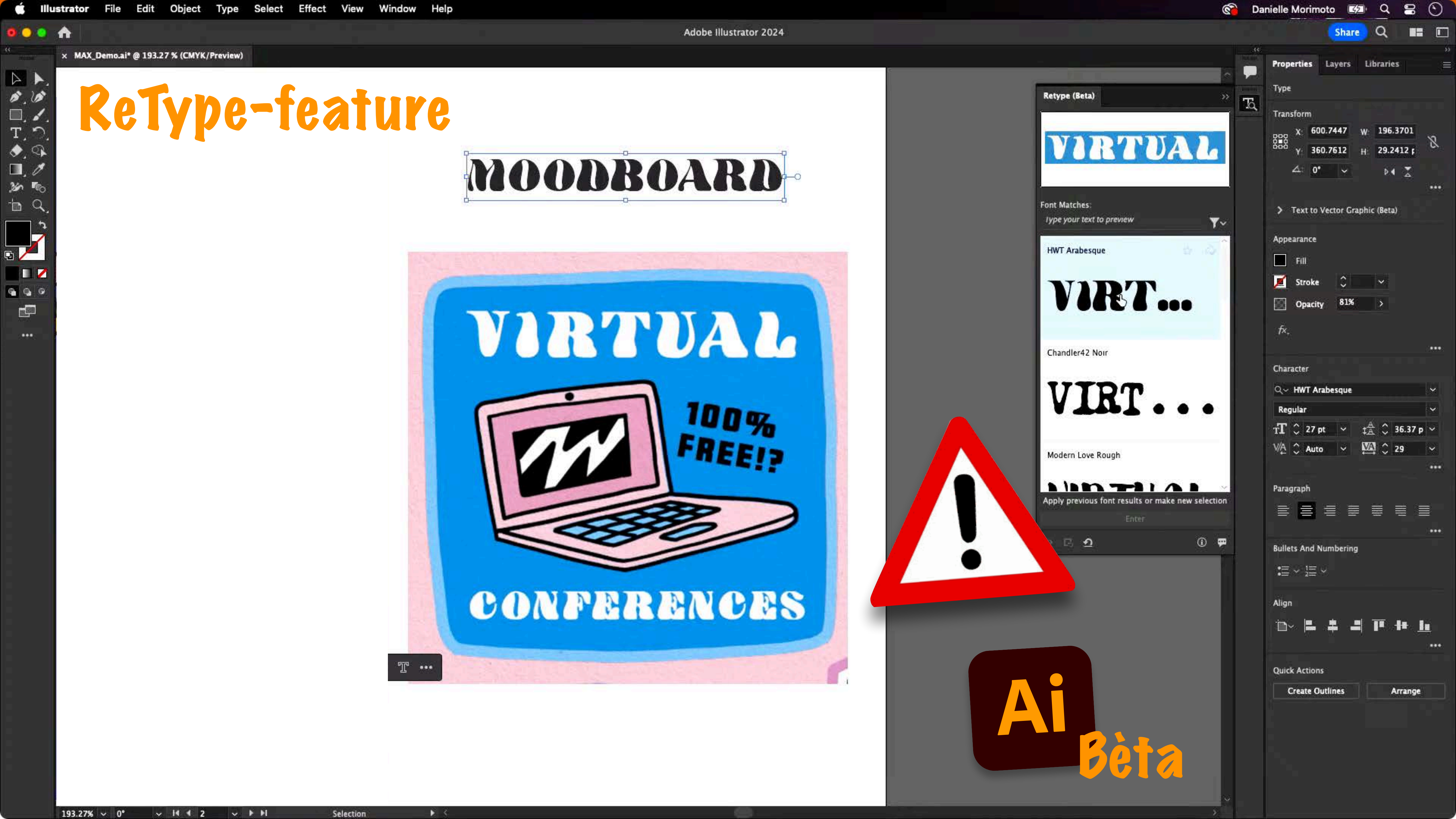
Search current library



California



Opnieuw kleuren Generatief kleuren aan...  
Prompt  
Beschrijf het kleurenpalet, de stemming of het thema dat u wilt genereren  
Kleuren  
Genereren  
Voorbeeldinstructies  
 Zalmsushi  Zanderig steen...  Donkerblauwe...  
 Trippy discola...  Terracottawoe...  Gele onderzeeër  
 Widelstorm  Vage smaragd...  Zomer aan zee  
Geavanceerde opties...



# ReType-feature

MOODBOARD



Ai Bèta

# Mock-up (Beta)



*Aan de slag !*



**Firefly Image 2  
Model**



**Firefly Vector  
Model**



**Firefly Design  
Model**



**Firefly Audio  
Model**



**Firefly Video  
Model**



**Firefly 3D  
Model**

# ***Firefly 3D Model***

## ***Bèta***

# *Substance Stager & 3D Viewer*



# Firefly-modellen



**Firefly Image Model**



**Firefly Vector Model**

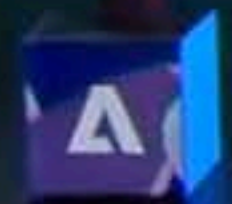


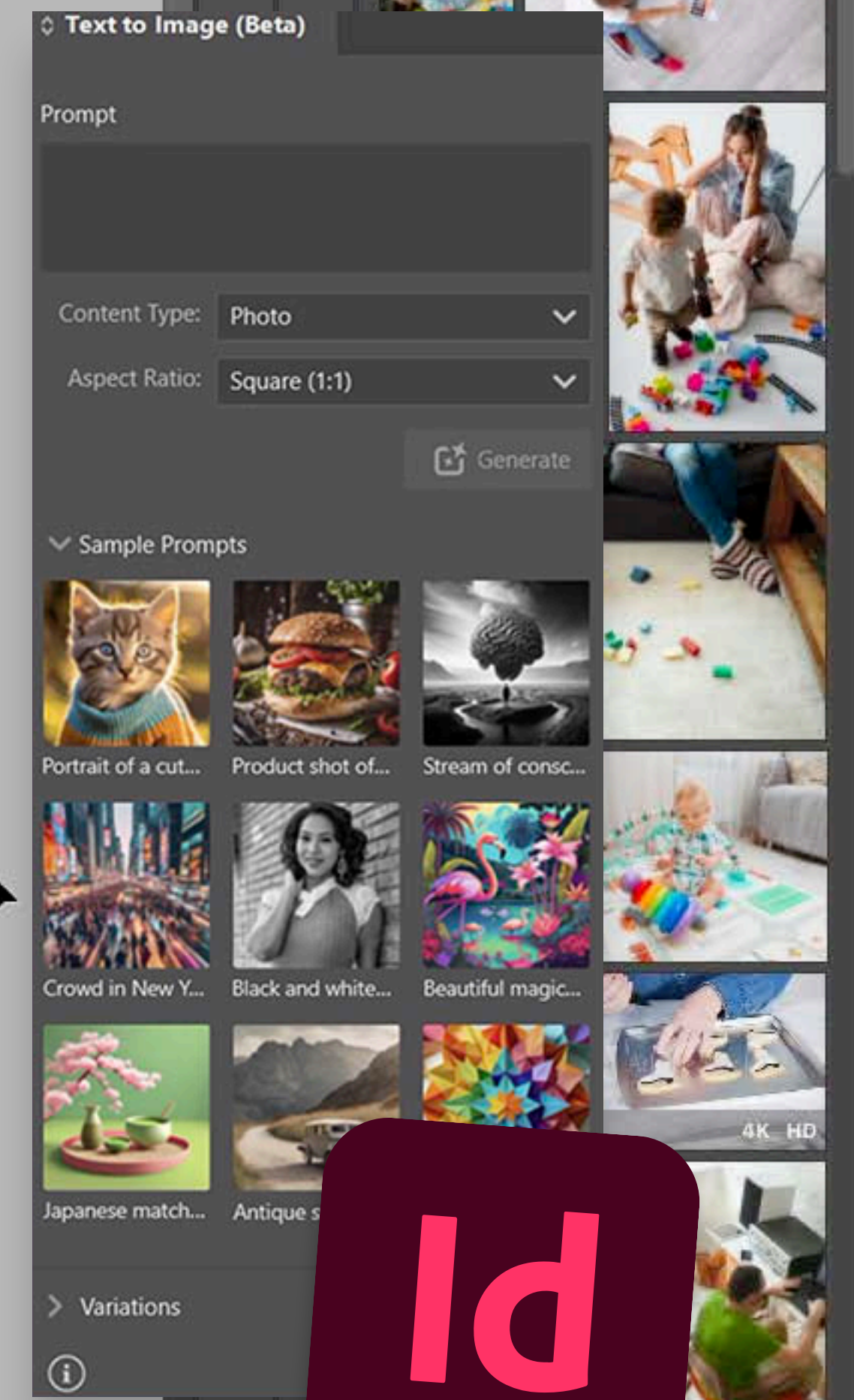
**Firefly Design Model**





Firefly Design Model







# Adobe Express





**Firefly Design Model**



### Ice Breaker

Your mission when this description card is shared is to get to know your class better.

1. What is your favorite color?

2. What is your favorite food?

3. What is your favorite animal?

4. What is your favorite sport?

5. What is your favorite movie?

6. What is your favorite book?

7. What is your favorite song?

8. What is your favorite hobby?

9. What is your favorite place?

10. What is your favorite time of day?

### NANCE'S FIRST DAY OF SCHOOL

I am 7 years old

I am 50 inches tall

Favorite Toy: Doll

Favorite Color: Pink

### CHICKEN DINNER

HORRIDGE MIDDLE SCHOOL

OCTOBER 20TH AT 5 PM

### READ-A-THON

1520 Elmwood St., New Haven, CT

March 4th, 5:30 PM

### After-school program

TUE-FRI 4 PM-7 PM

RED HILLS HIGH SCHOOL

Registration now open! \$50 per month

### MY BOOK REPORT

Book Title:

Author:

Number of pages:

Summary:

I liked it because:

### Golden Gate Bridge

Built in 1937, the Golden Gate Bridge is one of the most famous bridges in the world.

Did you know?

- It took 4 years to build. Construction started in 1933 and ended in 1937.
- The reason behind its yellow color is because the steel was coated in a special type of paint to protect it from corrosion. Irving Thomas, an architect on the project, decided to paint the entire structure "International Orange" to give visibility to the fog but also to make it stand out from the surrounding landscape.
- It has been photographed in the world.

### Parent-Teacher Conference

Reverend Middle School

307 Rose Ave., Nashville, TN

May 2nd from 6 pm - 8 pm

### School Supply Drive

Help create a successful learning environment and make sure all students have what they need to succeed.

Drop off your school supply donations at the school office by August 15th, 2023.

### Climate Change

Effects on plants, animals, and people.

### Car Wash

Killean High School Annual Fundraiser

March 20th, 10 AM - 5 PM

Come along and support our students at their annual school car wash!

### Science Fair

210 Small Avenue, Dallas, Texas

Monday April 8th at 6:30 p.m.

Coding all young scientists showcase your scientific knowledge and creativity by participating in our annual science fair. Explore various exhibits, experiments, and hands-on activities.

Sponsored by the Perryville PTA

### THE WORLD NEEDS TEACHERS LIKE YOU

### Teacher Schedule

Teacher	Class	Day	Time	Location
Mr. Smith	Math	Monday	8:00-9:00	Room 101
Ms. Jones	Science	Tuesday	9:00-10:00	Room 202
Mr. Brown	History	Wednesday	10:00-11:00	Room 303
Ms. White	Art	Thursday	11:00-12:00	Room 404
Mr. Green	Physical Education	Friday	12:00-1:00	Room 505

### CONGRATS ON OUR 100TH DAY OF SCHOOL!

### DELTA UNIVERSITY

#### STUDENT ID

Paige Schultz

ID # 4334543234

### NOTHING GETS HIM DOWN!

## POSITIVE MIKE

AT DUKE'S ELEMENTARY SCHOOL

OCTOBER 15TH - 16TH

TICKETS AVAILABLE AT OTSDB

### STUDENT PORTFOLIO


Stewart University




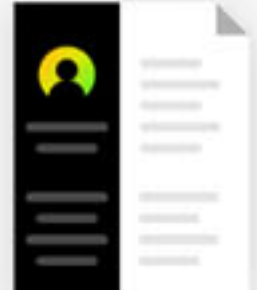
- Voor jou
- Social media
- Video
- Foto
- Document
- Marketing
- Generatieve AI


Populair Zakelijk Onderwijs Persoonlijk

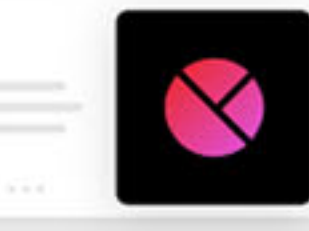
Aangepast formaat


  
Beginnen vanuit PDF-bestand


  
Flyer


  
Cv

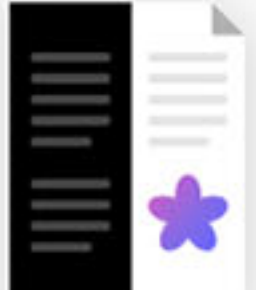
  
Poster


  
Presentatie

  
Rapport

  
Brochure

  
Factuur

  
Nieuwsbrief

  
Voorblad

Snelle acties voor documenten

Alle weergeven

  
Converteren naar PDF

  
PDF bewerken

  
Bestanden combineren

  
Pagina's ordenen

  
Converteren van PDF

  
Converteren naar JPG

Aanbevolen documentsjablonen

Flyer Menu Verdergaan Brochure Factuur Nieuwsbrief

Alles weergeven

























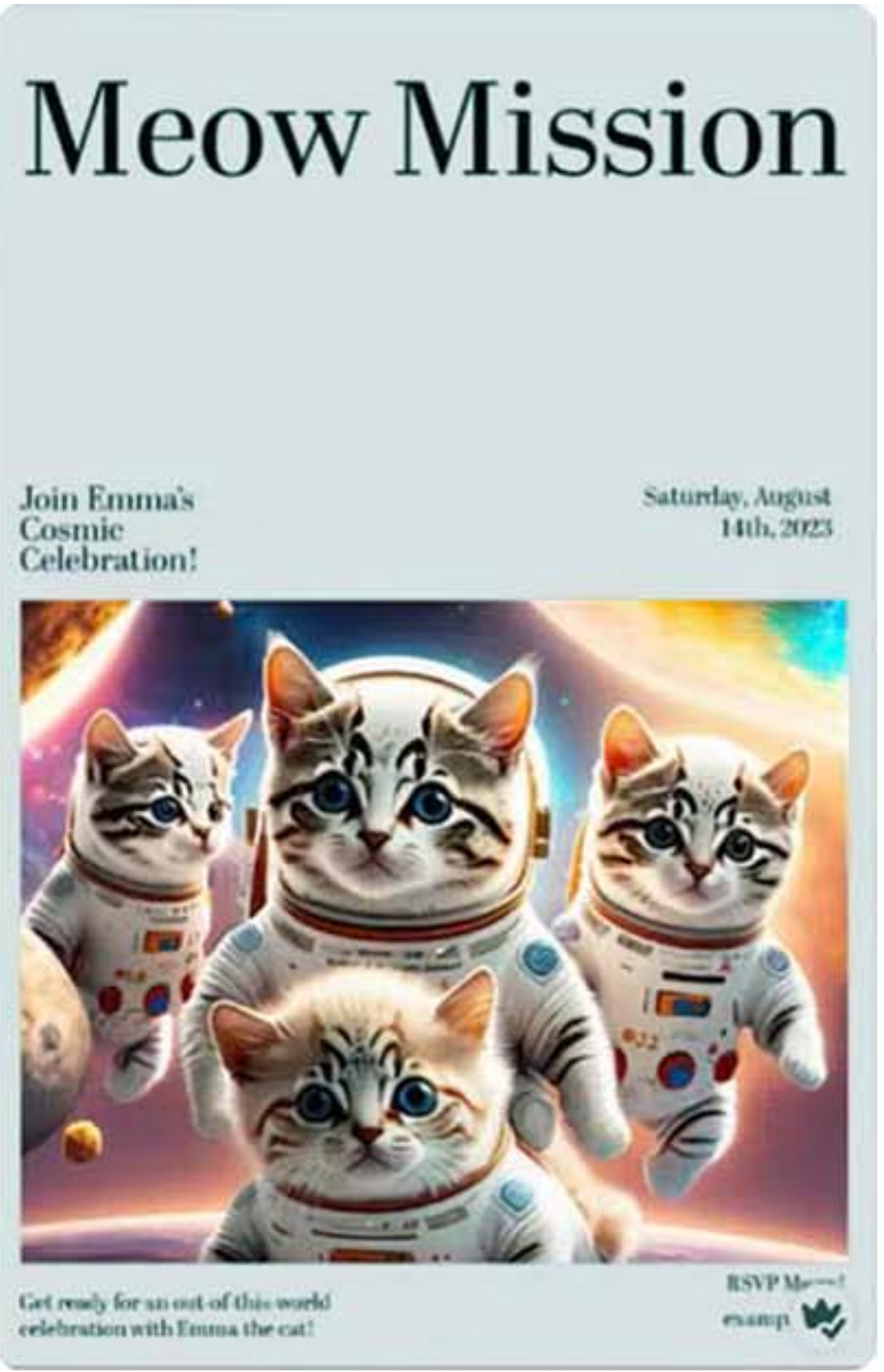
Give it a try, share your feedback, and together we'll make it better.

Poster

birthday party invitation for Emma the cat, cats in astronaut suits floating in space, bright colors, with cat puns

Generate

Kick-start your design, with templates made just for you



Generate more results

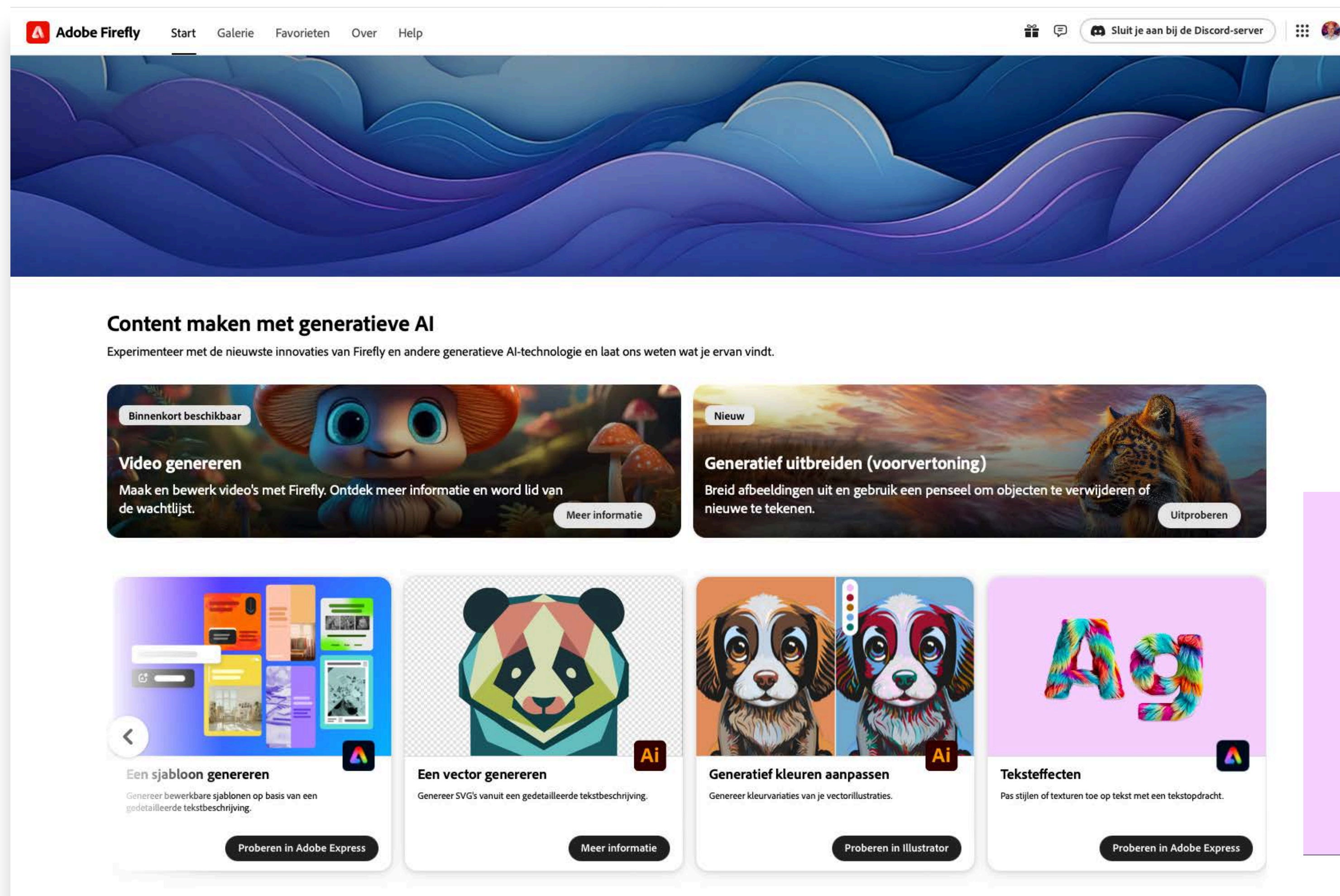
Recent



View all



# Firefly als springplank



Text FX !



# Nu als *Effect* in Adobe Express





# Auteursrechten en zo...

## Monkey selfie copyright dispute

Copyright dispute involving Celebes crested macaques

Between 2011 and 2018, a series of disputes took place about the [copyright](#) status of [selfies](#) taken by [Celebes crested macaques](#) using equipment belonging to the British [wildlife photographer](#) David J. Slater. The disputes involved [Wikimedia Commons](#) and the blog [Techdirt](#), which have [hosted](#) the images following their publication in newspapers in July 2011 over Slater's objections that he holds the copyright, and [People for the Ethical Treatment of Animals \(PETA\)](#), who have argued that the copyright should be assigned to the macaque.

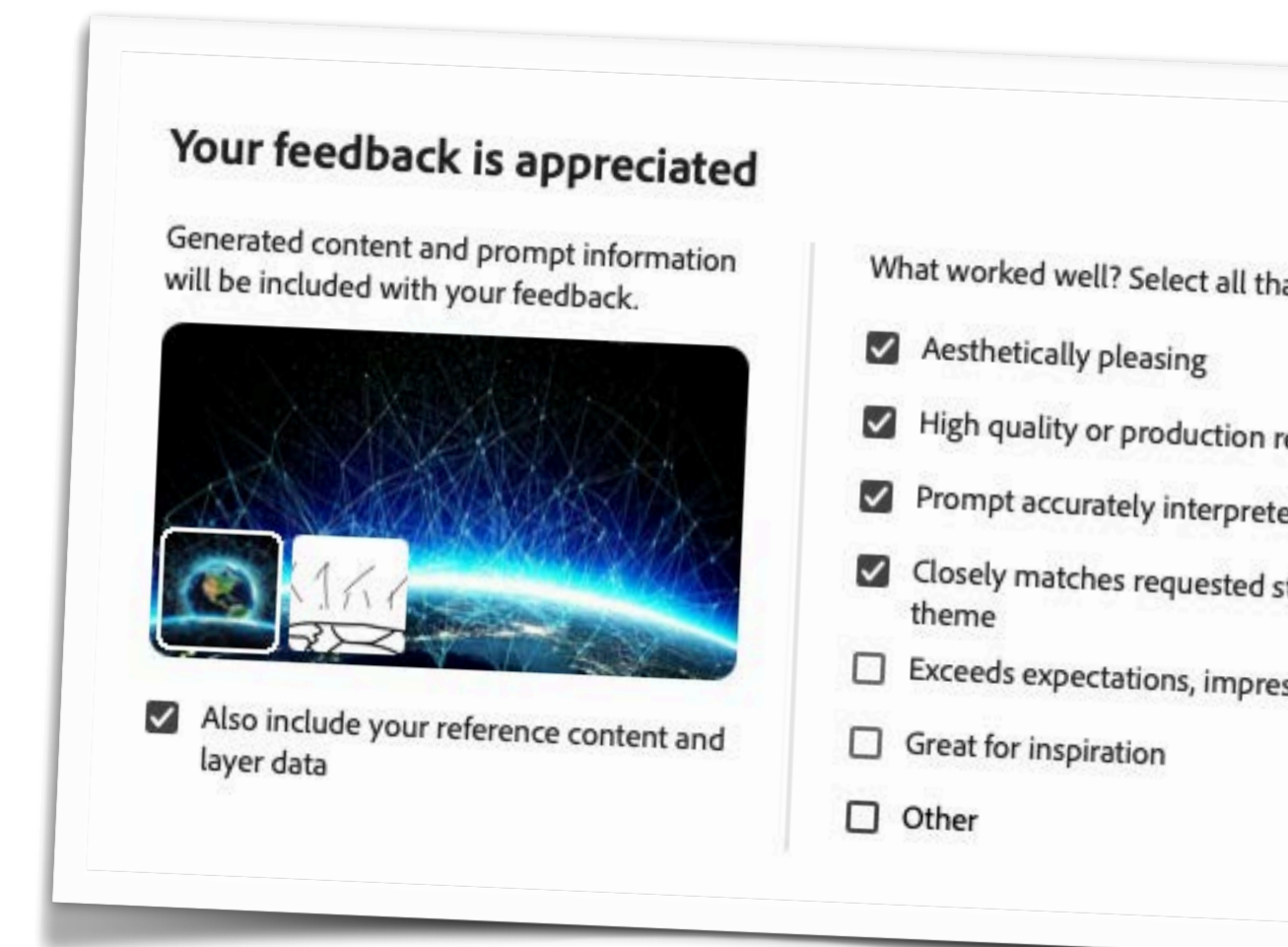


Bijna een filosofische kwestie...

# Auteursrechten volgens Adobe

- Adobe heeft **geen rechten** op jouw creaties
- Adobe gebruikt je creaties **niet** voor trainen
- Hooguit ter beoordeling, n.a.v. je feedback

*Misverstand over licenties m.b.t. de weergave van de door jou zelf gepubliceerde cloud files.*





**Generative AI training Not allowed**

Your feedback is appreciated

Generated content and prompt information will be included with your feedback



Please include your reference content and prompt data

What went wrong? Select all that apply

- ☐ Harmful stereotypes or bias
- ☐ Copyright or trademark violation
- ☐ Nudity or sexual content
- ☐ Violence or gore
- ☐ Not aesthetically pleasing
- ☐ Errors or poor quality
- ☐ Not relevant to prompt
- ☐ Incorrect styles, effects, or settings
- ☐ Other

# Adobe's approach

- We only train on content where we have permission
- We compensate Stock creators
- We do not train on customer content
- We do not mine the internet







**Firefly Image 2  
Model**



**Firefly Vector  
Model**



**Firefly Design  
Model**



**Firefly Audio  
Model**



**Firefly Video  
Model**



**Firefly 3D  
Model**





Sneak Peek: Gen AI in Video

# Vooruitgang in video-kwaliteit

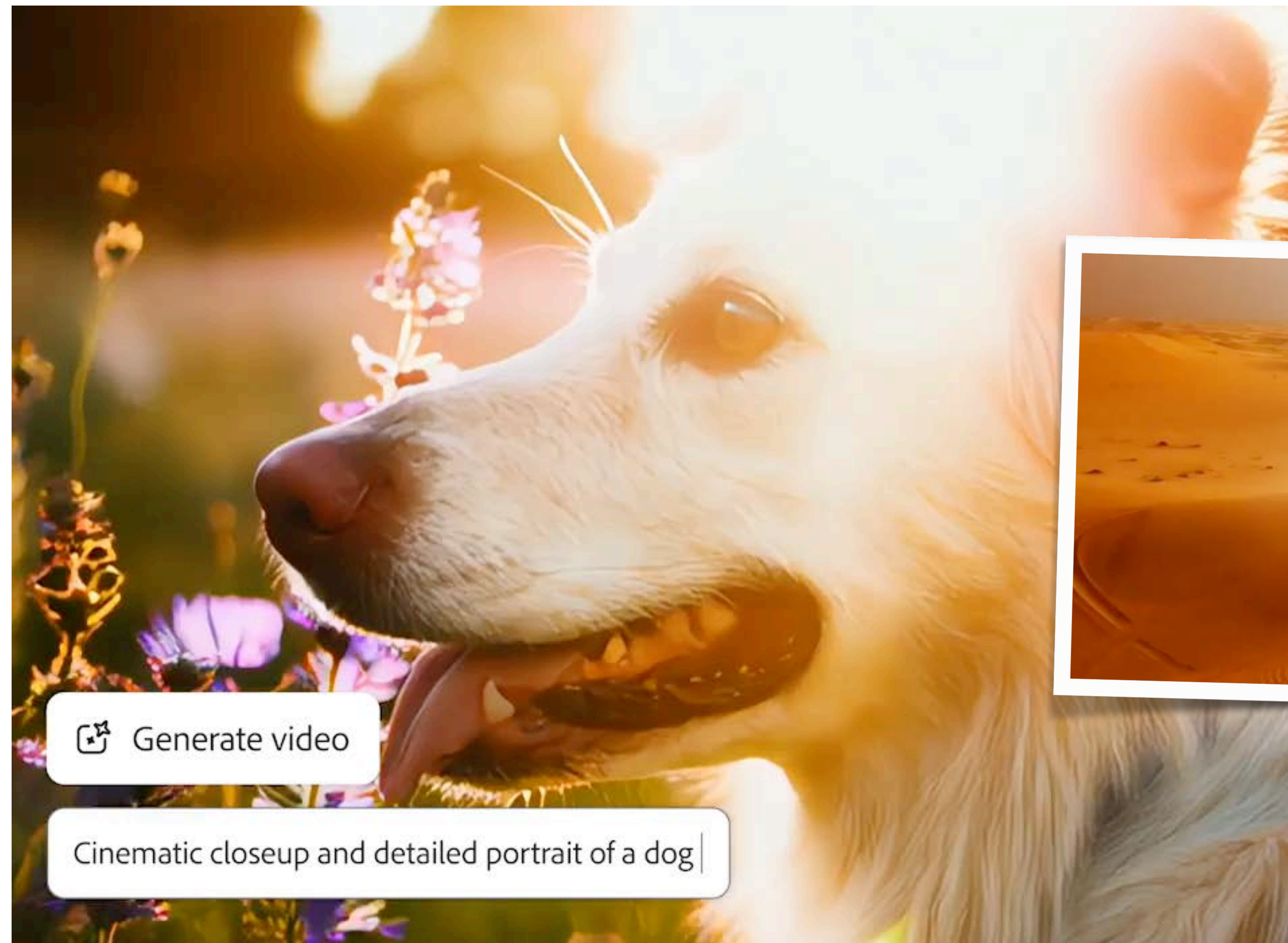


2023: <https://www.youtube.com/watch?v=gQFxmFBfQGk>



2024: [pic.x.com/pUrdil8KFi](https://pic.x.com/pUrdil8KFi)

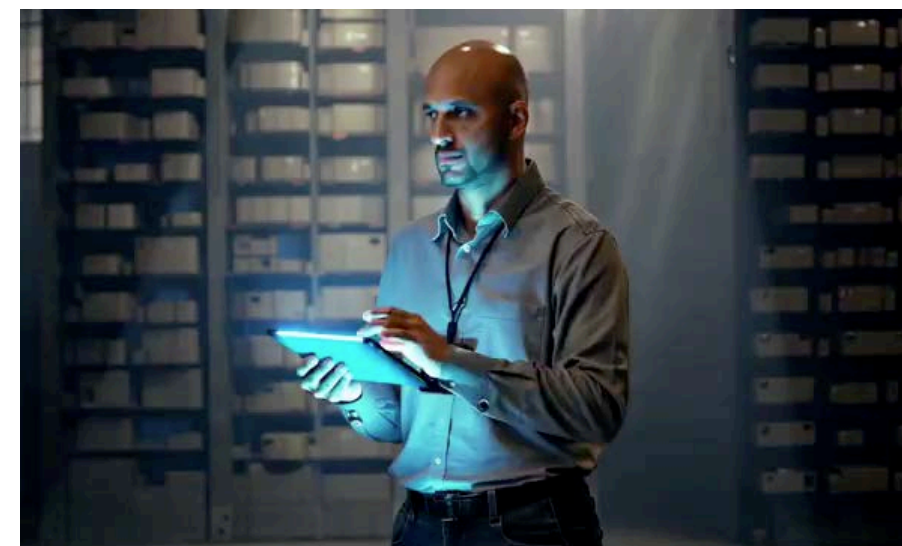
# Voorzichtige previews...



# Andere partijen...

*Runway image-to-video*

*Runway video-to-video*



<https://x.com/minchoi>



# Een creatief idee...



<https://www.gerdegotit.com/>



dynamic high energy dragon

## Firefly Image 3 Model



a cute kawaii tiger

## Firefly Vector Model



a dance party post

## Firefly Design Model



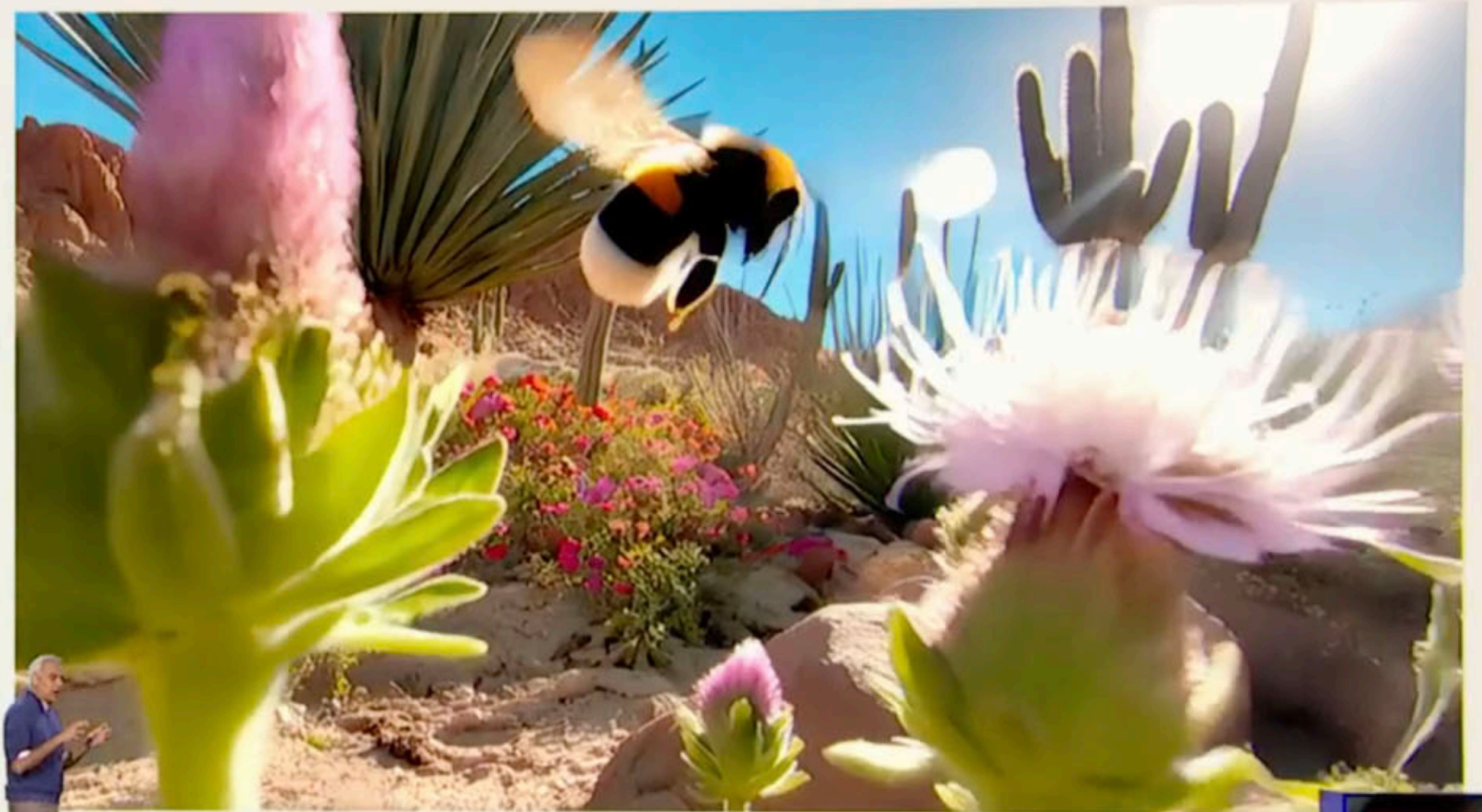
## Firefly Video Model



# Introducing the Adobe Firefly Video Model



a beautiful lush and colorful garden with red, blue, pink, and yellow flowers in the middle of a dry desert under the torching sun. there is one single bumblebee flying around. the background has a rocky hillside. there are a variety of cactus plants in the mid ground. the bee lands on a purple thistle flower and stays there shortly before flying off. it is the middle of the day, the sun is bright and intense. the bee is center framed and flies close to the camera. the ground is sandy and covered in large rocks. cinematic. ultra high definition.

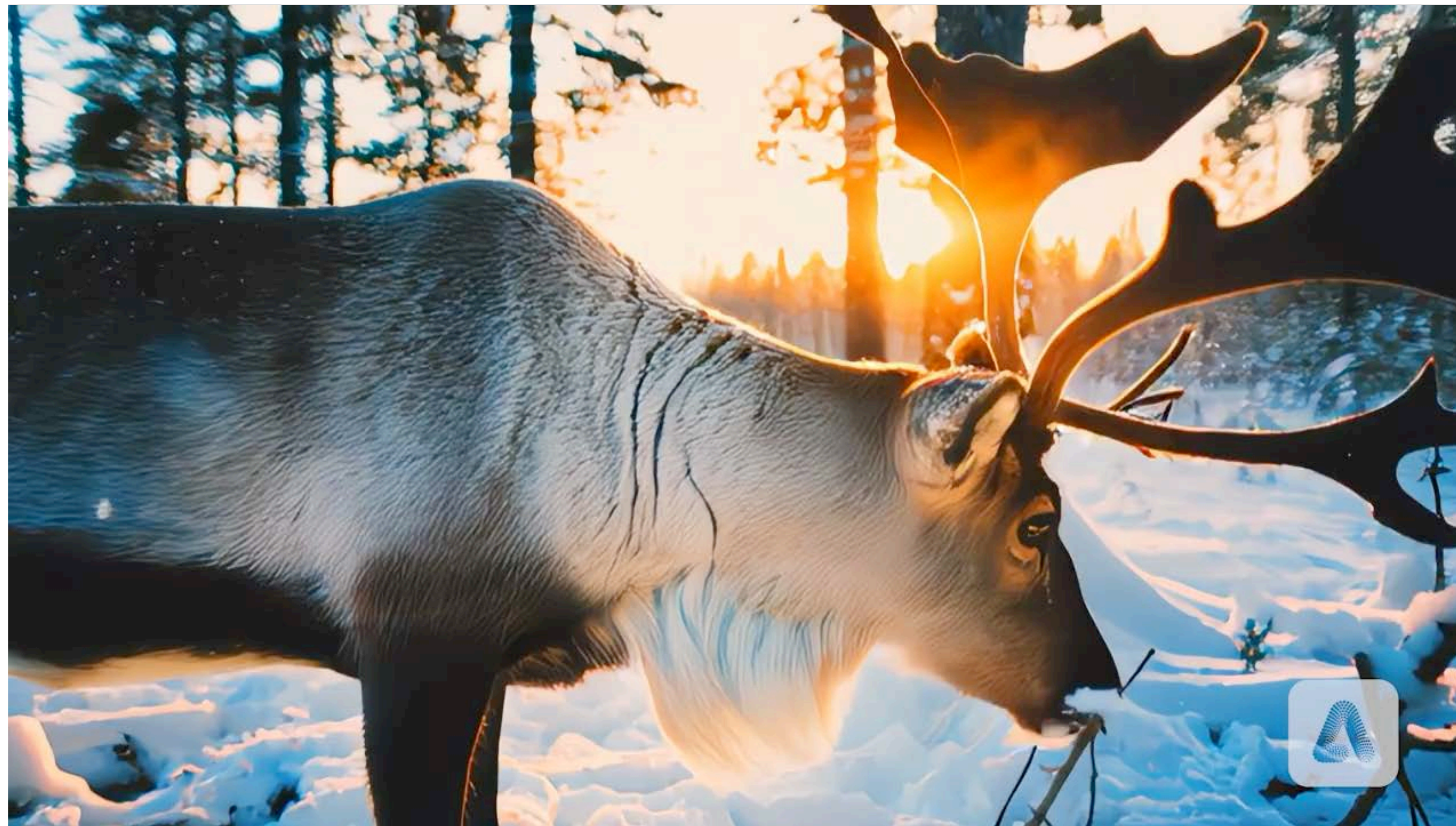
 Generate

*Wat gaat Adobe doen om dit soort lange regie-prompts te vervangen ?*



# Text to video – een vette prompt...

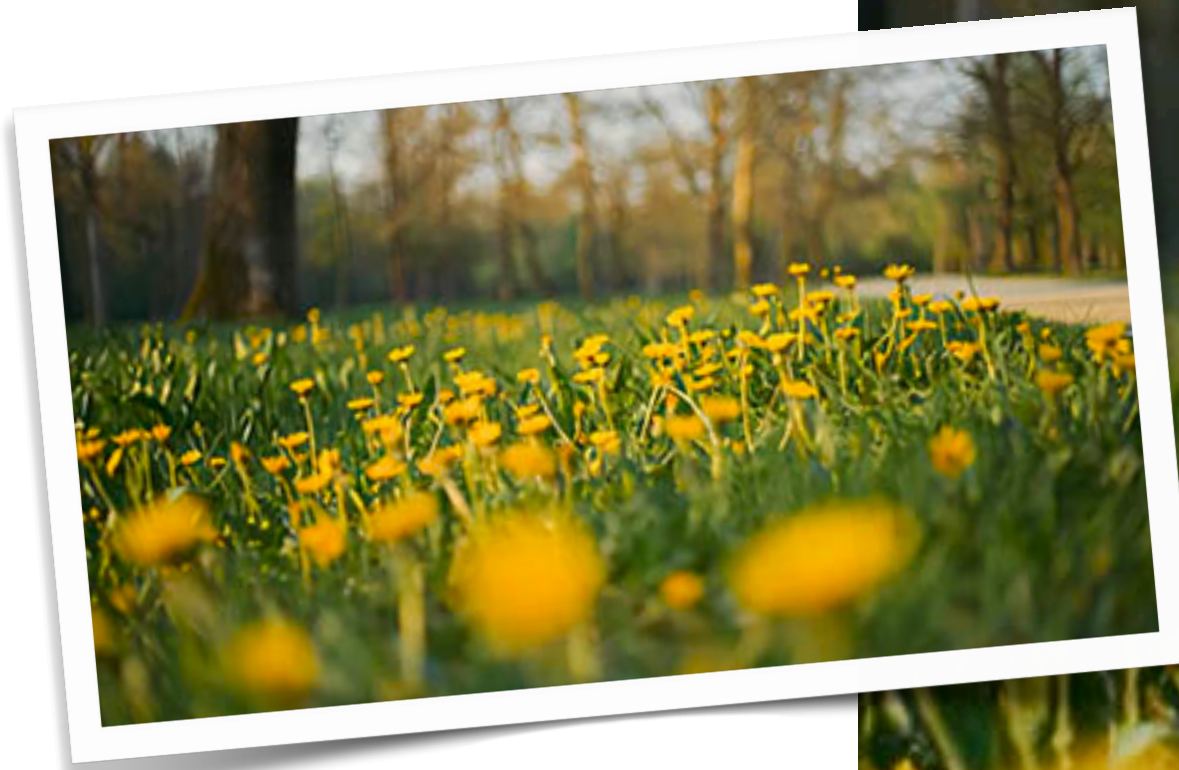
aspect ratio  
duration  
shot type  
camera angle  
location, light  
scene, props  
style, aesthetics  
characters  
**ACTION !**  
camera motion



Prompt:  
Cinematic closeup and detailed portrait of a reindeer in a snowy forest at sunset. Lighting is cinematic and gorgeous and soft and sun-kissed, with golden backlight and dreamy bokeh and lens flares. The color grade is cinematic, magical.



# Maak video van stilstaand beeld



Prompt:  
The flowers are moving  
in the wind, a beautiful  
butterfly is landing on  
one of the flowers.





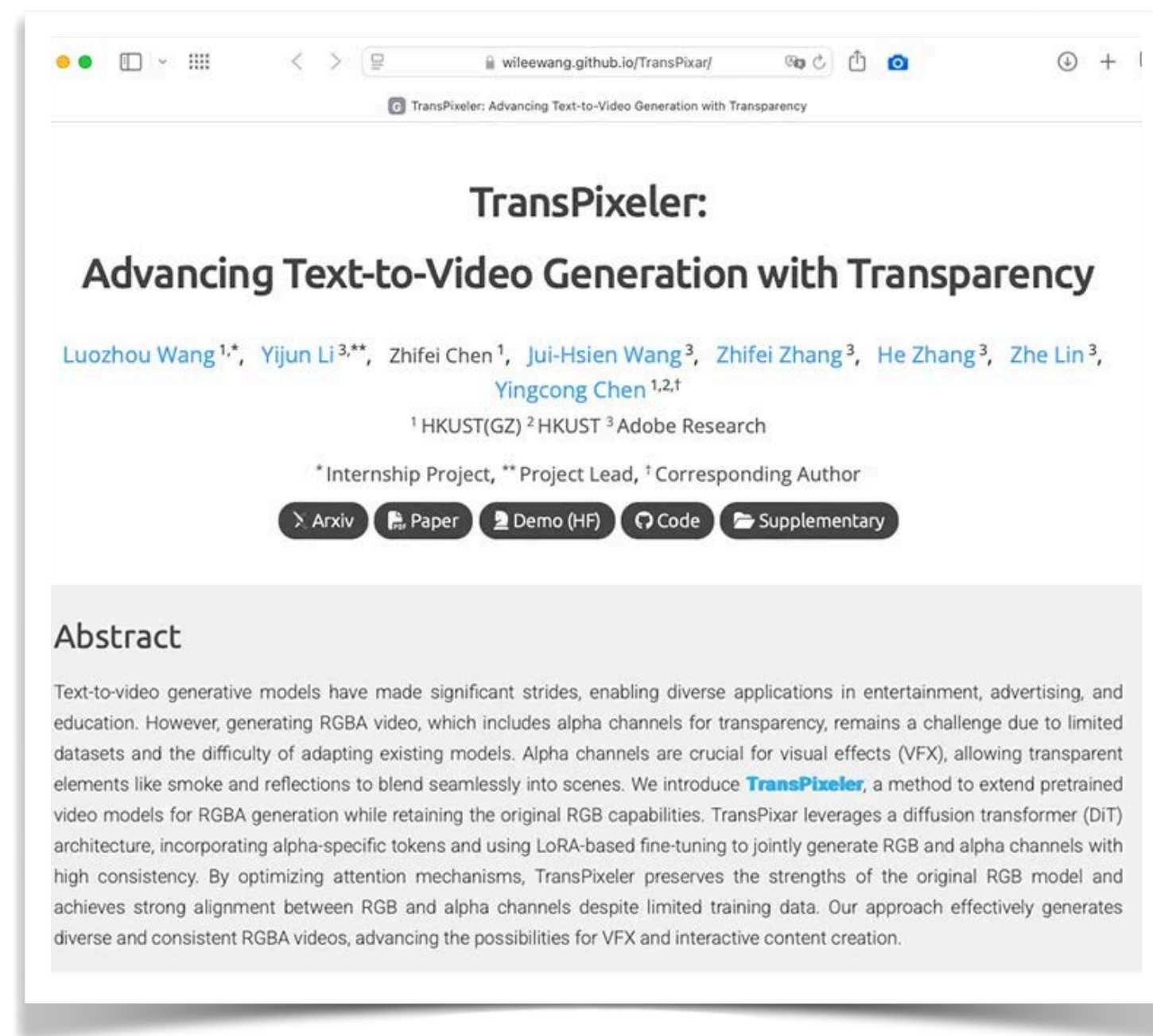
# Maak video in ander standpunt



Prompt:  
Detailed extremely  
macro closeup view  
of a white dandelion  
viewed through a large  
red magnifying glass

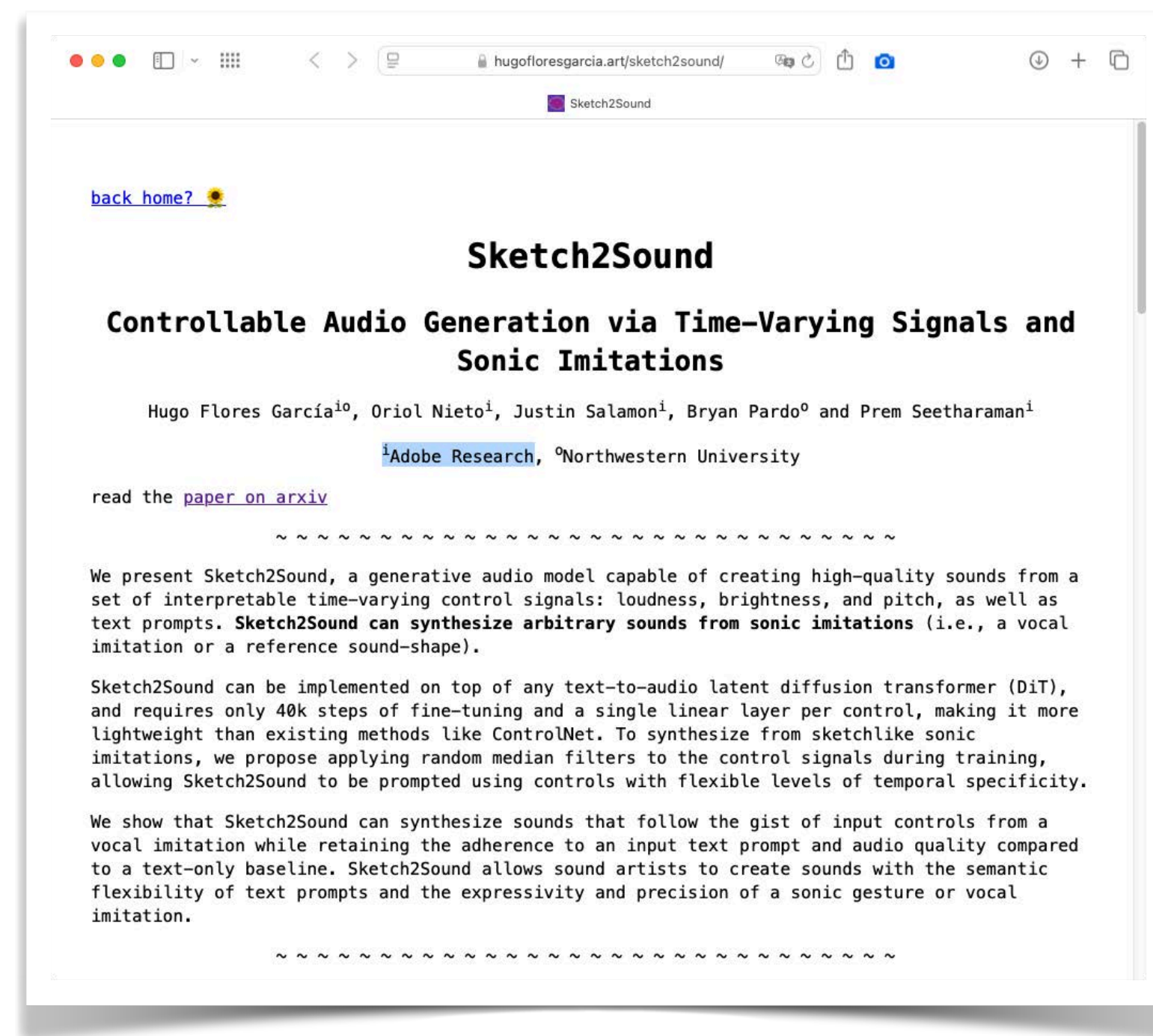


# Maak video met transparantie



<https://wileewang.github.io/TransPixar/>

# Mouth to Sound



<https://hugofloresgarcia.art/sketch2sound/>

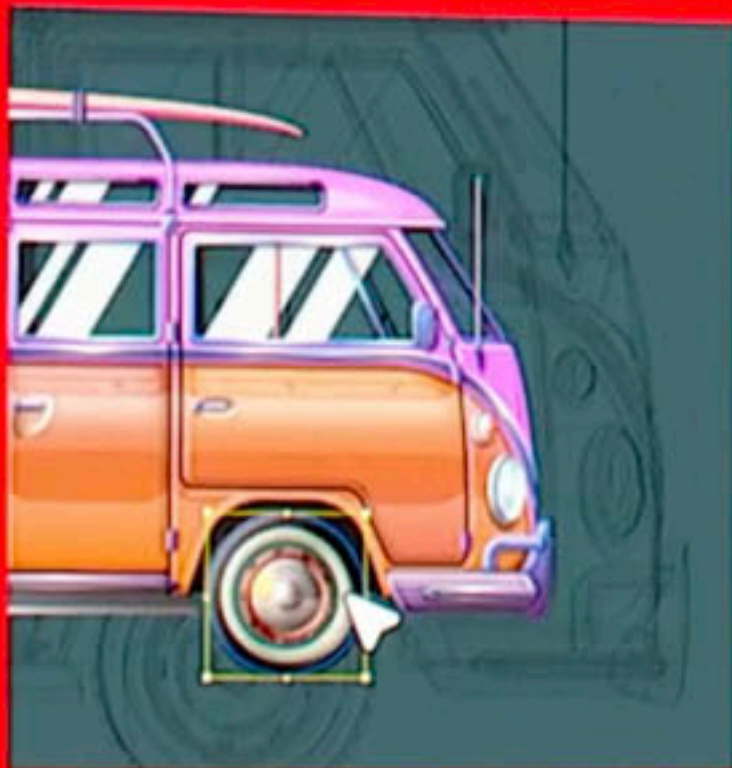


<https://www.youtube.com/watch?v=rRoEYNSxKas>

# Afronding



Concepting



Creating



Collaborating



**GenAI is a tool for  
not a replacement of  
human creativity**





**Your creative vision  
has never been  
more valued**



# Nieuwe fase in digitalisering

- Ruim 30 jaar geleden ontstond het **web: informatie**, voor iedereen, altijd en overal.
- *Generative AI* zorgt nu voor volgende stap: **CREATIE**, voor iedereen, altijd en overal !

De **impact** van *Generative AI* wordt enorm...

# Kort door de bocht: alle nieuws

*De buit:*

- Massa's voor *Photoshop*
- Flink wat voor *Illustrator*
- Wat hoop voor *InDesign*
- Beetje voor *Lightroom*
- Binnenkort in *Premiere*
- ***Adobe Express* en *Firefly***





# *Generative AI features in...*

## *Adobe Photoshop*

- Iets uit een selectie-gebied verwijderen
- Iets binnen een selectie-gebied toevoegen
- Afleidingen (draden, mensen) verwijderen
- Een toepasselijke achtergrond genereren
- Formaat afbeelding (canvas) uitbreiden
- *Contextuele Taakbalk* (voor prompt)
- Nieuw soort *Laag* en *Eigenschappen*



# *Generative AI features in...*

## *Adobe Illustrator*

- Een gebied of vorm vullen met een onderwerp, omgeving, icoon of patroon.
- Geselecteerde objecten opnieuw kleuren
- *Mockup & Retype* (commando & paneel)
  - *Contextuele Taakbalk* (voor prompt)
  - Nieuw soort element en *Eigenschappen*

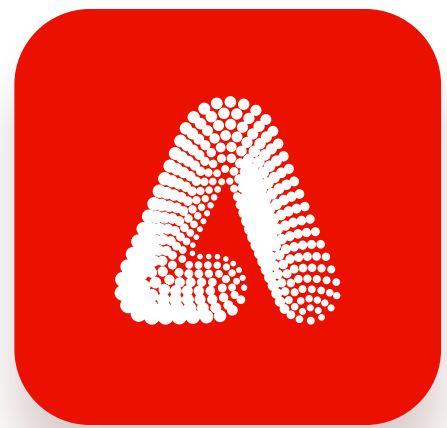


# *Generative AI features in...*

## *Adobe InDesign*

- Kader vullen met een gegenereerd beeld.
- Beeldkader gegenereerd laten uitbreiden.
  - *Contextuele Taakbalk* (voor prompt)
  - *Tekst naar afbeelding* paneel

# *Generative AI als website-tool*



## *Adobe Firefly*

De 'bron' van huidige en nieuwe features

- 250 Visuele voorbeeld-stijlen en -effecten
- Eigen stijl- en compositie-referenties



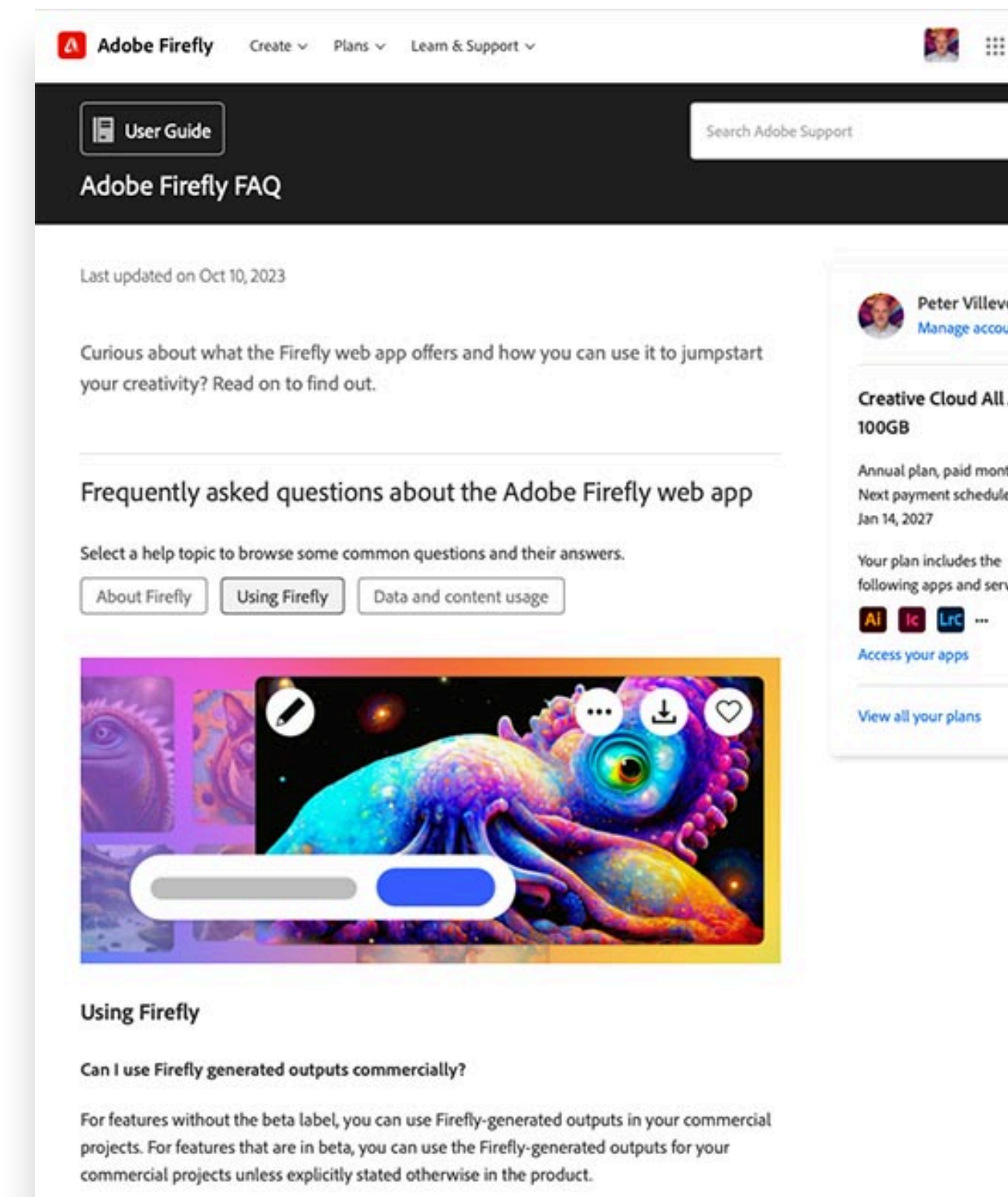
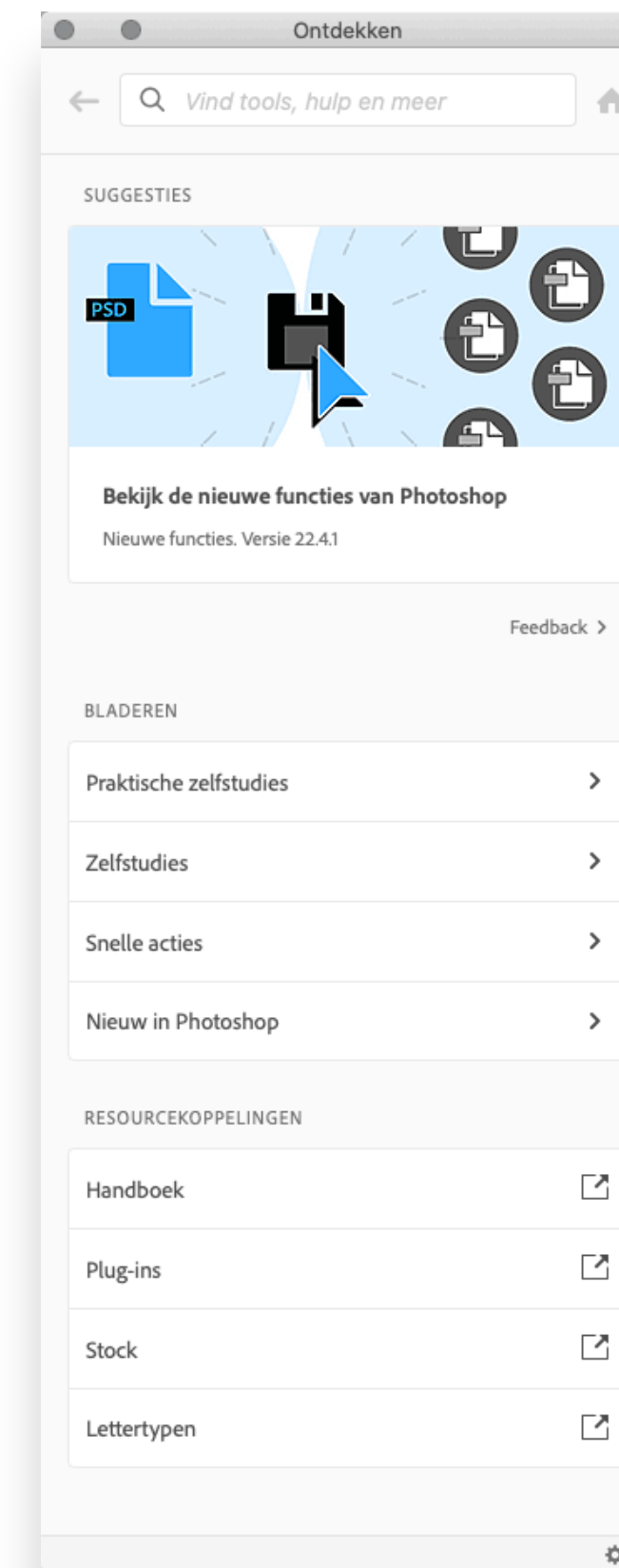
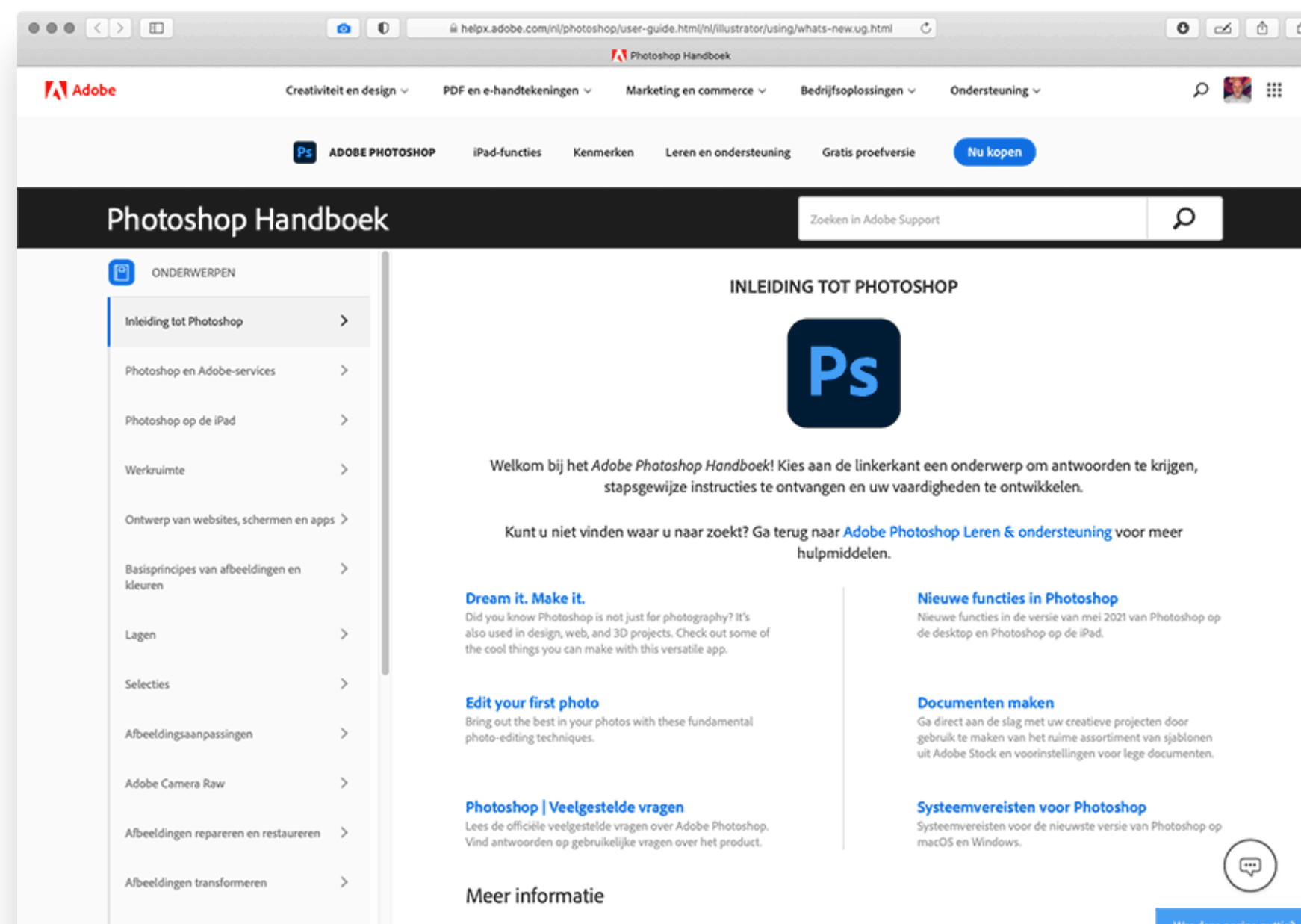
## *Adobe Express*

De 'hakkenbar' met veel AI-aanhakingen

- Snelle generatie van eenvoudige layouts
- Bijzondere tekst-effecten (letter-vullingen)

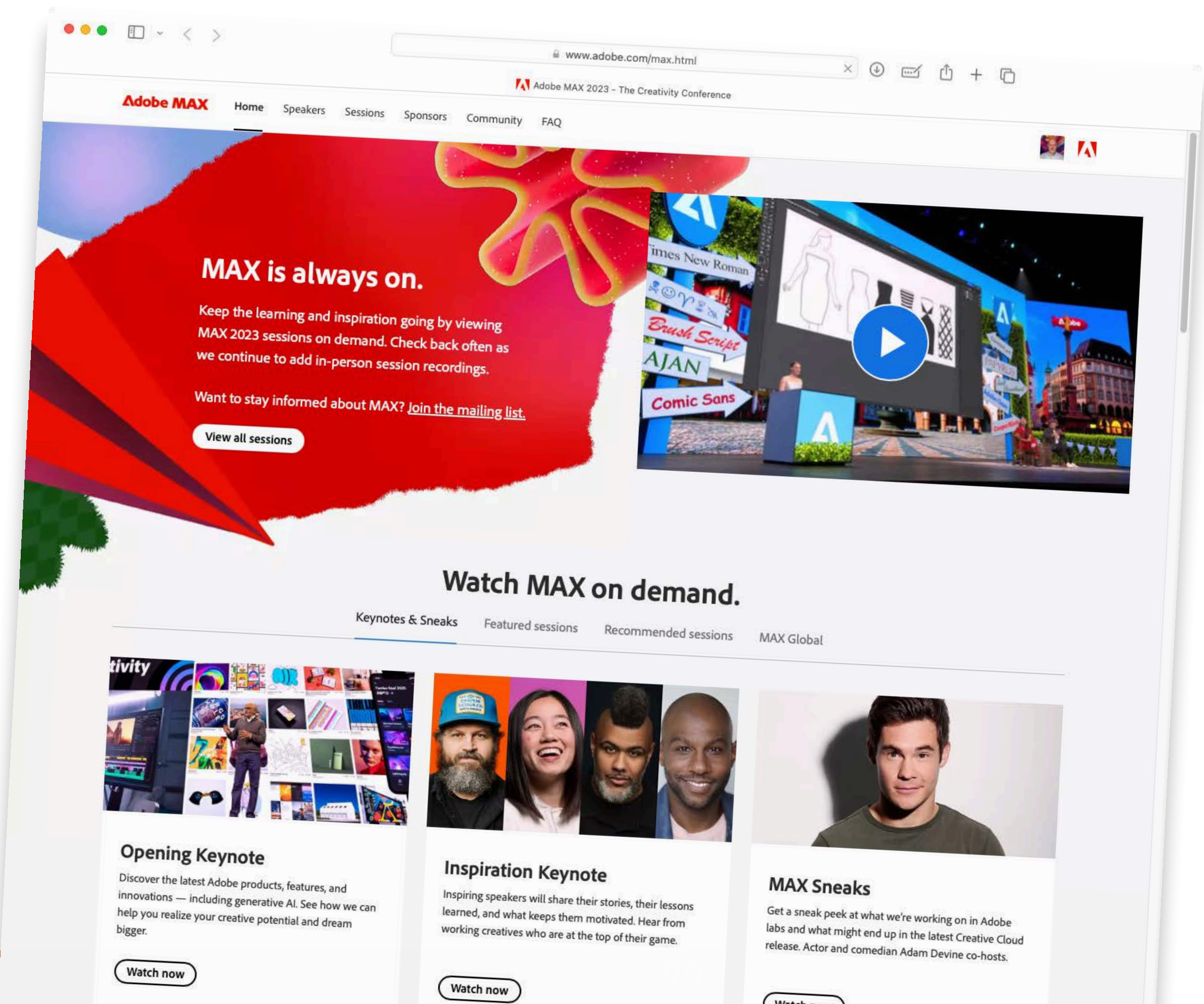
# Meer informatie...

- Op *Adobe Help* pagina's en in de programma's zelf



# Adobe MAX Online !

- De Keynote(s)
- De SneakPeeks
- Vrijwel alle sessies



*Dank voor je aandacht !*

