## 1．Introduction

Color is one of the most powerful tool you can have as an artist，颜色是艺术家最有力量的工具之一
and knowing how to use color，懂得如何运用颜色
it can take your work from good to great．
能让你的作品锦上添花
Hi，my name is Victo Ngai．
大家好，我叫倪传婧
I＇m a illustrator from Hong Kong．
是一名来自香港的插画家
Now，I＇m based out of Los Angeles．
我现在常驻洛杉矶
Today，I＇m here to teach you about colors．
今天我会教你们关于颜色的课程
I think color plays a huge role in my work．
我认为颜色在我的作品中至关重要
It really helps me to provoke the emotion I want，它帮我唤起想要的情绪
have really helped me to tell a story，帮助我讲述故事
really helped me to single out my heroes．
还帮助突出我的主角们
I＇m really excited today to talk about colors，今天能在这谈论颜色我非常兴奋
not because I＇m the expert in it，不是因为我是个色彩专家
but because I used to be really bad at it．而是因为我曾经真的很不擅长它

So I spent a lot time dissecting colors
所以我花了大量时间来剖析颜色
looking at other people work，观察别人的作品
and I feel like I came a long way from where I was，我感觉自己比当初进步了很多
that＇s why today，I＇m hoping to break it down step by step，这就是为什么我希望今天能抽丝剥茧
and maybe that can give people the confidence to develop their own voice in colors．
也许能帮助大家建立起属于自己颜色的信心
So in today＇s class，在今天的课上
we＇re going to start really basic，我们会从非常基础的内容开始
this is some of the foundation of color theories and understanding the terms．
比如一些色彩理论的基础和理解相关术语
Then we＇re going to look into some masterpieces，然后我们会深入地看一些名作
and see how color is working for those artwork，看看颜色对这些作品产生了怎样的影响和作用
as a foundation to build on for your own assignment．
来作为你们自己的作业的基础
We＇re not going to dive super deep into the nerdy part about color theory in this class，我们不会在这门课上对色彩理论进行非常学术，深刻的研究
so you don＇t need to know a lot about colors．
所以你不需要有很多关于色彩的背景知识
All you need really is just your eyes and your hands to follow it along．
你只需要带上你的眼睛和手 跟上我的节奏
So if you do follow along please，如果你决定上这门课
please share your projects in the class project gallery．
请在课题展示处分享你的作品
I would love to see what you guys have come up with．
我希望看到你们的想法和成果

I hope that you＇ll leave this class with我希望你结束这门课后
the curiosity and the confidence to try out colors．
能产生对色彩的好奇心和尝试不同用色的信心
I＇m so glad you have joined this class．Let＇s get started．
很开心这门课里有你 让我们开始吧

## 2．What We＇ll Cover

So if you tell me 10 years ago l＇ll be teaching a class on colors，如果十年前你跟我说我以后会教别人色彩

I＇ll probably laugh at you because unlike lines，我可能会笑掉大牙 因为不像线条那样
color is something that doesn＇t come naturally to me at all．我没有色彩方面的天赋

All through art school，自我学艺术以来
color has been my big weakness if you ask any of my past teachers，很多老师都说颜色是我最大的短板
but I work extra hard at overcoming that weakness and that fear，我付出了许多努力来克服这个弱点和对它的恐惧
and I＇m really excited to share with you what I did to get to where I am at this point．我非常高兴能与你们分享我一路以来的经验

So I started looking at other people＇s work，首先我开始观察别人的作品
seeing how they use color and not just looking at it，看他们怎么运用颜色，这不仅仅是看
but actually pulling them into Photoshop and isolating the colors with eye dropper，我还把这些作品拖进Photoshop，用拾色器一个个分析这些颜色
which is what we＇re going to do today as well．
我们今天也会这样做
I also started looking at a lot of books in patterns and textile because they usually have我也看了许多关于图案和纺织品的书 因为它们经常会有
really interesting color combination that＇s easy
非常有趣的色彩组合 而且轻易就能
and simple to just grab and to steal for your own use，把这些组合偷来归为己用
and we＇re going to do that today as well．
我们今天也会做这样的练习
So essentially，today＇s class is like a super condensed version of what所以今天的课程实质上是

I did for myself in the past 10 years to get to where I am now with my colors．过去十年里我学习颜色的经验的浓缩版本

So how today＇s class is going to work is that at first，今天的课上我们首先要做的是
we＇re going to go back to the basic，回归基础
get some familiar again with the color theory，熟悉一下色彩理论
at least the foundation of it，或者至少了解它最基本的一些东西
so that we can all have a common vocabulary to talk about the class with．以便于为我们这门课建立一个讨论时共通的语言

Then，we＇re going to look at some real life pieces；
然后我们会看一些实例
trying to marry that color theory with practice，尝试运用色彩理论
dissecting artist＇s work，and then see how they＇re using color to their advantage．分析艺术家的作品看他们怎样利用颜色为作品增光添彩

Finally，we＇re going to try to take an existing color palette，最后我们会将一个已有的色板搭配
break it down，and then create swatches that we can use for our own artwork．分解开来，然后创建一个能用在我们自己的艺术作品里的色盘

Even though we might not know how to create color yet，虽然我们可能还不知道怎么制造颜色

I think is pretty innate as human to sense color．

## 但我认为人们天生就能感受颜色

So when we＇re choosing the color palette，所以当我们选择色盘时
we already making a decision of what kind of emotion I want我们已经想好要借用其他作品中的哪种情感
to borrow from other pieces that can be applied to our own，运用到我们自己的作品里了
and through the process of refining those colors into our own palette，在将那些颜色精选为我们自己所用的过程中
we＇re also making decisions on the objectives that we want to achieve with those colors．我们还需要考虑好想要利用这些颜色达到怎样的目的

So l＇ve created a piece just for today＇s class．
所以我为今天的课创作了一幅作品
The work is a little bit more simple than my usual work nowadays．
它比我现在通常的作品要简单一点
It has a very clear foreground，middleground，and background，它的前景，中景和背景的层次很清晰
and I recommend that you also have
同时我也建议你
a more simple line drawings and composition to work with，从更简单的线条画和构图开始进行
so that way it won＇t complicate things and we can really just focus on the colors．
这样图片不会很复杂 我们就能专注在颜色上
So just to give you a correct expectation，另外我也希望给你们一个正确的预期
you＇re not going to get a PhD of color after this．
在这门课之后你不会摇身变成一个色彩博士
We＇re not going to go into super comprehensive color theory．我们对色彩理论的讲解不会面面俱到

I＇m not an expert in that．我也不是这方面的专家

This is just something that works for me and make color less scary．这门课只是我自己的经验 想让大家不再觉得学习颜色是一件很可怕的事

If you really want to get nerdy about color，which is really fun，如果你真的想对颜色进行更深入的探究

I＇ve also included a bunch of useful link in the class resources section．
我也在课程资源里放了一些很有用（也很有趣）的链接
So as you follow along，在你上这门课期间
you might notice the colors is different from
你可能会注意到
the film footage of my screen than the actual video captured on the screen，用相机录制的我的屏幕和用电脑直接录屏显示的颜色会有差别
that just can＇t be helped because of the light，这是没办法避免的，由于灯，
the glare，the environment factor．
光线和周围环境的影响
So if you＇re wondering which one is the more accurate color，如果你在想哪一个颜色更准确
it will be the screen capture．
那是电脑直接录屏
So that would be the one that you reference the color for．所以它应该是你用来参考的颜色

So today what you need for this class is Photoshop or今天这门课你需要用到的是Photoshop
some kind of a digital software such as Procreate if you＇re using an iPad．
或其它类似的软件比如Procreate（如果你用的是iPad的话）
I＇ll be working on the computer today and on this beautiful tablet．
我今天会用到电脑和这个酷炫的绘画板
You don＇t need something that fancy．
你不需要这么花哨的エ具
You can use whatever you use like iPads or a simple small tablet to draw on．就你平时用的 比如iPad或者普通的绘画板就可以了

Because colors exists in a surrounding，因为颜色的呈现会受周围环境影响

I like to optimize my workspace and make sure I＇m not getting unnecessary distraction，

## 我喜欢优化我的工作环境以保证我不会受到不必要的干扰

so I＇m really seeing the color that I should be focused on．让我能够真正看清并专注于颜色

So when I＇m at home，所以我在家的时候
which I＇m not at right now，不是现在这个录影棚
my workspace is facing a blank wall．
我的工作区是面对着一块空白的墙面的
So it gives me minimal distraction．
以把干扰减到最低
I have to make sure that my screen is not directly under any light or glares．
我还必须保证我的屏幕不是直接位于灯或强光之下
If you are super particular about making sure the colors in your screen looks right，如果你对屏幕呈现出的色彩准确度尤其在意
you can get those monitor hood that looks like blinders they put on a horse．
你可以使用显示器遮光罩 看起来像马眼罩一样的那种
I guess that also keep the colors focused on the screen．
它也许能让颜色像带上眼罩的马一样专注在屏幕上（笑）
The other thing I like to do is to set my desktop to a middle gray．
我常做的另一件事是把电脑桌面设置成中性灰色
I also set the background on my Photoshop to middle gray，我把Photoshop里的背景也设置成了中性灰色
so then I won＇t be tainted with colors when I＇m making decisions．
这样我在画画做决定的时候就不会被其他颜色干扰
So when I first start getting my work published，当我刚最开始发表我的作品时

I noticed to my great dismay that the color was wrong in the printed world．
我对印刷时产生的色差感到非常沮丧
So I look into it and found out that apparently，我研究了一下后发现
all monitors have different color settings，
显然，所有显示器的颜色设置都不一样
which I didn＇t know about before．
而这一点我之前是不知道的
So what you see，所以你在显示屏上看到的
what you spend hours trying to fine tuned on花了大量时间精细调整的颜色
your monitor can look totally different on other people＇s monitor and in print．可能和别人屏幕上显示的 或者印刷出来的颜色完全不一样

One thing that has really，最好帮到我解决这个问题的
really helped me was a color calibrator which is this little guy．
是校色仪 也就是这个小东西
There are many brands that make this．
市面上有很多品牌的校色仪
This is just what I use．
我用的是这个
So essentially，what it does is the software will它本质上做的就是 这个软件会
run these colors swatches on your screen and you just put this little guy，在你屏幕上执行一些色彩样本 你把校色仪这样
like this on the screen so it will measure how accurate

## 放在屏幕上 它就会检测

those color swatches is seeing and calibrate your machine that way．
这些颜色呈现在屏幕上时的准确度 并校准你的显示屏
So now my color in print is much more accurate，所以现在我的作品印刷出来的颜色精确了很多
thanks for this little extra stuff．
感谢这个额外的小东西
One thing you may not know is also your monitor is like a life organisms．
有一件事你可能不知道 你的显示屏像一个生命有机体一样
So the color changes over time as the screen ages．
颜色会随着屏幕老化而变化
So even if you calibrate it，

## 所以即使你校准了它

is good to get into the habit of doing it every once in a while，也最好养成习惯 定期校准一下
like once in a month．比如一个月一次

So feel free to follow along any of the setup tips or not．你可以选择尝试一下这些关于课前准备的建议 也可以无视掉

You don＇t have to do any of that and you can still follow along．你不必一定要做这些准备 也可以接着上这门课

Now，that we＇re all set up，好了我们已经准备好了
next step，let＇s dive into colors．
接下来让我们进入色彩的世界

## 3．The Power and Pitfalls of Color

The way that we should approach color has to be very mindful．我们应该非常留意我们接触颜色的方式

Before we just started adding color randomly into a piece，在我们随意将作品上色之前
we need to ask ourselves what are the objectives of doing that．我们需要问自己这样做的意图是什么

Having the objectives help us make decisions清楚的目标能帮助我们做明确的决定
along the way rather than just blindly trying things out．
而不是盲目的尝试
Usually for me there are three main objectives when I use color．通常来说我使用颜色有三个主要的目的

The first one is trying to think about what type of feeling l＇m trying to convey．第一是传递我想要表达的情绪

The second one is seeing how I can use
第二是用颜色
colors to move the eyes around to tell the story that way．
去引导观众的视线移动从而进行叙事

The third one is just really bringing the world of the art alive with the colors．第三是让艺术作品更鲜活生动

So talking about how colors really bring things alive，说到颜色如何赋予事物生命力

I recently watched a documentary made by Peter Jackson＇s．
我最近看了一部Peter Jackson导演的纪录片
So he used all black and white World War one footages，他用的全是一战时的黑白影像
but we master them with colors．
但对这些影像用现在的电子科技进行了颜色重塑
First part of the movie before Britain go into
电影的第一部分 在英国上战场之前
war and the soldier landed on the continent and were in black and white．
士兵们登陆欧洲大陆之前的时候是黑白的
Once we got into the trenches，当进入战壕后
all of a sudden everything come in to color and that contrast was pretty powerful．條然之间万物变为了彩色这样的对比非常震撼

We always see the black and white as ancient history
我们通常认为黑白代表着古老的历史
but all of a sudden now other people feel so much more real，现在颜色突然让这些人物感觉更真实了
and then you can see the flash of the color，
你能看到光影间掠过的色彩，
the rush on their cheek and all of a
他们泛红的脸规
sudden you realize how young those soldier were and it really hit you
一瞬间你意识到这些士兵们还是如此年轻
that pretty much you were sending a bunch of kids to war
它让你真切地感受到他们还只是一群孩子却已奔赴战场
and I felt like that was very emotional for me watching．
看过之后我非常为之动容
Now，let＇s use another example of my own work．

现在用我自己的作品来举个例子
This one was for a book called Kama Sutra，这是我为《爱经》这本书所绘的
some of you might be familiar with that．
你们有些人可能知道这本书
That＇s about essentially love and also sex，它主要讨论了爱与性
very different from World War I subject matter obviously．这显然和一战是非常不同的主题

In this scene，we see a little bit of the afternoon delight在这个场景中 我们看到的是午后甜蜜的时光
of a couple sneaking a snuggle and a archway．
一对情侣在拱廊下悄悄依偎在一起
As you can see in the color piece
正如你在这幅充满色彩的画中所看到的
the warmth of the red and the yellow really bring out the moment温暖的红色和黄色烘托出
of the time and the temperature and当下时刻的温馨和浪漫
the romance because of that and now we turn that into black and white．现在我们把它变成黑白画面

All of a sudden we＇re losing all of突然我们失去了
that mood and also the different elements become a little bit harder to read．之前那些温暖的气氛 画中的事物也变得不那么好辨认

So there＇s a few common pitfalls when it come to using color．
当在使用颜色的时候 我们有一些常见的误区
Usually，is just going to extremes like being too bold．
最常见的问题是要么用色太极端太大胆
So you＇re using all the colors that you possibly can and using all of them to the你把所有能用的颜色都用上
extreme when it comes to saturation or you＇d being just too timid，并将他们用到极致直到完全饱和 要么用太过于谨慎
very much staying in the mid range of the value of the hue，基本上只停留在中性色彩，中等亮度
so everything is lacking a clarity or hierarchy．导致画面不清晰缺少层次感

So I always find it really interesting how our senses and our cognition work together．我们的感受和认知如何共同运作是一件很有趣的事情

I read this really interesting article about how someone analyze Homer＇s Odyssey and how我读过一篇非常有意思的分析荷马的《奥德赛》的文章
in the whole book they describe all kinds of它提到这本书里描绘了多种颜色
color but one color was lacking in particular which was blue，但唯独没有提到蓝色
and the way they were describing sea was using deep wine color．书里描述大海时用的是深红酒色

Someone was making the assumption that because of that，文章作者提出了一个假设说 那是因为
we actually couldn＇t really see blue for a longest time，人们其实长久以来都没有意识到蓝色的存在
at least for ancient Western civilization（please refer to class resources if you wish to learn more about this topic）．
至少对于古代西方文明来说（想要对这个话题深入了解的可以参考课室资源）
That got me thinking like language in some way．这让我联想到语言

Now，we have all this different words for different colors．
现在我们给不同的颜色取了不同的名称
It really help us see those color separately and more distinctly．
这帮助我们更清楚地区分开了这些颜色
But it also take color out of their context so we think about color as red，as yellow，但这也将颜色从周边的环境中脱离 所以我们想到颜色就是红色，黄色
as green，as blue and we see them packaged also
绿色，蓝色 分开的仔仔细细
in different tubes of paint as all separated．
正如被独立分开包装在不同颜料管里的颜料

But if you really think about it color never exists in isolation．
但如果你仔细想想就会发现颜色从来都不是独立存在的
If you look around in your surrounding，如果你看看你的周围
there＇s no like just red，是没有纯粹的
red standing out，is always within its own contexts．独立的红色的，它总是存在于在周围的环境之中

So color is more of this shifting fabric of hues and values
所以颜色其实更像是不同色彩和亮度组成的不断变化的面料
and sometimes it＇s easy to forget that and that become a challenge when applying colors．有时候我们常常会忘记这一点而让我们在上色的时候难度更大

Nowadays，with the additional tool，现在我们有了更先进的工具
it further disrupt that relationship这更加破坏了我们对颜色与颜色之间密切关系的理解
because in the old days when you＇re mixing color with paint，因为在以前当你在用涂料混合颜色的时候
you＇re physically combining the pigments to create new colors．
你是实实在在地合并这些颜料来调出新的颜色
So if you start with five tubes or paint and then you create 20 colors，如果你有 5 管颜料，用它们混合出了 20 种颜色
all those 20 colors have the same parents
那么所有的这 20 个颜色都是同源的
that they were created from so they have a inherit harmony that＇s built in．
都是由同样的 5 个基本颜色混合而来 所以他们自然就有一种内在的和谐
But whereas now you can just use your color picker and pick any colors you want但是今天你只需要用拾色器从photoshop里选择任何你想要的颜色
from Photoshop and it＇s very easy to
这非常容易就
end up with something that looks like vomit of rainbow．
导致最后混合出的颜色像是混乱地叠加在一起
That just looks jarring．

## 看起来非常不和谐

There＇s also this prevailing misconception when it comes to对于颜色还有一个非常普遍的误解
color and I feel like that also have something to do我觉得这也是跟
with our language and our vocabulary．
我们的语言和词汇有关系的
For example，when we think of something that＇s bright，比如 当我们想要明亮一点的颜色时
we think of adding white．
我们就认为应该加白色进去
If we think of something dark，当我们想要暗一点的颜色
we think of adding black，我们就认为要加黑色
but that actually creates very lifeless color palette because但其实这样会让我们的色板非常死板
everything in our surrounding is actually mixed

## 因为我们周遭的事物

with multiple colors rather than just simply adding black or white．事实上是多种颜色混合而来的 并非只是单纯地添加黑色或白色

The same as people thinking，
人们同样也认为
＂If I want to make an image look really brilliant，如果想要让画面看起来非常鲜艳
then I have use saturated color．
就得用高饱和的颜色
It seems to make sense in our mind，the logic，这个逻辑看起来是说得通的
but l＇m going to show you some pieces that it＇s going to disprove that．但在接下来的课程里面我将给你展示几个反驳它的例子

## 4．How to Talk About Color

So the first step we＇re going to talk about the principles of colors．

## 第一步是色彩的基本原理

Before that，let＇s review the terminologies so we can
首先让我们先来复习一些术语
all be on the same page when we＇re having the discussion about colors．以便们在稍后的讨论中能步调一致

As you can see here，在这你可以看到
we have hue，value and saturation．
颜色有色相，明度和纯度
Some of the most commonly used term when we discuss colors．这是我们在讨论颜色时最常用的一些词

So hue essentially is just color．
色相本质上就是颜色
Different hues mean different color，as you can see here，不同色相代表了不同颜色 正如你在这里看到的这样
and value means the different shades of color，明度是指颜色的不同色调
like lighter or darker．
比如更亮或者更暗
Saturation essentially just mean how pure that color is，纯度是指色彩的纯净程度
how intense that color is，颜色有浓
and how chromatic that color is．
和有多鲜艳
So what does hue value saturation and actually
所以色相，明度和纯度到底
look like when we open the color picker in photoshop？在Photoshop的拾色器中看起来是怎样的呢？

So this is how you read it，这就是我们读取它的方法
this little bar as you switch along，当你在这个坚条上滑动时
you＇re switching different hues．
色相就会发生变化
So you＇re picking different color．
也就是说你在选择不同的颜色
As you go left to right，当在这个区域内从左往右时
that＇s the increase of the intensity or the increase of saturation of that color．颜色就变会得更浓，或者说饱和度就增加了

As you go from top to down，如果你从上到下
you＇re changing the value of that color．
你就改变了色彩的明度
So the top is lighter and the downside is darker．
上面部分是更亮下面部分则更暗
Sometimes you may hear people describe colors as cool color or warm color．有时你可能会听人形容颜色是冷色或暖色

That pretty much just mean where the color sits on the color wheel．
它指的是这个颜色在色轮里的位置
So all the warm colors are on this side as you can see．
所有的暖色都在这边
Things that are related to the sun or the heat are the warm color．
和太阳或热量相关的事物是暖色
Blues，purples，these are the cool colors．
蓝色，紫色之类的是冷色
But if you want to really go into it even like red，但如果继续了解后你就会发现，即使是像红色
there could be a warm red or a cool red．
也会有暖红色和冷红色之分
A cool red just mean it has more blue in it，冷红色是指里面含有更多蓝调
and a warm red just mean it has more orange in it．
暖红色则含有更多橘色调
So now that we＇re clear on the terminologies，

## 好了现在术语说完了

I have five key points I always keep in mind when I＇m designing my palette．
我在构建自己的色板时始终铭记五个关键点
The five key points are；
它们是
number one，color relativity．
1．颜色的相对性
Number two，color consistency．
2．色彩的一致性
Number three，value contrast．
3．明度对比
Number four，accent colors．
4．强调色
Number five，ratios and complementary colors．
5．比例和互补色
The importance of understanding these key points is not to stick to them，理解这些关键词并不是为了一成不变地遵守它们
but to really understand why and what they do．
而是要理解它们的原理和功能
That way，you can use them and break
这样才能随机应变，融会贯通
them to achieve what you want to convey successfully as well．
用它们来成功传递你的想法

## 5．Principle 1：Relativity

In some way，color is very similar to alphabets．
在某种程度上 颜色和字母表很相似
If I just give you like A or D or a F，如果我只给你一个A，D或F
it doesn＇t really mean anything，它并没有什么意义
but only when they are together and form a relationship，但只要当它们组合在一起 形成某种联系时
then you get the meaning，你就能理解其中的含义了
and color is just like that．
颜色也是如此
So why is it so important to understand that color works in relationship？
你可能回问为什么理解颜色之间如何互相作用是如此重要的呢？
It＇s because when our brain intake colors，因为当我们的大脑接收到颜色时
it translate those colors into meanings，它将这些颜色转化为含义
such as temperature，time of day，or objects．
比如温度，时间或物体
So as an artist，
所以作为一个艺术家
what we want to do is to harness the power of color and to recreate我们想要掌握颜色的力量
all those meanings to our brain with colors．
来重塑大脑对颜色的意义的感知
So here I have a few simple examples to show how
我这里有几个简单的例子展示了
color can look drastically different when it＇s put into different neighboring color．
当一个颜色被放置在不同的颜色旁边时看起来会有多不一样
The first example up is relative hue．
第一个例子是相对的色相
For example，in this case，比如，在这个情况下
these two colors looks very similar or some may say，这两个颜色看起来非常相似，甚至有人会说
they＇re the same color．
它们是同一个颜色
But really，if you put them in to a neutral background，但是如果你把它们放在一个中性色的背景前
it becomes really apparent that they＇re totally different color，

## 可以非常明显地看出它们是完全不同的颜色

and now they look super different．
现在它们看起来非常不一样
It＇s only because they are put in different hues，这是因为它们之前被放置在不同的颜色的中间
and that makes them looks like two gray rectangles．
让它们看起来像两个灰色的长方形
Okay．Now，let＇s move into relative value．
好了 现在让我们看看相对的明度
In this case，many people may swear that现在，很多人会发誓说
this rectangle is much lighter compared to this one，这个长方形的颜色比这个要浅很多
but now let＇s remove the neighboring color．
现在我们把背景色拿开
On the neutral gray，在这个中性灰的背景下
the reviews out there are actually the exactly the same color．
我们发现它们其实是完全一样的颜色
So now，let＇s talk about relative temperature．
接着我们讲讲相对的色温
Temperature just mean if a color is warmer or cooler．色温指的就是一个颜色是更偏冷还是更偏暖

In this block，the color looks warmer than this block．在这个方块里的颜色看起来比在这个方块里的更暖

But if we remove the neighboring color，但如果我们移开相邻色
we realized they＇re the same color again．
我们会发现它们其实还是一样的颜色
The reason why this one look warmer is because it＇s surrounding by a cooler color．这一个看上去更暖是因为它被周围更冷的颜色衬托了

So a really great example for how color works in有一个跟颜色的相对性有关的非常好的例子就是
relativity is this infamous blue dress versus white dress case．
这个备受争议的＂蓝裙子还是白裙子＂事件
A lot of people probably remember and participated in this debate．
许多人还可能记得并且还参与过那场辩论
This example really show how when people are focusing on the actual color of the dress这个例子完全证明了当人们专注于只是观察这个裙子的颜色
or they are trying to decode the color of the dress using information with a surrounding and light，
或常识使用照片里的环境和灯光来分辨裙子的颜色时
you can see totally different colors．
你会看到完全不同的颜色
I actually it as blue and black in the beginning，
最开始我看到的是蓝色和黑色
but when I tried to focus on other aspects of the image my brain was able但当我将注意力转移到图片里的其他地方时
to switch for a second to see that being gold and white，我的大脑能一下子转换 然后看到金色和白色
and that was super wild．
那真的是不得了
So as you can see，你可以看到
this is the original photo that was so controversial．
这就是那张引起争论的照片
If we edit it to reinforce certain aspects of that photo，for example，如果我们编辑一下强调这张照片的某些方面 比如
make it brighter，now it looks a lot more like as gold－trimmed on a white dress．增加它的亮度现在它看起来更像是镶金边的白色裙子

But if we make it darker，如果我们把它调得暗一点
now it looks a lot more like a blue dress with black trim．
现在它看起来就是一条带黑边的蓝裙子了

## 6．Principle 2：Consistency

So now，let＇s talk about color consistency，现在让我们来聊一下色彩的一致性
which just mean color shall live in
它指的是画面中的颜色应该
the same world if you want to convey a believable world that is．
有一致性和连贯性 如果你希望观众能代入你作品里的世界里
The reason why this is so important especially nowadays with它重要的原因（尤其是在当下这个充满电子工具的世界）
the digital tool is because the colors exist in vacuum．
是因为颜色们处于真空状态
You just pick whatever color you like，现在（使用电子工具）你可以选择任何你喜欢的颜色
whereas in the old day，但是在以前
you＇re mixing the pigment，你需要混合颜料
the problem was that the color tend to get you muddy．
当时的用色问题是颜色容易过分混合而变得混浊
Now，there＇s the color just simply don＇t have relationship with each other if you＇re not mindful of building that relationship．

现在用色的问题变成是颜色与颜色之间容易没有任何关联，如果不去有意思地去建立他们之间的联系的话

To convey why color consistency is important，为了告诉你们色彩的一致性有多重要

I have borrowed a piece from Tomer Hanuka．我借用了一幅Tomer Hanuka的作品举例

So you can see this beautiful piece here．你可以看到在这张美丽的画里

He has established a color system．
他建立了一个颜色体系
So the light area is represented here with光的部分是用蓝色代表的
the blue and then the darker area and the water part is the purple．

## 深色和水的部分是用紫色代表的

So when the light hits，当光照进来时
you see the blue and anything submerged is the purple．
你看到了蓝色然后水下的部分都是紫色的
I did a quick slide with the hue saturation．
我简单地用颜色饱和度工具对这㽬图做了调整
I just slide it all the way to 180 ．
我把色度调到了最左面，－ 180
What it does is shifting every color here to the other side of the color spectrum．这歌操作把画中的所有颜色都替换为色谱另一边的颜色

As you can tell，你可以看到
because all the color were shifted together，因为所有的颜色是一起被改变的
the color system he has built is still holding up together．
所以他建立的这个颜色体系依然成立
Here，the light is in pink and the water and the shadow is in this olive green．这里 光是粉色的 水和阴影部分是橄橅绿色

But when I start to divorce certain part of this image，但是当我把图片里的特定区域分离出来时

I put a layer mask here and only now
我在这部分建立了一个图层遮罩
the body part of the people are being shifted into the other spectrum of the color．现在只有人的身体部分被改变成了色谱另外一边的颜色

You can see the people are starting to really pop out of the background，你可以看到这些人开始从背景中凸显出来了
but not in a good way．
但不是以一种好的方式
There＇s no more consistency with the light and the background with this effect on the people，
光线对于背景和人物的影响变得没有连贯性了
and they just don＇t look like they＇re submerged in the water anymore．
他们看起来就不再像是沉在水下了
So I think what really taught me looking at his art is that我认为看他的艺术作品真正教会我的是
your color don＇t have to be real in the sense that it looks like what we see every day，你用的颜色不一定得是我们在日常生活中看到的真实的颜色
but as long as if you establish this consistent rules of colors in the world you create，只要你能在作品中建立一个统一的颜色规则
it will still read，because here we have clearly established
你的颜色们就可以成立 比如这里我们把
the light as the blue and then the water as the purple．
光设定为蓝色 水为紫色
We understand this instinctively that the people are not actually blue people．
看官自然而然就能明白到人物的皮肤并不是蓝色的
It＇s just that they＇re submerged in the water．
他们只是在水下而已。
In some case though，
然而在某些情况下
breaking the color consistency can actually be a good tool as well．
打破色彩的一致性也是一个好方法
One great example is Marilyn Monroe by Andy Warhol．一个非常好的例子就是Andy Warhol的《玛丽莲梦露》

As you can see，all the colors are all over the place and that＇s what你可以看到 这些颜色互相没有关联
it give a really pop and flat aesthetic to the image，这给了画面平面的＂波普＂感
and that＇s what the artist was going for．
这也正正是Andy Warhol想要的效果

## 7．Principle 3：Value Contrast

Next up is（value）contrast，接下来要说明度对比
and we can think of（value）contrast sort of like this gradient that we＇re seeing，明度对比有点像我们现在看到的这个渐变
with the absolute white being zero and the darkest black being 10.我们可以把绝对的白定义为 0 最深的黑色定义为 10

So by harnessing the power of（value）contrast，通过利用明度对比
you can effectively direct people＇s eyes and where they＇re going to look in your image．
你能有效地驾驭人们的视线 决定他们看向你的图片中的哪里
So here，we have two examples．
这里我们有两个例子
The contrast is a little bit clearer than in this photo here，which l＇ve pulled from the Internet．这幅画里的对比比这张我从网上下载来的照片要更清晰一点

This art is by Eyvind Earle．
这幅画来自Eyvind Earle
Both images，you can see，你可以看到这两张图都是
is a woodland scene with a pretty clear pathway leading somewhere．
森林里的场景 都有一条清晰的指向远方的小路
So now，let＇s discard the colors，现在让我们去掉颜色
so we can really see through value structure．
好让我们看清楚它们的明暗结构
So as you can see now with both images in black and white，现在你可以看到当这两幅画都变成黑白色时
the pathway that was obvious，原本在照片里很明显的道路
and the picture，and the photo here become kind of lost．
变得有点模糊了
So what this is telling us is that the color was the one doing这告诉我们在这张照片的场景里
the heavy lifting and directing the eyes in this sense．
引导我们的视线起着决定性作用的是颜色
Whereas in this image，

## 而在这张图里

we can still see the path and how the eyes
我们仍然能够看到这条路
read clearly following the highest contrast here in the foreground，以及我们的视线怎样随着前景中对比度最大的这里
and then following a lower contrast here in the middle ground，到中景对比度次之的这里
and then into the sky，which has a very close contrast value with the white．

## 然后到天空这边和背景白色的明度相接近的地方

You may wonder why we＇re talking about black and white value contrast，你可能会疑惑为什么我们要讨论黑白画面中的明度对比
when this is a color class．
这可是一节颜色课呀
Value contrast is probably the most powerful tools in directing our eyes．
明度对比大概是引导我们视线的最有力的工具了
So what it does with a solid value is that it frees up or liberate the colors，一个扎实的明暗结构可以让你自由地使用颜色
like，as long as the value system is greatly setup．只要这个明暗体系设定得很好

You can kind of use crazy color and the image will still read really well．即使你用一些大胆的颜色画面的阅读依然可以非常清晰

This image has a really nicely set up value hierarchy这幅画就有一个非常好的明暗层次
with the highest contrast in the foreground，对比度最高的前景
so our eyes kind of follow that．
吸引了我们的视线
Then into the middle ground with the contrast around然后带入到明暗对比度
like $5-0$ and then to the background with a contrast on 2－0．大概 5 － 0 的中景 和 2 － 0 的背景

Then we have this dark－shaped tree right

## 然后是这边这棵深色的树

here and with their shadow kind of lead our eyes right back它的阴影把我们的视线带回到了画面中心
in the center and then the whole circle get repeated．
然后整个循环再次重复
So our eyes just like keep investigating into the scene，所以我们的视线始终在画面内探索
rather than just drop out of the image．
而不是游走到画面外
So this example is actually really good at这个例子非常好地
showing how value is doing the heavy lifting in directing our eyes．
说明了明度是如何完成主导我们视线这一重要又困难的任务
What I did is I actually change the colors in this image，我还改变了这张图的颜色
but following the same value structure．
但保留了本身的明暗结构
Like here，the trees are actually darker blue．
这边的树用了深蓝色
It doesn＇t have as high a value number like close to black and the original．
它没有原图的黑色那样暗
But in relationship，it still
但是它依然
follow the similar rules and it＇s still read really well．
遵循之前的明暗相对结构 所以阅读效果仍然良好
In this case，it become a maroon，like burgundy color．
现在它变成了褐红色 有点像疋红色
But the value structure is still the same as the original and it still went really well．但是明暗结构还是和原图一样 它的效果也还是很好
in this one，the color palette got shifted to purple，在这个图里 色调变成了紫色
but still the same value structure and it still works．
但是明暗结构没变所以效果仍然不错

That＇s essentially what I meant by having这就我所说的
a solid contrast hierarchy can really freed up your colored palettes．
一个扎实的对比层次能让你自由地选择配色
So what I really like to do when I work in Photoshop
所以当我在用Photoshop的时候
is to have a hue saturation layer up top．
我喜欢在顶上放置一个色相饱和度图层
So when I＇m working，I often go back and当我画画时 我经常
check the hue saturation layer with the saturation查看色相饱和度图层
turned all the way down just to see what将饱和度调到最低
my piece value structure look like in black and white．
来看我的作品在黑白时的明暗结构
This is also a really good way to sort of refresh这也是一个非常好的恢复视觉疲劳的方式
your eyes after you turn that layer off and then see the colors again，在关掉这个图层后 再次看到之前的颜色
and that often help me make color decision choices．
这也有利于我的颜色选择

## 8．Principle 4：Accent Color

Another great way to move eyes around this time using color is accent colors．另一个引导视线移动的好方法是使用强调色

So what is accent color？
什么是强调色呢
It＇s usually colored that＇s bold with high intensity，它通常是大胆的，高浓度的颜色
and used sparingly throughout the image to direct the direction of eyes．
少量地出现在画面中用来引导你的视线
But it doesn＇t always have to be high intensity colors．

但它不一定非得是很鲜艳的颜色
It really depends on the overall color relativity in the piece．强调色取决于作品中总体的相对颜色

So in the piece that is mostly for example，like bright orange，在一幅充满了，比如亮橘色，的画面里
you can have a couple of dots of muted green，有几处零星的暗绿色
and that could actually be the accent color．它就可以作为强调色

So here＇s another piece by our friend Eyvind．这是另一幅来自我们的老友Eyvind的作品

In this example，the red clearly is the accent color in the field of cool blue．在这个例子里强调色很明显是淡蓝色场景中的红色。

So our eyes just go there immediately．所以我们的眼睛立刻看向那里

You can see he＇s also using his tricks of（value）contrast again，你可以看到他也用了名都对比的小技巧
where the trunk here is black，这里树桩是黑色的
darkest black，with this roof，最深的黑色而这个屋顶
the white is white where is neighboring，的白色则与之相邻
and this is where our eyes is drawn to．
让我们的视线也就被吸引到了那里
Now，we can look at it in black and white．
现在我们把它调成黑白
So without the accent color．
也就没有了强调色
The highest contrast are still here，对比最强烈的地方还是在这儿
but it takes a minute for us to arrive here，但我们需要反应一下才能看到
rather than just now，
不像刚才那样
it was very immediate．
立刻就发现了它
Here＇s another masterpiece by John Singer Sargent of using accent color．
这是另一个来自John Singer Sargent使用强调色的杰作
As you can tell，red is used quite a bit as accent color，你应该发现了 红色常常被用做强调色
because red is one of the color that has the strongest emotional impact to us humans，因为红色是对人们情感影响最强烈的颜色之一
since the inside of our body is red．
因为我们身体内部就是红色
We see blood is red．
我们的血是红色
So usually，it＇s have a alerting effect．
所以通常来说 它有着警报的作用
In this case，a set up，在这个例子里
the three red part，the red of her dress，三个红色部分的布局，红裙子
the pinkish red of the doll，粉红色的玩偶
and the red of the space partitioner，和红色的隔断
form a classic triangle composition．
形成了一个经典的三角结构
That just keep moving our eyes around，让我们的视线在其中不停徘徊
and really having that imaged activated．
激活了整个画面
Now，I have this adjustment layer with the red turn－off．
现在我建立了一个调整图层把红色去掉

It has actually changed into blue，把红色被变成了蓝色
into a similar hue as to rest of the image．
和画面中其余颜色更相近的一个颜色
All of a sudden，you may notice that the contrast over here become a lot more prominent．你可能会注意到 这里的对比突然就变得明显了许多

Our eyes just go straight here and then fall off the page，我们的视线立刻被吸引到了这边 然后就掉出了画面
because we don＇t have the agency to bring us back and因为没有媒介将我们带回来
continue the lovely circle in this composition．
到这个循环的构图里了
Because accent color is so effective，因为强调色是如此有效
it＇s really important that we place it wisely．
明智地使用它就变得非常重要
Take this piece by Eyvind as an example．
用Eyvind的这幅画举例
If we crop it in having the red，如果我们把它从这里裁掉
right at the edge，让红色正好在边缘
that really leads our eyes to the edge，我们的视线就会完全被这边吸引
and then fall off the page．
然后就掉出画面了
Because there is no other element or other reds around here to bring us back in，因为周围没有其他元素或者红色将我们的视线带回画面
the circulation just stop．
视线的循环就停止了
I think one of the goal of creating an image，我认为创造一幅画面的其中一个目标
is to keep our eyes in the image for as long as possible．

就是让观众的视线尽可能久地停留在画面上
Like here，we have the red，就像这里 我们使用红色
and then we still have this little breathing room that bring this down here，然后在这儿我们有一个小小的让人喘息的空间把人们的视线带过来
and then this is a middle grade of contrasts that lead us right back to the house，然后这个中等强度的对比又将人们的视线引回到房子上
and it keep going on and on and on．
然后视线在其中不停循环流转

## 9．Principle 5：Ratio

When we talk about color ratio，党我们在讨论色彩比例时
what we＇re really talking about is deciding and letting one color be the leader，我们其实是在讨论决定一个主色
and then letting other colors play the supporting role．
然后让其他颜色作为配角
This is especially true when it come to complementary colors such as green，and red．这一点在使用互补色，比如绿色和红色时，尤其重要

Complementary colors just mean color that＇s sitting right across from each other，互补色指的是在色轮里
opposite each other on the color wheel．
位于对角线上的两种颜色
So when complementary colors are used in equal part，所以当互补色被平等运用时
whether in size or intensity，不管是在相同的面积还是浓度
they diminish each other rather than creating this beautiful kinetic energy，它们会互相削弱而不是产生美妙生动的能量
that could be when they＇re used well．像它们被正确使用的时候那样

So here＇s a beautiful piece by Julia Noni，这一幅美丽的作品来自Julia Noni
one of my favorite working Photographer right now．
她是我现在最喜欢的现役摄影家之一
Her composition as you can tell is amazing，你可以看到她的构图真是绝了
same with her understanding of value structure，同样她对明暗结构的理解也很妙
but what I love the most is her use of complementary colors．
但我最爱的还是她对互补色的使用
Here we have this dominating bright red，这里我们看到主导画面的明亮的红色
and then completed with this muted olive green，与低调的橄榄绿相呼应
that merge and melt seamlessly into this dark figure，和深色的人物相交溶成为一体
creating a beautiful silhouette．
渲染出一个美丽的剪影
Then I sabotage it by changing the green into the same intensity as the red．然后我通过把绿色调整为和红色一样的强度 来打破了这幅画的和谐

Also bringing in more greens，
我还加入了更多的绿色
so now the ratio of the color green
所以现在绿色占据的画面比例
occupying the space is the same as the amount of space the red is occupying．和红色一样多

As you can tell，it become a little bit confusing to her eyes．
你会发现这幅画看起来有点混乱了
Now the two colors is fighting for attention．
现在这两个颜色在争抢着吸引观众的注意
Instead of supporting each other，而不是相辅相成
they are actually making the piece a lot weaker compared to the original one．它们让这幅画比之前的版本要差了许多

So at this point of the class，

## 到了课程的这个阶段

we＇re going to look at other artist＇s work through我们将要研究一些其他艺术家的作品
the lenses of the key points we just talk about．
通过我们刚刚谈论的那些关键的角度
So you know that I＇m not just straight out and making stuff up．让你相信我可不是空口而谈胡编乱造的

## 10．Color at Work：Masterpieces

So for me，one of the best way to really learn about color and also to对我来说 最好的学习颜色和
debunk along the color misconception is by looking at other artists pieces，揭开对颜色的迷思的方法之一就是看其他艺术家的作品
really dissecting it，and to see why the color
认真地剖析它 看看为什么他们的
feels or convey the message as they do in their systematic way，颜色能系统性地创造和传递信息
not just purely feeling because feeling can be very misleading．
而只不是纯粹地感受 因为感觉有时候可以非常有误导性
I think when we see a masterpiece，
我认为当我们看到一件杰作时
everything comes so well together that we almost take it for granted．
它的每一处都如此地和谐完美 让我们几乎觉得那是理所当然的
There＇s a saying by Picasso（Correction：This is by architecture Norman Foster）毕加索说过一句话（改正：这句话是建筑师Norman Foster说的）
＂It takes a little effort to look effortless．＂
＂你必须花很多功夫，才能让作品看起来毫不费力＂
So when we see something that＇s so effortless，所以当我们看到那些看起来游刃有余的作品时
we have to remind ourselves that every brush stroke on the canvas was an active decision．我们必须要提醒自己，画布上的每一笔都是艺术家深思熟虑后的决定

So this is a piece called Fishing for Oysters at Cancale by John Singer Sargent．这是另一幅John Singer Sargent的画，《在康卡勒捕捞牡蛎》

He＇s really a master when it come to color and composition．
他真的是一个色彩和构图方面的大师
You may notice there is like all these water puddles on the beach and think，你可能注意到这些在沙滩上的水兆，然后想
okay，sure，beach，water puddles，so what？
行吧，当然了，沙滩，水函，所以呢？
Right？But then，if you cover those puddles up，对吧？但是如果你遮掉这些水凼
like what I did in this manipulated version，就像这个我修改过的版本一样
all of a sudden the image becomes a lot more stagnant．
这幅画霎时就变得呆板了许多
Without the water puddles，没有这些水凼
there＇s no more circulation around from the top part of the image to就没有了视线从画面顶部
the bottom and have your eyes circle around the figures，到底部的循环 也就无法让你的视线徘䧃于画中的人物周围
and here it is，in the original and here in my sabotage version，这是原版 这是被我修改后破坏掉的版本
then you realize how genius it really is to put
你会意识到加入这些水函是多么妙的决定
those puddles in so it can reflect those sky blue colors．
它在画面这端 能反射出天空的蓝色
Again，if you squint your eyes，如果你像我之前说的那样，眯上你的眼睛
that＇s a good way to diminish the impact of color and see the value，这是一个非常好的减少颜色的干扰，专注于明度的方法
then you＇ll see the highest contrast is around here，你会看到对比最强烈的地方大概在这儿
and that＇s where your eyes is going to focus on．
这将是你视线集中的地方

Now let＇s take a look at these concept art piece for Cinderella by Mary Blair．现在让我们看一下Mary Blair为 《灰姑娘》做的概念艺术

You may think that the brightest color here is this pink and let＇s take a look．你可能会认为图中最鲜艳的颜色是这个粉色 让我们来看一看

It＇s not really that saturated，它其实不是那么饱和
it＇s in the middle range．差不多在中间程度

Now let＇s take a look at this part．
现在我们看一下这一块
It＇s even less saturated，它甚至饱和度更低
at the one－third range．
大概在三分之一的程度
Then let＇s take a look at the shadow．
我们来看一下这个阴影
It＇s actually around the same saturation
它的饱和度和刚才的粉红色差不多
as the pink if not blue but more towards the right side，甚至跟往右一点
so it＇s actually more saturated．
所以它的饱和度其实更高
A lot of people don＇t really realize，许多人没有意识到
usually the most saturated color is at通常来说最饱和的颜色
the darker color and the shadow color such as this part．
其实是深色和阴影部分的颜色 就像这个部分一样
To further illustrate that point，为了进一步阐述这一点
let＇s look at a Monet piece．
让我们看一幅莫奈的画
Again，here the pink appear very vibrant，

## 这里的粉色又看起来很鲜艳

and so let＇s pick it up and see what that looks like．
让我们用拾色器取下色 看看它看起来到底怎样
Again，it＇s very neutral．
它又是在中间的
This is like not even halfway through the saturation甚至没有到一半的饱和度
which we understand is leading from the left to the right，我们理解的饱和度在这个立方体里从左到右加深
and let＇s look at these beautiful bright greens here．
我们再看一下这里这个美丽的亮绿色
It＇s right in the middle，它正好在中间
again not very bright．
也不是非常鲜艳
What about the yellows here？
这里这些黄色怎么样呢？
Again，right in the middle．
又是在中间
Now let＇s take a look at the shadow．
现在我们来看下阴影部分
All of a sudden，突然
we＇ve jumped to the（right）edge．
它跳跃到了（右面）这个边缘
Now let＇s take a look at this example by Victor Higgins．
现在我们看一个Victor Higgins的画
The statue is a practically glowing with light．
这个光芒四射的雕像
Let＇s take a look at the saturation of it．
让我们来看一下它的饱和度
There＇s almost no color in that．
它基本上没有色调

Even the wings，is just barely in the middle，即使是翅膀这里也几乎不到中间程度
the lighter part has actually become less saturated．
更亮的地方饱和度就更低了
So in this piece，
所以在这个作品里
what really contribute to
真正帮助产生
the glowing effect is contrast because even in the black and white，发光效果的是对比度 因为即使是在黑白情况下
it really feels like there＇s a lot of light being看起来也有满满的光
reflected by the statue but now as we can see in black and white，被雕像反射出来 但是现在我们看到当它是黑白的时候
the reading become a lot more one dimensional．
图像变得更平面化了
We zoom in into the statue and
我们的目光聚焦在雕像上
then maybe see a little bit of the highlights here and then that＇s it，可能会看到这里有一点高光也就这样了
and then if we go back to the color version，如果我们再看一下彩色版本
here＇s a beautiful use of complementary color with the green，as an accent color．这里有互补色的巧妙运用绿色作为一个强调色

As you can notice，this is the only bright green in
你可以注意到 这是在这幅以红色为主要背景的画里
the whole image and dominating red environment．
唯一一处绿色
So we might first see
所以我们可能首先看到
the highest contrast with the statue and then we＇ll follow the statue with our eyes，这个对比最强烈的雕像 然后我们的视线沿着它向下
and linger around this female and wonder what she＇s looking at，来到并徘徊在这个女性的周围 可能还会想她在看什么呢
and she＇s here clearly as the heroine她明显是这幅画里的女主角
of this image being established by this excellent color．
被绝妙的用色衬托出来了
Here＇s a beautiful piece by Arthur Hecker．这是一幅来自Arthur Hecker非常美丽的作品

The color gives such luminosity and really makes you feel like颜色让整个画面都散发着光芒 让你真切地感觉到
the girl is in front of a fireplace and that＇s the power color has when it is used right．这个女孩就在壁炉前 这就是当颜色被正确使用时能产生的力量

We don＇t see the light source at all but we can feel the heat and the temperature．我们并没看见光源但我们却能感受到热量和温度

While I was in college，my teacher；
当我上大学时 我的老师
Chris Buzelli once said
Chris Buzelli Ali曾经说过
a really good art piece should be packed with adjective instead of just noun．
一个伟大的艺术作品应该充形容词而不只是名词
For example，in this piece，比如在这幅画里
the nouns are；girl，cat，名词是女孩，猫
teapots but the reason why this piece is so great is because of和茶壸 但这幅作品好的原因是
the adjective that we can find in it such as warmth or luminous．
我们能从中感受到的形容词 比如温暖和光芒
That is what really give us the feeling that we have towards this piece，那才是让我们对这幅画产生感觉的东西
and now let＇s take a look at this practically glowing fluorescent green here．现在让我们看看这里几乎在发光的荧光绿

It＇s like practically jumping out of the page but let＇s take

它显眼得几乎要跳出画面了
a color picker and see how saturated it really is．但让我们用拾色器看看它到底有多饱和

It＇s almost not a green，it＇s like this gray color．它都几乎不是绿色 它像灰色一样

Let＇s take a look at the other part of green．
让我们看看另一边的绿色
Okay，so this on read as a green but still very much a muted green，好吧 这个是绿色的 但也只是很柔和的绿色
and the reason why these greens feels so bright这些绿色在我们看来非常鲜艳
or saturated to us is precisely because of the color relativity that we talk about．或者说饱和的真正原是由于我们之前说过的颜色的相对性

Everything else is very orangy－red and because of that，由于图中其它部分都是非常橘红色的
they seems a lot greener than they really are．
所以它看起来就比实际上要绿很多
Now that we have looked at many masters＇pieces，现在我们已经看了许多大师的作品了
now let＇s take a look at the student of the masters，让我们来看看大师的学生
which is me，and see how I learn the things from my heroes and apply it to my work．也就是我啦看看我是怎么从他们的作品里学以致用的

## 11．Color at Work：Client Project

So here＇s the book cover for The Green Children of Woolpit that l＇ve done recently．这是我最近为《伍尔皮特的绿孩》一书完成的封面

I feel like when you＇re working on a project with text，当在有文字的情况下作画时
there＇s always a clue to color and that text，文字总是能为你的用色提供线索
and this case is pretty obvious，在这个例子里它非常明显
it＇s the green children．
就是＂绿孩＂
The kids are green and they came from a world that is all green．
孩子们是绿色的 他们来自一个绿色的世界
So it makes sense to me that the color should also have a green tint and所以对我来说画面也应该有绿色是非常合理的
that＇s how I first establish the overall tone of the image．这也是我在开始时奠定整张图的基调的方式

Besides being green，that kids are also creepy．除了绿色这些孩子也有一点吓人

They came from this other underground world．
它们来自另一个地下的世界
It＇s a mystery throughout the story if they＇re good or they are evil to human．
它们对人类来说是好是坏在故事中前大半部分都是个谜
So we want a sense of mystery on that cover．
所以我们希望封面也有一丝神秘气息
I decided to give it like a low lighting situation to enhance that feeling of unknown．
我决定让画面光线暗一点来增进未知的感觉
When we see in low light，
当我们在弱光环境时
our eyes tend to see the blues and the greens better than we see the reds．
我们的眼睛更容易看到蓝色和绿色 而不是红色
The reds tend to become more like black and dark color．
红色看起来更像是更黑色或深色
So let＇s talk about this piece with the five key points that we covered so far．让我们用之前提到过的五个关键点来讨论一下这幅作品

The first one is relativity，第一是相对性
which really is understanding color and seeing them as a continuous fabric．也就是把颜色们理解成一块连续不断的面料

So that is more like an ongoing backdrop for the four other things that we talked about．这一点会始终贯穿在我们说过的其他四点之中

The second point is consistency．
第二点是一致性
This piece，for example，比如在这幅画里面
is a low light environment with a green tint．
是一个弱光的绿色的环境
So everything has to live in that world to feel like it belongs．
所以在这个世界里的每样东西都应该感觉是属于这个世界的
I＇m also using the value that we talk about to establish a kind of eye movement．
我也用了我们提到过的用明度来建立一个视线的移动
Our eyes are being drawn towards these kids and then we我们的视线被这些孩子吸引
follow this dark shape of curve go up
然后沿着这个深色的弧形部分往上
and then see the girl here who is also a heroine in the story．
接着我们看到这里的这个女孩 她也是故事中的女主角
The curve of the shape also directs the eye，这个弧形的形状也引导了我们的视线回到下面的孩子们
which is more on the composition side other than what we talked about today with但更多是由于它的构图 而不是我们今天专注的
value and colors bring us back to these kids．
明度和颜色
The fourth point is accents color．
第四点是强调色
In this case is the red here．
这幅画里的强调色是红色
I use it very sparingly and only around area that I want your eyes to really focus on．我只使用了非常少的红色 而且只在这一块我希望你们的视线能够专注的区域

A little bit up top so then to create
在这上边也有一点
that circulation we see in the John Singer Sargent piece，we saw earlier．
用来创建一个刚刚我们在John Singer Sargent的作品里看到的循环
The last point is ratio，

## 最后一点是比例

which is closely tied in with the accent color as well．
它也和强调色紧密相关
I imagine if I have red everywhere and have this red想象一下如果到处都是红色
the same intensity as this green．We can take a look．而且和这个绿色是一样的强度 我们可以看一下

This green is around the middle of the saturation side．
这个绿色差不多是中等的饱和度
Then we can take a look at this red is a lot more muted or even here．
我们可以看一下这个红色要黯淡很多
It＇s a lot more muted and darker．
要暗很多深很多
So that way，it support each other rather than competing with each other．这样一来 它们是相互支持而不是互相竞争的

Now，when we＇re working on something like this one，当我们创作一幅类似的作品时
which is a book cover with type on it，也就是有文字在上面的书的封面
we have to consider the type as part of the composition and therefore，我们必须要把文字考虑成为构图的一部分
consider as value impact as well．
因此也要考虑到它对明度的影响
So here＇s an example of the same cover without the type．
这里是一个同样的封面但是去除了文字的例子
As you can see，the value，你可以看到
all of a sudden，feels a lot more muted．
明度突然就变得柔和了许多
With the type，the value structure feels a lot more completed．当有文字的时候 明暗结构感觉更加完整

So now that l＇ve already covered the key points and l＇ve shown现在我已经讲完所有的关键点了
you how I dissect other artist＇s piece，我也向你展示了如何剖析一个艺术家的作品
why don＇t you guys also pick a piece that you really like and bring it to Photoshop，不如你们选一幅自己喜欢的作品 在Photoshop里打开
use the Eyedropper tool to really understand the color．
用上拾色器 来真正地理解它的用色
Maybe turn it into black and white as well to see what their value structure looks like．或者也可以把它调成黑白看看它的明暗结构是什么样的

Now，that we have gone through all of this，现在讲完了之前这些
we＇re entering to the exciting part of the class，我们即将进入这门课好玩的部分
which is stealing other people＇s palette and then make into your own．
也就是＂偷取＂别人的色盘然后为你所用

## 12．Prepare Your Piece

So what are we going to do now？
现在我们要干什么呢？
First，we got up pick a limited palette．
首先我们要选取一个有限的色盘
So what does a limited palette means？
什么是有限的色盘呢？
I think for this class sake，我认为对于这门课来说
it just means a pallet consists of less than 10 colors including black and white．
它指的是包括黑白在内，少于十种颜色的色盘
Now，you may think that sounds like a lot．
你可能觉得那听起来很多
But if you really did the exercise we just set like color picking，other artists work，但如果你做了之前的练习 比如拾取颜色，看其他艺术家的作品
you notice in the painterly work，你会注意到在画家的作品中
there are over thousands and colors and in the graphic work，

## 可能有上千种颜色

usually there＇s more than 10 as well．
即使在平面绘图里也通常会超过十种颜色
So I think 10 color is a pretty good place to所以我认为十个颜色是一个好的开始
start to have a good selection of color in different来选择涵盖
hues，and values and saturation．
不同色相，明度和饱和度的颜色
We will build upon that to have a second generation of colors在那之上我们会建立二级颜色
that＇s been generated from the first set of swatches that we took from other people．那是在我们从别处拿来的第一组色板的基础之上生成的

So now，let＇s talk about what art would be good for this exercise．
现在让我们讨论下选择什么样的艺术品适合这个练习
This is the sketch that I prepared for this class．
这是我为这节课准备的草图
I think is a good idea to pick something a little bit simpler．
我认为选择比较简单的图开始会比较好
So we can really focus on the colors and not get confused by the complexity of the image．我们能真正地专注于颜色而不会被图案本身的复杂性迷惑

So in this one，we have a clear foreground，所以在这幅画里面 我们有一个清晰的前景
a clear hero which is the girl，
一个主角也就是这个女孩
and then we have middle ground．
我们有中景
The tree with a bird in it and the background which is just the sky，这棵树和上边的鸟 背景也就是天空
pretty simple hierarchy，and three major elements that we were working with．
非常简单的层次 也是我们要处理的三个主要元素
Before we really get into color，
在我们上色之前

I just want to talk a little bit about color mode because that was something我想稍微讲一下色彩模式
really confusing for myself and maybe confusing for you as well．因为我觉得它挺难懂的 你们可能也会这么觉得

So color mode can be changed here．色彩模式可以在这里更改

Mostly we work with two color mode，我们通常使用两种色彩模式
one is RGB and one is CMYK．
一个是RGB 一个是CMYK
RGB is the mixing of color light，red，green， RGB是红，绿，蓝三原色的色光的混合叠加
and blue and that＇s how monitors display the colors，它也是显示屏呈现颜色的方式
and the CMYK is a four colors separation that＇s being used by industrial printing．
CMYK是四分色被用在印刷业中
So $C$ is cyan which is blue， C指的青色也就是天蓝色
$M$ is magenta which is red， $M$ 指的品红色也被称为洋红色

Y is yellow which is yellow．
$Y$ 是指黄色
K is black because in the back of the days when the color would actually leave edge into plate，
K指黑色 因为在以前颜色还是通过套色印刷出来的时候
the black is called a key plate．
黑色就叫做定位套版色（Key plate）
That＇s why now is $\mathrm{K}, \mathrm{CMYK}$ ．
这就是为什么黑色用K指代，CMYK
We shall also took a look at the color setting
我们也应该看一下颜色设置
because you realize that within RGB and CMYK，因为你要意识到在 $R G B$ 和 $C M Y K$ 里
there are different working spaces as well，也有不同的工作空间
and this is probably the most confusing part．
这可能就是最让人感到疑惑的部分
Here right now，we＇re at sRGB which is the default setting for most monitors，现在我们选择的是 $s R G B$
most cameras，and most Internet browsers．
也就是绝大部分显示屏，照相机和浏览器的默认设置
If you go down，如果你点开下拉菜单
open this out you see there＇s other option，many other options．
你可以看到有许多其他的选项
So another common one is Adobe RGB．
另一个常用的是Adobe RGB
Adobe RGB has a wider range of color that＇s around like 35 percent more than sRGB． Adobe RGB的颜色范围更广大概比sRGB多百分之35

You might think more is better．
你可能觉得颜色越多越好
In some case，yes．
在某些情况下是的
Because it has more colors，因为它的颜色更多
is able to be more color accurate if you print a piece with Adobe RGB setting．所以你在Adobe RGB这个设置下印刷你的作品时颜色就更准确

But when you try to show your work online，但当你想要在网上展示你的作品时
the color tends to get duller and muted because
颜色就容易变得失色和黯淡
the Internet browsers is unable to read all this color in Adobe RGB．
因为浏览器无法识别Adobe RGB里所有的颜色
So I think for this project，所以我认为对这个练习来说
if you＇re thinking of mostly showing off your work in如果你主要想在课堂内部
our classroom share or on Instagram or online，或在Instagram和网上展示你的成果
then sRGB is probably the way to go．
$s R G B$ 可能是更好的选择
But if you are wanting to print it out for example with a nice Epson Stylus printer，但如果你想把它打印出来 比如用高级点的爱普森打印机
then Adobe RGB is the way to go．
那么选择Adobe RGB吧
If you are going to mass－produce this and send it to press，如果你要大规模印刷然后寄去出版社
then CMYK is the way to go．
那么就用CMYK
This is a pretty commonly used working space for CMYK．
这是CMYK最常用的工作空间
Now，we have this set to RGB．
现在我们把它设置成RGB
l＇ll just pick the one for the web．
我选择了在网上使用的色彩模式
Here，I have a finished line drawing that was based on my sketch．
现在我有一幅基于我的草图完成的线稿了
As you can tell is pretty close．
你可以看出它们挺相似的
I always say it＇s important to spend more time我总说在草图上多花点时间是非常重要的
with your sketch because it＇s a quick way to
因为这是一个在你开始定稿之前
fix any composition problem before you get into the finished line drawing．
相对快捷的修改任何构图问题的方法
The last thing you want is you spend hours on the drawing and
你最不想要的就是在线稿上花费了大量的时间
then realize that the whole thing has a very weak composition foundation．
结果意识到整个基础构图都有问题

So here we are and what I like to do before adding color is to just create flats．好了在我上颜色之前我想要先创建一些分层

If that＇s not familiar with you，如果你没有听说过它
flats are essentially how comic artists work．分层是漫画家最基本的创作方法

It just means shapes of flat color not the final color，它指的是色块 不是用最终的颜色
just like placeholder for each major element．
而是像占位一样 给图中的每个主要部分分层 铺一个底色
So then，the color of that element can easily be changed．
这些底色之后都是可以轻松修改的
So the lasso tool is something I use a lot．
我经常使用套索工具
I use a magnetic one as well because right now the contrast is pretty high，我也用磁性套索 因为现在这里的对比度比较高
so it＇s pretty easy to select．
所以比较容易选中
So what does the magnetic lasso does is磁性套索工具
that is sort of snap to places with high contrast．
主要能自动贴紧选中对比度较高的地方的边缘
So as you can see here，就像这儿

I am loosely following the guideline and it snap into place．
我随意地沿着这个线条 它就会自动地贴住这个边缘
It＇s not going to be a 100 percent accurate．
它不是百分百精确的
But we can always go back and fix it later．
但是我们可以一会儿再修正
It＇s just a quick way to make the flats as opposed to using比起普通的套索工具 它是一个更快速分色块建立平色的方法
the regular lasso tool because then you have to be super steady with your hand．

## 因为普通的套索工具 需要你的手保持非常稳定

Now，having that magnetic snapping it allows shaky hands．
用磁性套索的话你的手抖一点也没事
Then we just open a new layer and fill that color．
然后我们新建一个图层填充上颜色
Now，when you fill the color，当你填充颜色的时候
you don＇t want to use really crazy like neon，最好别用太跳脱的颜色 比如荧光色
green or blue or magenta because that＇s going to mess up your color judgments．
绿色，蓝色或者红色 因为它们会扰乱稍后你对颜色的判断
So I tend to stay in the neutral，我倾向于使用中性色
and maybe if you have colors that you already know you want to use in that range．你也可以用其他你想要用的，不那么乍眼的颜色

I always like to organize my layers and folders here．
我喜欢在这里整理我的图层和分组
So then when you get a lot of different layers that won＇t be super confusing．这样当你有很多不同的图层的时候也不会特别混乱

So here，we have this layer filled，好了现在我们把这个图层填充上颜色
and then you just go on．
然后继续这样做
So as you can see here I already made the selection，你可以看到我已经选中了这里
now just adding color to it．
现在只需要往上加颜色
So I can read which layer is which．
让我可以知道每个图层是什么
At this point，it really it doesn＇t matter what color you put．
这个时候你上什么颜色并不重要
Like I can have a gray tree，比如我可以有一棵灰色的树
it doesn＇t mean I have to stay gray．
它不意味着这个颜色就不能改了
It＇s just easy for yourself to它只是让你能轻易地
distinguish one part of the image from another part of the image．
区分图片里的不同部分
So here，I＇m pretty much done with most of the big shapes．现在我差不多分完所有大的色块了

You can see with the woman here，你可以看到这里这个女性的图像

I broke it down into three parts．
我把它分解成了三个部分
The dress here，the body here，and the hair．
裙子，身体和头发
Right now，the tree is still，树也是如此
the leave is just one part with the branch as a second part，叶子是一部分 树枝是第二部分
and then the bird on top．
然后上面的鸟是另一部分
So now，go ahead and pick a piece of work from现在快去为自己选一幅
yourself that share similar quality with the example I just said，和我刚才举的例子有相似性质的图画吧
simpler shape，clear foreground，middle ground，形状简单，清楚的前中背景
and background，and then we＇ll dive into the colors．
然后让我们进入颜色的世界吧

## 13．Steal a Palette

So as I mentioned before when I first started out，我之前提到过 在我开始画画时
color was one of my biggest weakness when it come to picture making．

## 颜色是我最大的弱点

Sometimes I have a very particular feeling that I want to convey with my art，有时候我想通过我的作品表达一种特定的感觉
but I＇m not exactly sure what those feelings looks like in colors，但我不太清楚怎样用颜色把这些情感表达出来
or sometimes I want to use one particular color very much but not或者有时候我特别想用一个颜色
sure what other colors I can pull to support that hero color，但不确定我可以用其它什么颜色来支撑我的主色
and what really helped me personally is by对我帮助最大的方法
browsing a lot of different palette and then pulling them，就是浏览许多不同的色盘 把它们提取出来
and just straight up stealing them and try to make that work with my own piece，直接＂偷走＂然后尝试用在我自己的作品里
and that＇s what you guys are going to do today as well．
那也是你们今天要做的
Welcome to the Dark Side．
尽情展示你的阴暗面吧
I love it．
我喜欢
Okay，so well，our dark side is not really that dark．
好吧 我们也不是那么坏
Even though we＇re stealing，虽然我们是在＂偷＂
we＇re not stealing everything．
但我们不是全盘照抄
I think it＇s very important that you steal
我认为很重要的一点是
from artists that works really different from you．
你要从那些作品与你的非常不同的艺术家那里偷
So even if you use the exactly same palette，这样的话即使你用的是一模一样的配色
your work in the end will be totally different．
最后你的作品还是完全不一样
What＇s more，when we use their color is usually just the foundation．
不止如此，我们通常只是把他们的色盘当作基础
We＇re going to build on top of that，我们还会在上面继续构建
and then develop the color further to suit the piece that we＇re working on．发展出更适合我们自己的作品的颜色

So in the end，it＇s not really going to look like所以到最后 它不会真的看起来非常像
the original color palette that you start out with．
最开始时那个原本的色板
So talking about stealing，说到＂偷＂
there＇s technique to stealing as well． ＂偷＂也要讲究技巧的

You can＇t just steal everything，like，你不能全部照偷，比如
painterly pieces are very hard to steal because
油画的作品就非常难＂偷＂
the color shift pretty much every brush stroke or every pixel．
因为每一笔一画 颜色都在变化
So it＇s hard to really narrow down，like，
所以要把它们简化到
what are the major six，比如最主要的六，七种颜色
seven colors they use．
是非常难的
So in the beginning，it＇s much easier to steal所以在一开始
when the colors are clearly separated in an image．
＂偷＂那些颜色被清楚地区分开的图要简单得多
For example，old propaganda poster，

比如老的宣传海报，
or nouveau posters，or a textile，or wallpaper pattern．
＂新艺术＂时期的海报，或者纺织品和墙纸图案
These are all pretty easy examples to pick the colors out．这些都是非常容易就能提取出颜色的

There are also a lot of useful design color palettes that＇s around online．在网上也有许多实用的设计配色

They just give you those swatches straight up．它们直接就把色样展现给你了

So you don＇t even need to do the hard work of color picking，你都不用千辛万苦去分辨，挑选颜色
which is very manually demanding．挑颜色可是体力劳动活啊（笑）

But I personally prefer to collect the materials that I color－steal from．但是我个人更喜欢自己收集我要＂偷＂的素材

Because I think the process of curating，因为我觉得搜集的过程
you＇ll also building your own visual library．也是在建立你的视觉库

You＇re also curating your own taste and preferences，你也在收集整理自己的品味和喜好
and eventually that＇s going to become part of your own art style as well．
最终那也会变成你自己的艺术风格的一部分
So I haven＇t always worked in digital．
我并不总是用电子产品来工作
When I figured out that color was my weakness，当我意识到颜色是我的软肋时
the first media that I turned to was actually silk screening我转向的第一个材料其实是丝网
because you＇re able to premix the color，test it out，因为你能够预先混合，测试颜色
and see what they look like before you commit to a palette，在你确定把它放入你的色板之前可以看看颜色配搭的效果如何
and you can do things in layer，
你也可以一层层叠加
which translate to how I work nowadays in Photoshop．
这也影响了我现在用Photoshop时的绘画方式
There＇s a lot of similarity with the layering system．
版画和Photoshop里的图层有许多相似之处
Here＇s a pretty early piece that I did，这是我相对早期的一幅作品
and here＇s what the color palette that I steal from．
而这是当时被我＂偷＂配色的作品
I think this piece is pretty obvious why I steal the color palette．
我觉得我＂偷＂这张图的色板的理由应该很明显
I want a piece that have that propaganda vibe going on，我想要一幅有宣传氛围的画
and even the composition with the glowing sun and everything．甚至是太阳和其他东西的构图也比较相似

Here＇s another one with more of a different composition．
这一组的构图区别就比较大
But I just really love the color palette in但我真的很喜欢这张海报的配色
this poster that I tried to see if I can make it work into my work，所以我尝试了一下 看它能不能融入我的作品里
even though it shares nothing in similar with composition．
即使它们的构图完全不同
The last one is more of a recent piece，最后这一幅是我近期的作品
and this one is I want to revisit我希望它重现
the old simplicity look of the screen printing and just really using flat colors，旧时丝网印刷所呈现出的简洁的视觉效果
no gradient and no complicated texture，所以我只用了色块 没有渐变 没有复杂的纹理
and you can see on the right is the color inspiration for that．

## 你可以看到在右边是这幅画配色的灵感来源

So now that we have finished making flats for all the major elements，现在我们已经为所有主要元素铺完底色了
let＇s think about what color palette we＇re looking for．让我们想想要找怎样的色板

We can always seek emotional and tonal clues from our piece．
我们可以从作品的情感或色调入手
Like in mine，I feel that it＇s pretty soft，像在我的画面 我觉得它非常柔和
quite feminine，and is around spring time right now，相当女性化 现在要春天了
so I was thinking about something pink，所以我想到了粉色
and that clue gives me a direction of my research hunting down the color palette．这个线索给了我搜寻色板的大概方向

So one of my favorite place to look for color resources is my bookshelf．我最喜欢的找寻颜色资源的地方之一是我的书架

I have collected a lot of books just for the color．
我为颜色收集了很多书
This is a series of books．
这是一个系列书中
This is one of them，from the V\＆A Museum in England．的其中一本来自英国的V\＆A博物馆

It has amazing collection，它有让人惊叹的收集
just different color textile in different pattern．
不同颜色，不同花纹的布料
So I bookmark the ones that I thought could work that
我标注了我认为可以用的
has the soft pink that l＇m looking for．
有我想找的桑和的粉色的图片
This is one of them，这是其中一个
and then this is another one．
这是另一个
Here＇s another book from the same series．
这是同系列的另一本书
I thought this is a pretty cool palette．
我觉得这个配色很不错
A little bit more modern，可能更现代一点
maybe，with the pink as well．
也有粉色在里边
So I looked through a few more books，我还翻阅了另外几本书
and in the end，I decide I want to make this my pattern．
最后我决定选择这个图案
So this book are actually textile from kimono．
这本书其实是讲和服的布料
Just really zoom in to show you the pattern on it，它把上面的图案放大了进行展示
and I think this is a really lovely palette．
我认为这个配色很可爱
So I＇m going to pull that into the computer．现在我要把它导入到电脑里

So when you＇re working with analog resources，当你用类似的资源时
there＇s a few way you can easily get it into Photoshop to pick the color out．有几个简单的把它们导入Photoshop，方便选取颜色的方法

Scanning is one of them，比如扫描
or taking it with your smartphone．
或者用你的手机拍照
Everyone has a smartphone now．
现在人人都有手机
Make sure the color environment is good，

## 确保周围的颜色环境良好

white lights，so it＇s not tinted with yellow．
用白光，这样它不会泛黄
Even if it＇s off，就算拍出来效果不是很好
you can always adjust it a little bit before you pick all the color in Photoshop．你也可以在用Photoshop取色之前调整一下

So I just took that image with my phone and then bring it into a computer，我是直接用手机拍的 然后导入电脑
and now I＇m going to pick out the color with
现在我要用拾色器把颜色挑取出来
the eyedropper and create swatches that I can use later．
创建一个色板供之后使用
So what I＇m going to do first is I have created a new layer on top of this，我首先要做的是在背景上面新建一个图层
and on that new layer，在这个新建图层里

I＇m going to set a gray bar background so that I can see the color I＇ve picked out．我要放置一个灰色的坚块在背景图片旁边 方便一会儿我记录选取的颜色

I＇ll just pick a mid gray there，我就选中灰色吧
and then select，and then have another layer on top of the gray layer，选中 然后在这个灰色图层上面再创建一个图层
and now I can start using the eyedropper tool．
现在我就可以用拾色器了
So first，we＇ll pick the green here，首先我要选这个绿色
pink，this light yellow，粉色，浅黄色
this white part，this gray with a blue tint，这个白色，带点蓝调的灰色
this red，and finally，
这个红色 以及最后
this dark purple．
这个深紫色
So now，we have a seven－color swatches that we can bring into our work and use it．现在我们有 7 个颜色可以用到我们的画里了

So I added the neutral color bar there，我在这里创建了一个中性灰色的区域
just so I can see the color clearly and not being distracted by this layer right here，是为了让我能看清选取的颜色 又不被旁边的图片干扰
and also I think it＇s an interesting exercise to我认为这是一个很有趣的理解颜色的练习
understand color and see how the key points we are talking about，还可以看看我们讨论过的关键点们
specially color relativity is at work．
特别是颜色的相对性怎么体现在这个作品里
For example，here，the green looks
比如这里 这个绿色
a lot more vibrant because it＇s adjacent to a complementary pink．看起来比较生动 因为它与它的互补色，粉色相邻

But here on the neutral gray，但当它被放在中性灰色周围时
it started to look a lot duller．
就看上去黯淡了许多
So as you can see now，好了你现在看到

I have the color palette that I just built and I dragged it我有一个刚刚组合好的色板了
into this loosely colored flat file，我把它拖进这个大概用色块分好层的图片里
and I can start to apply them to the different layers．
我要开始给不同的图层上色了
Keeping in mind was the hierarchy that I want the image to have，要记住我希望这幅图的层次分明
and obviously，in this one，

## 很明显这幅图里

I want the attention is with the lady．
我希望焦点是在这位女性身上
So I think I＇m going to have the red所以我要把她的头发涂成红色
be in her hair because that＇s going to be the most attention grabbing color．
因为那是最引人注目的颜色
So this is her hair layer．
这个图层是她的头发
I have it on layer lock．
我锁定了这个图层
What that does is actually is locking the pixel．
它也就锁定了这个图层里的像素
Notice if I don＇t have the layer lock，注意 如果我不锁定它
and I tried to fill，然后填充颜色的话
it just filled it everything outside or after really aim for it．
它就会把周围填上颜色 而不是你想要填满的地方
But if I have the layer lock，如果我锁定了图层
then I can just use short key to fill which is ALT－Delete to fill the foreground color．我就可以用快捷键ALT－Delete来填满前景

That just make the process a little bit faster for myself．
它让我的效率提高了
We remember that the higher contrast give you the most attention．
还记得我们说过对比度越大越能吸引人注意吧
So let＇s think about using a lighter color for her skin，所以我用浅一点的颜色给她的皮肤上色
so then we have the high contrast with the hair and her skin．
现在头发和肤色的对比度就强了
So let＇s pick this near white color with a tint of blue here，让我们选这个几乎接近白色又带有一点蓝调的颜色
and then again，we use a shortcut to fill it，然后我们再用快捷键填充上颜色
or you can simply fill that with this tool as well．
或者你也可以用这个油漆桶工具
I think the shape，
我认为这个形状
I want the body to read as a continuous shape，我希望她的身体能够被看成一个连续的整体
and right now this part is breaking it up．
现在这一部分把它割裂了
So I＇m probably going to turn the red dress into a similar value with the skin color，所以我要把红裙子改成和皮肤颜色差不多明度的
and the yellow seems like a good choice．
黄色看起来不错
Now，let＇s move on to the background，现在让我们看下背景
which is another big，
它是也是一个非常重要的部分
big part，and really contribute to the mood of the image．
对建立画面的气氛有很大的帮助
I want that romantic pink feeling we have．
我想要浪漫的，粉色的感觉
So I＇m going to grab those baby pink，所以我要选择这个浅粉色
and then fit into the background．
然后填充到背景
As you can see，all of a sudden those light really changed in the image．
你可以看到画面的亮度突然就改变了
So now all of a sudden，it feels a lot more warm and amicable than before．
它一下子就变得比之前温暖平和了许多
Now，let＇s also change the tree．
现在让我们来改变这棵树的颜色
So what we＇re doing here is actually is replacing

## 我们现在做的实际上是

all the placeholder color with one of the color from these swatches，用我们色板里的颜色一个个来替换掉所有这些之前占位的颜色
and this is still like a rough step，这也是一个粗略的步骤
so some of the color might not work．
所以色板里有些颜色可能并不适合我们的画面
See here，I didn＇t lock it．
看着儿 我忘记锁定这个图层了
That was a good demonstration of what you shouldn＇t do．
这是一个很好的反例
You can just keep going until you have pretty much filled你可以继续下去直到你基本上替换完
out all the flats that you have created．
之前创建的所有色块的颜色
At this point，don＇t worry too much that I feel like I＇m short on color yet，这个时候不用太担心颜色要用完了
we＇re going to expand on that，我们还会扩充色板的
right now I just try to stick with the swatches and现在我仅仅是依照色板里的颜色
use all of them for all your layers of flats．
把它们全部用到所有的色块图层中
You can go ahead and do what I just did，你可以继续照着我刚才做的这样
create swatches and then use the swatch，建立色板 然后用它们
apply to your layers of flats，替代之前的色块
and the next step we＇ll start developing those colors．
下一步我们会开始扩充这些颜色

## 14．Personalize your Palette

Okay．So at this point，
现在的话
we have applied all the color from the swatches onto all our flat layers already，我们已经把所有颜色从色板上填充到底色的图层上了
and honestly I＇m quite liking the directions it＇s going．
说实话我还挺喜欢这幅图现在的样子的
Some of you might even say，＂Okay，有些人有可能觉得说＂好的，
it looks pretty done，＂like maybe that＇s
这看起来基本完成了＂如果这是
the flat comic style you＇re going for and that＇s totally fine．
你想要的平面漫画的风格的话那完全可以
I think knowing when to stop is always a difficult question，我觉得要知道什么时候停下来总是很难的
and it changes as you get more experience，随着你经验的增加这个答案也会改变
you have a better understanding grasp of it．
你会对它有更好的理解
But at this point，I feel like going with your gut is the probably the best thing，但是现在 我觉得跟随你们的直觉可能是最好的
and if you feel like your piece has already achieved the goals that you had in mind，如果你觉得你的作品已经达到了你脑海中的目标
then feel free to stop anytime．
那就随时可以停下来
But for me，I feel like this piece has the potential to get even better，但是对我来说 我觉得这幅画还可以更好
especially keeping in mind the brain feeling that I want to convey．
尤其是想到我之前想要传递的感觉
I feel like it＇s still a little bit stiff，我觉得它还是有点生硬
so I＇m going to keep going．
所以我还要继续
So as I＇m looking at this piece right now，

## 我现在看着这幅画

I think what stands out for me the first is the skin color．
我觉得最突兀的部分是皮肤的颜色
I feel like it＇s just a little bit too white，我觉得它有一点太白了
and because the color I＇d picked from the swatch has this light blue tint，而且因为我从色板中选的颜色是带有一点蓝调的
and makes her feels a little bit zombie－ish and that＇s
这让她看起来感觉有点像僵尸
going against that warm feeling that I have．
这和周围柔和的感觉相悖
At this point，we can create secondary color by using the color from the swatches．现在我们要用色板中的颜色来创造二级颜色

So I＇m going to go into the woman layer and then find her skin，我找到了这个女性的皮肤的图层
which is this layer．
也就是这个图层
I＇m going to duplicate this layer by pressing Command－J．
我要使用快捷键Command－J来复制这个图层
Then you see that layer here．
你看它出现在了这儿
Or you can use this to duplicate that layer．
或者你可以这样复制图层
I just like to use a short key because it＇s much faster．
我喜欢用快捷键因为这样方便很多
So now，I have a new layer of the same thing，现在我有一个有着同样图案的新图层
again，we locked it．
我们也锁定它
I was thinking maybe adding some of the pink will help．
我觉得可能加一点粉色会更好
So this layer I＇m going to make it into a pink layer．
所以这一层我会把它涂成粉色

Let＇s fill it，this is the layer．
让我们填满它 好了

So now，I have this top layer of the skin，现在我在皮肤的图层上放了另一个图层
now the skin is two layers being pink．皮肤就有两个图层了 它现在是粉色的

But then this merging too much with the background，但是它和背景太相似了几乎融合在了一起
so I can always adjust opacity．
我要调整一下不透明度
Maybe 50 to let the bottom layer show through．
大概到百分之50吧 这样底下的图层就能透出来
So now by virtually having two layers on top所以现在实质上皮肤是有两个图层
of each other and then the top layer semi－transparent，互相叠加的 然后上面这层是半透明的

I＇m creating a new color．
我就调出了一个新的颜色
So after the skin is done now my eyes really got drawn to皮肤完成后 现在我的视线被这只鸟吸引了
the bird because the bird seems pretty high
因为它看上去亮度对比度相当高
（value）contrast as well and I want to tone that down．
我想让它不那么高调
So l＇m going to do the same thing，所以我要重复之前的步骤

I＇m going to duplicate this one layer，layer lock it．
复制这个图层 然后锁定它
I want to keep the mid－ground color relationship in the greens．我想要保留中景的物体之间颜色的关联

So I＇m going to use the green here onto this duplicated layer．所以我要把复制的鸟的图层填充上绿色

Then do the same thing，adjust the opacity．
然后一样的 调整不透明度
So now，I feel like the bird as much more push back in space，现在我觉得鸟在图片里不像刚才那样显眼了
so then our lady can come forward．
所以我们的女主角也就被凸显出来了
All those little flying leaves，所有的这些小落叶
we haven＇t changed their color so is still white，我还没有给它们上色所以它们还是白色的
and is really popping forward because of a high－（value）contrast．
它们在图片里非常突出 因为明度对比强烈
So let＇s go ahead and l＇ll still give it some color and push it back．让我们给它们填上颜色 使其与图片融合

Maybe give it yellow right now．
黄色可能不错
So as you can see it this way we can create new colors from你可以看到 通过在视觉上的叠加和改变透明度
the original colors of the swatches by blending them visually and changing the opacity．我们从原色板里发展出了新的颜色

So at this point，现在

I＇m pretty happy with the main colors that I put in with all the elements．我觉得我对所有元素主要的颜色都比较满意了

The image is definitely getting softer and towards where I wanted to be．这幅图肯定是更柔和 更靠近我想要的感觉了

But one thing really jump out to me is actually the line now，但现在我发现线条是个问题
that we have to remember the line is also part of the image，要知道线条也是图像的一部分
and the line color is also part of the color system here．
线条的颜色也是这里整个颜色体系的一部分
The black line just started to feel a little too harsh，

## 黑色的线条开始感觉有点太生硬了

again that＇s more of a stylistic choice．
这主要是一个基于风格的选择
I generally，I like something a little more painterly and the outcome，我通常更喜欢画家绘画的那种风格和作品
rather than something that＇s maybe more graphic．
而不是更靠近平面绘图的那种
So let＇s go ahead．
所以让我们继续
I think，for example，
我认为 比如
with this one，let＇s find the hair layer．
这里 我们找到头发的图层
Okay．So it＇s always good to double－check that＇s the layer you want，再检查一下选中的是你想要的图层总是没错的
even just by again blending it with opacity like softening it，即使只是再调整一下它的不透明度 让它更柔和
maybe a 40 or 45 percent．
大概到百分之40或45吧
It＇s already I feel like better than just the black black，and then with the body lined．这样已经是比刚才特别黑的黑色的好一些了然后是身体的线条

That＇s another thing，I like to because this piece I work digitally，说个题外话 因为我是在电脑上处理这幅图的
and I knew that I want to change the color of the line eventually．我知道我最后会想要更改线条的颜色

So I work on the lines on separate layers，所以开始时我就把不同部分的线条画在了不同的图层
so it＇s easy for me to change the color that way．这样最后更改线条颜色时会比较简单

But if you work traditional with your lines getting in，但是如果你的所有线条是在同一个图层的话
you can always still separate your lines like the way you separate the flats．你可以像之前给主要元素分层那样来分离线条

So let＇s give that arm a pink color，让我们把手臂线条改成粉色
and now I feel like we＇re losing a little bit of现在我觉得她的嘴唇
her lips because it＇s become the same color of the cavity inside her mouth．
不够明显了 因为它和口腔是一个颜色了
So I＇m going to pick up this color that I just created by
所以我要用这个颜色这是我刚刚
turning down the black opacity of the hairline．
调低头发的黑色线条的不透明度后得到的颜色
So now，there＇s a new color and l＇m going to use that for the outline for her mouth．现在得到了一个新颜色了 我要用它来填充她的嘴唇

Then you can keep doing this for the other part of the image until you got to你可以像这样继续优化图片里的其它地方
the point that you feel like everything feels nice and soft in this case，直到你觉得所有部分都不错了 变得柔和了（以这幅图来说）
or whatever you＇re trying to achieve with your piece．
或者其他的你想要你的作品达到的感觉
As you can see here，
你可以看到
I have changed all the colors of my line at
现在我已经改变了所有线条的颜色
this point and to me I think the color can still use a bit more depth，但我觉得颜色还可以更有层次感
and I think I＇m going to introduce a light source
我认为我应该用一个光源
to really help with that atmospheric perspective．
来帮忙营造气氛
So I think I love to use gradient a lot，我非常喜欢用渐变

I forgot who mentioned this，我忘了是谁说的了
but they＇re saying gradient essentially is the passage of time，他说渐变实质上是时间的流逝
which I think is quite romantic because if我觉得这种说法很浪漫
you look at our nature，the time you see gradients，因为如果你看自然里的渐变
you show like sunrise or sunset with very dramatic change of time．
比如日出和日落都有比较戏剧性的时间的流逝
So I think with this piece，我认为在这个作品里
the light source is going to come down from up here，光源应该从这里往下
and that will be really nice because she＇s looking up here，这应该不错因为她在往这里向上看
and this can create like a focus with the light and her direction of looking．这样光和她看向的方向可以有一个交点

Usually with lights，we think of yellow light，说到光我们通常想到黄色的光
as more of the sun and more warmth，就像太阳一样 更温暖
like a bluish light，像偏蓝色的光
more like electronic，more artificial，就更像电子的光，人造光
or like really morning sort of a cool light．
或者像早上的冷光
In this case，I think it＇s definitely more of a warm light situation．
这里呢我觉得它肯定更像是一个暖光的情境
So I＇m going to have a new layer，
所以我要新建一个图层
and then I＇m going to grab my gradient tool here．
然后在这里用渐变工具
I think I＇m going to use this yellow．

## 我要用这个黄色

So right now，pretty much I＇m still using the color we already have，现在我基本上还是在用已经有的颜色
we can always tweak those colors later as we go．
我们之后也可以继续创建一些颜色
On the offset，I feel like that just give so much depth to the piece，但它给这幅画增添了如此多的层次感
like the air of the center on top feels lighter，there＇s a direction．比如顶部中间的这里的空气像是更轻盈一些就有了一个方向感

Talk about color consistency，说到颜色的一致性
now I feel like the hair is not reflecting this surrounding anymore．现在我觉得头发和周围环境不太融合了

So I＇m going to do a layer duplicate that we just did．所以我要像刚才那样复制这个图层

Then also introduce this same yellow like，but now，然后加入这个同样的黄色 现在

I＇m actually picking up this new yellow light which was blend from我选择的其实是这个新得到的黄色
the pink and the earlier yellow from the dress for this one．
由从粉色和裙子上的黄色混合而来的
Then fill her hair and then add a layer mask．
然后填充她的头发 再添加一个图层蒙版
I love doing layer mask because that way you can control the layer，我喜欢用图层蒙版因为你可以通过它来控制你的图层
change a layer without actually altering anything，来调整一个图层但不会对原本图层里的内容造成影响
for example，about a half a gradient，比如 这里给头发做一个渐变
but then I can turn off this layer mask and is still a intact layer．如果我关掉这个图层蒙版 我仍然有一个完整如初的图层

So you can always go back if you
你始终可以退回去
don＇t like what you did and it＇s non－destructive，which is really great．如果你不喜欢刚刚的操作 这个方法非常好因为它是非破坏性的

A lighter gradient，I feel that maybe this is a little bit strong so I＇m going to adjust我想要一个更自然的渐变 我觉得这个有点过了 所以我要调整一下
the layer opacity to come down a little bit around there．
图层的不透明度 把它调低一点大概到这儿
Now，I＇m going to do the same with the tree，duplicate a layer，现在我要对这棵树进行同样的操作 复制一个图层
and then apply the same yellow，
然后用同样的黄色
do the layer mask of the gradients．
做一个渐变的图层蒙版
So in layer mask，在图层蒙版里
it works as blacks being the negative，黑色为虚，也就是完全透明不现实任何像素
white being the positive．
白色为实，也就是完全不透明现实100\％的像素
So now，I＇m having a gradient of black up，现在我做了一个从下往上由深到浅的渐变
meaning like these parts are being erased．
顶上这个部分就会被抹掉
So showing the layer underneath it right here．
就会露出它下面一层图层的颜色
So now，I＇m visually blending color that way，现在我把颜色在视觉上混合了
and then I＇m also going to turn down the opacity a little bit，然后我要把不透明度调低一点
so as not to lose that green too much into the background．
让绿色不至于太融入背景色
So I＇m liking the direction and where we＇re going．我很满意现在这个图的进展

I think the big shapes are in good place．
我觉得大的色块都挺不错了
So it＇s time to get into the secondary shape and really enrich the image，现在是时候加入一些二级形状来丰富画面
and add some complexity and interest to it．
再增加一点复杂性和趣味性了

## 15．Refine Your Palette

The first thing I think we need to create sort of glowing orb for this flower．我认为我们需要创建的第一样东西就是这朵花的光晕

The line is already hinting that it＇s glowing，这里的线条已经暗示了它在发光
but not so much yet．
但它还没有
So this is the layer that I added with the same color as a dress．所以我添加了一个图层 填充上和裙子一样的颜色

But obviously，we need to turn down the opacity so we can actually see the flower．但是显然我们需要调低不透明度 让我们能够看到花

Now，with this framing，
有了这个框框作用
the flower is getting more attention than before as well．
这朵花比之前要引人注意多了
As you can see，I also added some gradients to the knees and你可以看到 我还在膝盖和手的位置加了一些渐变
the hands where it＇s usually a little bit more red in the human body．
通常人们身上的这几个地方要更红一点
So it just feels a lot more fleshy than before．它们现在看上去比之前更有血色了

Now，we can go ahead and make a new layer，现在我们继续 创建一个新图层
and then put it into a new group from this layer，secondary shapes．从这个图层建立一个新的组，＂二级图形＂

I always titled them in order to keep my file organized，

## 我总会给所有的文件命名 保证它们井然有序

because that way，when I right－click on something，这样的话 当我用右键点击某个地方时
the title showed up then I would know what it is．
会出现它的名称我就知道它是什么了
Especially when you have like over a 100 layers which happened with my work．
尤其是当你有超过一百个图层的时候 像我的作品
So now，we can really zoom in and then pretty much the same thing as our flats before．现在我们放大 然后重复之前分层的步骤

We can still use our magnetic tool or the Lasso Tool to create secondary flats．我们仍然可以用磁性套索或套索工具来选取二级分层

That was a secondary flat．
那是一个二级分层
I＇m just going to，at this point，我现在
use placeholder colors as well．
只随意用一个颜色来占位
Let me just clean up this selection．
再稍微调整一下选中的区域
Then just creating more secondary shape．
接着创建更多的二级分层
So you can tell us one mess up，你可以看到这个地方搞砸了
the magnetic got pulled away by another strand of line．
磁性套索脱离线条的方向了
So when you press down＂Alt＂，，如果你按下＂Alt＂
the Lasso Tool become a subtraction Lasso Tool，套索工具就变成了套索撤销工具
so then you can correct your selection that way．这样你就可以改正你的选取范围了

Or you can press＂Shift＂and the Lasso will become additive Lasso．或者你可以按下＂Shift＂就会变成套索添加工具

So it＇ll add to your selection．
它可以增加现在的选取范围
I＇m going to also do the secondary shape for the leaves as well．
我也要给这里的树叶创建二级图形
So again，new layer put it into new folder，secondary shapes．
像之前一样 新建图层 从图层建立一个新的组命名为＂二级图形＂
Another tool that I like to use to get selection is just quick Magic Wand．另一个我常用来选取的工具是这个非常快捷的魔棒工具

If you click here，如果你点击这里
which has sampled all layers，选中＂对所有图层取样＂
it takes an all layers into consideration，它就会把档案里面所有的图层都考虑进去
and what it＇s doing is selecting that one area that＇s
它的作用是 选中这块被
being surrounded by different color．
其他颜色围绕住的区域
So if I don＇t have this on as sampling only如果我没有选择＂对所有图层取样＂的话
this empty layer．
它就只会对这个空白的图层取样
So essentially，you select the whole thing．也就是选中整个画面

But if I have sampled all layer on，但如果我选择了＂对所有图层取样＂
then it look at the image as everything all the layer它会把整张图，所有图层都当作一个整体
together and it only selects this part，它就只会选中这个部分
and that＇s what I want．
也是我想要的部分

So I＇m going to make a bunch of quick leaf secondary selection．
我要快速地选中这些作为二级图形的叶子
See here＇s a little gap，看这里有一个小的缺口
that＇s why it went over．
这就是为什么它越过去了
So that part might not be that good for using our magic tool，which is fine．所以这个部分可能不适合用魔棒工具 但也没什么

We＇ll go back in there with our Lasso．
我们一会儿可以用套索工具
Then you can just keep doing this until you feel you have covered然后继续这样直到你觉得选中了
most of the secondary shape that you want to add different color to．
绝大多数你想要替换颜色的二级图形
So at this point，I have selected all my secondary elements，现在我已经选中了所有的二级元素
and when I select，
当我在选择的时候
I usually have a general rule that I use．
我有一个通用法则
With a secondary element，我想用二级元素
what I want to do is create volumes within one bigger shape．
在一个较大的图形里建立立体感
For example，in these hair where I think would be the highlight，比如 在头发这里我觉得应该是高光的部分

I put a lighter color in，
我加入了一个较浅的颜色
and where I think will be in shadow or concave，在我觉得应该是阴影或凹陷的地方

I put a darker shape in it．
我放入了一个较深色的形状
The same with the leaves，

## 叶子也是这样

where I think it＇s hitting the light，我觉得被阳光照射的地方

I put on a lighter shade and where I think is turning away from the light，我用浅一点的颜色 在我认为背光的地方

I put a darker shade．
我用深一点的颜色
This is just rough and you can tell it现在还比较粗糙 你也能看出来
feels a little bit stiff like she has plastic hair．
头发这里感觉有点生硬像是塑料的一样
So we are going to soften that and make it really feel like part of this bigger shape．所以我们要柔化一下 让它看起来更自然像是这一片形状里面的一部分

Again，what I love to do is using gradient．
我还是会用渐变
So this was the highlight area．
这是高光的部分
I＇m going to add the layer mask．
我要添加一个图层蒙版
So let＇s really think about how the hair behave in a three－dimensional way．让我们想想在现实生活中我们的头发是怎样的

Around the root is probably going to be going in and catching less of the light．在发根这里会向内 看起来颜色会更深

So I think the highlight is a little bit too strong and can be softened here．
所以我觉得这里的高光有点太强了 可以弱化一下
What I do is just to erase that part of it with the gradient tool．
我用渐变工具清除了一点这部分的高光
Same with the hair that＇s behind the arm．
手臂后面的头发也是如此
That＇s probably a little bit of a cache shadow going on．
这里应该有一点阴影
But I want everything that＇s soft at this point．
但是我希望整个画面比较柔和

So I＇m not really going to put in a cache all of this yet．
所以我现在不会加很多阴影
So I＇m just going to soften that by erasing part of that highlight．
我会擦除掉一些高光让这部分看起来更柔和
So it＇s still seeing through our base layer，让底下图层的颜色能够稍微透出来
which is these two there．
也就是这两层
Here，also you see by making these area darker，这里你可以看到当你把这部分的颜色加深时
all of a sudden this part is popping out．
旁边这部分一下子就变得显眼了
So there＇s a lot of push and pull like sculpting，所以这其中有许多的推拉 就像雕塑一样
like you have the big shapes first and then you get into details．你要先确定大概形状 然后再考虑细节

Start chiseling the smaller moments out and making the piece more refined that way．雕琢每个小部分 让它更加精细

So now，I have all my secondary shapes in their happy place，现在我已经完成了所有的二级形状
happily blending with the primary shapes．
它们和主要图形也都完美融合了
I think it＇s definitely an improvement from where we come from．我认为我们比开始的时候有了很大的进展

But overall，I feel it is still lacking some of that warmth of the light．但总的来说 我还是觉得这幅画缺少一点阳光的温暖

So now，we＇re actually going to actively change these color所以现在我们要积极地变更这些颜色
with those helpful adjustment tools that are available in Photoshop．在Photoshop里这些调整工具的帮助下

So this is one proof that digital tool has that traditional tool doesn＇t，这是电子工具比传统工具厉害的地方
like if you painted something，
you can＇t just make a slide and make
你不可能仅仅是滑动一下
it into higher intensity or shift it into a different hue．
就让颜色的浓度增加 或改变成另一个颜色

But we can in this world．
但是在电子世界里我们可以这样

So we＇ve got to take advantage of that．
我们要好好利用这一点

For example here，I think I wish there was
比如这里 我 希望
a little bit more warmth with these strands on here compared to down here．
这几缕头发比下边这部分的要更暖一点
So I＇m going to get into the hair layers，我要选择头发所在的图层
see I title that hair details．
我看到了这个叫＂头发细节＂的图层

I＇m going to go into Hue／Saturation．
找到＂色相／饱和度＂
Remember we talked about that early on．
记得我们之前讲过吗
So this is the tool that allows you to manipulate这个工具让你可以调整
the hue saturation of color you already have．
已有颜色的色相和饱和度

Then you can just like slide around to see．
你可以随意滑动 看下效果
Well，that＇s pretty cool，还挺酷的

I mean like having a purple highlight．
如果高光部分是紫色的话
But I think I＇m going for something a little bit more harmonious．
但我还是会选择更和谐一点的颜色

Loving the yellow，but a little too intense．
喜欢这个黄色 但是有点太显眼了
So maybe not that much．
可能不这么黄会好一点
Maybe let＇s say like a 15 and a little bit higher．
试一下色相调到15饱和度再高一点
So this allows us to shift the hue along on that color slider．
这个工具让我们可以用这个滑动条来改变色相
This，I＇m increasing the saturation a bit and then that＇s the brightness．
这个可以增加饱和度 这个可以调整亮度
I think for the brightness，
我觉得亮度
we can just have it to be the same．
就像之前这样就好了
With the preview，this is what I use a lot．这个预览功能我经常用

I find really helpful is to compare the before and after，它能够比较修改前后的画面
and that＇s so great at making decision．
这对我们做决定很有帮助
I think it＇s an improvement，我觉得这个调整不错
so I＇m going to go for it．
可以把它保留下来
I think overall，the color does feels a little bit dull as well．
我觉得总体来看颜色感觉有点单调
So Let me go into the background and up that as well，选中＂背景＂图层 然后像刚刚那样
giving it a bit more saturation．
增加一点饱和度
So now see，compare it．
然后比较一下
Feels a lot warmer．

## 画面看起来更暖了

Yeah．Then this is really fun part
接下来这一步又很有趣了
as you can start going into secondary shapes and then start changing individual colors．你可以开始给你的二级形状替换颜色了

Now，we click off＂Sample all layers＂．
取消选中＂对所有图层取样＂
So it＇s only sampling those current layer．让它只对当前图层取样

I think this process can be more intuitive，我觉得这个过程可以更靠直觉一点
like what feels right．
跟着你的感觉走
I mean in some way，
从某种程度上来说
I＇m just like spacing things out for this image．
我挺喜欢这幅图里的树叶之间有一点颜色间隔
So it looks like not all the leaf color change is at one place．
这样就看起来不像所有树叶的颜色变化都在一个地方
Okay．So maybe it＇ll be cool if some of
好了 如果有些树叶有一点蓝色
the leaves is a little bit more on the blue side．
感觉会挺不错
Because I mean if you really look at a plant like their color is so complex and因为如果你仔细观察会发现植物的颜色是很复杂的
it＇s impossible to completely emulate that part．
你不太可能完全仿照出来
Here we have changed just a few leaves，现在我们只改变了一些叶子的颜色
and all of a sudden，
突然之间
these trees feels like it has so much more color or just richness in color because这棵树的颜色就感觉丰富了许多

I spaced out the different blue leaves．
因为我用蓝色的树叶制造了颜色的间隔
Now，I＇m going to go on with the lighter leaves as well．
现在我要继续处理浅色的树叶
Again，spacing it out，岔开来选择
and then changing．
然后改变颜色
I feel like why digital tool sometimes is so great for people who are not familiar with color，我觉得有时候电子工具对不熟悉颜色的人来说非常有益
because you can really see what is changing是因为你可以看到是颜色的什么性质在改变
even without really knowing the theory behind it．
即使你不了解背后的原理
But then through this process，但是通过这个过程
you are actually learning how color work．
你其实是在学习颜色是怎样运作的
So it＇s almost like you＇re learning while you＇re doing it，which is really great．
它就像在实践中学习 这一点非常好
Then you can keep going with the rest of the little shapes．
你可以继续编辑剩下的这些小的形状了

## 16．Finishing Touches

So at this stage，
到了现在这个程度
I think we are almost done．
我认为我们基本完成了
What I like to do usually when I wrap up a pieces is to really在一个作品的结尾阶段时我通常喜欢
push the volume even more with some shadows and highlights．
通过阴影和高光进一步提升画面的质感
That＇s really the fun part，

这一部分非常好玩
because it just makes the objects a lot more pronounced all over sudden．
因为它一下子就让物体鲜明很多
So what I＇m going to do first，所以我首先要做的
is to add another layer called women shadow on top of the women layer，是在＂女性＂的图层上新建一个图层叫做＂女性的影子＂
and I like to create Clipping Mask．
然后我要创建一个剪贴蒙版
What that means is，它的意思是
see how that little arrow，看这个小箭头
it means that now is attached to those folder．
它是指它现在和这一组连接在一起了
So whatever I draw，所以不管我画什么
it only appear in the area where the base layer is．
都只会出现在最底部图层的区域里
So what the layer that＇s being contained in this folder．
也就是说它被限制在了这一组里的图层的区域里
So if I release the Clipping Mask，如果我释放这个剪贴蒙版
you can tell just like drawing it everywhere．
你可以看到我就可以在画面里的任意地方画了
So it means that the effects I＇m doing whatever is only它意味着我不管做什么效果
applying to this layer and no other pixels in the background．
都只应用在这个图层里 不会改变背景里的画面
So that comes in really handy when doing shadow，这让我们在创建阴影的时候方便许多
because you don＇t need to really worry about the orient to the outline really clean．因为你不需要担心 阴影的边缘部分也会很干净利落

Let me show you what I mean．
让我给你展示一下我所说的是什么意思
For example，I want a little of that cash shadow here，right？比如 我想在这里投一点点阴影

So with this edge，所以在这个边缘的地方
you have to be a little bit careful because it is in the same layer，你得小心一点 因为头发和身体的图层是在同一组里的
the hair and the flesh is group in the same woman layer．
它们都被分在＂女性＂这个组里
But once I create Clipping Mask，但一旦我创建一个剪贴蒙版
see how these parts just got automatically cleanup．
看 这个部分就被自动清理干净了
Then what I do is select Multiply and that然后我在这儿选择＂正片叠底＂
gives a darker shade of color by blending the blue I just pick up，它把我刚刚用的蓝色和身体的肤色相混合
and the flesh color of this body．
创造了一个颜色深一点的阴影
Usually，with a warmer light，通常在暖光的情况下
you have a cooler shadows．
阴影应该更冷一点
So in this case，I just pick up this blue，所以我选取这个蓝色
sort of a neutral blue and then apply it．
稍微中性的蓝色 然后在这里上色
So when you use Multiply，当你使用正片叠底的时候
usually the color get more intense as well，颜色通常会变得更强烈
so I tend to use a more neutral color to do that．

## 所以我倾向于用更中性的颜色来做正片叠底

Again，this is what it looks like when is normal，这是它正常情况下看起来的样子
and then when is multiply，这是它正片叠底的时候
it looks like this with the layer Clipping Mask．
再加上剪贴蒙版 它看起来就是这样了
So I＇m going to go ahead and at where I think there should be shadow like for example，所以我要继续在我觉得应该有阴影的地方重复这些操作
under the armpits here．
比如腋下这块
I＇m also going to attach this resources．
我会上传相关的资源
So if you want to really understand how those blending layers work，如果你想真正理解这些混合模式的原理
like all of this，比如这些
they all do different things and they are especially helpful when they come to它们都有不同的作用 且在你处理图片的时候都非常有用
manipulating photos that resources is going to be very helpful but usually，资源里会有详细介绍 但是通常来说
the blending mode I use most is the multiply for shadow．
我用得最多的混合模式就是正片叠底用来处理阴影
For example，at the shadow，比如 这里的阴影

I feel like it shouldn＇t be this harsh．
我觉得它不应该这么生硬
When it got to the dress part，在这个裙子的部分
then again we are bringing out a very handy tools，layer mask，我又要使用这个非常方便的工具了 图层蒙版
and having that part sort of be erase，
擦除掉一点这个部分
and that follow the curve a lot nicer．
让它和这个弧度更好地融合
We can also add some shadows to the leaves to pop individual ones我们也可以通过增加阴影来突出某些树叶
even better to give the illusion of a overall more voluminous tree．让整体看上去好像更有立体感

Same thing Multiply，for example here．同样使用＂正片叠底＂，比如在这里

Then，you can see maybe this color feels a little bit你可以看到这个颜色可能有点
too light when we＇re using on the tree．
太浅了 当我们把它用在树这里的时候
Then，we can always go back and then adjust that as well，我们可以倒回去调整它
bringing the value down like around there，把明度调低大概到这儿
and then making it into normal．
然后把混合模式调回＂正常＂
So you can pick that up，
你可以提取
that color we just create it up，我们刚刚创建的这个颜色
bring it back to Multiply so you can see what that looks然后再改回＂正片叠底＂模式 你可以看看
like when it＇s being used as a shadow color．
用它作为阴影色的话看起来是什么样的
We can keep going on that．
我们继续刚刚的操作
But see how this area of the leaves feels like is popping看这一部分的叶子已经感觉比下面这部分突出了许多
from this area so you＇re just adding extra volume to that shape．所以你刚刚给这个部分增加了额外的立体感

Then，we can also add some highlights，where highlights，我们也可以加一点高光
usually are such as the cheek bones，在通常应该有高光的地方 比如颧骨
can put it into detail folder although we have here．
可以把它放到我们之前创建的＂细节＂这一组
Then，with highlight，you can just pick the color as on here你可以选择你的高光颜色 比如这儿
and then we here choose a value．
然后我们选择明度
Well，this is very close to white already，它已经很接近白色了
so there＇s not much more we can go from there．
所以我们改变不了太多了
But you can still see，
但是你可以看到还是有一点变化的
to move up the layer because it was behind the line layer．我把这个图层移到了上面 因为它刚刚被线条的图层遮挡住了

Then，that feels like a little too much，这感觉好像有点过了
so lets dial down the opacity．
让我们调低不透明度
White feels like it doesn＇t work on the lip as the highlights，白色用做嘴唇上的高光感觉不太合适
that＇s just too white，有点太白了
so let＇s pick a light pink color，then there we go．我们选一个浅粉色涂上去 好了

If you feel like maybe the flower can you some dots，如果你想要给这朵花加上露珠
so it looks more like dewy and cute，让它看起来更晶芗可爱
we can do that too．

## 我们也可以这样做

But this place is just like adding但这就像是
the really final touches because the big part is already done．
最后的点睛之笔了 因为大的部分已经完成了
Now，it＇s just like the cherry on top of the cake．
它就像在蛋糕顶部放一颗樱桃
So I think I＇m done，
我觉得我差不多搞定了
and I think the piece is at a good place．
这个作品看上去不错
I think you guys should also compare
我觉得你们应该比较一下
your final piece to the first version when you just apply
自己最后的成果和最开始
the swatches from other people＇s palette you just saw and then只用别人色板上的颜色的色块的版本
see how far you have come along and how you have made that onto your own．看看你进步了多少 是怎样在自己的作品里运用我们讲过的知识的

So next step，I＇m just going to show you how you＇ve gone to export your piece so接下来我要教你怎么导出作品
you can share it with all your friends and families and ex boyfriends and ex girlfriends．让你可以和你的朋友和家人分享，甚至给你前男友，前女友炫耀一下

## 17．Export Your Piece

Now we have done our hard work，现在我们已经辛苦地完成我们的作品了
of course，we have to tell the world about it．
当然我们要让所有人都知道
The Photoshop files and layer as way to big to really share online， Photoshop的文件和图层要在网上分享的话太大了
so now we＇re going to export it．
所以我们要导出它

What we＇re going to do is go to File，我们要做的是点击＂文件＂

Export，Save for Web because l＇m assuming you want to share it online． ＂导出＂，＂储存为Web所用格式＂因为我觉得你们是想把它分享到网上

Save it as JPEG unless you＇re making like GIF thing．We＇re not．选择存为JPEG 除非你想要做成GIF 我们不做那个

I wanted it be JPEG high，我想要选JPEG high
it just mean good quality．这样图像质量比较高

Here you can look 4－Up．
你可以在这里选择＂四联＂
What it means is that it shows you the four different version of what它指的是给你展示四种不同版本的图片质量
quality is as a quality goes down like here 15 percent．
质量每次降低百分之十五
The file size is going to decrease with it．
文件大小也会随之减小
I guess you just have to find that optimal point
你得要找到一个满意的点
that you feel that it is a good size like maybe
你觉得大小合适
you don＇t want to post something that＇s like 59 megabyte that no one can open．就像你不会想发布一个 59 MB 的文件在网上没人能打得开

But it＇s still good－qualitynot to really give your work the credit that＇s due．但是它的图像质量仍然要好你也想让你的作品得到赞扬吧

Here I think 60 looks pretty good and you can always change这里我觉得百分之60看起来挺不错的 你也可以在这更改
your quality that to see if it makes any different，like 80.
你的图片质量 看看它有没有什么变化比如改到百分之 80
So one other thing that really
另外一个有助于
help with reducing the quality and size is by limiting the color．

## 压缩图片质量和大小的方法是限制颜色的数量

In our case，the color is not that complicated．
我们的作品的颜色不是很复杂
So you don＇t see a very big different but if you see like，所以它不会有特别大的差别但如果你
use a photo or use something with a lot of variety of colors，用一张照片或其它色彩很丰富的图片
then as the quality goes down，随着图片质量降低
it＇s pretty noticeable like some colors just won＇t be there anymore．有些颜色很明显的就消失了

Click Convert to sRGB if you were not working in it or just点击选中＂转换为 $s R G B$＂如果你之前没有选中它
click it to be safe because Internet browsers use sRGB．
这是为了保险起见因为浏览器用的就是sRGB色彩模式
Right now my size is pretty big
现在我的图像尺寸挺大的
because I feel that I might want to print this，I like this piece．
因为我觉得我可能会想要把它打印出来 我喜欢这个作品
It was worked at 300 dpi ，它的分辨率是 300 dpi
so this is really big．
所以它真的挺大的
I think for online，我觉得如果只在网上分享
like around 1700 （wide）is already really good．大概1700分辨率宽就非常不错了

It＇s good enough for like a full flush on your website page and just check everything．它对于你把作品在网页上完整地展示出来就足够了然后检查一遍

Copyright，Contact Info，that depends if you want to have it， ＂版权和联系信息＂，取决于你想不想要放上去
and you can set it in a different part of Photoshop．
你可以在Photoshop里另外一处设置它

Preview，Monitor Color，yes， ＂预览＂，＂显示器颜色＂，对的，
yes and you just save．
对的，你只要保存就行了
Wait for it load，then you can save it as awesome piece into for example the desktop．等它加载 你可以把它储存为＂了不起的作品＂，存到，比如说，桌面上

Image，JPEG，yes，save．
＂仅限图像＂，＂JPEG＂，对的，＂保存＂
Then we＇ll have our awesome piece right here．
然后我们就完成了这幅优秀的作品

## 18．Final Thoughts

I really hope that you enjoyed the project and to let you learn something new．我真心地希望你喜欢这门课 并从中有所收获

I think the biggest takeaway for this class is to conquer your fear in color．我认为这门课最想要做的是帮你克服对颜色的畏惧

So I think stealing other people＇s color palette is really just the first step．借鉴别人的配色方案仅仅是第一步

When I started having a better understanding of colors，当我开始对颜色有更深的了解后

My palette definitely expanded，我的色板无疑扩展了
and I feel that because of that，我感觉正是因为如此

I have a wider range of vocabulary，我建立了更完善的视觉语言
visually to approach different subject matters．
去描绘不同的主题
So I hope that now you find color a little less intimidating and excited to explore more．我希望你现在不再觉得颜色是那么令人害怕了 并想要继续进行探索

I can＇t wait to see what you have created．
我等不及想看你们的作品了
Thank you so much for taking this class．

非常感谢你们参与这门课程

