SYRACUSE UNIVERSITY PROJECT ADVANCE

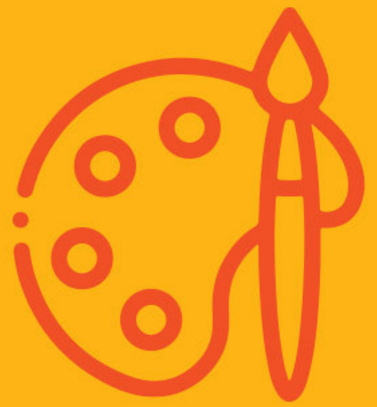
Creative Coding

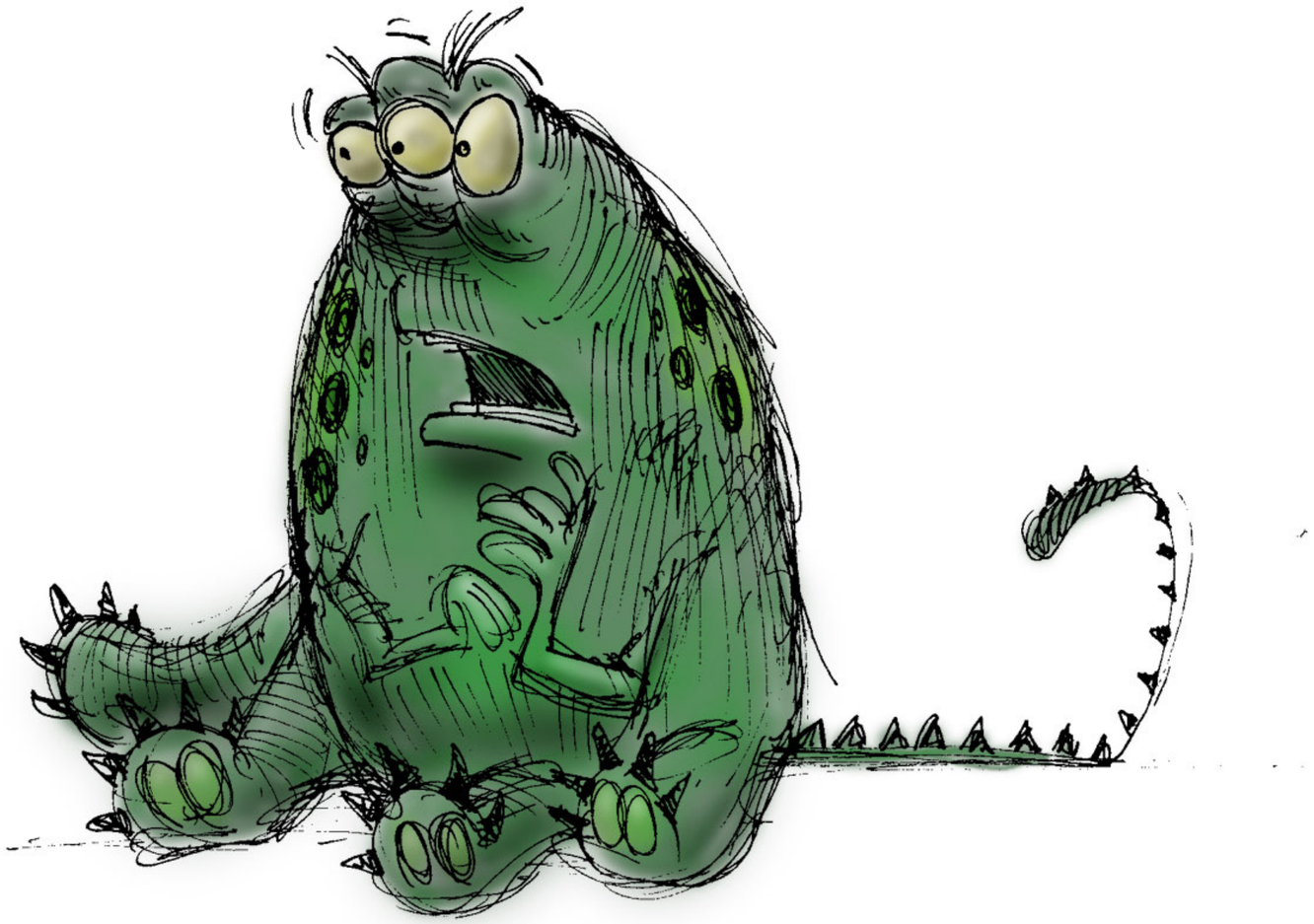
By Jeff Passetti

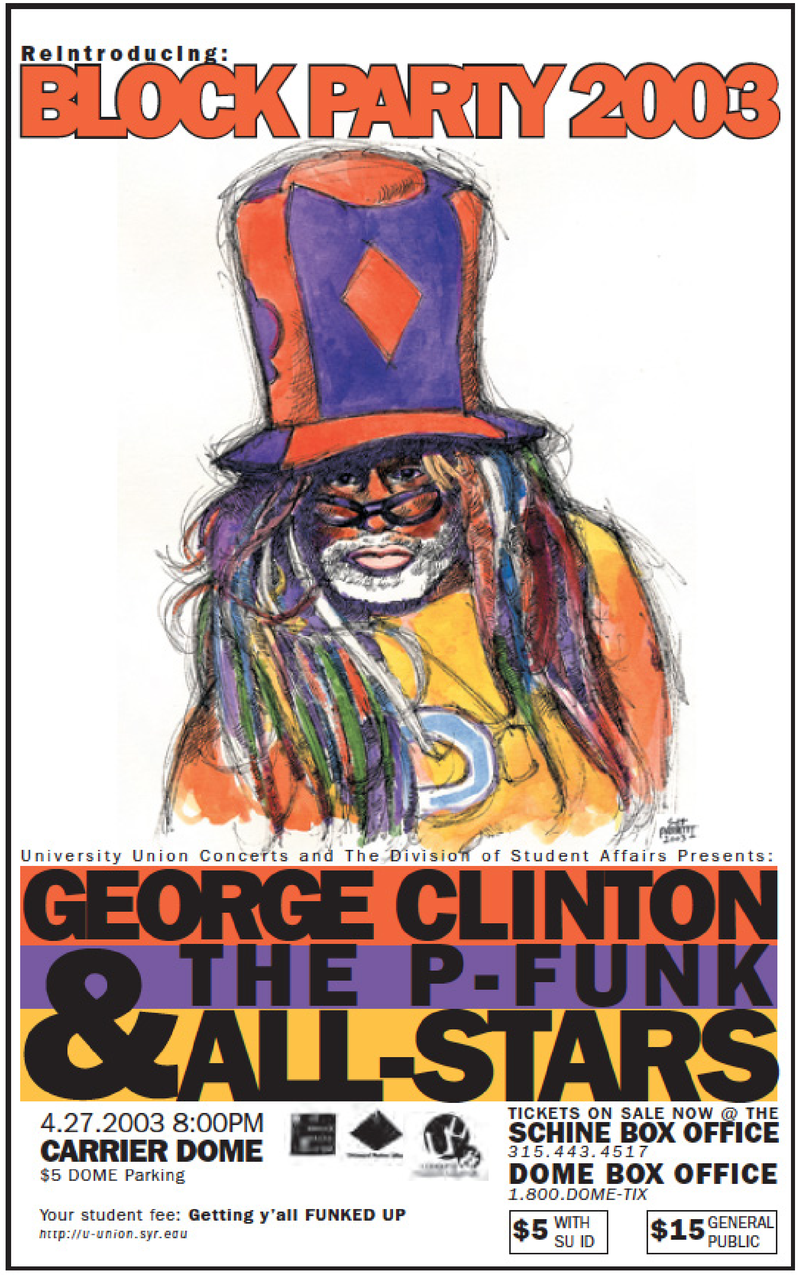
Spring 2025

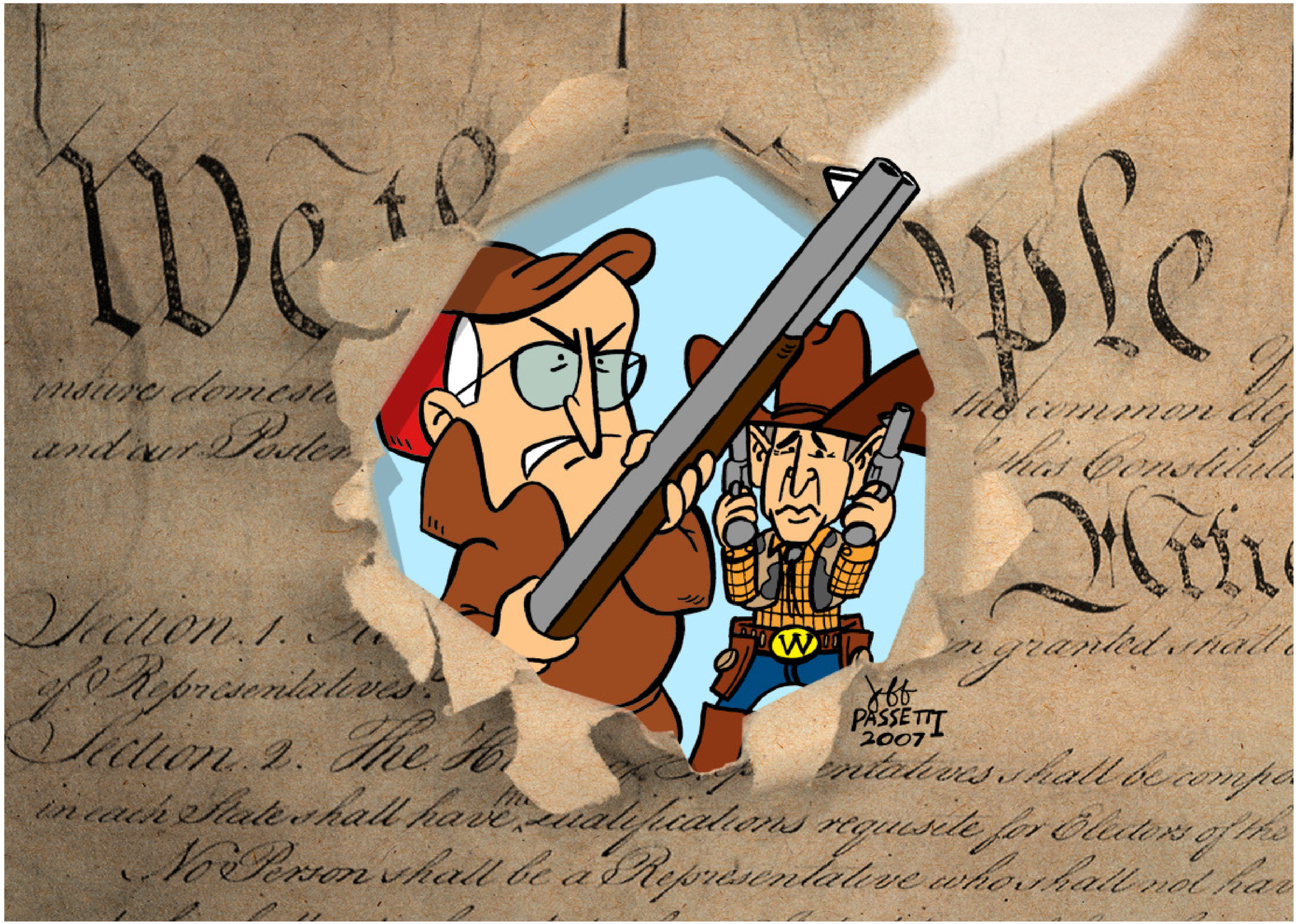
Syracuse University

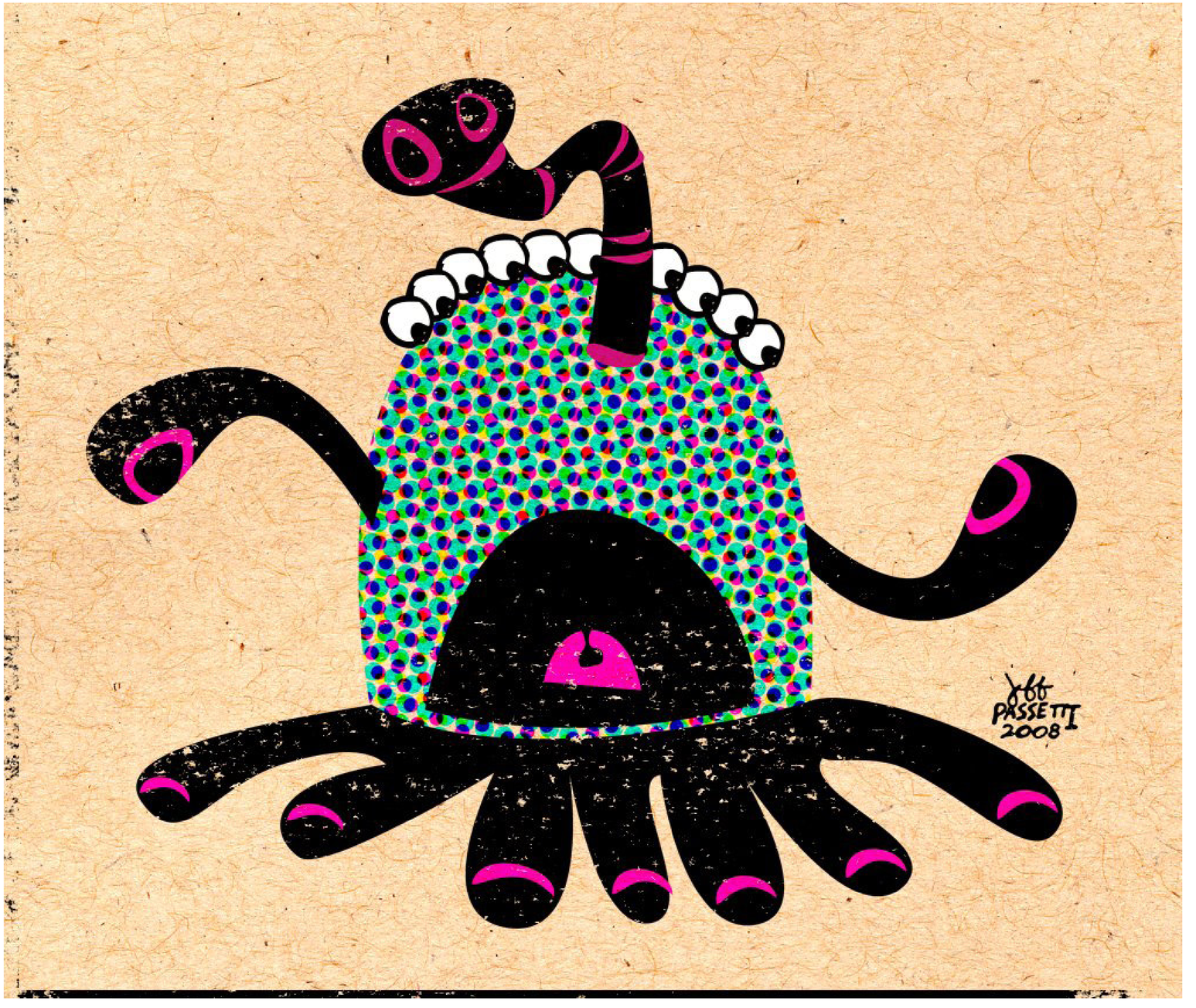
My Evolution



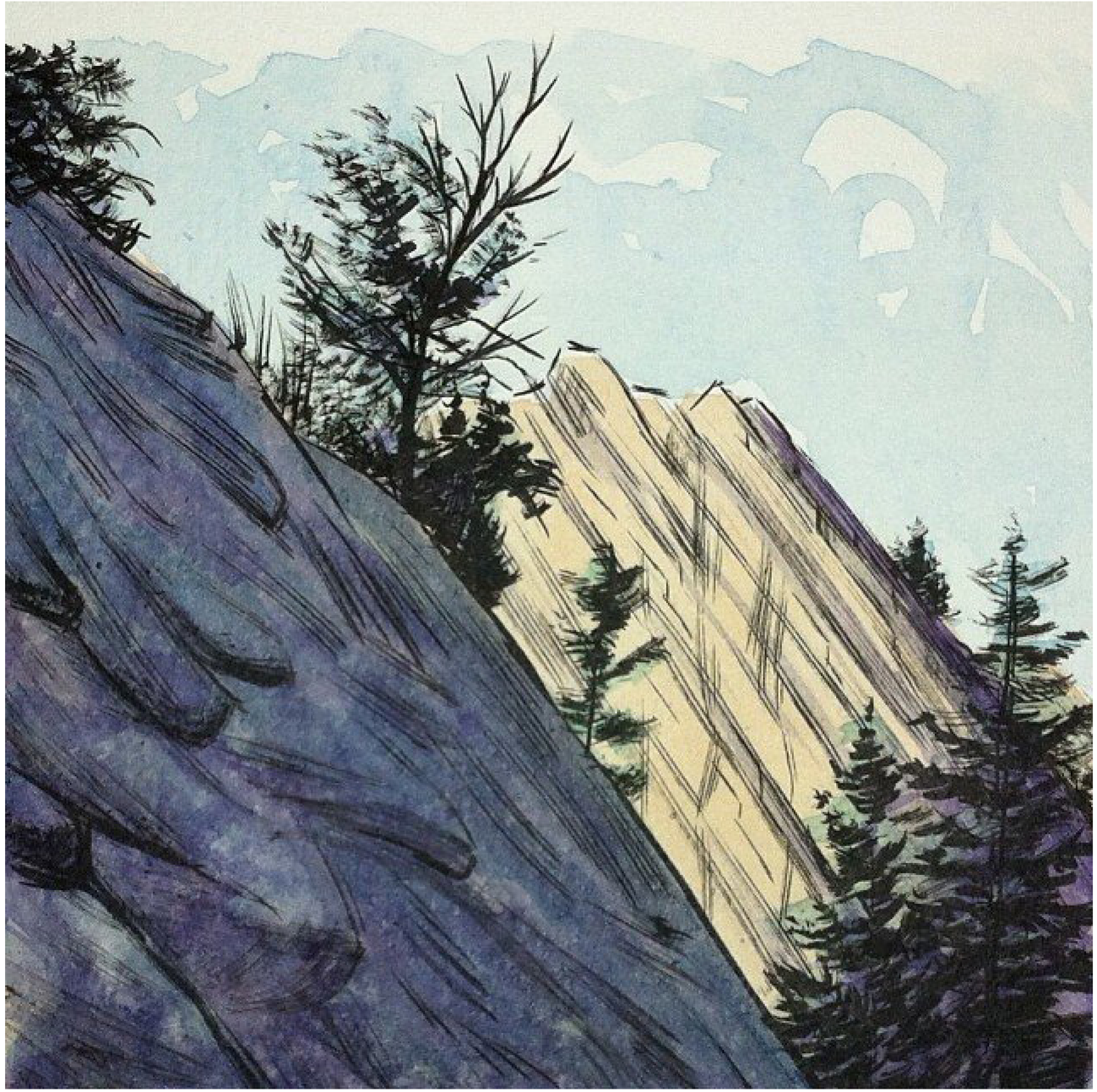


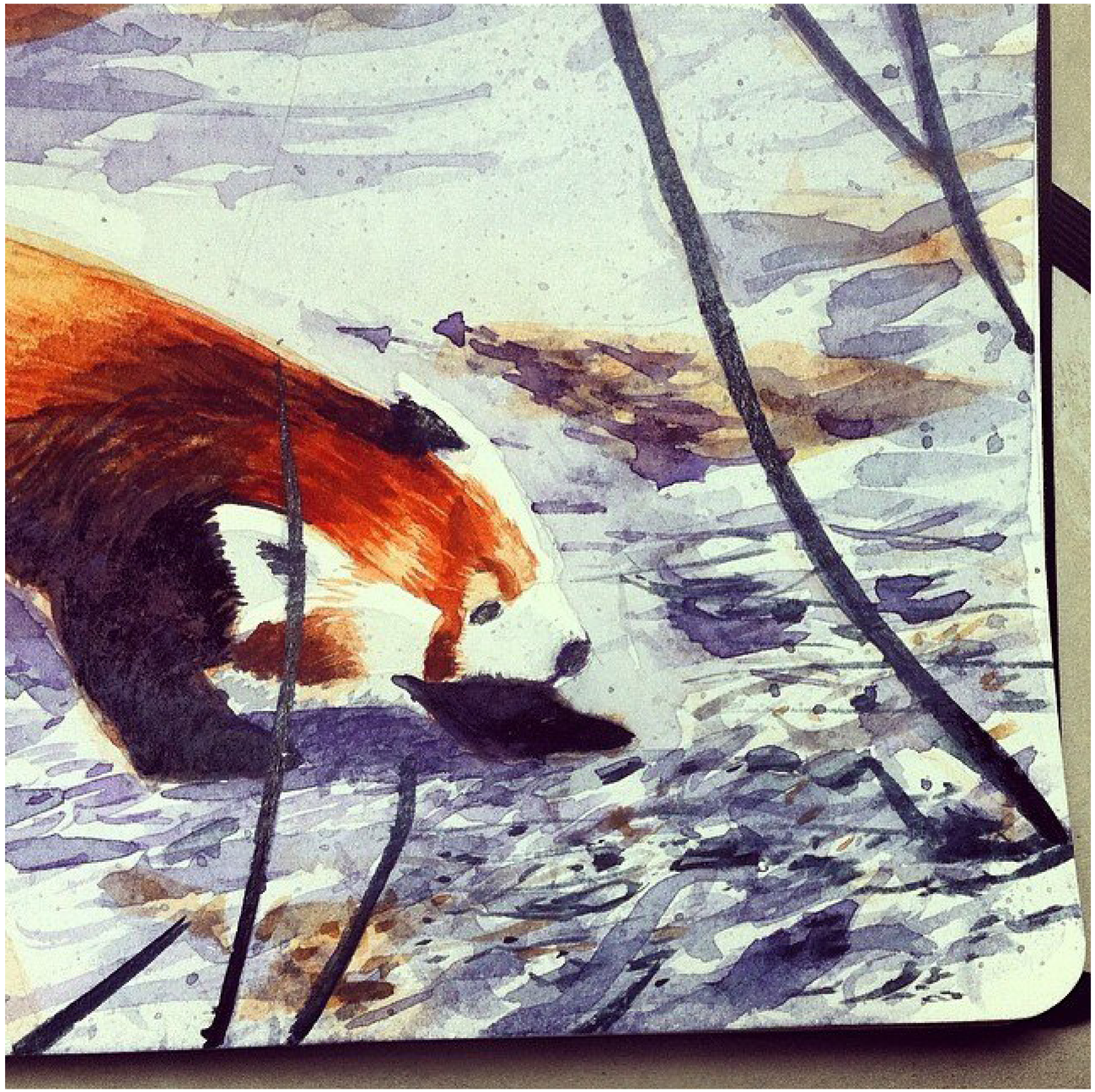

Reintroducing:
BLOCK PARTY 2003
University Union Concerts and The Division of Student Affairs Presents:
GEORGE CLINTON
& THE P-FUNK
& ALL-STARS
4.27.2003 8:00PM
CARRIER DOME
$5 DOME Parking
Your student fee: Getting y'all FUNKED UP
http://u-union.syr.edu
TICKETS ON SALE NOW @ THE
SCHINE BOX OFFICE
315.443.4517
DOME BOX OFFICE
1.800.DOME-TIX
$5 WITH SU ID
$15 GENERAL PUBLIC


PASSETTI
2007


Jeff
PASSETTI
2008

Dr. Ph. Martin's
BLACK STAR
WATERPROOF INK
MATTE
ARTISTS' WATER COLOUR SABLE
Pointed Round
Wilhelm R. Weber





ARTISTS' WATER COLOUR SABLE ~ Round Winsor & Ne

ATHENA'S PRIDE

BOOM BOOM Mex Mex TAQUERIA

madison county
Indulge your senses.

FDRHPO
Fort Drum Regional Health Planning Organization

translation
Syracuse English Colloquium 2007-08

Beneterra Agritech
Growing energy, nature's way

SYRACUSE UNIVERSITY
Alumni Club | WASHINGTON, D.C.

U.S. Embassy
PRISTINA, KOSOVO

WORD&IMAGE
Syracuse English Colloquium

50th Anniversary logo

Newhouse School at Syracuse University

newhouse50.syr.edu

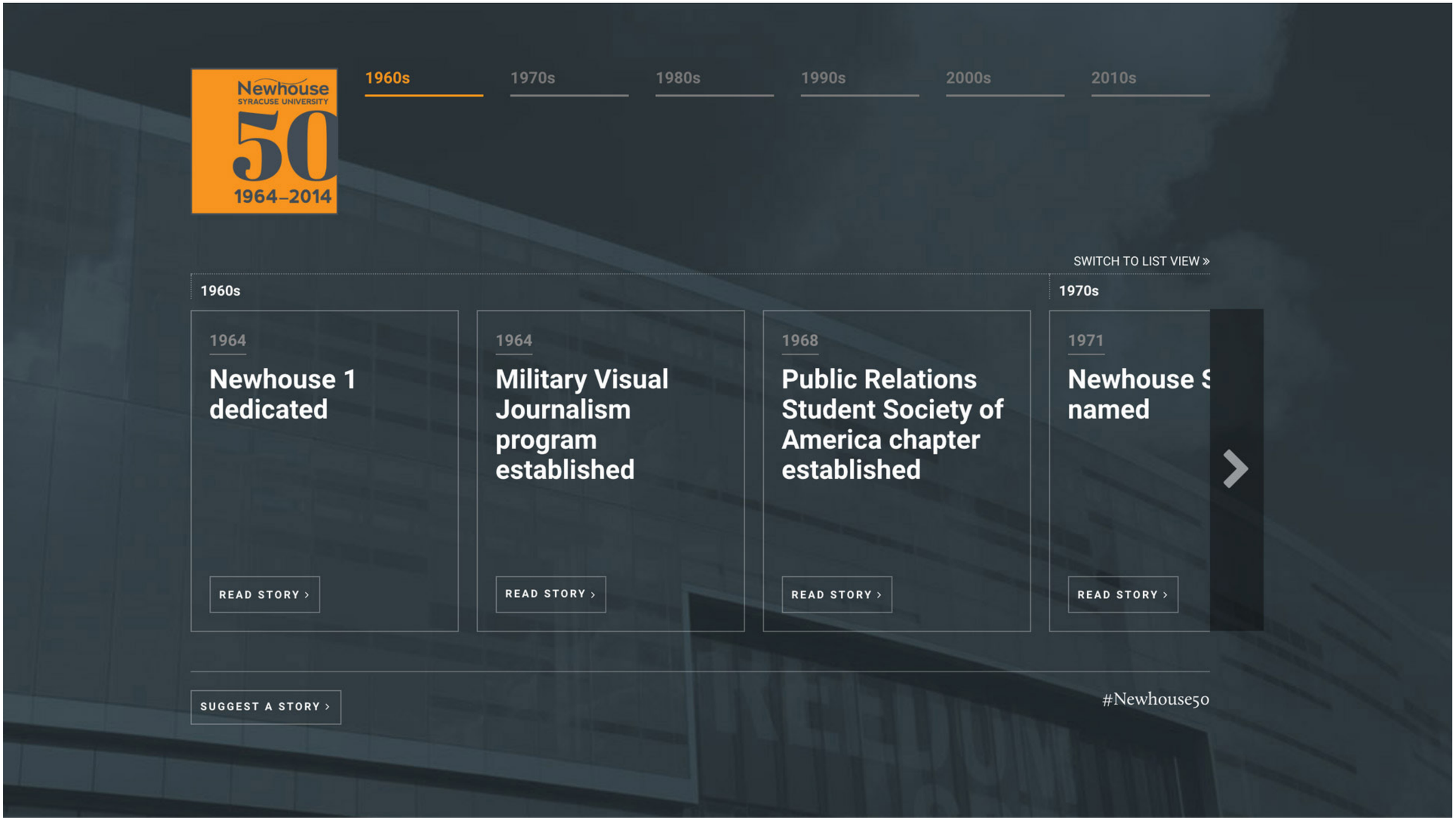
Newhouse
SYRACUSE UNIVERSITY
50
1964–2014

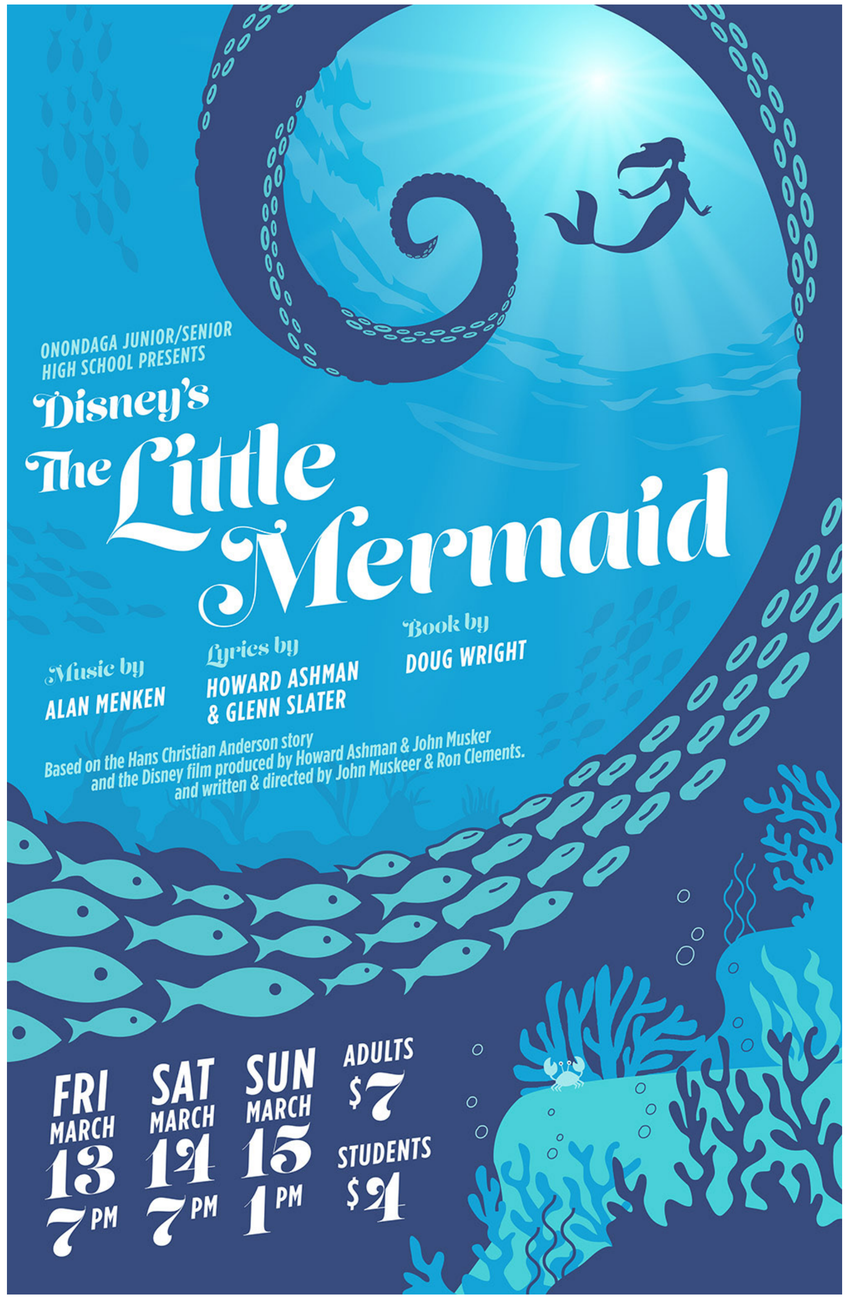
Fifty Years of Newhouse

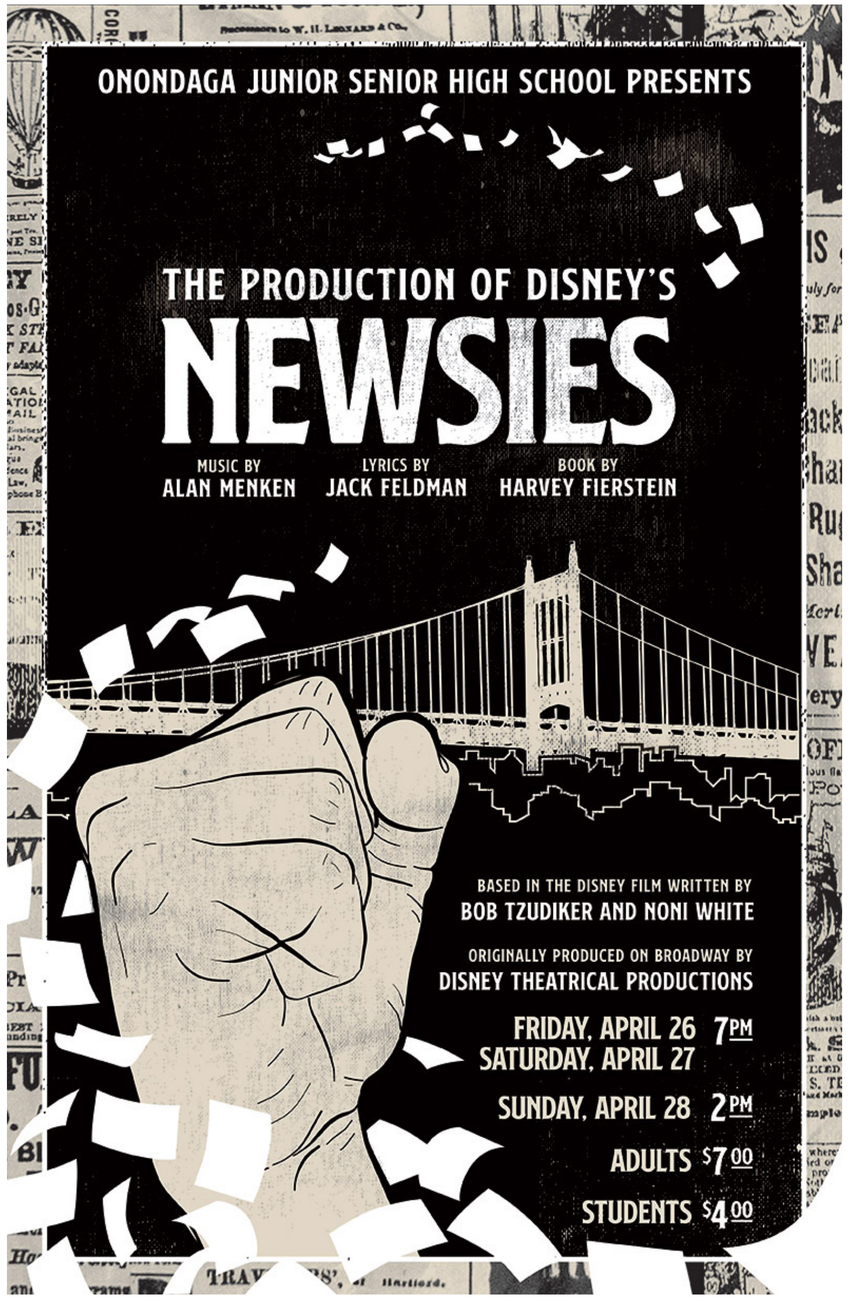
Fifty years ago, in August 1964, publishing magnate Samuel I. Newhouse stood side-by-side with President Lyndon B. Johnson to dedicate the newly-opened Newhouse 1 building, marking the beginning of a great relationship between the Newhouse family and Syracuse University that endures to this day.

As we celebrate 50 years of Newhouse during the 2014-15 academic year, join us and take a look back at some of the many highlights of those five decades.

VIEW TIMELINE ›


Newhouse
SYRACUSE UNIVERSITY
50
1964–2014
1960s
1970s
1980s
1990s
2000s
2010s
SWITCH TO LIST VIEW »
1960s
1970s
1964
Newhouse 1 dedicated
READ STORY ›
1964
Military Visual Journalism program established
READ STORY ›
1968
Public Relations Student Society of America chapter established
READ STORY ›
1971
Newhouse S named
READ STORY ›
SUGGEST A STORY ›
#Newhouse50


ONONDAGA JUNIOR/SENIOR
HIGH SCHOOL PRESENTS
Disney's
The Little Mermaid
Music by
ALAN MENKEN
Lyrics by
HOWARD ASHMAN
& GLENN SLATER
Book by
DOUG WRIGHT
Based on the Hans Christian Anderson story
and the Disney film produced by Howard Ashman & John Musker
and written & directed by John Muskeer & Ron Clements.
FRI
MARCH
13
7 PM
SAT
MARCH
14
7 PM
SUN
MARCH
15
1 PM
ADULTS
$7
STUDENTS
$4


ONONDAGA JUNIOR SENIOR HIGH SCHOOL PRESENTS
THE PRODUCTION OF DISNEY'S
NEWSIES
MUSIC BY
ALAN MENKEN
LYRICS BY
JACK FELDMAN
BOOK BY
HARVEY FIERSTEIN
BASED IN THE DISNEY FILM WRITTEN BY
BOB TZUDIKER AND NONI WHITE
ORIGINALLY PRODUCED ON BROADWAY BY
DISNEY THEATRICAL PRODUCTIONS
FRIDAY, APRIL 26 7PM
SATURDAY, APRIL 27
SUNDAY, APRIL 28 2PM
ADULTS $7.00
STUDENTS $4.00

Syracuse University
AT
SUNDANCE
FILM FESTIVAL
2019

Why Teach Creative Coding?

- Creative Coding = Code for Expression
- A way to teach coding through visuals, sound, interactivity
- Engages visual learners, artists, and students turned off by rigid syntax

STEAM

- Visual thinking, experimentation, personal voice
- Coding as a medium, not just a skill
- Helps students become explorers, not just problem-solvers

The Nature of Code

natureofcode.com

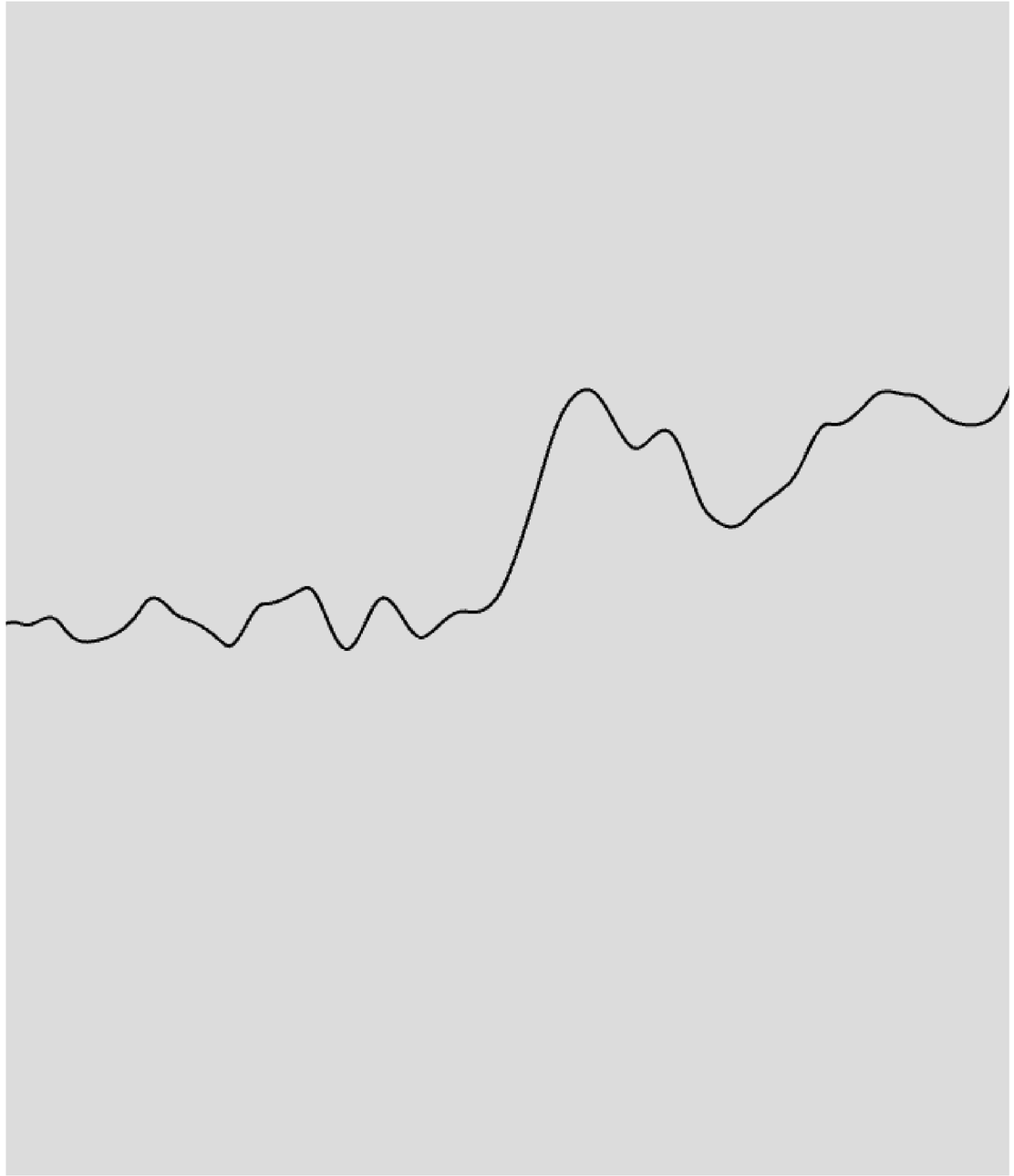
Daniel Shiffman
Associate Arts Professor
New York University

- **Introduced me to the bridge between natural systems and code**
- **Encouraged me to observe nature differently: seeing the world as both inspiration and dataset**
- **Connected me to a broader global community (via The Coding Train)**

DEMO #1

Circle Grid with Randomness

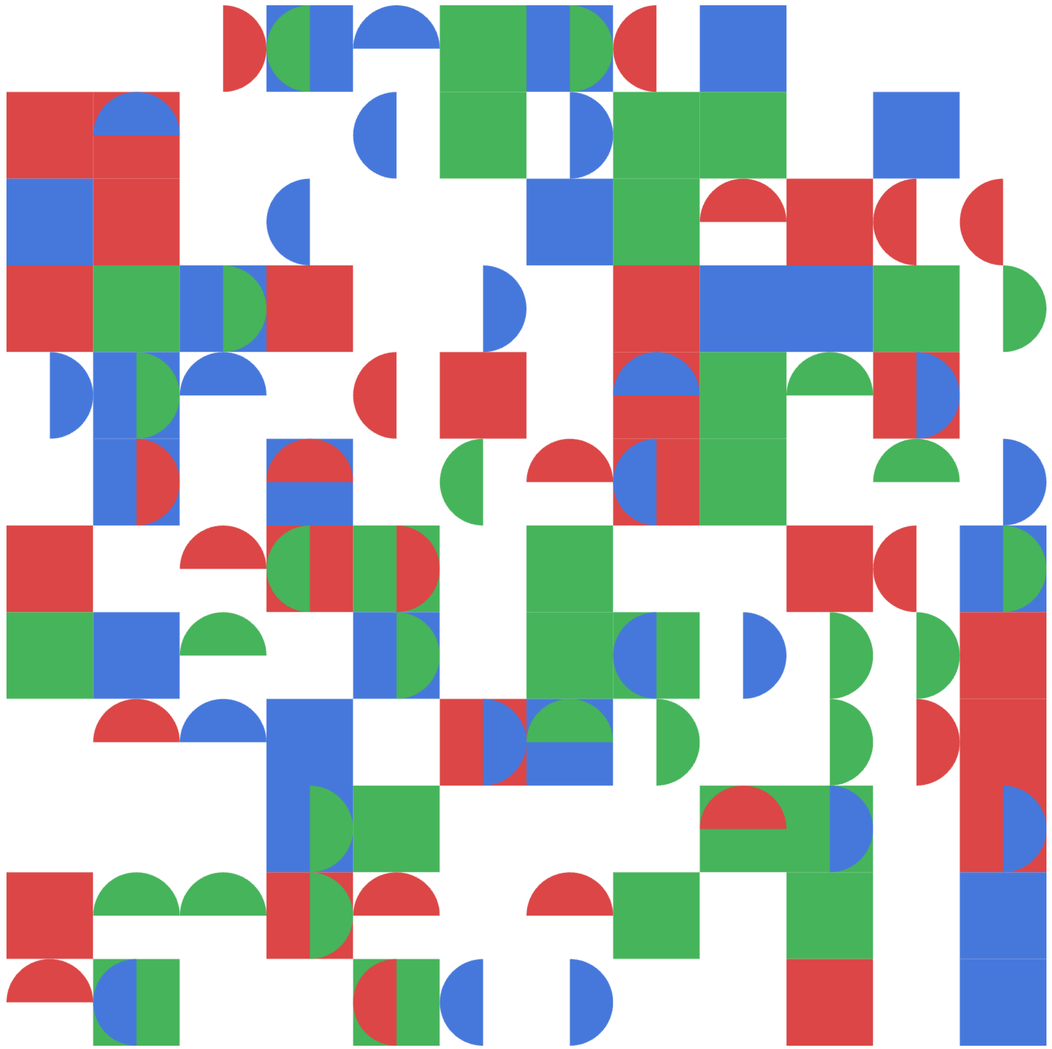
- Draw a 2D grid of circles using for loops
- Add random() for radius and color
- Introduce variables to change parameters



DEMO #2

Circles with Perlin Noise or Mic Input

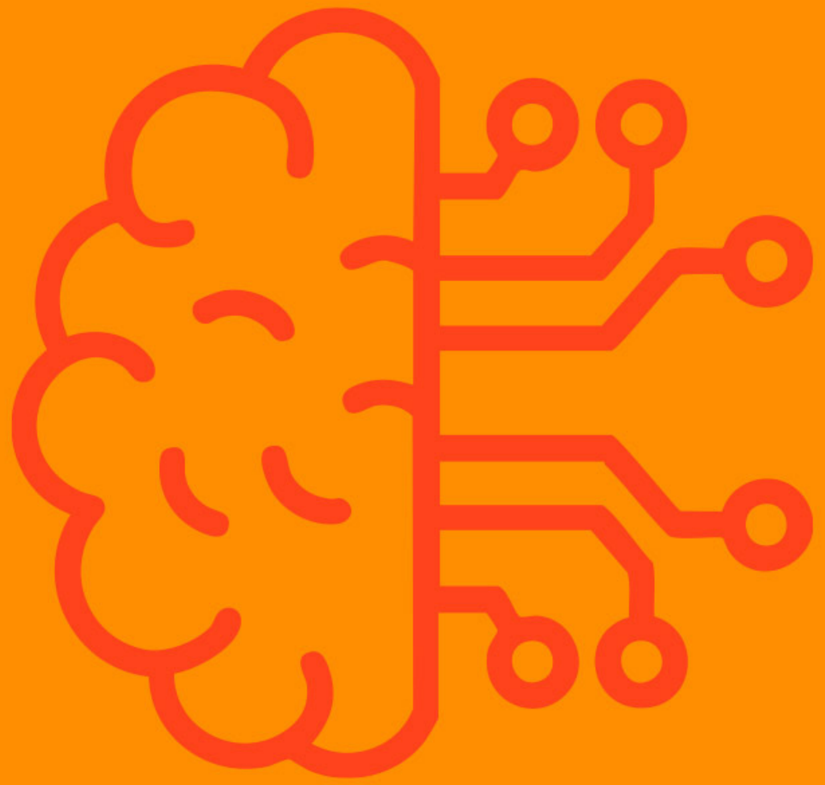
- Use noise() for smoother variation
- Optionally use mic input to animate shapes based on volume
- Introduce mapping and motion



DEMO #3

Abstract Compositions

- Combine circles, squares, lines into a visual composition
- Add rules for placement, rotation and randomness
- Emphasize visual structure and constraints
- Use data from an API as seed material

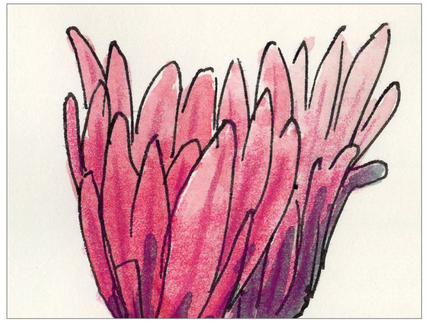


AI + Creative Coding

- AI lowers the barrier to entry for creative coding
- Acts as a creative partner, not just a tool
- Reduces friction and supports curiosity
- Raises important questions about authorship and originality
- Encourages experimentation and iteration

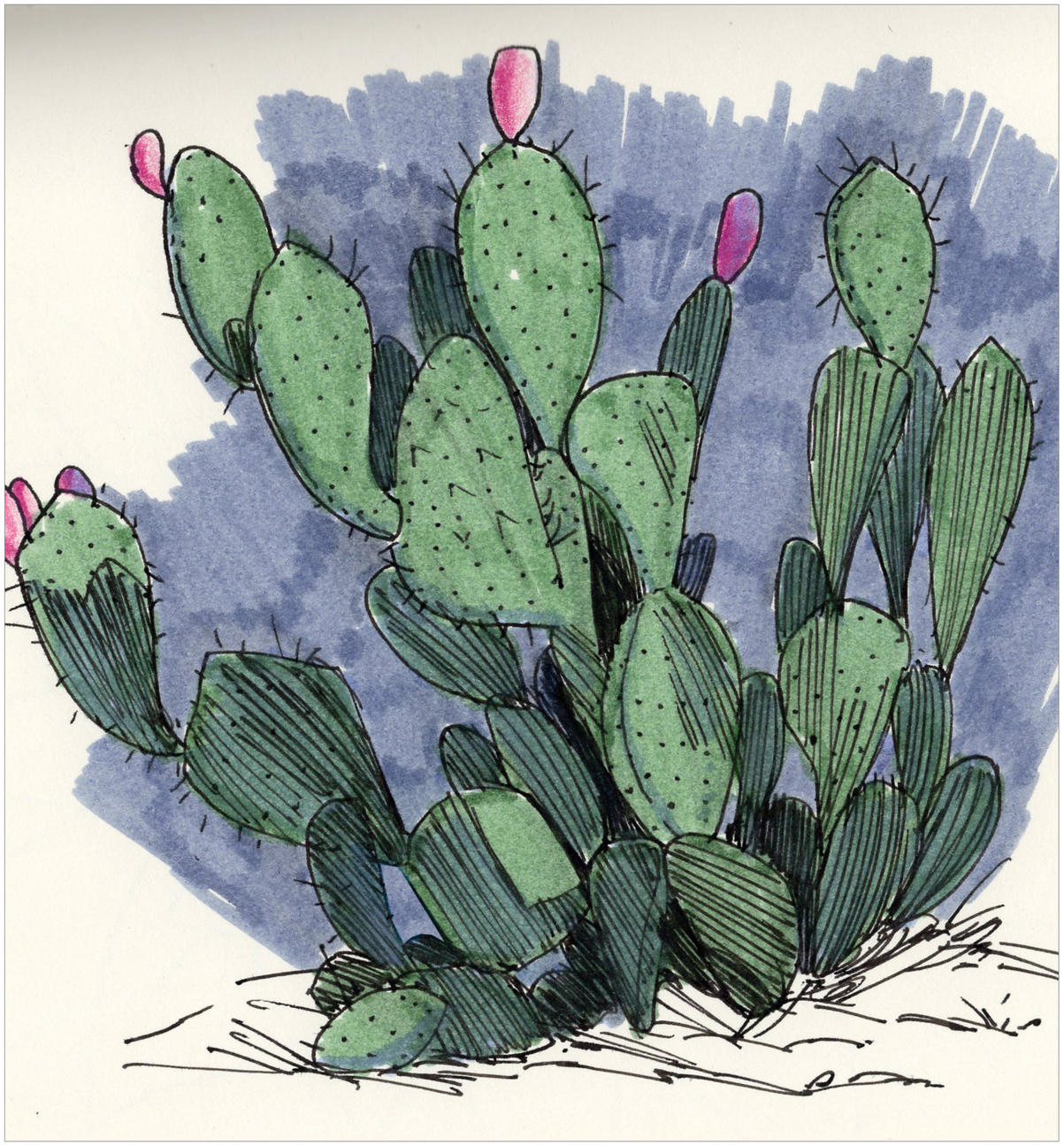
My Recent Work

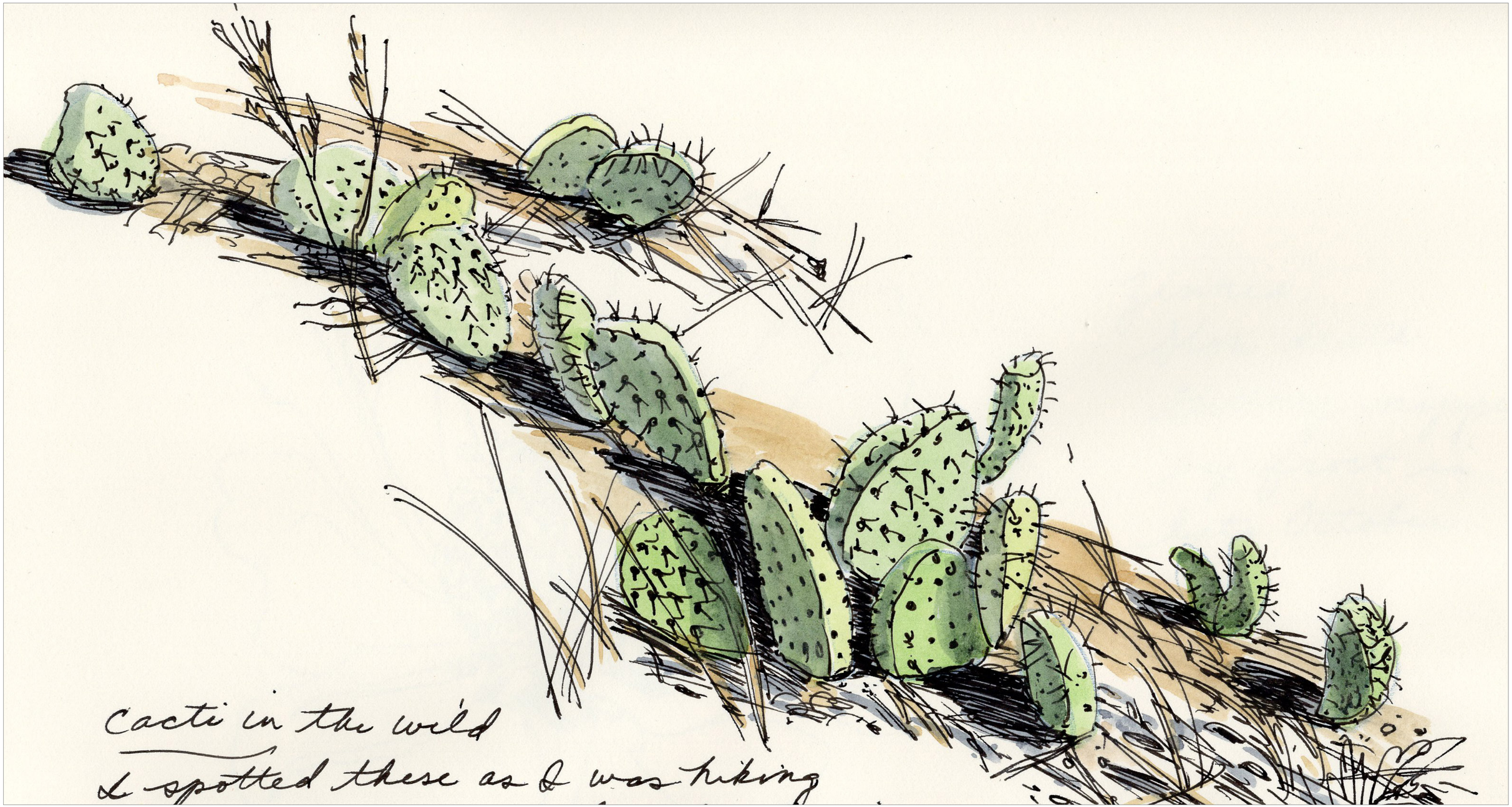
- Using generative sketches as studies for traditional artwork
- Exploring visual rhythm, randomness, and organic systems
- Code-driven compositions that turn into mixed media collages

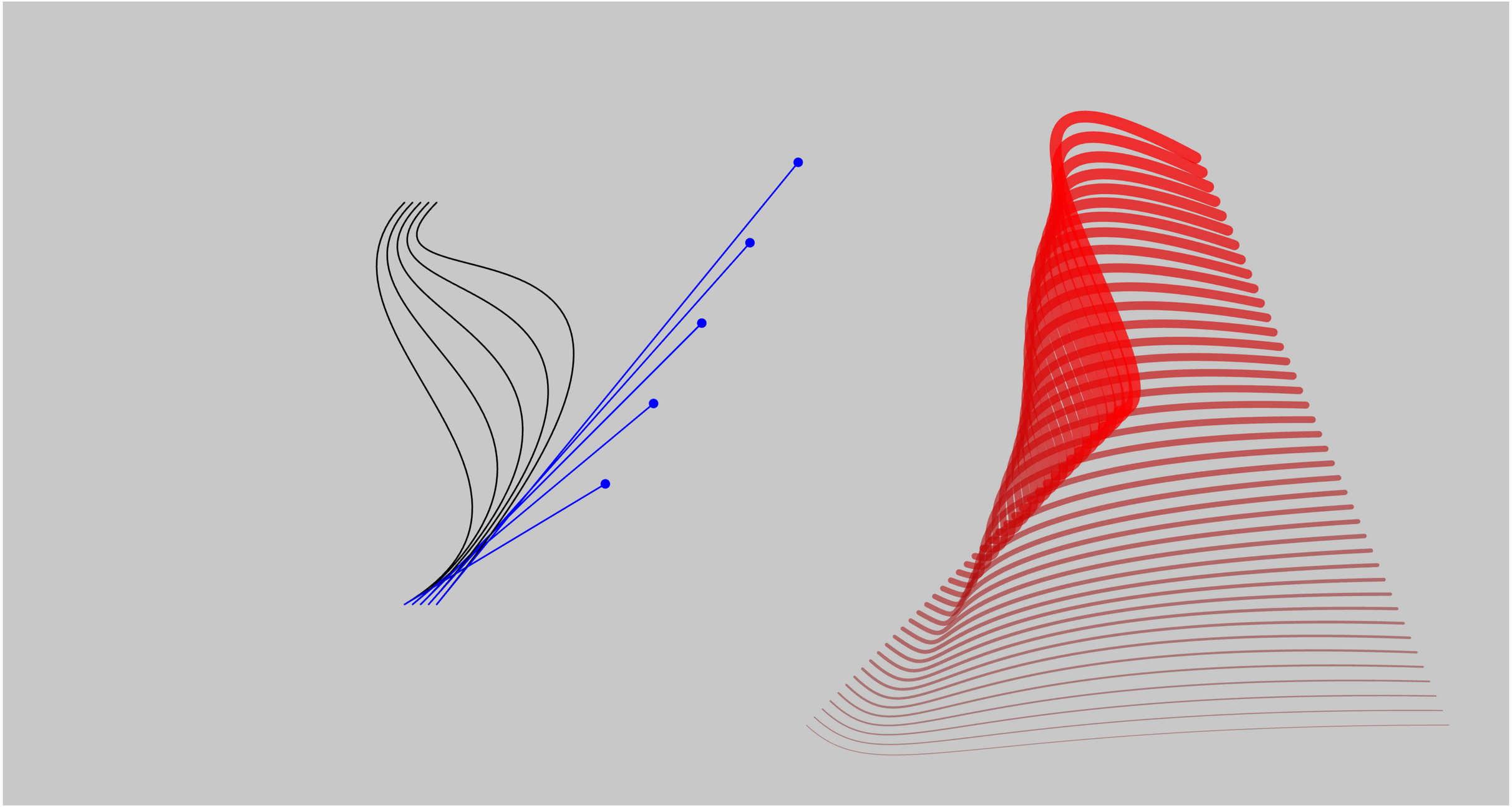


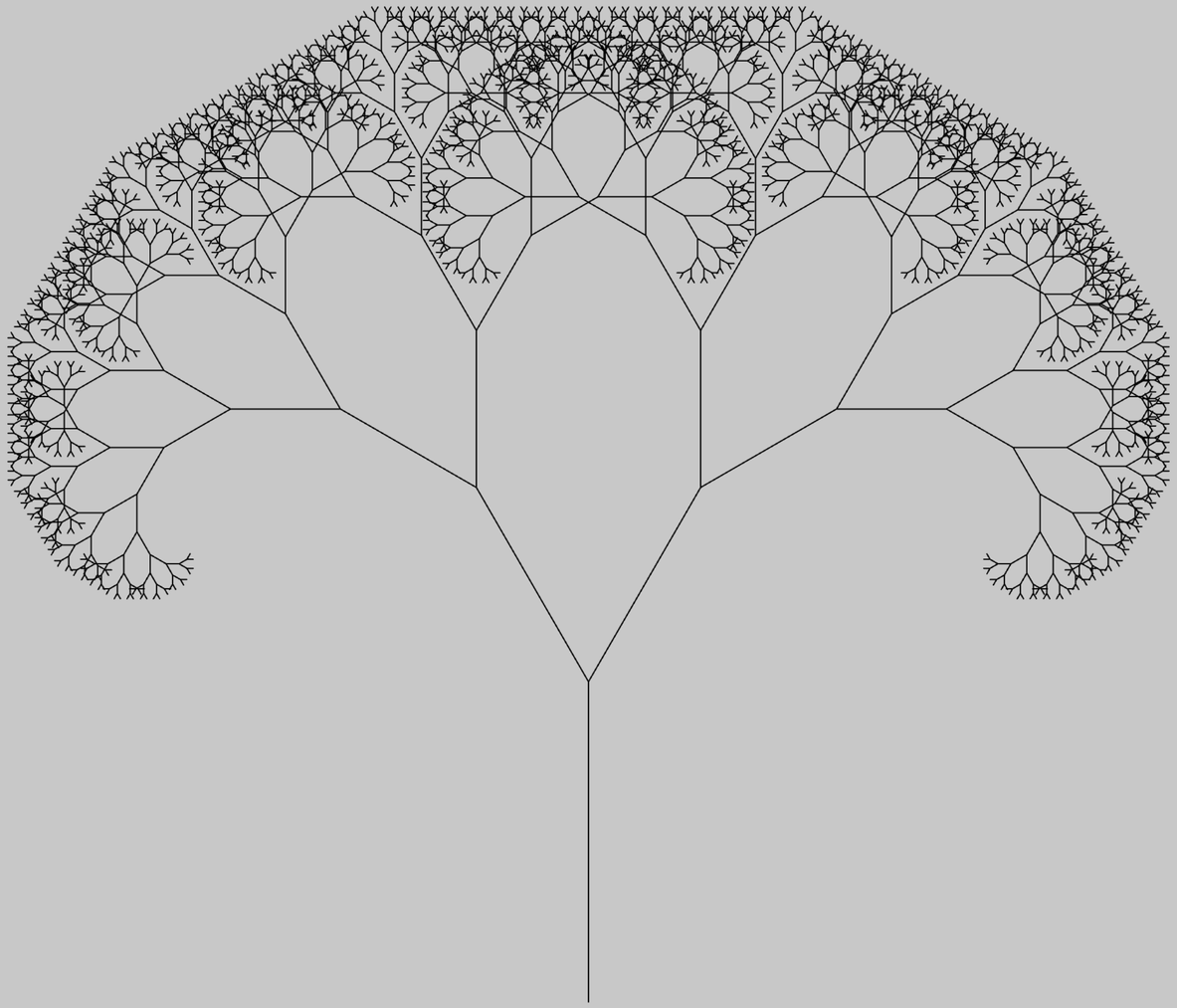
Opuntia (prickly pear cactus)

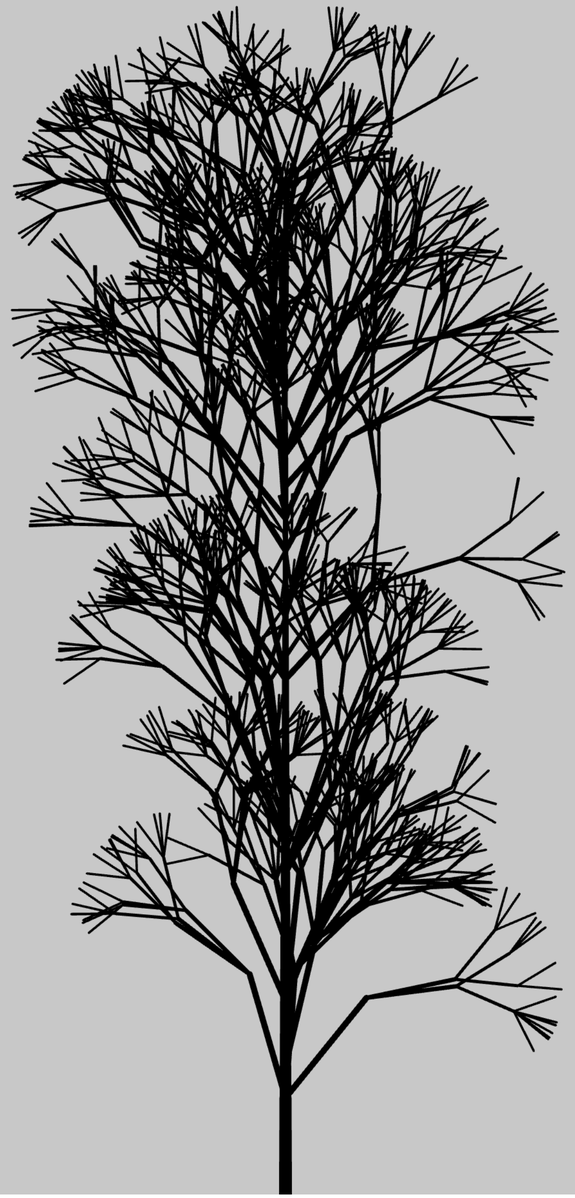
the prickly pear plant caught my eye with its natural clusters of paddles, each one uniquely shaped. The spaces between these paddles create interesting shapes that draw me in, while the textures (dots and needles) add personality with their imperfections. These details create a rhythm similar to the African Milk Tree, guiding my eye showcasing the plant's structured yet very organic design.

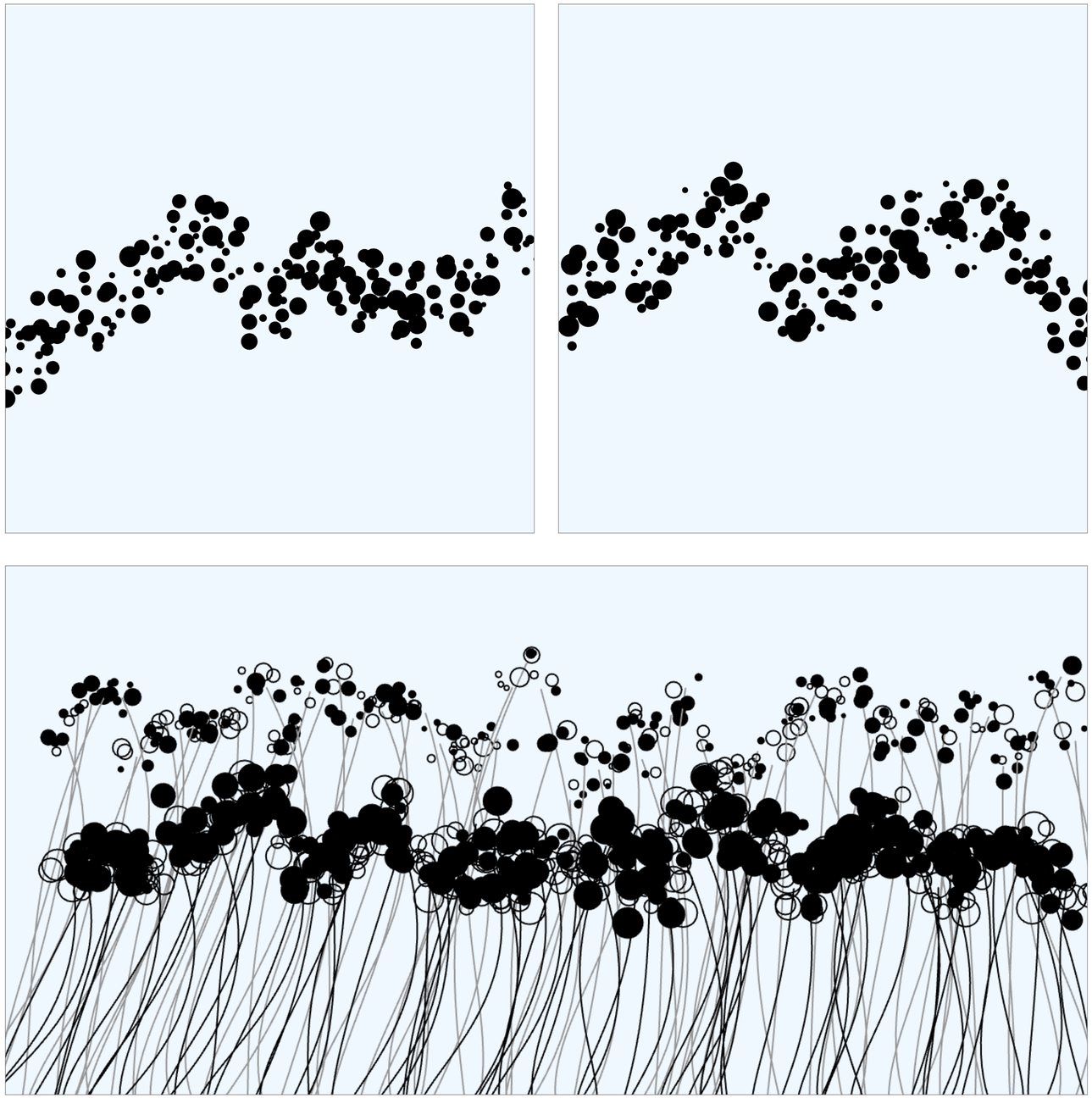


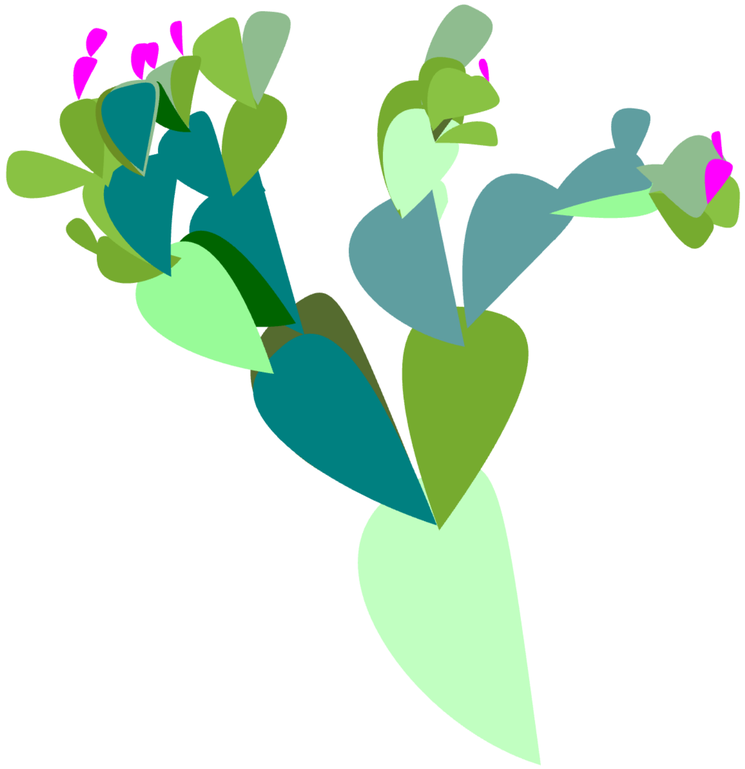

Cacti in the wild
I spotted these as I was hiking

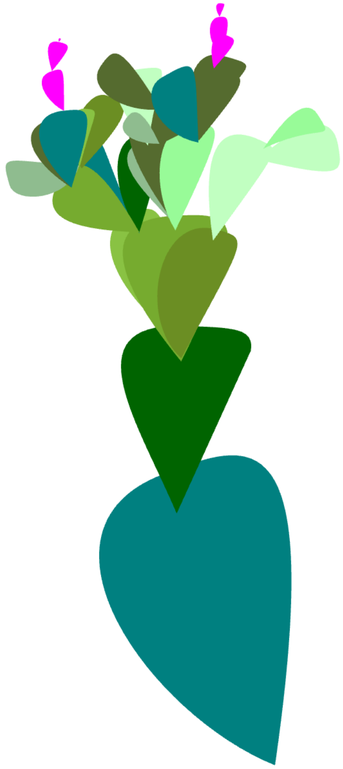


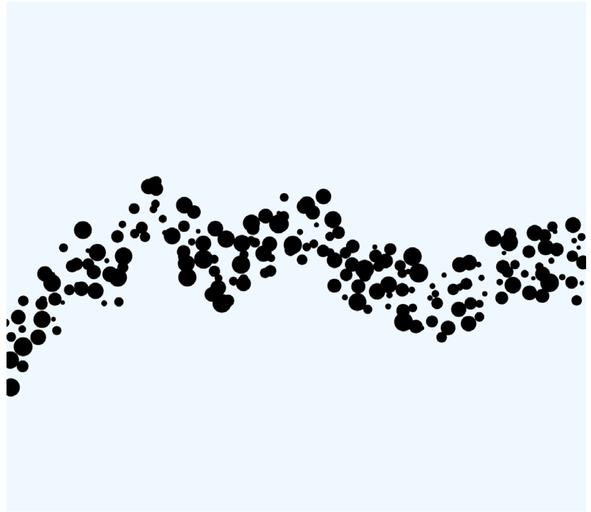


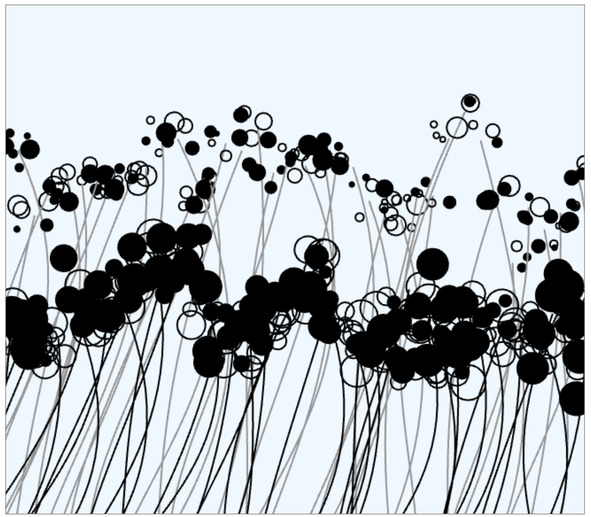












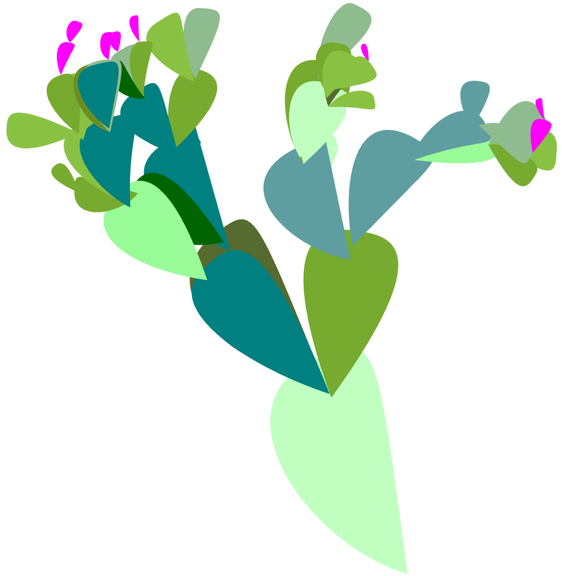
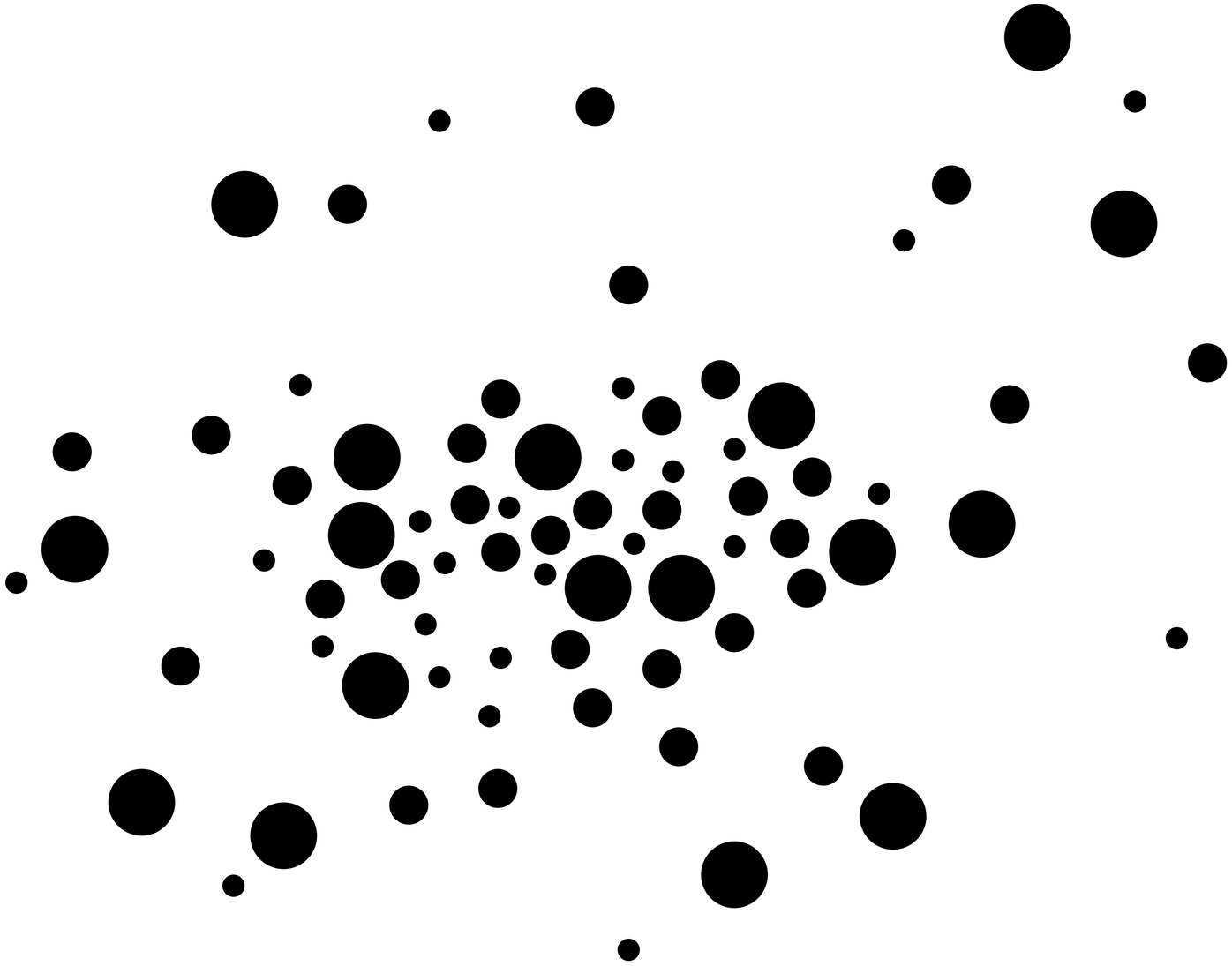
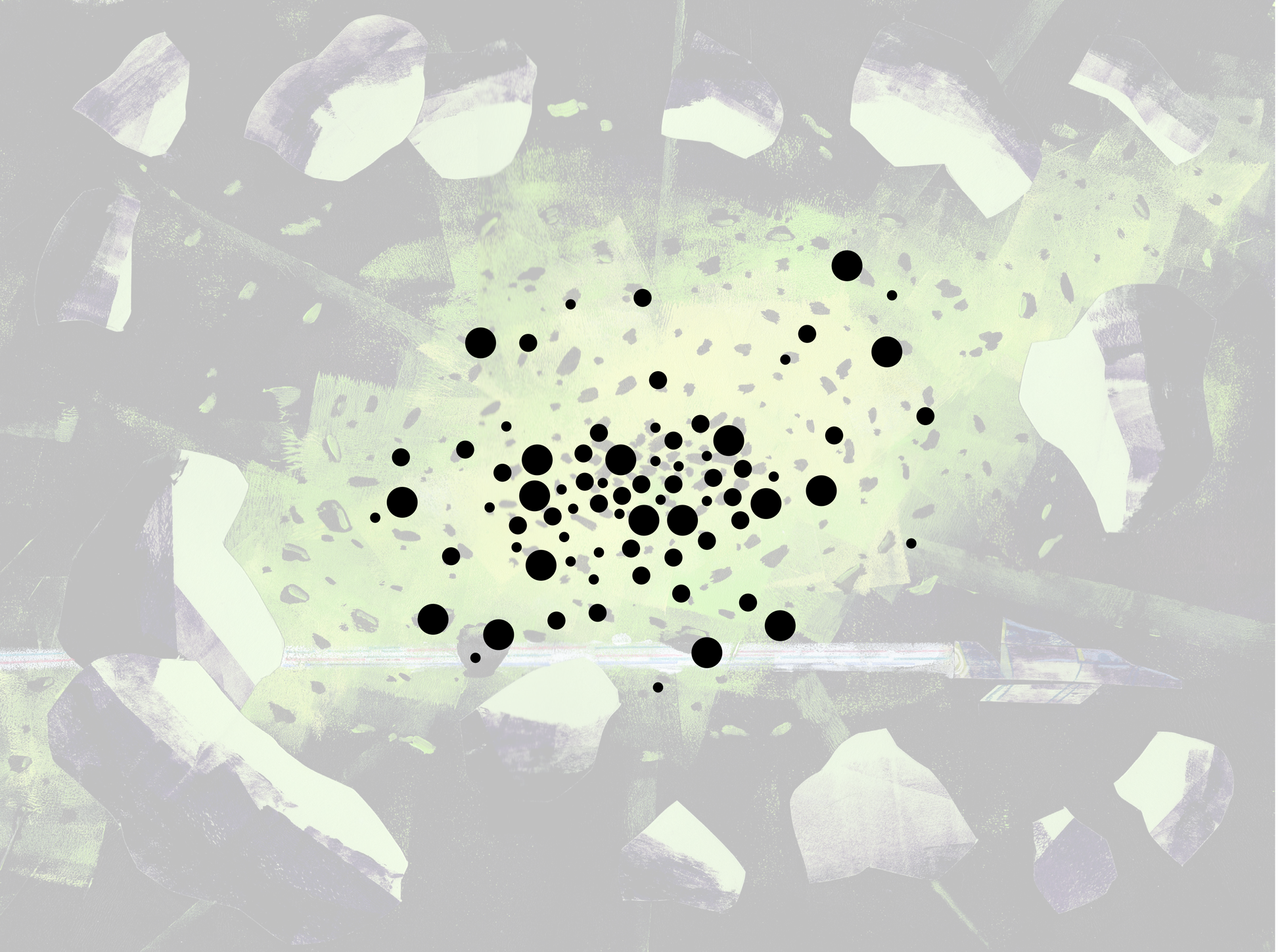
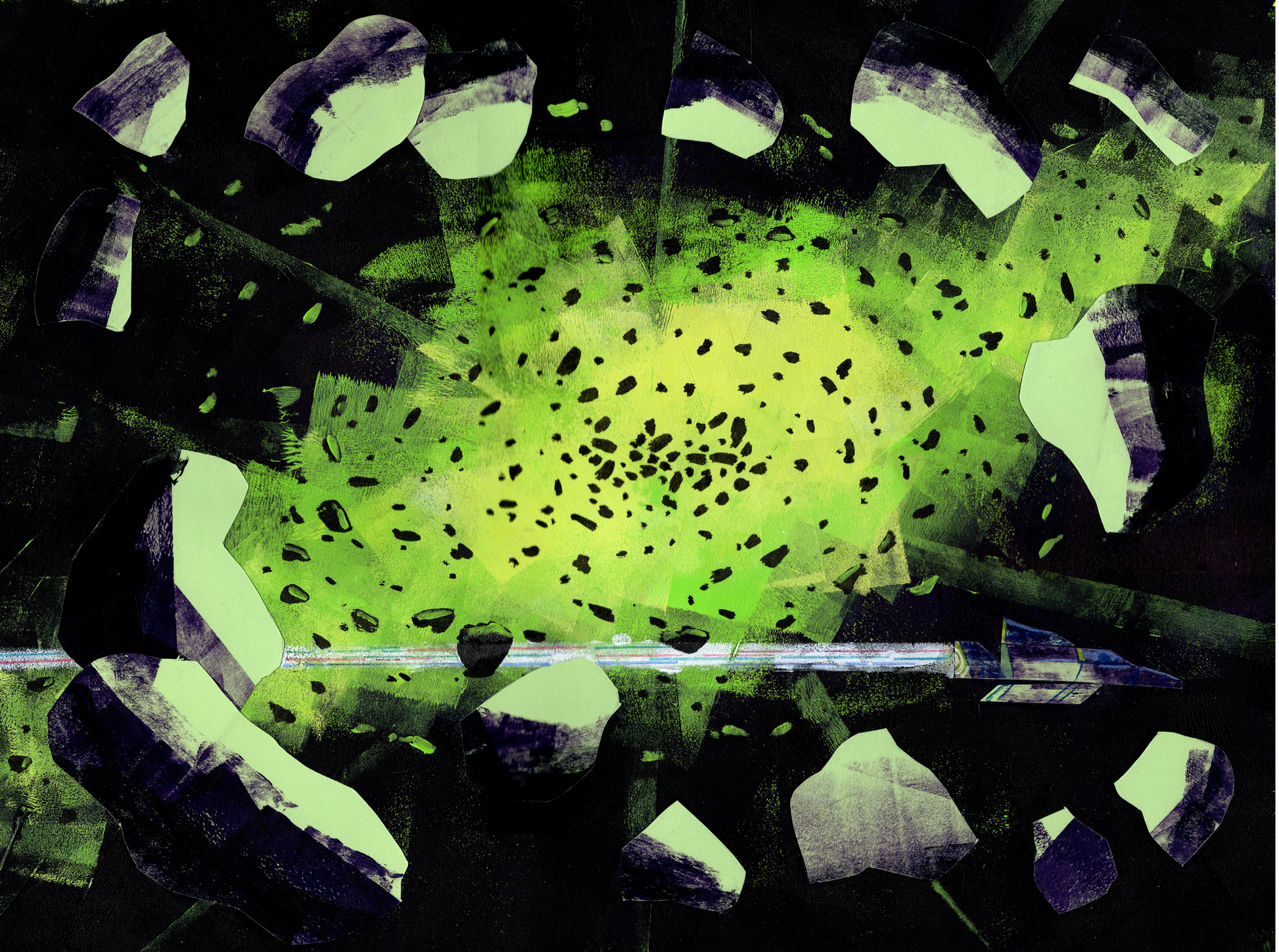
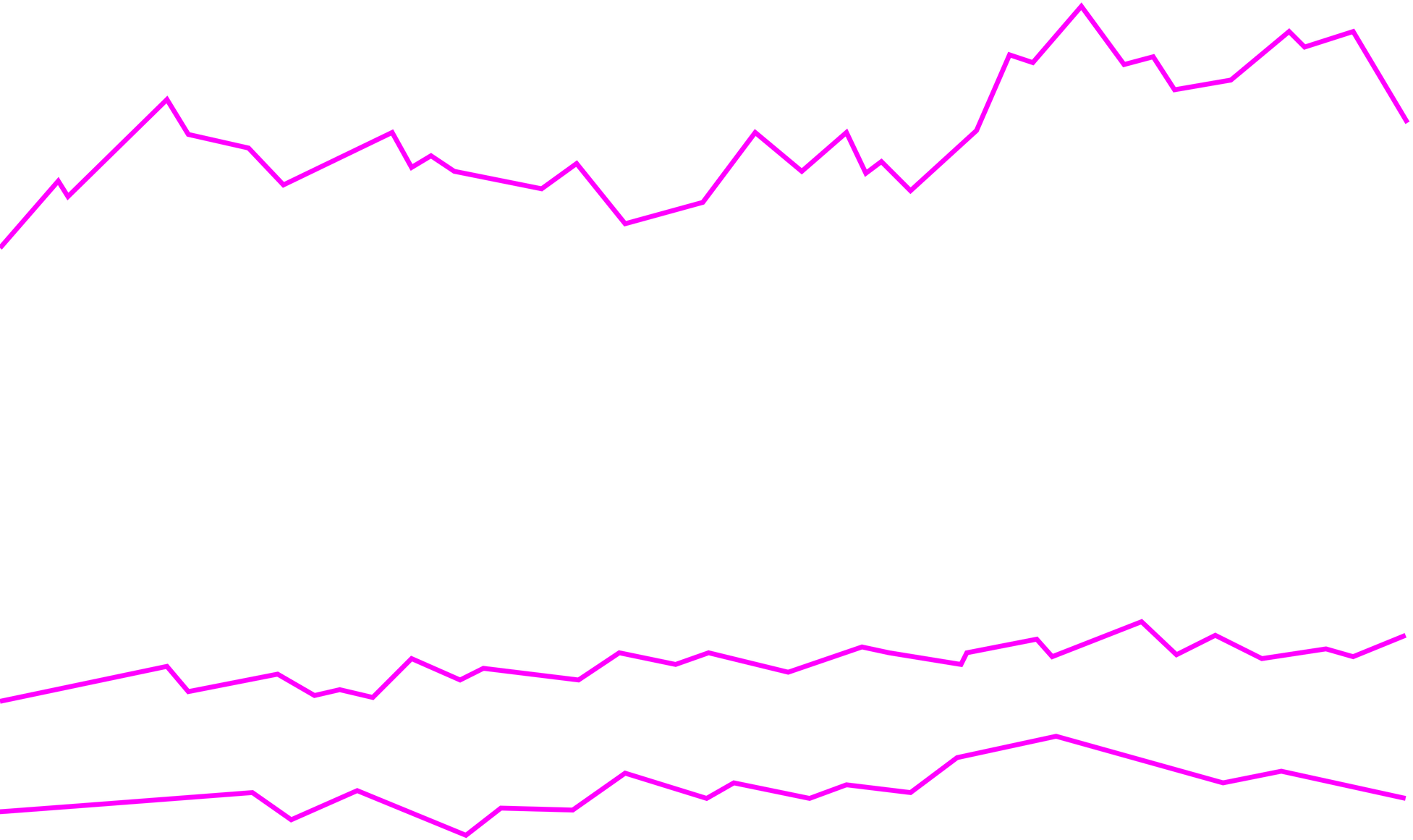


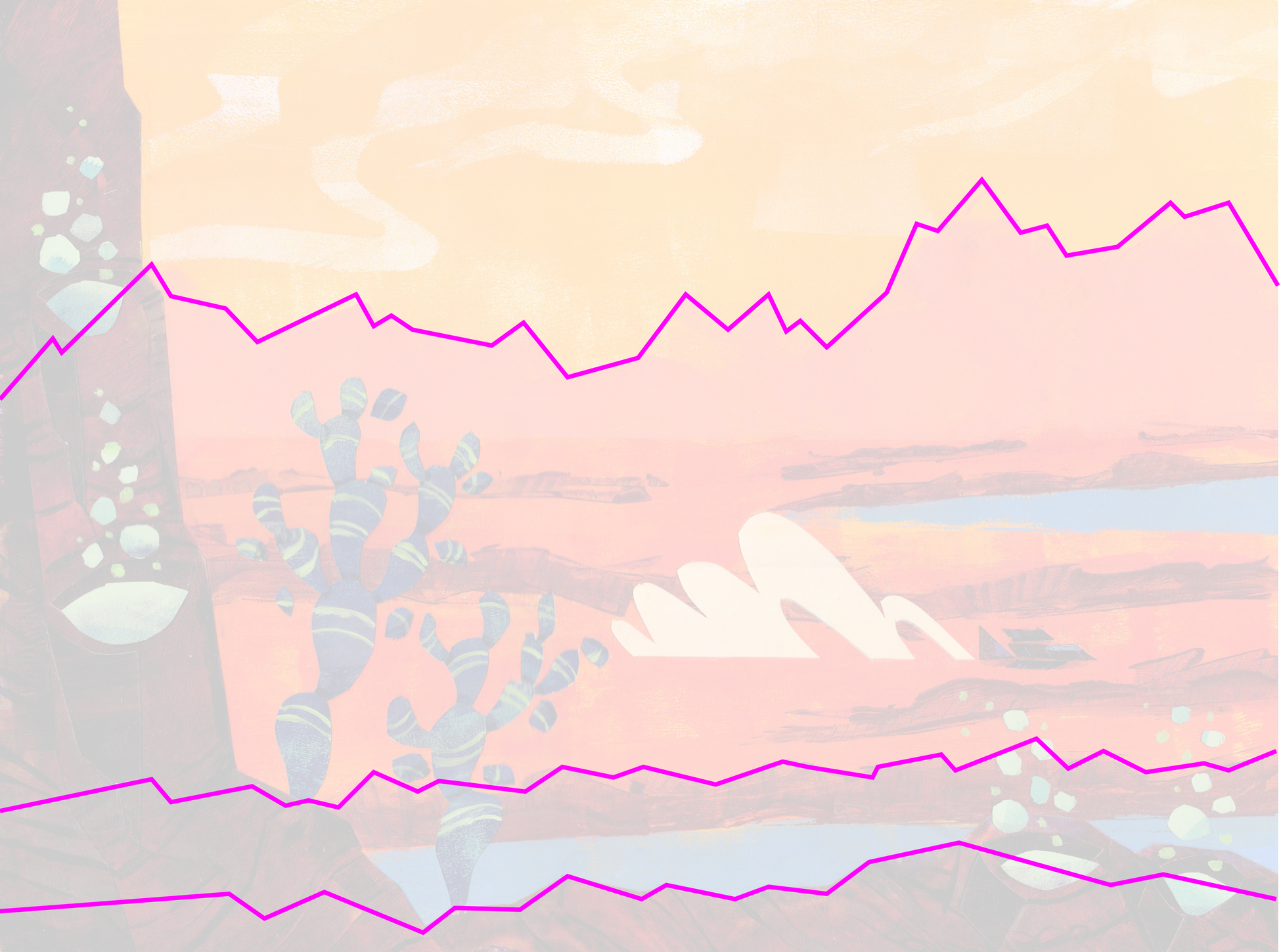
Illustration + Generative Art Fusion

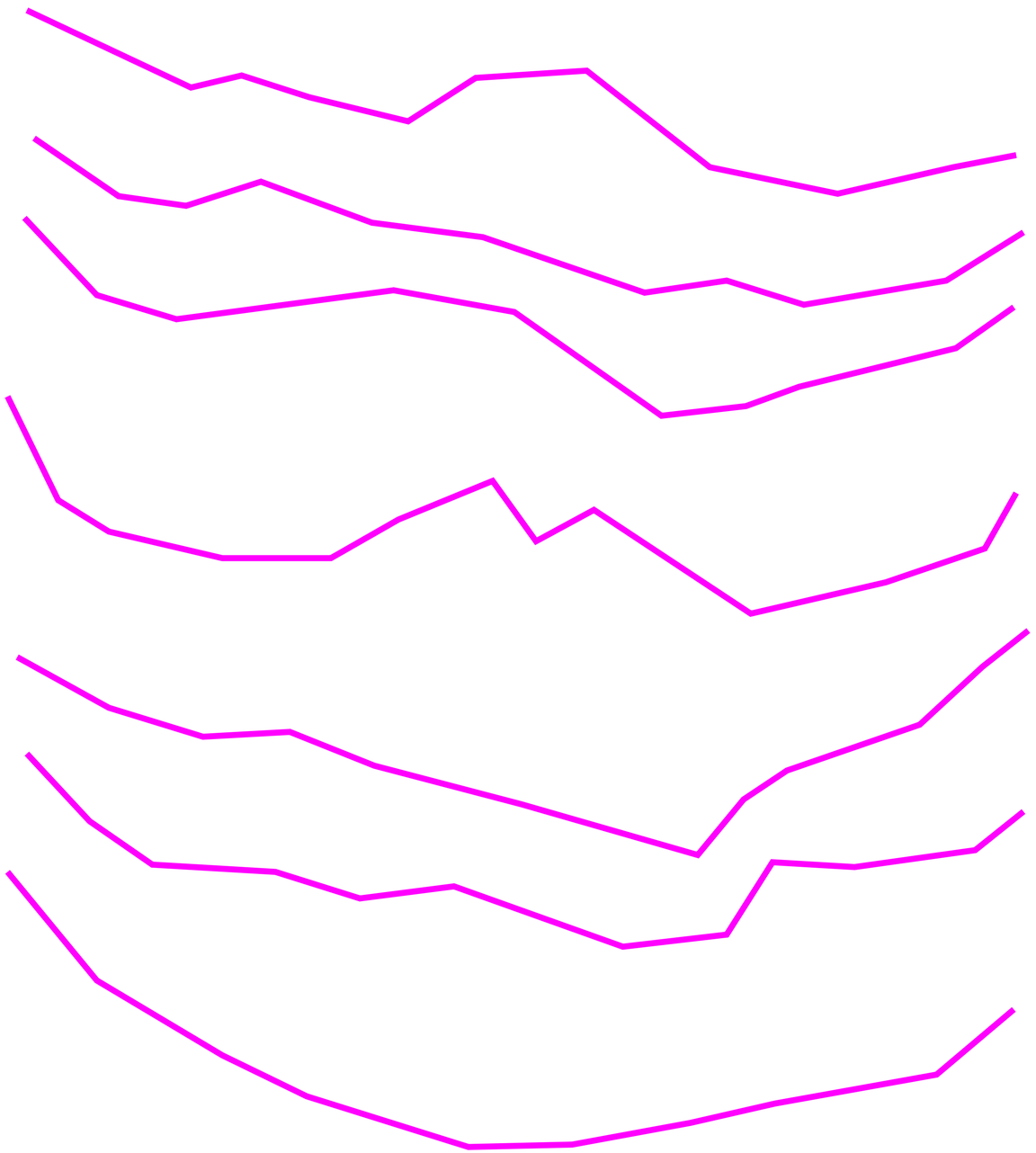


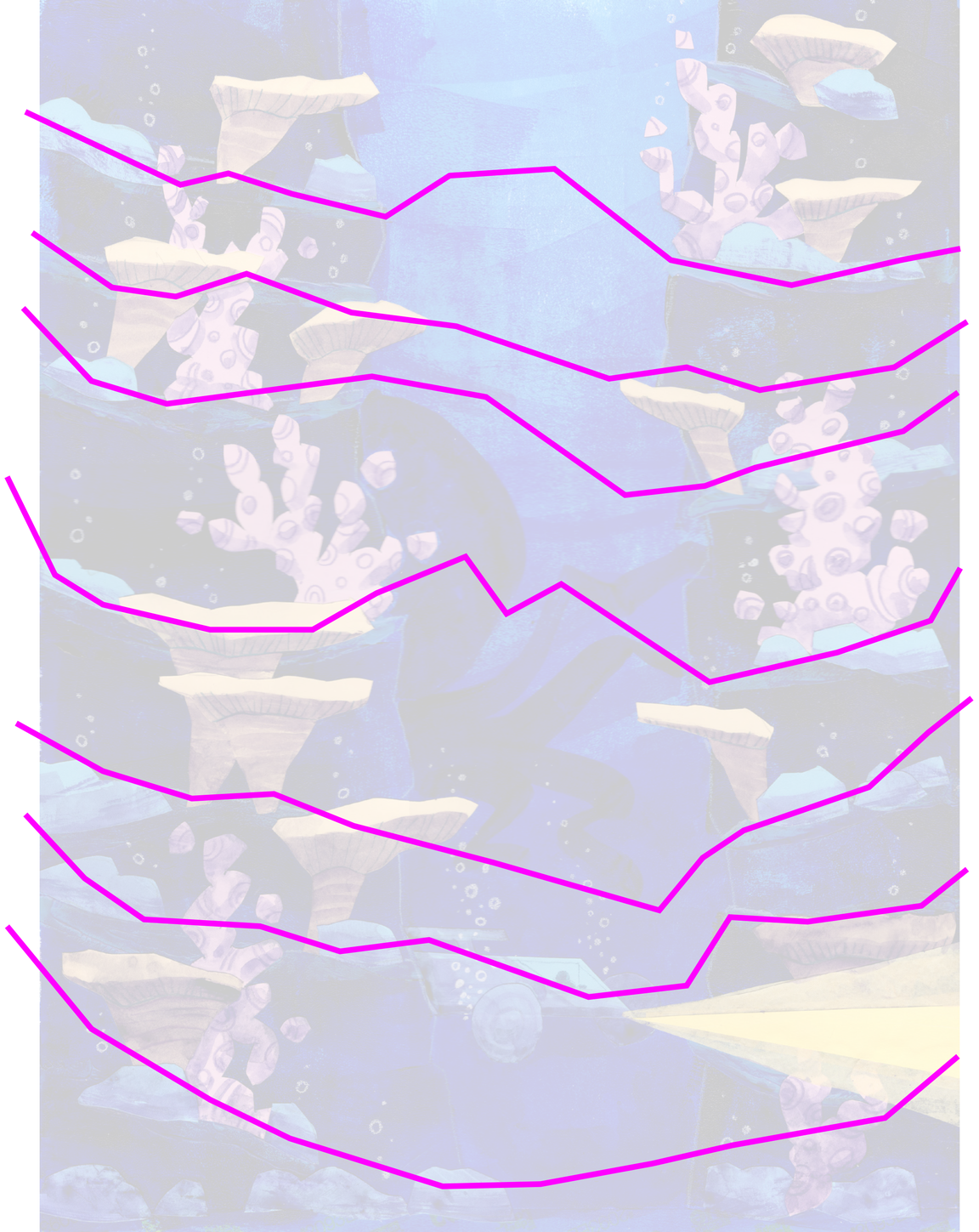


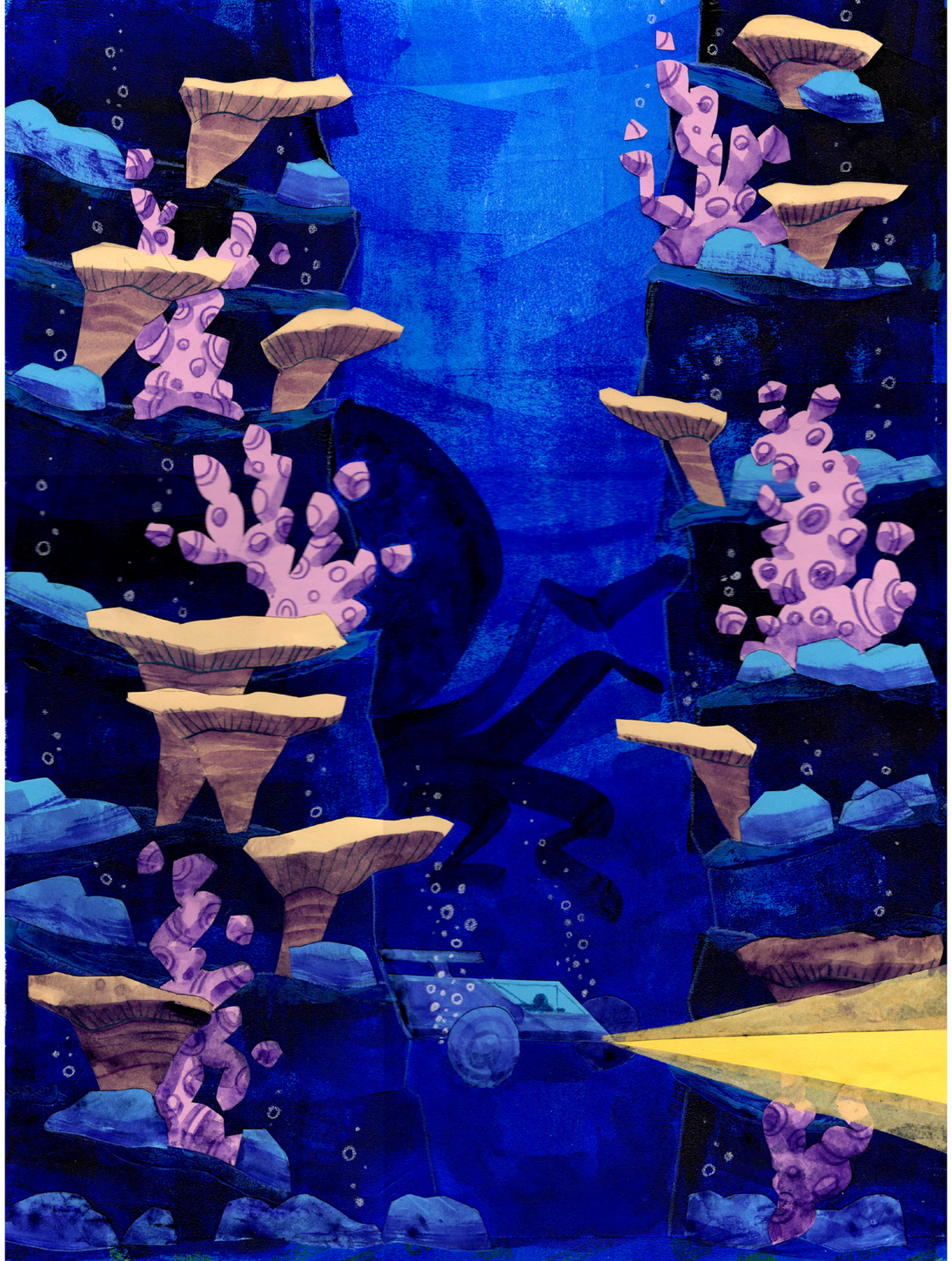


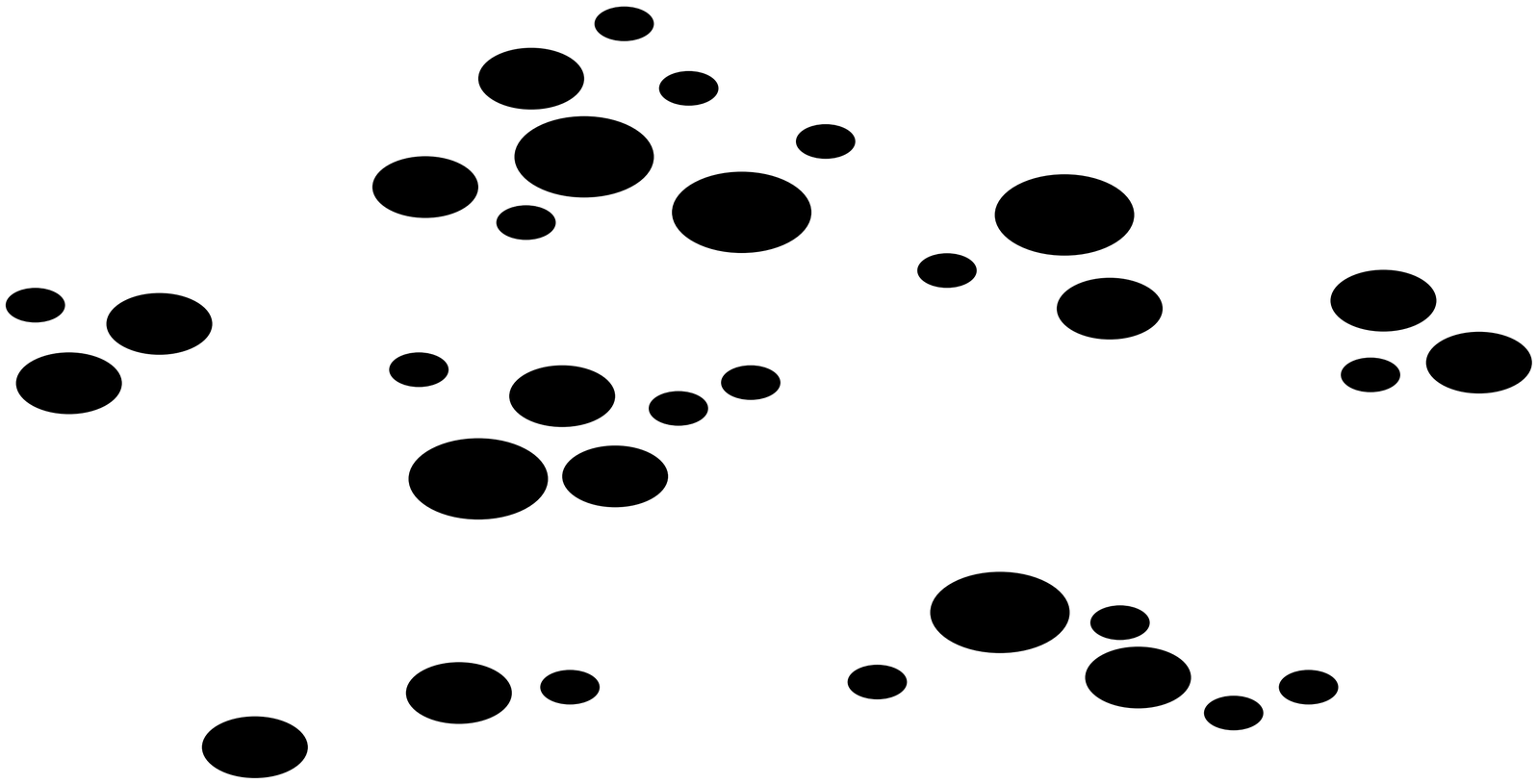


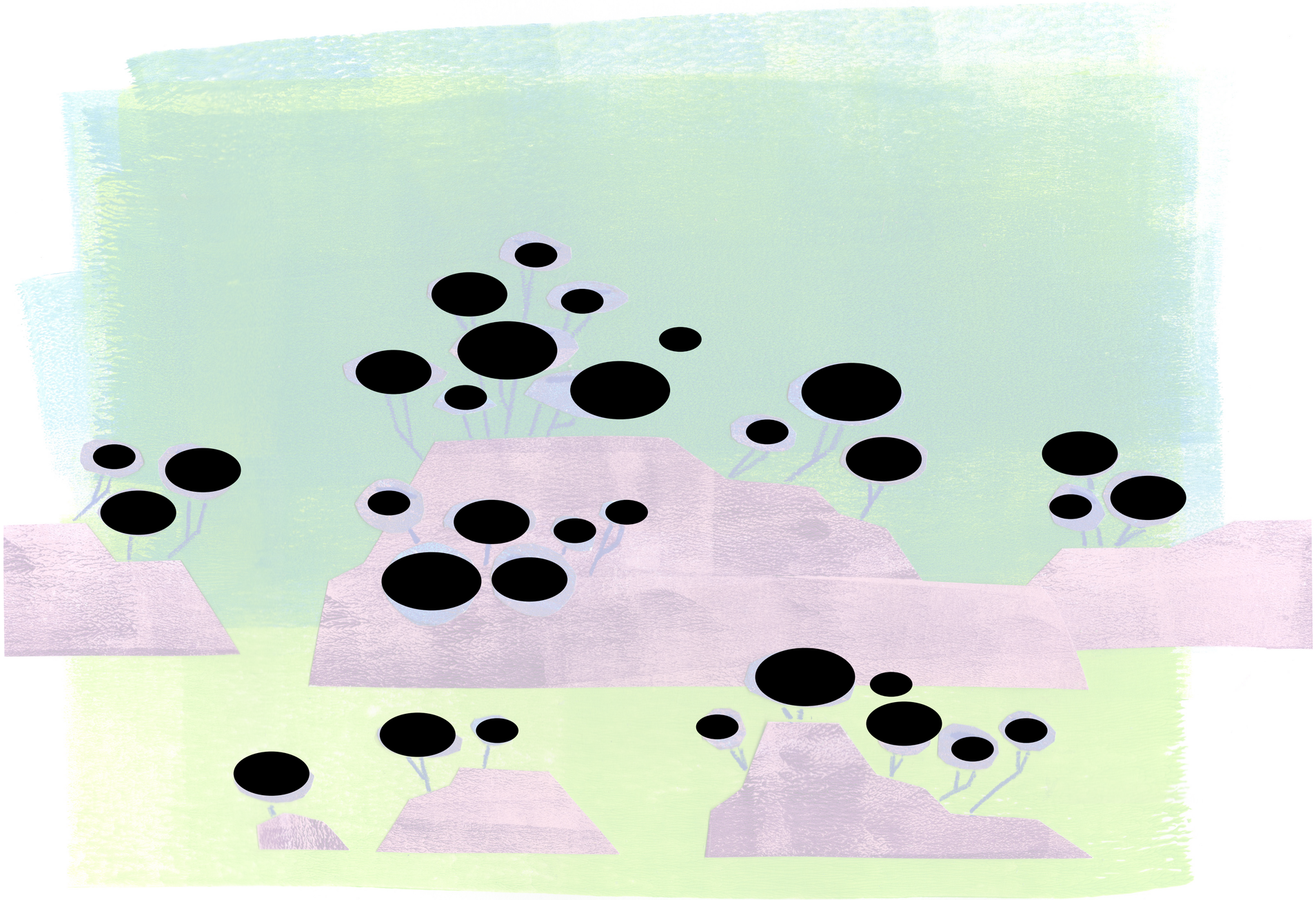


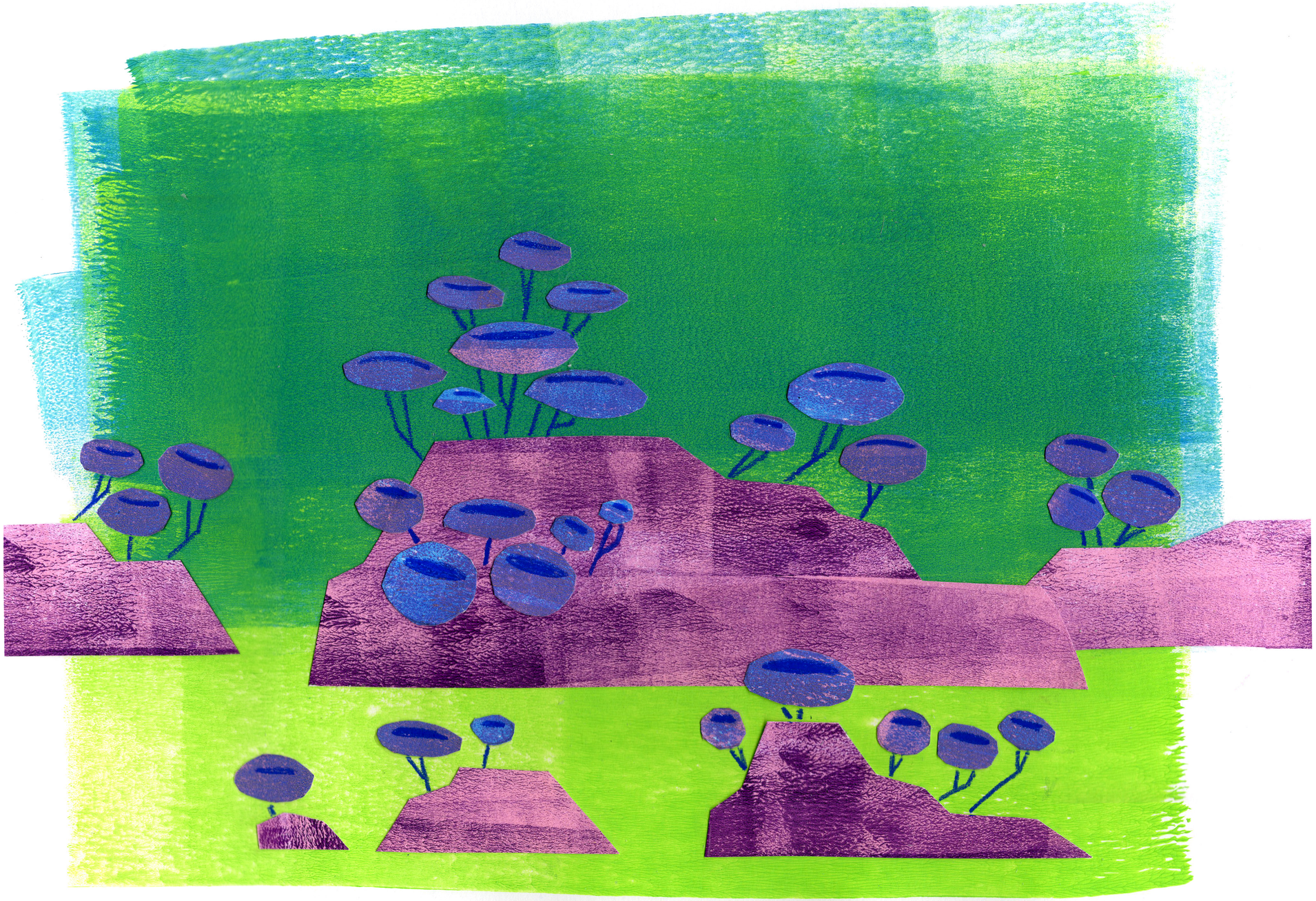


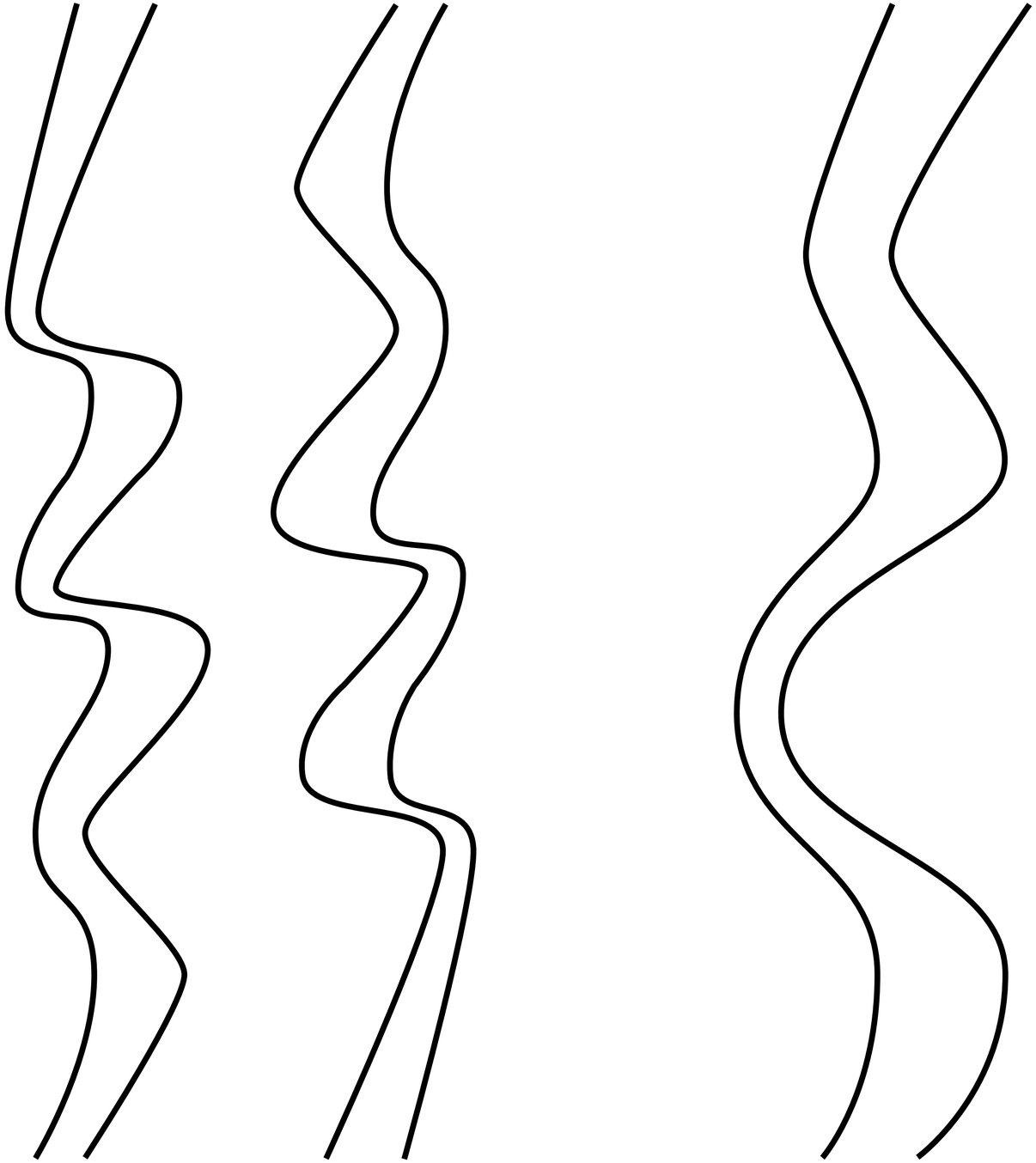


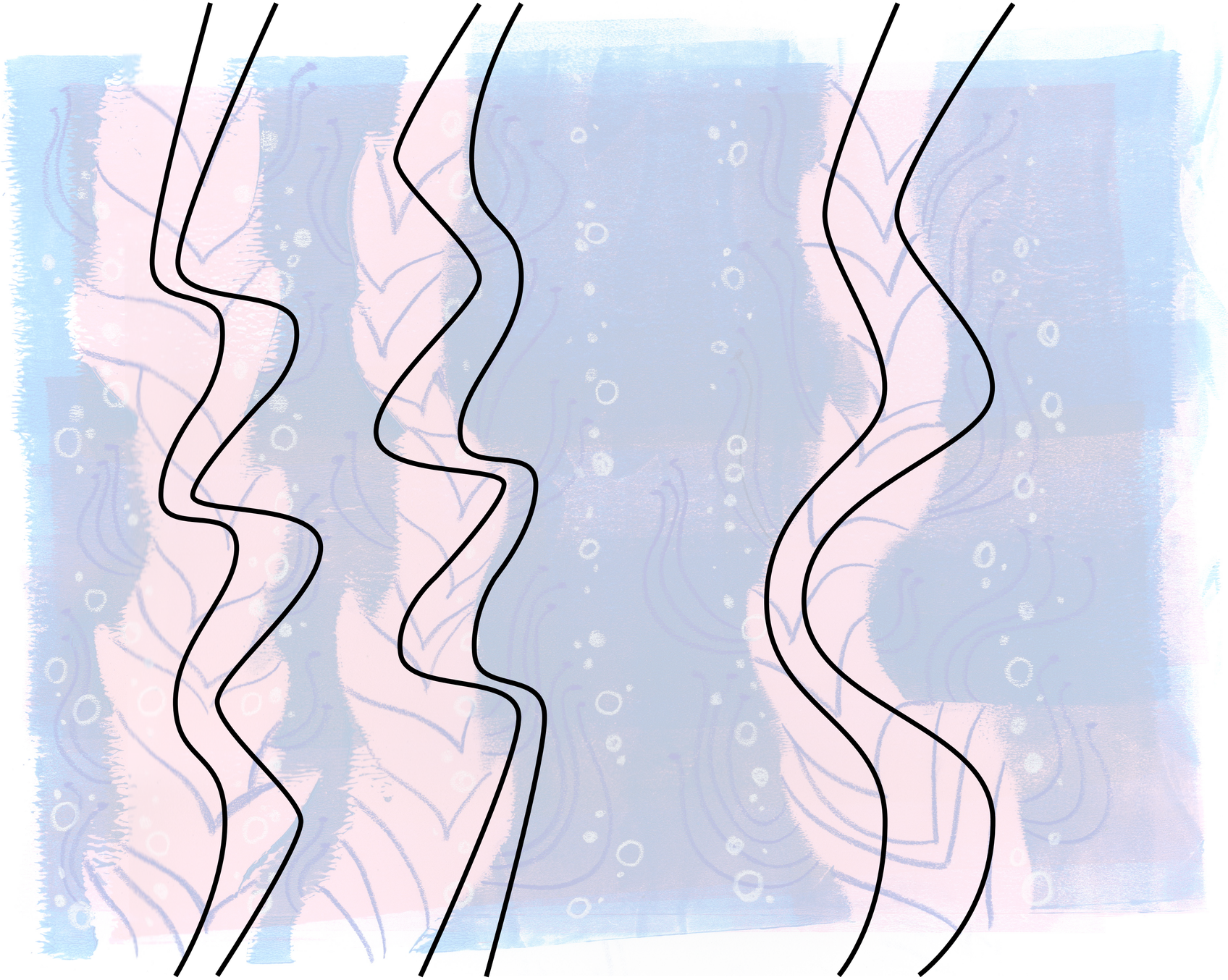


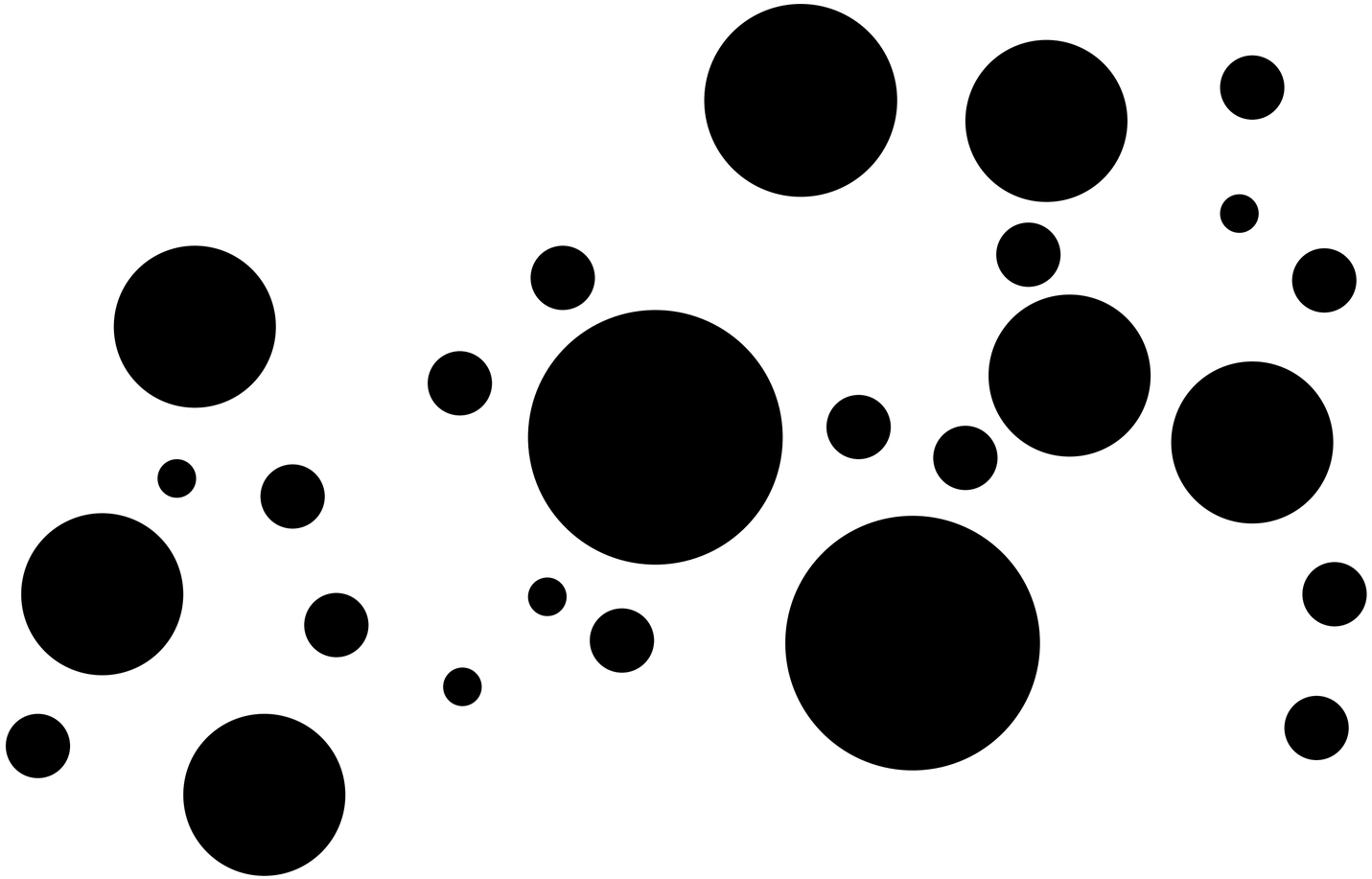


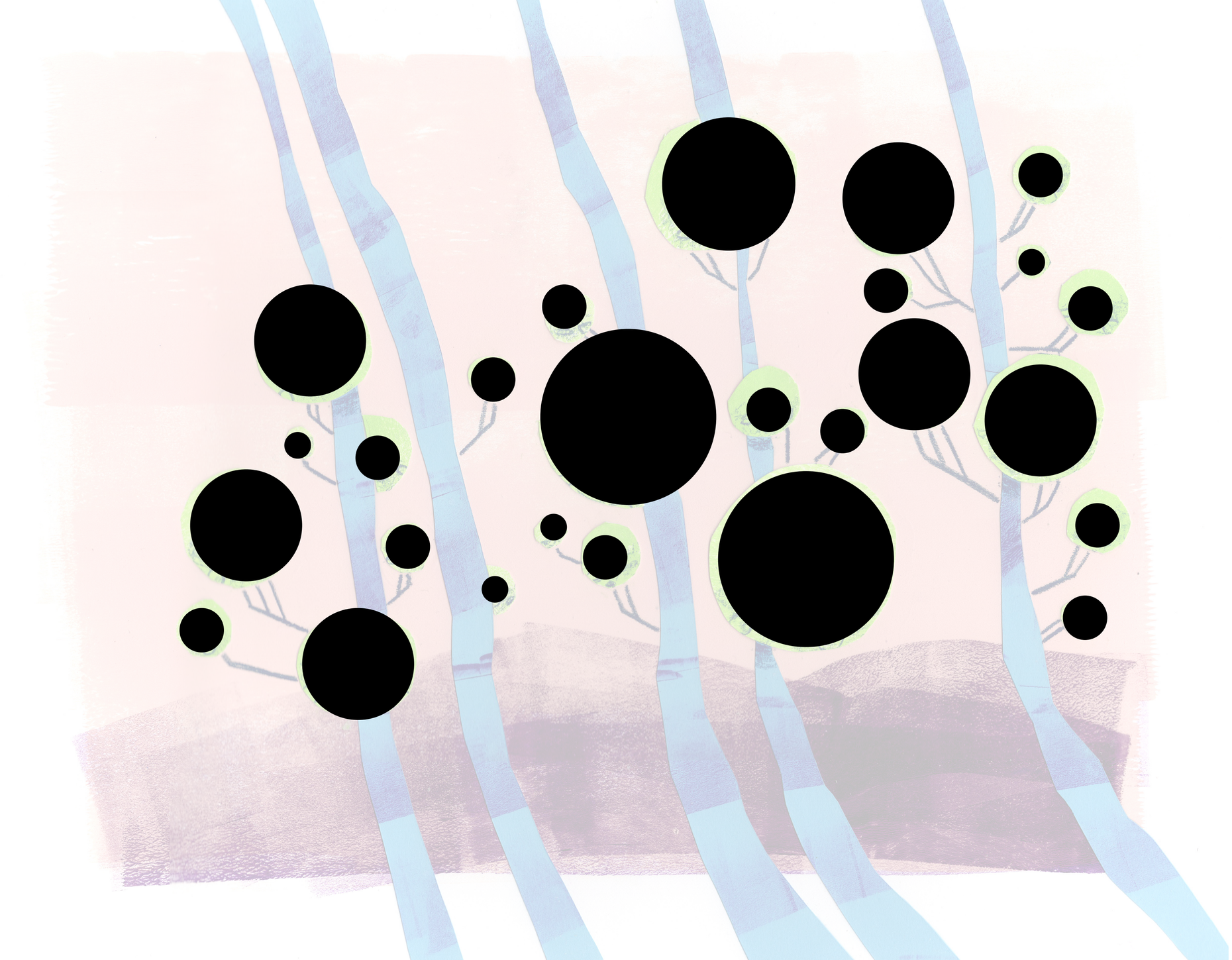


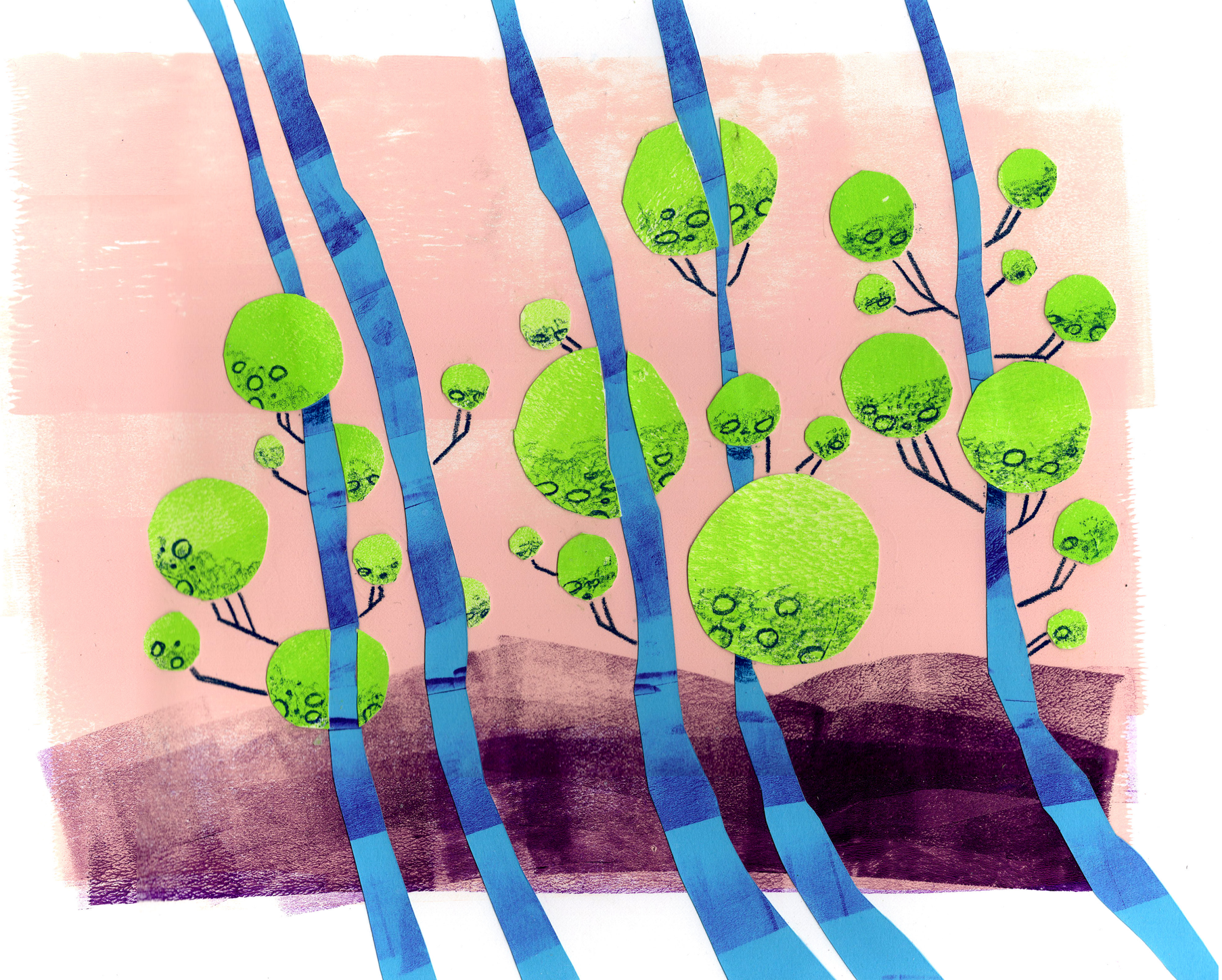


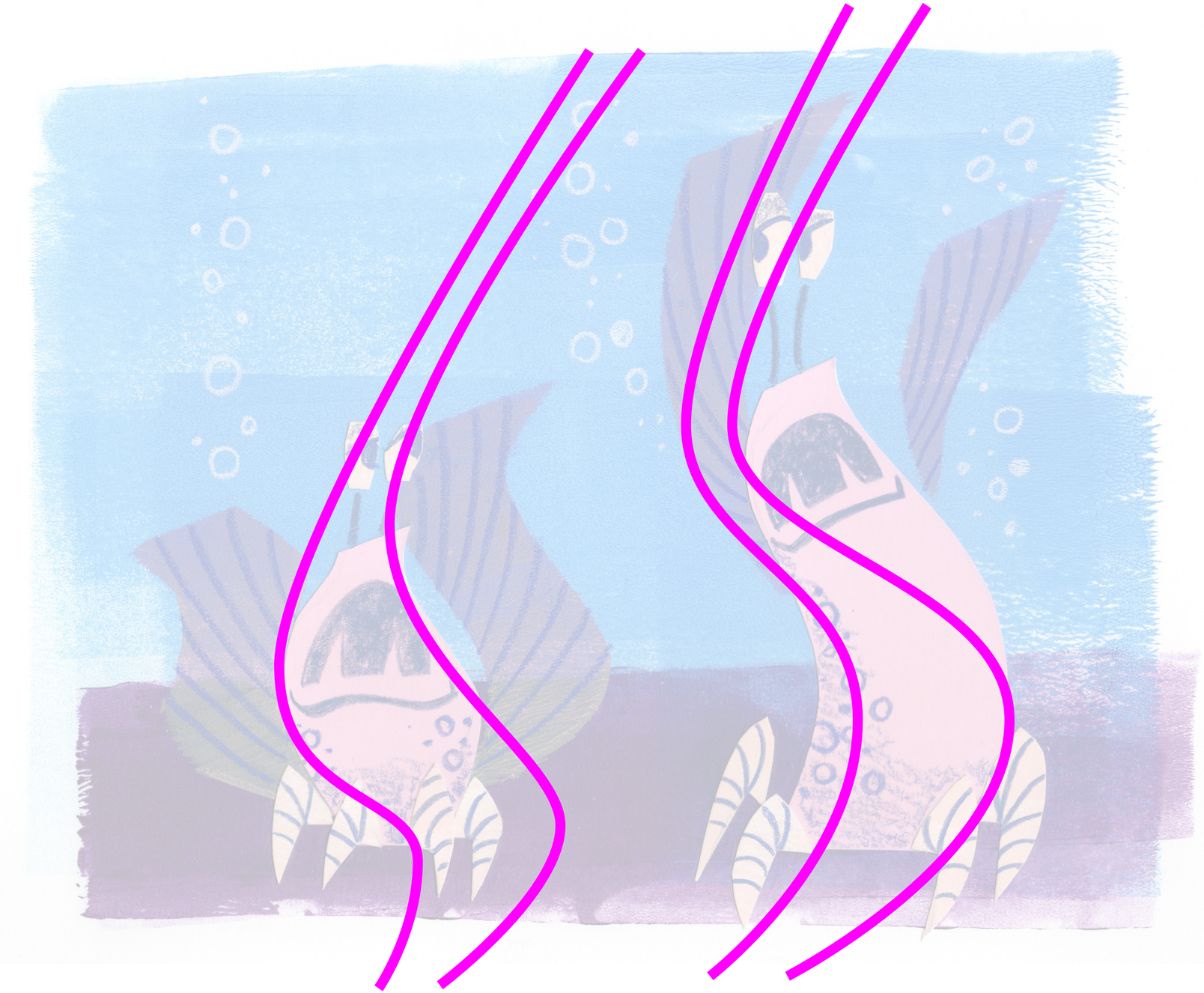


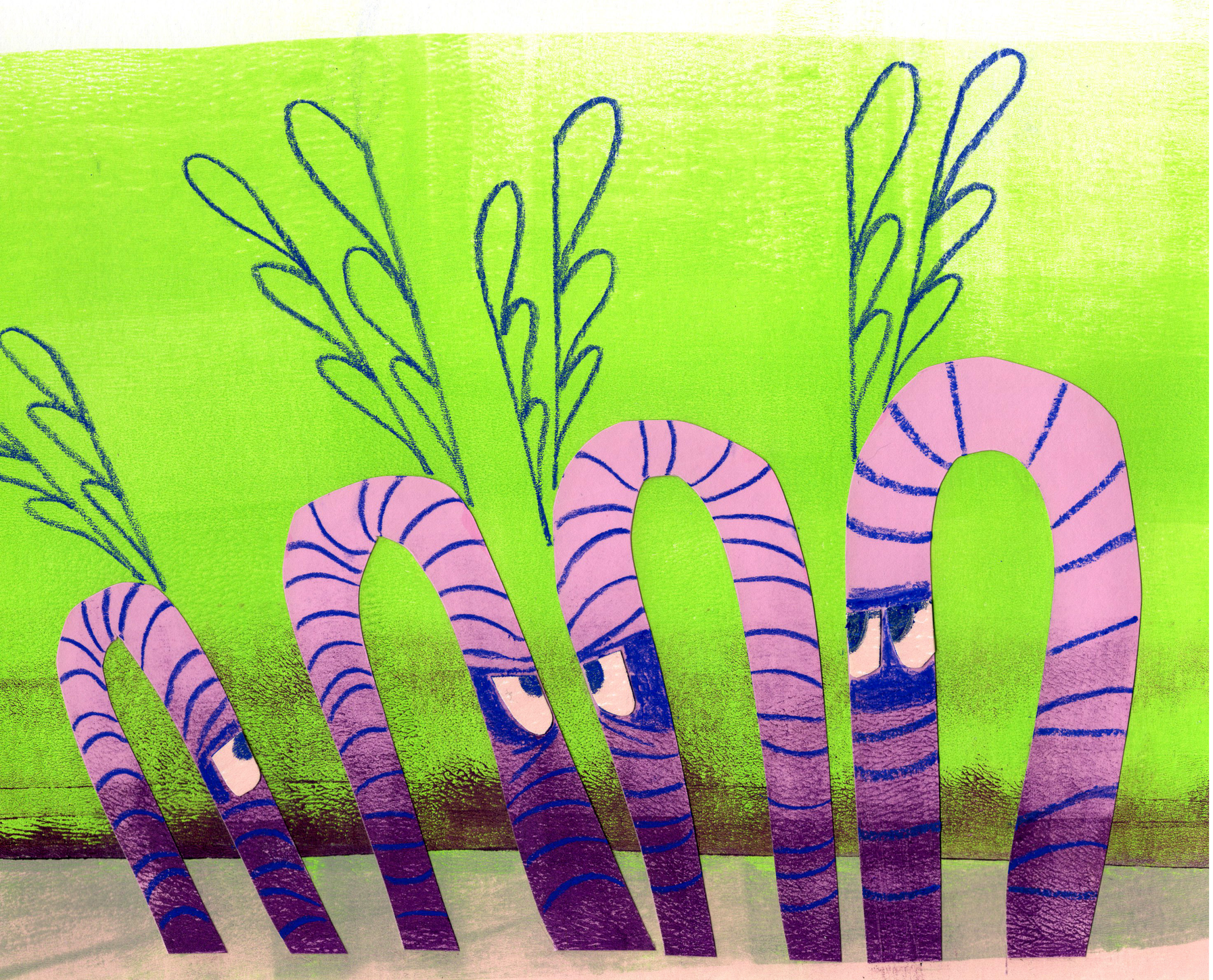








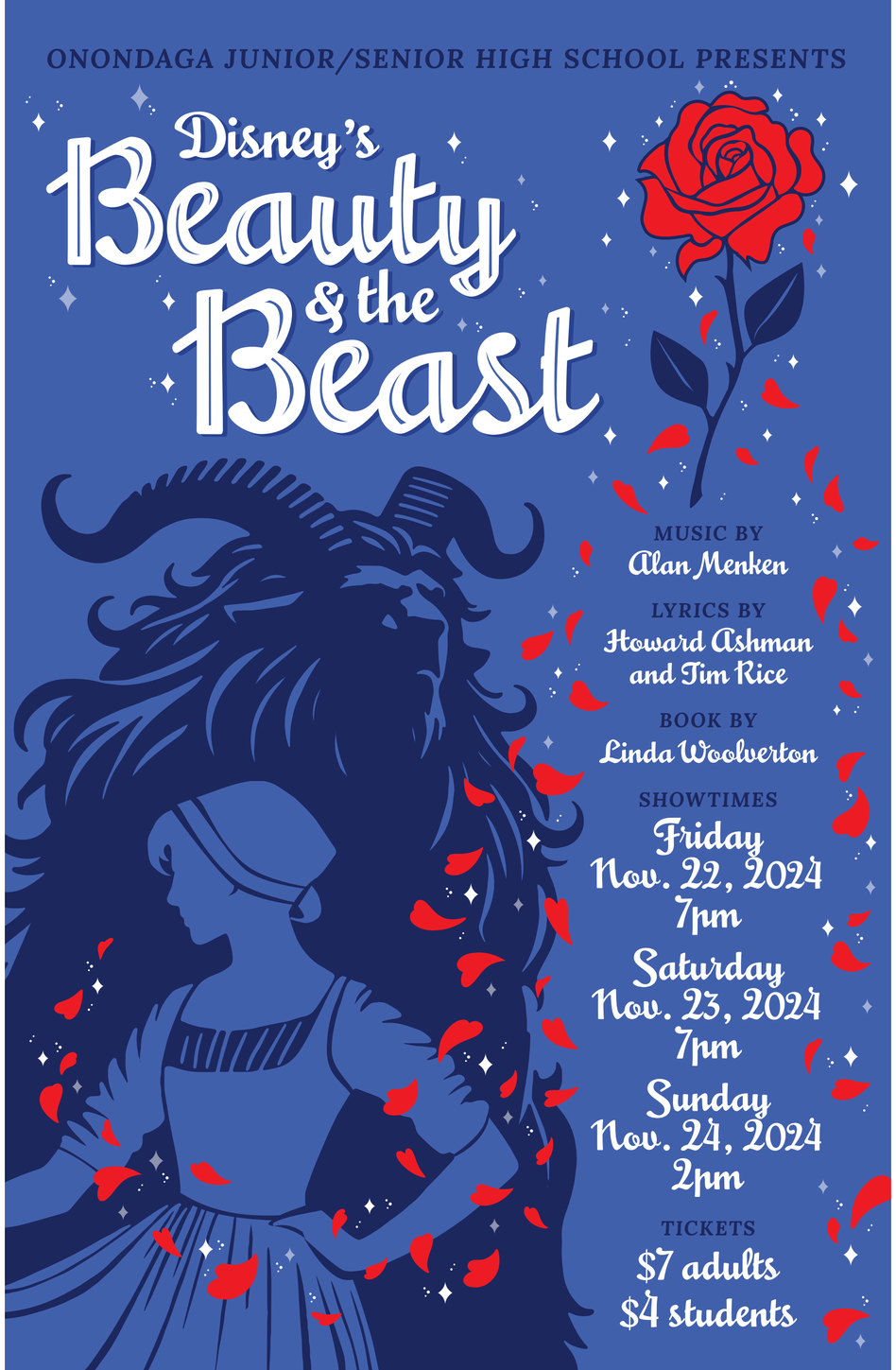




HORNS&HARMONIES

A festive concert at Hendricks Chapel

ONONDAGA CENTRAL DRAMA PRESENTS
MEREDITH WILLSON'S THE MUSIC MAN
MUSIC, BOOK AND LYRICS BY
MEREDITH WILLSON
STORY BY
MEREDITH WILLSON & FRANKLIN LOUCEY
ONONDAGA JUNIOR/SENIOR HIGH SCHOOL
AUGUST
10 & 11 6 PM
TICKETS
$5 EA.
$20 FAMILY OF 4 OR MORE
"IOWA STYLE" FAMILY EVENING
Pack a picnic and bring chairs or blankets (limited bleacher seating available). There will be lawn games, and snacks and food available for purchase as well.


ONONDAGA JUNIOR/SENIOR HIGH SCHOOL PRESENTS
Disney's
Beauty
& the
Beast
MUSIC BY
Alan Menken
LYRICS BY
Howard Ashman
and Tim Rice
BOOK BY
Linda Woolverton
SHOWTIMES
Friday
Nov. 22, 2024
7pm
Saturday
Nov. 23, 2024
7pm
Sunday
Nov. 24, 2024
2pm
TICKETS
$7 adults
$4 students

GAY
HEAD
10K
ROAD RACE
AQUINNAH, MA
10.01.23

GAY
HEAD
10K
ROAD RACE
AQUINNAH, MA
10.01.23

RUN
FOR THE
LIGHT
GAY HEAD 10K
OCTOBER 6, 2024
AQUINNAH, MA

ART, DESIGN, AND CODE

The Synthesis

- Sketchbooks informed code,
  code informed sketches.
- Embracing process-driven experimentation
- Growing understanding of hybrid workflows
- Code no longer sits on the side:
  its become a part of my artistic sense

ART, DESIGN, AND CODE

Looking Forward

- Develop a new toolkit
- Explore and build bridges between nature, art, design, and generative code
- To share these intersections with broader audiences through exhibitions, education, and open-source creative tools.

Questions?

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