# TRANSCRIPT OF PROCEEDINGS

In the Matter of:                     )
                                      )
COPYRIGHT ON ARTIFICIAL               )
INTELLIGENCE AND VISUAL ARTS          )
LISTENING SESSION                     )
                                      )

Pages:     1 through 140

Place:     Washington, D.C.

Date:      May 2, 2023

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In the Matter of:                   )
                                    )
COPYRIGHT ON ARTIFICIAL             )
INTELLIGENCE AND VISUAL ARTS        )
LISTENING SESSION                   )
                                    )

                                    Suite 206
                                    Heritage Reporting
                                       Corporation
                                    1220 L Street, NW
                                    Washington, D.C.

                                    Tuesday,
                                    May 2, 2023

        The parties met remotely, pursuant to the notice,

at 1:00 p.m.

            ATTENDEES:

            MARIA STRONG, Associate Register of Copyrights
              and Director of Policy and International
              Affairs
            MARK GRAY, Assistant General Counsel
            EMILY LANZA, Counsel
            NICHOLAS BARTELT, Attorney-Advisor
            DAVID WELKOWITZ, Attorney-Advisor
            JORDANA RUBEL, Assistant General Counsel
            JALYCE MANGUM, Attorney-Advisor
            J. SCOTT EVANS, Adobe
            BEN BROOKS, Stability AI
            ALICIA CALZADA, National Press Photographers
              Association
            SARAH CONLEY ODENKIRK, Cowan, DeBaets, Abrahams &
              Sheppard
            KARLA ORTIZ, freelance concept artist
            CURT LEVEY, Committee for Justice
            REBECCA BLAKE, Graphic Artists Guild
            JAMES GATTO, Sheppard Mullin
            ALEX RINDELS, Jasper AI
            PAUL REINITZ, Getty Images
            LUC BOULET, Professional Photographers of America
            HEATHER WHITNEY, Morrison & Foerster
            DANIEL TAKASH, The Niskanen Center

ATTENDEES:  (Cont'd.)

ZARA VARIN, Dual Wield Studio
DANIEL GERVAIS, Vanderbilt University Law School
JAMES SILVERBERG, American Society for Collective
  Rights Licensing
TOM LOCKLEY, Grey Owl Audio
MATTHEW CUNNINGHAM, Cunningham Concept Design
BRIAN FRYE, University of Kentucky College of Law
NETTRIC GASKINS, freelance artist
PHUC PHAM, Freelance Solidarity Project
ANKIT SAHN, Ajay Sahni Associates
JEFFREY SEDLIK, PLUS Coalition
PATRICIA SIGMON, artist/art director
DELANIE WEST, Be Super Creative

1    P R O C E E D I N G S

2                                        (1:00 p.m.)

3              MR. GRAY:  Hello, everyone.  Thank you very

4    much for joining us today.  We are going to start our

5    session now.

6              Welcome to the United States Copyright

7    Office's Listening Session on Artificial Intelligence

8    and the Visual Arts.  Today, we are going to be

9    discussing a variety of issues in the visual arts

10   space.

11             My name is Mark Gray, first off.  I'm an

12   Assistant General Counsel here in the Office of the

13   General Counsel.

14             Before we start our first panel, I would

15   like to introduce Maria Strong for opening remarks.

16   Maria is an Associate Registrar of Copyrights, as well

17   as the Director of Policy and International Affairs

18   here at the U.S. Copyright Office.

19             Maria?

20             MS. STRONG:  Thanks, Mark, and welcome,

21   everybody, to the Copyright Office's Public Listening

22   Session on Artificial Intelligence and Visual Arts.

23   In copyright law, works of visual arts are broadly

24   defined as pictorial, graphic, and sculptural works.

25   Some examples include two-dimensional and three-

1   dimensional works of fine graphic and applied art,

2   photographs, prints and art reproductions, maps,

3   globes, charts, diagrams, models, and technical

4   drawings, including architectural plans.

5           Because the visual arts include a wide

6   variety of works, today, we will ask broad questions

7   to facilitate discussion across each participant's

8   area of expertise.

9           It's likely that almost everyone on this

10  webinar has seen various images that deep learning

11  text-to-image models can produce based on text

12  prompts.  We've heard concern from artists and

13  photographers about what the training and deployment

14  of these models might mean for their livelihoods and

15  their industries both in terms of the input of their

16  own images into these models, as well as the

17  excitement and concerns related to the outputs.

18          And the purpose of our session today is to

19  discuss these issues.  We want to hear how the public

20  is thinking about policy issues raised by these

21  technologies.

22          To begin to address the copyrightability and

23  registration issues raised by works generated using AI

24  tools, the Office recently issued new registration

25  guidance in mid-March.  That guidance makes clear that

1    applicants have a duty to disclose the inclusion of

2    AI-generated content in works submitted for

3    registration.  It outlines how to do so, how to update

4    pending applications, and how to correct the public

5    record on copyright claims that have already been

6    registered without the required disclosure.

7              There was a lot of interest in today's

8    event.  Unfortunately, we were not able to accommodate

9    all requests to speak.  But this is not the last

10   chance to share your views on AI with the Copyright

11   Office.  As we've said before and we'll say again,

12   there are two more listening sessions happening later

13   this month.  And down the road, we will be requesting

14   written input through a public notice of inquiry.

15   Please visit our website, copyright.gov/AI, for more

16   information and resources on our AI initiative.

17             Finally, we thank our panelists in advance

18   for contributing to today's discussion and

19   conversation.  This is a complex topic and a deeply

20   personal one for all our panelists, whether they are

21   users or developers of AI technology, artists whose

22   works help train that technology, or creators

23   contemplating how AI will affect their careers.  We

24   are all looking forward to a thoughtful and respectful

25   dialogue.

1          Let me turn the mic back to Mark Gray to

2     outline the various logistics for today's session.

3     Thank you.

4          MR. GRAY:  Thank you very much, Maria.

5          So, as a quick reminder, before we get into

6     specifics, today's listening session is the second of

7     a series of listening sessions that we are doing here

8     at the Copyright Office going through the end of May.

9     Each of our sessions is going to look at different

10    topics, different types of works, and, as a result, is

11    going to have different panelists and may even use

12    different formats.

13         So, after today, we have two more sessions

14    scheduled.  There is a session on May 17, Wednesday,

15    which will be focusing on audiovisual works, which

16    would include movies and video games.  And our final

17    session will be on May 31, which will focus on musical

18    works and sound recordings.

19         The purpose behind these listening sessions

20    is to inform the Office's overall AI initiative, so

21    some of the questions our panelists raise may be ones

22    that we seek to explore further in written comments

23    later this year.  So please keep in mind that while

24    there are a handful of my colleagues here from the

25    Copyright Office on today on video, the rest of the

1    Office is in the audience and is listening, and all of

2    this is going to help inform our work.

3         The schedule for today, the session format

4    is going to be two panels of different sets of

5    speakers, followed by a third segment where a set of

6    additional speakers will get the chance to share brief

7    remarks.

8         We are making a video recording of this,

9    both of this session as well as the other three.  We

10   are trying to get those online within three weeks of

11   each session taking place, so please keep your eyes

12   peeled for that if you have any friends or colleagues

13   who don't have the opportunity to watch the session

14   today.

15        Before we get started, a few Zoom

16   housekeeping notes.  If you are a panelist who is not

17   speaking at the current session, please keep your

18   camera and microphone off and on mute.  And then,

19   likewise, if you are a panelist, please keep your

20   camera on and be ready to go off of mute when you're

21   speaking.

22        We will be recording the session today.  As

23   I mentioned, the recording will try to go up in about

24   three weeks from today.  And we have enabled Zoom's

25   transcription functionality for those of you who are

1    interested in following along with captions.

2          The way we're going to do the first panel is

3    we're going to start with a brief introduction and

4    short statement by each of the panel participants if

5    they so desire.  We'd like you to try to keep those to

6    two minutes.  We're going to be keeping an eye and the

7    moderators may need to cut you off if it goes a little

8    long just so we can keep everything on schedule.

9        After those introductions and brief remarks,

10    we're going to do a moderated listening session.  The

11    panelists have received a set of broad questions in

12    advance.  Those are meant to prompt and guide a

13    discussion, but panelists and participants are welcome

14    to share any other relevant perspectives or

15    experiences they think are important for the Copyright

16    Office to hear.

17          If you are a panelist, please try to use

18    Zoom's Raise Hand functionality, and we will try to

19    call on you in the order that you raise your hands

20    just to keep the conversation organized.

21          Please keep in mind this is a listening

22    session and not a debate, so there will be other

23    opportunities in the future for people to engage more

24    directly with competing views.  But the purpose today

25    is really to help the Office air out a variety of

 1    ideas and issues and perspectives for us to guide our

 2    own thinking.

 3            As a final note, I see we have some

 4    questions in the Q&A from the audience.

 5    Unfortunately, this is a listening session for the

 6    participants.  We are unable to accommodate audience

 7    questions.  So thank you so much for your interest.

 8    Please keep your eyes out on our website for future

 9    public participation and comment opportunities, but we

10    cannot take any comments today, unfortunately, from

11    you.

12            With that, I'm going to hand it over to our

13    moderators for the first session, Emily Lanza and Nick

14    Bartelt.  Emily is a Counsel in our Office of Policy &

15    International Affairs.  And Nick is an Attorney-

16    Advisor in the Office of the General Counsel.

17            Emily, the mic is yours.

18            MS. LANZA:  Thank you, Mark, and welcome,

19    everyone.  We will begin with introductions in the

20    order as stated on the agenda.

21            So, first up, Scott with Adobe, would you

22    like to go ahead?

23            MR. EVANS:  Sure.  Thank you for having me

24    today.  My name is J. Scott Evans, and I'm Senior

25    Director and Associate General Counsel at Adobe.

1          For over four decades, Adobe's mission has

2     been to empower our creative community with the tools

3     that they need to express their imagination and earn

4     their livelihoods in areas like photography, art,

5     music, filmmaking, and design.  AI and generative AI

6     specifically have profound impact in these areas, so

7     we really wanted to make sure that we, as we harness

8     the power of this new technology, we're doing so in a

9     way that empowers creators.

10          Last month, Adobe launched its generative AI

11     technology, Adobe Firefly.  Firefly's initial text-to-

12     image model was designed to be commercially safe; that

13     is, it was trained on images licensed from Adobe

14     stock, openly licensed content, and content in the

15     public domain.  We want our tools to be good for

16     enterprises and the creative community.

17          When it comes to copyright, we know that the

18     issue of training is one where the creative community

19     has concerns.  For this reason, through a technology

20     Adobe developed called Content Credentials, we're

21     enabling artists to attach a do-not-train tag that

22     will travel with their content wherever it goes.  With

23     industry adoption, it is our hope that this tag would

24     prevent the training on content that has the do-not-

25     train tag.  We are working with generative AI

1    technology companies to respect these tags.

2            From an output standpoint, for much of our

3    professional creative community, generative AI serves

4    as the front door to the creative process.  They're

5    changing the image.  They're adding colors, editing,

6    adding elements.  They're adding their own human

7    expression to the work.  So we need a way, a

8    transparent way, to track this expression.

9            Here, Content Credentials can function much

10   like an ingredients label.  They'll show you where the

11   image came from and what edits have been made to it.

12   So, for generative AI, it gives the creator a way to

13   show that they started with an AI generated image but,

14   most importantly, to demonstrate the human creativity

15   they brought to the work.

16           Finally, Content Credentials will bring a

17   level of transparency that is much needed with the age

18   of generative technology.  Adobe is automatically

19   attaching a Content Credential to images created with

20   Firefly to indicate the image was generated by AI.

21   We're working to drive transparency standards so that

22   together we can deploy this technology responsibly in

23   a way that respects creators and our communities at

24   large.

25           I thank you for having me today, and I look

1    forward to engaging further on these issues.

2              MS. LANZA:  Thank you, Scott.

3              Next up is Ben with Stability AI.

4              MR. BROOKS:  Well, thank you to the

5    Copyright Office for hosting us here today.

6              I lead public policy for Stability AI, a

7    leading developer of open source AI models designed to

8    unlock humanity's potential.  These include, as many

9    of you know, the latest versions of Stable Diffusion,

10   which is a model that takes a text prompt from users

11   and translates that prompt into a new image.  Users

12   can interact with these models either through a hosted

13   service, like an app or an API, or they can freely

14   use, integrate, and adapt the open source code subject

15   to our ethical use license.  Stability has also

16   launched a number of other image models as well as a

17   suite of language models.

18             Stable Diffusion is a type of latent

19   diffusion model.  So these models use content to learn

20   the relationship between words and visual features,

21   not unlike a student at a public gallery.  Based on

22   this acquired understanding and with creative

23   direction from the user, these models can help to

24   generate new works.  In this way, AI should be

25   understood as a tool to help artists express

1     themselves.  It's not a substitute for the artist.

2              Instead, AI can help to simplify the

3     creative process.  It can help existing creators boost

4     their productivity as part of a wider workflow.  And

5     it can also help to lower barriers to entry for people

6     who simply don't have the resources or training to

7     realize their creative potential today, including

8     those with life-altering injuries or disabilities.

9              As with other assistive technologies, from

10    paintbrushes to cameras to editing software, the user

11    ultimately determines the content and use of any

12    generated images.

13             I do want to acknowledge today the depth of

14    feeling on these issues among creators and developers.

15    AI is changing rapidly, and we understand that it can

16    feel highly disruptive.  We welcome a dialogue with

17    all members of the creative community about the fair

18    deployment of these technologies.  And through the

19    session today, I can share some details about how

20    we're working towards that goal in practice, whether

21    that be through new training techniques, authenticity

22    standards, and best practices for things like opt-

23    outs.  So thank you very much.

24             MS. LANZA:  Thank you, Ben.

25             Next up is Alicia.

1            MS. CALZADA:  Hi.  I'm Alicia Calzada.  I'm

2    the Deputy General Counsel for the National Press

3    Photographers Association.

4            First, I really appreciate the invitation

5    for NPPA to be a part of this event.  This is very

6    important to us and our members.

7            Before I was an attorney, I was a

8    photojournalist for 20 years.  And through NPPA, we

9    serve the -- we are the nation's premier organization

10   for visual journalists.  We serve still photographers

11   and videographers, and, frankly, most of our members

12   do both.

13           Some of the things we do include working to

14   support the First Amendment rights of visual

15   journalists.  We also advocate for their copyrights

16   and for greater copyright protection and for a strong

17   copyright system.  We also have a code of ethics that

18   is the industry standard among visual journalists, and

19   that is, of course, a very important piece of what I

20   hope we'll get into today.

21           NPPA has a few concerns related to AI.  The

22   first, of course, is copyright protection for

23   photographers against unauthorized use of their images

24   and unauthorized copying.  So we do support

25   legislation that accomplishes that.

 1          For us, it's not just about money.  As I

 2   mentioned, we care about ethics.  And for visual

 3   journalists, their reputation is one of their most

 4   valuable assets.  And so the right to control the use

 5   of their image and protect against misuse is very

 6   important.  When their photos are used in an unethical

 7   manner, it impacts them.  It impacts the entire

 8   industry, frankly.

 9          And we also think that news consumers have a

10   right to know the source and the authenticity of the

11   content that they're consuming, the news that they're

12   reading and watching.

13          Finally, a concern that we are monitoring is

14   that journalists, like many photographers, do use

15   technology in some ways that are, in fact, quite

16   ethical, and so we're watching what the Copyright

17   Office is doing as they frame the question of what is

18   copyrightable.  We understand that something entirely

19   AI-created might not be copyrightable, but we want to

20   make sure that in making policy we don't risk the

21   copyrightability of photographs that for generations,

22   frankly, have used special timers and triggers, such

23   as the kind of things a sports photographer or a

24   nature photographer might use.

25          So those are some of the things that are

1    sort of on our radar related to AI, and we're

2    definitely looking forward to this session and to

3    continued conversation on these issues.

4              MS. LANZA:  Thank you, Alicia.

5              Next up is Sarah.

6              MS. ODENKIRK:  Hi.  Thank you very much for

7    including me in today's conversation.  My name is

8    Sarah Conley Odenkirk, and I'm a partner with Cowan,

9    DeBaets, Abrahams & Sheppard.  I co-head the Los

10   Angeles office and also the Art Law Practice Group.

11             My deep involvement in the implications of

12   emerging technology and visual arts goes back almost

13   30 years with my dedication to representing artists

14   and also working to establish public policy around

15   visual art in public spaces.  The combination of these

16   elements in my practice has positioned me well to do a

17   lot of advising around the impact and implications of

18   blockchain technology and now AI, both from the

19   standpoint of the impact on creators as well as on

20   public policy.

21             It's crucial to maintain the focus on the

22   impact the technologies have on artists and artists'

23   abilities to continue to create and innovate.  This

24   becomes complex when we cannot easily determine when,

25   where, and how potential copies and other copyright

1    infringements may be occurring.

2         In order to explore possible futures, we

3    need to start by breaking down the processes used in

4    AI into their component parts as the analysis will

5    likely suggest different solutions at different

6    points.  Figuring out fair, enforceable, and

7    economically sound solutions to questions raised at

8    the point of training AIs will differ from determining

9    how to treat the output artists coax from these

10   platforms.  We also must distinguish the generic

11   generative process employed by commercial AI platforms

12   from the more bespoke process of generative art as a

13   medium employed by artists.

14        So I urge the Copyright Office to consider

15   the impacts on artists in light of the new structures

16   that are made possible with these technologies and to

17   adhere or even strengthen principles underpinning the

18   copyright law that support balancing the interests of

19   artists' innovation and creativity with the market

20   forces.  It may be time to consider more than just

21   guidance, more than just analyzing what is considered

22   copying or protectable.

23        I would love to see the Copyright Office

24   take the lead in championing technical solutions that

25   meaningfully address the way content is scraped,

1    sourced, and used, and explore realistic ways to track

2    IP rights and compensate creators.

3              MS. LANZA:  Thank you, Sarah.

4              Next up is Karla.

5              MS. ORTIZ:  So back in April of last year, I

6    saw a website called Weird and Wonderful AI Art.  It

7    had the names of many of my peers alongside work that

8    looked like theirs but wasn't.  I thought it's just a

9    new experiment.  Well, I asked my peers whose name I

10   saw on that website, and no one knew what this was and

11   no one had been asked to be a part of it.

12             So we tried to reach out to the folks who

13   were running the website, folks who are also selling

14   merchandise that looked like the studies they were

15   doing.  We asked them to please take down the work of

16   the artists who didn't want to be there.  Instead, we

17   got ghosted.  I thought this was small enough to

18   ignore, but little did I know this would be my first

19   encounter with generative AI.

20             Fast-forward to September-ish, and larger

21   generative AI models like Midjourney and Stable

22   Diffusion are now mainstream.  So I research again,

23   and I am horrified by what I found.  Almost the

24   entirety of my work and the work of almost every

25   artist I knew was scraped and utilized to train these

1    for-profit models.  I was mortified that this was done

2    without anyone's consent, credit, or compensation,

3    that once AI models are trained on our work, our work

4    could not be forgotten, and that generative AI

5    companies were even encouraging users to use our full

6    names to generate imagery that can look like our work.

7            For example, Polish artist Greg Rutkowski,

8    who in December, between Midjourney, Stability AI, and

9    the very problematic un-Stable Diffusion, Greg's name

10   had been used as a prompt for image generation about

11   400,000 times.

12           If there is one thing I want everyone to

13   remember is that this hyped technology is entirely

14   fueled by the ill-gotten data it is trained upon.  It

15   is unlike any tool that has come before as it is an

16   innovation that uniquely consumes and exploits the

17   innovation of others.  No other artistic tool is like

18   this, and I know.  I've used most of them.

19           In my opinion, to reward tech that relies on

20   the proceeds of theft by granting it copyright would

21   just add insult to injury.

22           Oh, also, my name is Karla Ortiz.  I am an

23   award-winning artist who works in film, game, TV,

24   galleries, you name it.  I worked on *Magic: The*

25   *Gathering*, *Guardians of the Galaxy Volume 3, Loki*, and

1    most notably known for my design of *Dr. Strange* for

2    the film adaptation.

3             I am also a plaintiff in one of the first

4    class-action lawsuits against generative AI companies,

5    specifically, Midjourney, DeviantArt, and, yes,

6    Stability AI.  Hi.

7             MS. LANZA:  Thank you, Karla.

8             Next up is Curt.

9             MR. LEVEY:  Hi there.  I'm Curt Levey,

10    President of the Committee for Justice.  We're a

11    nonprofit that focuses on a variety of legal and

12    policy issues, including intellectual property, AI,

13    tech policy.

14             There certainly are a number of very

15    interesting questions about AI and copyright.  I'd

16    like to focus on one of them, which is the

17    intersection of AI and copyright infringement, which

18    some of the other panelists have already alluded to.

19    That issue is at the forefront given recent high-

20    profile lawsuits claiming that generative AI, such as

21    DALL-E 2 or Stable Diffusion, are infringing by

22    training their AI models on a set of copyrighted

23    images, such as those owned by Getty Images, one of

24    the plaintiffs in these suits.

25             And I must admit there's some tension in

1    what I think about the issue at the heart of these

2    lawsuits.  I and the Committee for Justice favor

3    strong protection for creatives because that's the

4    best way to encourage creativity and innovation.

5           But, at the same time, I was an AI scientist

6    long ago in the 1990s before I was an attorney, and I

7    have a lot of experience in how AI, that is, the

8    neural networks at the heart of AI, learn from very

9    large numbers of examples, and at a deep level, it's

10   analogous to how human creators learn from a lifetime

11   of examples.  And we don't call that infringement when

12   a human does it, so it's hard for me to conclude that

13   it's infringement when done by AI.

14          Now some might say, why should we analogize

15   to humans?  And I would say, for one, we should be

16   intellectually consistent about how we analyze

17   copyright.  And number two, I think it's better to

18   borrow from precedents we know that assumed human

19   authorship than to invent the wheel over again for AI.

20   And, look, neither human nor machine learning depends

21   on retaining specific examples that they learn from.

22          So the lawsuits that I'm alluding to argue

23   that infringement springs from temporary copies made

24   during learning.  And I think my number one takeaway

25   would be, like it or not, a distinction between man

1 and machine based on temporary storage will ultimately

2 fail maybe not now but in the near future.  Not only

3 are there relatively weak legal arguments in terms of

4 temporary copies, the precedent on that, more

5 importantly, temporary storage of training examples is

6 the easiest way to train an AI model, but it's not

7 fundamentally required and it's not fundamentally

8 different from what humans do, and I'll get into that

9 more later if time permits.

10    But I think the good news is that the

11 protection for creators of the works that are used as

12 training examples can and will come from elsewhere,

13 where the generated output is too similar --

14    MS. LANZA:  Thank you, Curt.  I'm going to

15 have to -- sorry, I'm going to have to cut you off

16 there.

17    MR. LEVEY:  Okay.  Sure.

18    MS. LANZA:  But we'll have time during the

19 question to continue.

20    MR. LEVEY:  Sure.

21    MS. LANZA:  Rebecca, would you like to go

22 ahead, please?

23    MS. BLAKE:  Yes, I'm happy to go ahead.  And

24 I'm apologizing in advance for the construction that

25 has just started up outside my window.

1          My name is Rebecca Blake.  I'm the Advocacy

2     Liaison for the Graphic Artists Guild.  The Graphic

3     Artists Guild is a trade association representing the

4     interests of visual artists other than photographers,

5     illustrators, designers of all stripes, production

6     artists, cartoon and comic book artists, animators and

7     others.

8          Our mission is to protect the economic

9     interests of our members, and in that vein, we've long

10     advocated for greater copyright protections for

11     individual artists, fair labor and trade practices,

12     and policy which supports small creative businesses.

13     We welcome this opportunity to weigh in on AI

14     generative technologies.

15          Our members include artists who have

16     embraced generative AI in the creation of their own

17     original works and artists who, for various reasons,

18     have not adopted the use of generative AI or, in fact,

19     see it as a threat to their livelihoods.

20          While we support the ethical, legally

21     compliant development of AI as a tool for visual

22     artists, we have serious concerns about the copyright

23     and ethical questions raised by AI generative

24     technologies.  These include the inclusion of

25     copyrighted material in the training data sets without

1    permission or notification, which we see as a

2    copyright infringement not excused by fair use,

3    protections for artists' works as inputs into AI

4    generative platforms, the unfair competition in the

5    marketplace resulting from the massive generation of

6    images which may ape existing artists' styles or

7    replicate artists' works, confusion with the

8    registration of works containing AI-generated

9    material, and existing barriers to the affordable

10   registration of works created by visual artists other

11   than photographers.  And I hope we can go more into

12   this in the subsequent questions.

13             MS. LANZA:  Thank you, Rebecca.

14             And last but not least, James, would you

15   like to conclude the introductions, please?

16             MR. GATTO:  Yes.  Thank you.  Hi.  My name

17   is James Gatto.  I'm honored to have the opportunity

18   to share some views here today on the important

19   copyright issues with AI.  I'm a partner in the D.C.

20   office of Sheppard Mullin, where I lead our AI

21   practice.  I've been an IP attorney for 35 years.  I'm

22   also a member of the ABA IP Section AI Machine

23   Learning Task Force, but the views expressed today are

24   solely my own.

25             I've been doing work with AI for about two

1    decades, but, like others, I'm seeing a significant

2    increase in that work due to the meteoric rise of

3    generative AI.  Clients have a lot of questions.

4              I applaud the Copyright Office's initiative

5    to issue preliminary guidance on the examination of

6    applications involving AI-generated content.  I know

7    there's great debate in the community on these

8    guidelines, on authorship issues with AI, the level of

9    human involvement needed, and issues with joint

10   authorship.  I hope these listening sessions will

11   result in the Copyright Office keeping an open mind on

12   whether to tweak their guidance and provide further

13   clarity on some of the procedural aspects of the

14   guidance.

15             Some of the issues for which clarity would

16   be helpful are the following:

17             When does the level of detailed input or

18   prompts by a human provide sufficient basis for the

19   output to be deemed original intellectual conceptions

20   of the author and therefore protectable?

21             What is the relevance of predictability in

22   the authorship analysis?  This concept was part of the

23   basis for the Kashtanova decision but does not appear

24   in the guidance.

25             What level of detail is needed to comply

1      with the duty of disclosure regarding use of AI?

2                What is the copyrightability of a work where

3      a human uses AI-generated content as inspiration art

4      but does not copy it?

5                And what are the criteria for determining if

6      AI-generated content is more than de minimis such that

7      it should be explicitly excluded from the application?

8                AI is a powerful tool, and to promote the

9      constitutional mandate, the Copyright Office should

10     develop policy that promotes rather than deters its

11     use.  As a result of the guidance in the Kashtanova

12     decision, at least many companies that rely on

13     copyright protection for their content, including game

14     companies, artists, and many others, are concerned

15     about using generative AI and in some cases restrict

16     or limit employees' use of it.  That's not consistent

17     with the goal of promoting the use of technology.

18                So we hope through these sessions we get to

19     a happy medium where artists' rights can be respected

20     and tools can be used to facilitate the creation of

21     their expressive works.

22                MS. LANZA:  Great.  Thank you, James, and

23     thank you all for those introductions, and welcome

24     again.

25                So, to begin our discussion, I'll start off

1       with a question.  How is the training of artificial

2       intelligence models affecting your field or industry?

3       What should the Copyright Office know about the

4       technology's use of training materials when

5       considering the copyright issues related to training?

6               And, also, please be specific in your

7       answers in terms of kind of which part of the visual

8       arts ecosystem you're talking about.

9               So, great, I already see hands.  So, Karla,

10      you're the first on my screen.  Can you please go

11      ahead.

12              MS. ORTIZ:  Yeah, absolutely.  So,

13      basically, the training of artificial intelligence is

14      already affecting my particular field of

15      entertainment, specifically concept art, illustrators,

16      anything that requires a painter.  We're already

17      seeing the effects of these tools, you know, in our

18      industries.

19              Something to consider is the training of

20      these tools is very important.  When considering these

21      tools, you can't just focus on the output.  You have

22      to see the entire process as a whole.  And as a whole,

23      these tools, you know, particularly, you know, some of

24      the tools around here, like Stability AI and

25      specifically LAION, under the pretext of research,

1      gathered 5.8 billion text and image data from across

2      the Internet to train various AI/ML models for

3      commercial purposes.  Again, it was trained upon for

4      research and then switched immediately for commercial

5      purposes.  Technologists like Andy Baio call this, you

6      know, loophole data laundering.

7                But another thing that's important to note

8      is that this was done without consent, credit, or

9      compensation.  The work of myself and almost all of my

10     peers are in those data sets, again, and also our

11     names are, you know, encouraged to be utilized as

12     prompts so that users can get something that mimics or

13     feels similar to our work.

14               I personally am of the belief that the work

15     generated by these models is impressive only because

16     it is based upon the works of artists.  And, again,

17     this was done without consent.  And we're not even

18     talking about all the issues when it comes to

19     propaganda, identity theft, and so on.

20               One of the things that I will say as well

21     that the copyright should consider, and I won't take

22     much longer of anybody's time so people can have their

23     say, as one of the few artists in this panel, you

24     know, there's various others as well, but I'm a

25     teacher, and I can tell you that anthropomorphizing

1    these tools to equate it as human-like is a fool's

2    errand.  I've spoken to countless machine learning

3    experts, such as Dr. Timnit Gebru, such as Professor

4    Ben Zhao, and they all agree that it's not what's

5    happening.  This is a machine.  This is mathematic

6    algorithms.  You cannot equate it to a human.

7            And to further add and to give the

8    perspective of an artist, an artist doesn't look at a

9    bunch, like 100,000, images and is able to generate,

10   like, hundreds of images within seconds.  An artist

11   cannot do that.  Yes, I have my influences, but it's

12   not the only thing that goes into my work.  My life,

13   my experiences, my perspective, my technique, all of

14   that goes into the work.

15           Furthermore, something that I feel like a

16   lot of people miss in these discussions is technical

17   artistry, and one of the hardest things you can do

18   ever in the arts is be able to successfully mimic

19   another artist's style or another person's work.  It's

20   the hardest thing.  I consider myself masterful.  I

21   can't even do it.  In fact, it's so rare that they

22   even have documentaries on Netflix showcasing the few

23   artists that can successfully mimic, let's say, a

24   Leonardo da Vinci.

25           And depending on what that artist does with

1    that successful mimicry, if they sell it or if they do

2    anything commercial with it, you know, that could

3    potentially be called forgery.  So I don't know why --

4              MS. LANZA:  Thanks, Karla.  Sorry to

5    interrupt.

6              MS. ORTIZ:  Oh, yeah.  No, no, no, it's

7    totally cool.

8              MS. LANZA:  But, yeah, we just have a

9    couple --

10             MS. ORTIZ:  No, no, no.  Totally great.

11   Just wanted to drop that in.

12             MS. LANZA:  All right.  Thank you, Karla.

13             James, you're next on my screen.  Please go

14   ahead.

15             MR. GATTO:  Great.  Thank you.  I'll try to

16   be brief.

17             So, I mean, obviously, one of the core

18   issues with training AI model on copyright-protected

19   content is whether it's infringement and/or if fair

20   use applies, and, largely, that's going to be a fact-

21   specific question depending on the details.  I think

22   that to the extent there, you know, are any policy

23   considerations or guidance the Copyright Office, you

24   know, can provide in that, that might be helpful, but

25   there is a pretty significant existing body of law on

1    that, kind of the broad legal test.

2         I think some of the areas that should be

3    considered, consistent with what Scott said from

4    Adobe, there's a lot of tools out there that can be

5    used that help mitigate the problem, and whether those

6    tools should be mandated or, you know, some other role

7    the Copyright Office can play with respect to them

8    would be helpful.

9         Should AI tool providers be required to be

10   more transparent on the content they use to train

11   their models?  I think that's an important issue.

12        Should there be greater use of tools that

13   prevent AI from using copyrighted works to train AI?

14   Similar to how robots.txt works to prevent search

15   engines from indexing certain web content.  The

16   technology is there and some of the concerns can be

17   abated if these tools become mandated or just widely

18   used.

19        And the last point I'm going to make is

20   maybe not directly relevant to visual arts, but just,

21   you know, there's other content that using it is not a

22   problem because it's licensed, whether it's open

23   source software that's being used to train AI code

24   generators or like images that are under a permissive

25   license, like Creative Commons, as long as there's no

1       prohibition on commercial use, the use of it may be

2       permissible, but the question is then are there

3       licensed compliance obligations that need to be met

4       and, you know, whether and how those should be dealt

5       with in these contexts.  Those are just a few of the

6       issues I think would be helpful to consider.

7                   MS. LANZA:  Thanks, James.

8                   Alicia, you're next on my screen.  Please go

9       ahead.

10                  MS. CALZADA:  Thanks.  That's a really

11      interesting point about things like Creative Commons

12      that actually do have conditions to, you know, what

13      seems like on the surface an unlimited license, but,

14      actually, there are things you have to do in order to

15      earn that license.

16                  Back to the question about how it affects

17      our industry, the primary concern, as I mentioned

18      earlier, in our industry really is an ethical one, and

19      journalists rely on copyright as a means of

20      controlling how their work is used.

21                  And it's one thing to say, isn't it neat

22      what this computer can do while you're, you know, just

23      goofing off with friends or doing research or that

24      kind of thing, but, you know, when these works start

25      being used to create deepfakes or images that are used

1       to promote civil unrest, there are a lot of ways that

2       news images can be abused through this kind of a

3       process in very, very negative ways.

4             And the journalism industry really is

5       concerned about where that's going to go and how it

6       impacts the industry as a whole.  You know, we already

7       have editors who have for decades, you know, paid very

8       close attention, you know, to work that comes in to

9       ensure the quality of the sourcing and that kind of

10      thing.  But, on some level, there's things out there

11      in the world that we worry about people seeing and

12      thinking is journalism when it really isn't.

13            MS. LANZA:  Thanks, Alicia.

14            Next, Curt, you're next on my screen.

15      Please go ahead.

16            MR. LEVEY:  Sure.  Let me first briefly

17      finish what I was saying about the good news for

18      protection for creators, despite the fact that I do

19      think it's getting harder and harder to distinguish

20      between what humans do and machines do.  But,

21      regardless of how they're trained, where the generated

22      output is similar to one of the examples in the

23      training data or really any preexisting work, it's a

24      derivative work or an outright copy, and the licensing

25      requirements for derivative works need to be as

1      strictly enforced as for non-AI works.

2              And then, second, and some of the others

3      have alluded to this, since the source of the training

4      data is typically unlicensed data, I should say

5      publicly available data or web scraping, we need

6      strict enforcement of the website or database terms of

7      service.  And Mr. Evans mentioned a do-not-train tag.

8      That's a good example.

9              Also, when you said what should the

10     Copyright Office be aware of, I wanted to say a little

11     bit more about temporary storage and why that's not

12     fundamentally required.

13             Generative AI learns from a very large

14     number of examples, and so does a human artist or

15     author.  The artist or author is not born with that

16     ability here.  He or she learns from countless

17     examples of art, photography, music, written works, et

18     cetera, and, you know, more and more the human views

19     those examples on a website.  The human may purposely

20     make copies of the examples he used.  And even if he

21     doesn't purposely do it, his computer makes a

22     temporary copy as he views the image, reads the

23     written work, et cetera.  Yet we all dismiss that

24     copying as fair use, you know, if we even acknowledge

25     it at all.

          1              So what AI training does is not very

          2      different.  For convenience sake, the examples are put

          3      in a database, which a learning algorithm cycles

          4      through, and that is temporary copying.  But humans,

          5      like I said, often copy for convenience sake as well.

          6      And once the AI cycles through the examples in

          7      training, the examples can be thrown away.

          8              The trained model, consisting of millions or

          9      billions of weights, analogous to the synaptic

         10      connections in the human brain, retains no copies of

         11      the training examples.  Human memory, on the other

         12      hand, does remember at least some specific examples.

         13      So, in some sense, there's less of an infringement

         14      danger with AI than humans.  But, to be fair, neither

         15      humans nor AI depend on retaining the specific

         16      examples they learn.

         17              So, again, the problem with relying on the

         18      temporary copy argument is that it's not really

         19      necessary.  You could train the AI model by having it

         20      scroll through the very same images or written works

         21      that the human learns from.  In fact, the AI model

         22      could learn from, you know, data being relayed by a

         23      mobile robot that, you know, visits art galleries

         24      throughout the nation.  Someday, you know, that may be

         25      how it's done.  Think Google maps.  Either way, my

1    point is that hanging one's hat on temporary copying

2    is skating on very thin ice.

3              MS. LANZA:  Thank you, Curt.

4              Next up is Rebecca.  Please go ahead.

5              MS. BLAKE:  Yeah, gosh, there's just so much

6    to unpack from that previous answer.

7              Very quickly --

8              MS. LANZA:  Oh, Rebecca, you muted yourself.

9    Can you unmute?

10             MS. BLAKE:  I'm so sorry.

11             MS. LANZA:  That's all right.

12             MS. BLAKE:  Very quickly, some of our

13   members completely eschew using AI image generators.

14   They're concerned about the ethical concerns with the

15   way the image data sets were built.  They're worried

16   about copyrightability.  And they're worried about

17   exposing their clients to infringement.

18             Other members of the Graphic Artists Guild,

19   in fact, use AI image generators.  For the most part,

20   we're hearing that they use it for ideation but not

21   for the creation of completed works, or they use it to

22   generate elements of a much larger work, for example,

23   to create background graphics.

24             We do have one member who, in fact, has a

25   career in AI generative for an AI image generator as

1     part of that new generation that has achieved a

2     career.  However, we've been trying to gauge job loss,

3     job creation, job loss, and we're in very, very, very

4     early days to be able to do that.  It's something we

5     need to start tracking now that these generators have

6     been out almost a year.  However, we do hear a lot of

7     anecdotal evidence of job loss.  It's in particular

8     sectors.  That is hampered by the fact that many of

9     the artists working in these areas, in fact, sign NDAs

10    or are reluctant to go on the record discussing

11    projects that they've lost because they're afraid of

12    retaliation.  They work in a very small industry.

13          Of our members who do use generative AI, one

14    member stated that he was able to take on larger

15    projects with a smaller workforce.  So that does

16    indicate that generative AI permits a streamlining and

17    less hiring of artists.  And another member stated

18    that because she uses AI generative technology, she

19    was able to cease contracting to a certain number of

20    designers.  So, again, that indicates a benefit to one

21    member but at the loss of others.  So that's speaking

22    to the job market.

23          But I want to address two other things.

24    First of all was this idea, this equivalency of the

25    way machine learning works to the way human learning

1     works.  This is a false equivalency for a very, very

2     major reason.  When a human learns to draw, they will

3     ape, they will copy the styles or the works, existing

4     works of illustrators they admire.  This is very

5     common in the learning practice.

6           But there are ethical considerations,

7     copyright considerations, and best professional

8     practices that professional illustrators follow that

9     take them away from the wholesale copying of either a

10    style or, in fact, of an image itself.  This does not

11    occur with machine learning.  The machine is not

12    driven by a creative process, a desire to develop

13    one's own style, one's own mark, one's own creativity.

14    It's simply reiterates a style that it has been

15    learned on.  So there is no equivalency in the

16    outputs.

17          The second thing I just wanted to touch on

18    very briefly was this idea that there can be tags or

19    codes or metadata which is embedded in images which,

20    in fact, permits one to track whether or not an image

21    can be used for inclusion in a data set, whether it

22    can be ingested into a platform, et cetera.

23          There's a huge issue with that, which is

24    that Section 1202 of the Copyright Act permits the

25    removal of copyright management information, including

1    metadata, if that removal is done knowingly or with

2    reasonable grounds to know it will induce, et cetera,

3    et cetera, infringement.

4         We believe that section of the Act needs to

5    be modified so the removal of CMI, including metadata,

6    without permission of the copyright holder is

7    prohibited, regardless of whether or not it's done

8    knowingly to permit infringement.  We see metadata and

9    CMI as key to being able to protect artists' works in

10   an AI environment, but that failure in Section 1202

11   needs to be addressed.

12        MS. LANZA:  Thanks, Rebecca.

13        Next up is J. Scott.  Would you like to go

14   ahead?

15        MR. EVANS:  Sure.  You know, at Adobe, we

16   believe that if AI is done right, if this is done

17   right, it benefits both creators and consumers of

18   content because it does nothing but amplify human

19   creativity and intelligence.  It doesn't replace it.

20        And so what we see as a major issue here is

21   that creators now have limited resources to attribute

22   their work, especially when generative AI comes into

23   play.  One of the important things we need to do as a

24   collaboration with artists and technology is to put

25   creators at the forefront of this technology.

1          Creators want control over their work that

2     is used in generative AI training, and we need to give

3     them the tools in order to make those decisions.  We

4     know many creators that are very excited about this

5     technology and want their creativity to be used in

6     training these models.  They are very excited about

7     them.  But we do understand that there's a segment of

8     the community that is not excited and wants the

9     ability to prevent the use of their art in training,

10    and they should have an ability to do so.

11         And that's the reason Adobe has developed

12    the Content Credentials.  We worked very hard with

13    setting up an open-source industry standard with the

14    Coalition of Content Provenance and Authenticity, the

15    C2PA.  It's an open standard that platforms and

16    hardware manufacturers can put into their products

17    that will allow you to put these Content Credentials

18    that will surface them to users and developers of AI

19    technology so that those cues can be followed, and

20    that's something that we think that's very important.

21         We also think there may be technology where

22    artists could harness this technology by training

23    models based solely on their own style or brand and

24    then commercializing that and having that technology

25    and understanding that there are different ways that

1    this technology can be used is very important.

2              One of the ways the Copyright Office, I

3    think, can help in this is to encourage industry to

4    adopt these open standards that will give artists the

5    ability and tools in order to identify whether they

6    want to participate or don't want to participate and

7    encouraging that kind of proactivity among the

8    companies that are developing this technology to give

9    artists a tool to control their creative work.

10             MS. LANZA:  Thank you.

11             And, Sarah, please go ahead.

12             MS. ODENKIRK:  Thank you.  I think I'm going

13   to be reiterating a number of things that have already

14   been said, but, first, I'd like to say that, you know,

15   I think that there's a lot of reasons to be concerned

16   about AI in general.  There are big issues, big global

17   ethical issues that definitely need to be addressed.

18   Unfortunately, I think we do need to somewhat separate

19   those questions from these questions that we're

20   talking about with regard to copyright issues in order

21   to parse through things.  Otherwise, we're going to

22   very quickly get sidetracked with, you know, scary

23   potential future possibilities, which I don't think we

24   should ignore, but we need to separate that out of the

25   copyright conversation for now.

      1          There's clearly a lot of potential in

      2    addressing some of the training issues through

      3    metadata and through some of the tools that Mr. Evans

      4    was speaking about, as well as some other tools that

      5    have been developed and people are looking to in order

      6    to protect the content.

      7          And I'd like to underscore what Rebecca said

      8    with regard to Section 1202 and, you know, really

      9    needing to be concerned about the way in which the

     10    metadata can be taken off of content and thereby

     11    allowing it to be misused and really keeping creators

     12    from being able to track that data.

     13          So I think that the final point that I want

     14    to make is with regard to paying attention to the

     15    purpose of the use that the images are being scraped

     16    and collected for.  And if what we're talking about is

     17    using those images for the purpose of creating a

     18    commercial venture, a commercial product that's to be

     19    used to earn money, that's a very different use than

     20    artists looking at images and using tools in order to

     21    generate art, and while they're obviously connected, I

     22    think we need to look at them very separately in terms

     23    of figuring out what policies and laws and approaches

     24    we can take to protect creators in the front end of

     25    that process.

1          MS. LANZA:  Thank you, Sarah.

2          So, before we move on to Question 2, I just

3     want to make sure everyone had a chance to speak.

4          Ben, would you like to add anything to

5     Question 1 before we move on?

6          MR. BROOKS:  Yeah, thank you, Emily.  I

7     think just on this question of impact, I think these

8     go to a broader set of issues around style and

9     authenticity, and I do have remarks on training

10    specifically for later.  But I want to reiterate what

11    I said at the beginning, which is that we see AI as a

12    tool to help artists express themselves, but it's not

13    a substitute for the artist.

14         That said, we obviously support efforts to

15    improve creator control over their public content, and

16    we're focusing those efforts in three areas in

17    particular.  So one is around access to content.

18    Today, already, data sets like LAION-5B respect

19    protocols like robots.txt that indicate whether a

20    website consents to automated data aggregation.  But

21    we're also developing new ways to help creators

22    qualify the use of that public content for AI

23    training.

24         So one of the things we've done is we've

25    committed to honoring opt-out requests from creators

1     in the next wave of Stable Diffusion releases.  And

2     going forward, I think this was a point alluded to by

3     J. Scott, we're also exploring new standards for opt-

4     outs so that the opt-out metadata will travel with the

5     content wherever it goes subject to some of the

6     problems that have been flagged just a little while

7     ago.

8          The second area we're focusing on is

9     authenticity of content.  So we're working to

10    implement content authenticity standards, like C2PA,

11    with the Content Authenticity Initiative so that users

12    and platforms can better identify AI-assisted content.

13    By distinguishing AI-assisted content, these standards

14    can help to ensure that users apply an appropriate

15    standard of scrutiny in their interactions with that

16    content.  It can help to limit the spread of

17    disinformation through social media platforms.  And,

18    ultimately, it can also help to protect human artists

19    from unfair mimicry or passing off.

20          And the third and final point I just want to

21    make is the work that we're doing to improve the

22    quality of data sets.  So, for example, by improving

23    the diversity and reducing the duplication in training

24    data, we can help to mitigate the risk of things like

25    overfitting, which is where the system erroneously

1    overrepresents certain elements of a particular image

2    from the data set.  So, for example, if you've only

3    ever seen sunsets, you might think that the sky is

4    always orange.

5            In addition, by improving diversity in our

6    data sets, we can be more representative of diverse

7    cultures, language, demographics, and values, all of

8    which can help to mitigate the risk of bias in those

9    outputs.

10           So I think the final point on this question

11   I'll add is, you know, we believe the community will

12   continue to value human-generated content, right?  We

13   carry a complex digital camera in our pockets

14   everywhere we go, yet we continue to value painting.

15   Likewise, Photoshop didn't destroy photography.  We

16   have machines that can run faster than athletes, but

17   we continue to place a premium on sport.  And the same

18   will be true of visual arts in the post-AI creative

19   economy, particularly when we have some of these

20   content authenticity standards in place.

21           MS. LANZA:  Thank you, Ben.

22           I'll turn it over to my co-moderator, Nick,

23   for the next question.  Thank you.

24           MR. BARTELT:  Thanks, Emily, and thanks,

25   everyone.

1          I think the focus of the first question that

2     Emily had asked was a little bit more on the input and

3     the training.  So I think we'll shift the discussion a

4     bit to ask, what should the Copyright Office be aware

5     of regarding how these AI systems, and some of you

6     have already touched on this, how these AI systems

7     generate works of visual art?

8          And then, as sort of a subquestion there,

9     I'll ask, because I know we have limited time, is

10    that, you know, are there any copyright considerations

11    that vary based on the type of visual works that are

12    at issue there?

13         So I see James's hand first.

14         And I know, Karla, we had lost you a minute

15    ago, but I see you're on there too, so we'll go

16    through.

17         Go ahead, James.

18         MR. GATTO:  Great.  Yeah, so, obviously, the

19    operation of the AI tools vary, and each case is fact-

20    specific.  We recognize it's a challenge for the

21    Copyright Office to give guidance for all scenarios,

22    but there are a number of fact patterns that are

23    common.  And I think what would be helpful, one thing

24    that would be helpful, is kind of like the Patent

25    Office did with patent eligibility guidelines, if the

1    Copyright Office could provide examples of situations

2    that are used in generative AI that they would deem to

3    be copyright-protectable, that would be helpful.

4        The other thing is, just to take one use case, so

5    I do a lot of work with NFTs as well, and there's a

6    lot of concern around the use of generative AI for

7    some of these NFT projects.  If I create NFTs that

8    represent images and, for example, I specify two

9    images of dogs, each having a different collar that I

10   designed and different colors, and I use AI just to

11   generate the permutations of those artistic elements

12   that I created under my control, saying, produce those

13   permutations, AI should just be deemed a tool, even

14   though it's output from a generative AI.

15       The question is, as you scale that up and

16   maybe some of the parameters are a little bit looser,

17   where does the line get crossed between it being my

18   creative expression and it being too much input from

19   generative AI?  That's one practical use case that

20   we've seen in a number of these NFT projects.

21       So I think that there's many other -- I'll

22   be brief so others can talk -- but there's many other,

23   I'd say, common use cases that we're seeing, and I

24   think that any input or guidance or examples that the

25   Copyright Office could provide would be very helpful

1    to, you know, assist those in trying to figure out

2    where the line is and recognizing that, you know,

3    there are fact-specific differences.  Thank you.

4            MR. BARTELT:  Okay.  Thanks, James.

5            Actually, because, you know, Karla had her

6    hand up before we had switched the question, we'll go

7    Karla and then Ben and then Curt.

8            So go ahead, Karla.

9            MS. ORTIZ:  Wholeheartedly appreciate it.

10           So something that I think the Copyright

11   Office should be aware of regarding how AI systems

12   generate work of visual art, there's been some talk at

13   the idea of, like, whether these models copy,

14   remember, memorize, whatever the word, overfit,

15   whatever the word really is.

16           Something I'd like the Office to know is

17   that studies are being done concerning these issues.

18   For example, there's research from the University of

19   Maryland and the University of New York.  They did a

20   study that found diffusion models generated high

21   fidelity reproductions, which is basically plagiarism,

22   at an estimated 1.88 percent, and it is estimated by

23   these researchers to be higher.

24           Cursory numbers, but let's take a look at

25   like Lensa AI, which uses Stable Diffusion, has about,

1    you know, this was around December, has about 25

2    million downloads, and gives users about 50 trials

3    each.  At 1.88 percent, that's potentially 23,500,000

4    generated images that could be similar to training

5    data.  And we see this consistently with, like, for

6    example, Steve McCurry's famous Afghan girl can be

7    perfectly plagiarized by these tools, as it happened

8    in Midjourney.

9            Another thing that I'd like, you know, folks

10   to consider as well is, like, the music, the, you

11   know, Stable Diffusion -- no offense, Ben -- but

12   Stable Diffusion already has made the case for us.  I

13   mean AI companies have already made the case for us.

14           For example, Dance Diffusion was a music

15   program developed by Harmonai, which has links to

16   Stable Diffusion, and as they trained their model,

17   they stayed clear from copyrighted data and only did

18   public domain.  And one of the things that they quoted

19   on is, because diffusion models are prone to

20   memorization and overfitting, releasing a model

21   trained on copyrighted data could potentially result

22   in legal issues.  Why was this done for the music

23   industry but not the visual industries?

24           And this also goes to the point to why opt-

25   out is inefficient, regardless of what it should --

1    the standard should be opt-in, because opt-out places

2    an undue burden on people who may not know the

3    language, who may not be online, who may not even,

4    like, know what's going on.  Companies cannot just

5    arbitrarily grab our copyrighted works, our data, and

6    just say, this is ours, and then later on we have to

7    remove ourselves, which is why opt-out is important.

8            The other thing that's really important,

9    again, is transparency.  And I know that Adobe, you

10   know, is mentioning this, but, for example, we need to

11   really know what, for example, open license works

12   mean.  We really need to know and have an open data

13   set to see exactly what it means so that licensors,

14   you know, can actually, like, fulfill their licenses.

15   And --

16           MR. BARTELT:  All right.  Thanks.  Thanks,

17   Karla.  So I want to make --

18           MS. ORTIZ:  Oh, I forgot the guidance on

19   you, but you guys go on ahead.  If we have time later,

20   let's do it.  I'm sorry.

21           MR. BARTELT:  Okay.  Yeah.  I just want to

22   make sure we get through everybody in our remaining 10

23   or so minutes.

24           MS. ORTIZ:  Yeah.

25           MR. BARTELT:  So I'll go back to you now,

1    Ben.  I think you mentioned, what should the Office be

2    aware of of how these AI systems generate works?

3              MR. BROOKS:  Yeah, look, I think it's

4    important that we properly characterize the training

5    process, right?  These models are not, as is sometimes

6    being described, you know, a collage machine or a

7    search index for images.  These models review pairs of

8    text, captions, and images to learn the relationships,

9    again, between words and visual features, right?  So

10   that could be fur on a dog or ripples on water or

11   moods like bleak or styles like cyberpunk.  And with

12   that acquired understanding and with creative

13   direction from the user, those models can then help

14   the user to generate new works.  So, in this sense,

15   training is, we believe, an acceptable and

16   transformative use of that content.

17             But there are some good instinctive examples

18   as well.  Stable Diffusion notoriously struggled to

19   generate hands, right?  So it produced three-finger

20   hands or 12-finger hands because it doesn't know that

21   a hand typically has five fingers.  And it isn't

22   searching a database of the many images with hands,

23   right?  Instead, it has learned that a hand is a kind

24   of flesh-colored artifact typically accompanied by a

25   number of sausage-like appendages, right?

1           And that all has real implications for how

2      we should think about AI training and generation.  In

3      other words, these models are using knowledge learned

4      from reviewing those text-image pairs to help the user

5      generate a new work.  They're not using the original

6      images themselves.  And those images are nowhere in

7      the AI model.

8                MR. BARTELT:  Great.  Thanks, Ben.

9                And, Curt, we'll go to you next.

10               And just so everyone knows, we have about

11     two minutes for the remaining five people with their

12     hands up before this panel ends.  So, if you have any

13     concluding remarks, you know, kind of work them into

14     whatever you have to say here.  Thank you.

15               MR. LEVEY:  Well, let me answer the

16     question, but also, in a sense, these are concluding

17     remarks.

18               A couple of the panelists feel strongly that

19     machine learning is not like what humans do, so let me

20     say more about why I believe it is very similar.

21          The human brain consists of neurons connected by

22     synapses of various strength.  So, when a human sees

23     an example, those synaptic strengths are slightly

24     modified.  Modification takes place slowly.  But, you

25     know, given a lot of examples, there's a lot of

1    modification and learning.  That is how we learn.

2            Neural networks consist of artificial neural

3    networks connected by artificial synapses.  When the

4    AI is shown an example, the synaptic strengths or

5    weights are slightly modified, and, again, over time,

6    the modifications add up, and we call that learning.

7    And I realize this similarity is difficult to see

8    because, for one thing, humans are very invested in

9    seeing themselves as being very different than

10   machines, you know, myself included.

11           So my advice to the Copyright Office is to

12   look past that difficulty and use the similarity to

13   your advantage to guide your policy development rather

14   than reinventing the wheel.

15           And I would also suggest that your position

16   that only product of human creativity can be

17   copyrighted is something that, you know, you should

18   think about.  I don't take a position either way,

19   whether copyright should be granted to AI-generated

20   works.  But the Copyright Office should keep in mind

21   that it likely will have to recognize AI authorship as

22   AI becomes more sophisticated and the philosophical

23   distinction between human and machine creativity

24   becomes harder to sustain.

25           You know, already generative AI can pass a

1    Turing test of sorts in that it's hard to tell the

2    difference between human creation and machine

3    creation, and that'll be all the more so once

4    artificial general intelligence becomes a reality.

5            And I'll stop there.

6            MR. BARTELT:  Okay.  Thank you, Curt.

7            Sarah?

8            MS. ODENKIRK:  Thank you.  And apologies for

9    noise.  I'm in the corner of a conference room in the

10   midst of a big conference trying to find a quiet space

11   here.  So just a couple of things.

12           I think that, you know, even if we assume

13   that an AI platform has preemptively licensed all of

14   the content that it's using to train the AI and that

15   everything underlying is fine and licensed, we really

16   need to look at the way in which the artist is using

17   that content and how they're interacting with the AI

18   platform in order to come up with their eventual

19   artwork.  And that's something that is going to have

20   to be explored in a little bit more detail rather than

21   just having really broad blanket rules about what can

22   come out of that AI interaction and collaboration

23   where artists are using it as a tool.

24           To go back to something that James brought

25   up with regard to generative artists, I think that

 1     point really warrants a little bit more exploration as

 2     well because we do have a whole group of artists and

 3     they've, of course, received quite a lot more

 4     attention lately, especially with the NFT marketplaces

 5     opening up.  And that has to do with artists who are

 6     generating their own algorithms using their own data

 7     sets to put the artwork in and generating work.  It

 8     may be that it's quite a bit generated by the AI

 9     platform and not by the artists themselves except that

10     the underlying content is, in fact, created by the

11     artist, including the algorithm.  So these are really

12     different ways of looking at tools that kind of

13     emanate from the same place but end up being used in

14     different ways and creating different results.

15             One just last point is that I think that

16     oftentimes we're going to have to still look at and

17     rely on traditional means for figuring out whether an

18     output is substantially similar to either somebody

19     else's work or that, you know, there are copyright

20     infringements in that output.  This is where we're

21     going to have to consider things like the fact that

22     many artists don't even register their copyrights.

23     And so whether they have access to the court system

24     because of that, it's really going to impair their

25     ability to seek some sort of resolution of those

1    issues.

2          And this is where maybe we can take a look

3    at the Copyright Office's Small Claims Board as a

4    place to perhaps think about resolving some of these

5    issues because we are going to have a tremendous

6    number of artist-related issues that maybe don't rise

7    to the level of needing to go to federal court but

8    definitely are going to need to be resolved in a

9    meaningful way for those artists.

10          MR. BARTELT:  Thank you, Sarah.

11          J. Scott?

12          MR. EVANS:  Thank you.  I mean, at Adobe, we

13    look at the laws that exist today.  We look at the

14    guidance that you provided.  And after many hours of

15    thinking through this, we view text prompts as

16    conceptually an idea, an idea that is put into a

17    machine that will give you many different expressions

18    of that idea.  So the expression seems to be being

19    completely generated by a computer, and under current

20    law, that is not copyrightable.

21          But, as we said in our opening statement,

22    most of the creatives that we have talked to don't use

23    generative AI as the end product.  What they do is

24    they use it as inspiration or a jumping-off point, and

25    then they take that product and they do other things

1    to it, just like they would if they took a piece of

2    art that was in the public domain and they created a

3    new work that had elements of creativity and human

4    creativity to that.  So that's what we think is

5    important.

6            I think what would be helpful is some

7    additional guidance that you heard from our first

8    speaker from the Copyright Office that gave examples

9    of what you're looking for.  And I hate to say this,

10   but it probably would be more helpful if we had a new

11   form that was specifically designed for AI-created

12   works that drilled down on these particular issues so

13   that some of the concerns that we hear from filmmakers

14   and from photographers who use some sort of AI in the

15   generation of the work, but not to the extent or in

16   the way that we're talking about AI that generates the

17   work itself, is used.

18           And so I just think that, you know, we need

19   specific guidance.  We need malleability from the

20   Copyright Office.  As the technology changes, as you

21   just heard, we may need to change that guidance.  We

22   need the ability to do that and to follow these issues

23   very closely.

24           But, at Adobe, you know, we think that we're

25   headed in the right direction based on the current

1    laws that exist today, the guidance that you all have

2    provided.

3              MR. BARTELT:  Great.  That's good to hear.

4    Thank you, Scott.

5              And, Alicia, you are next.

6              MS. CALZADA:  Thanks, and I'll be brief.

7              I just, I hear efforts to minimize the value

8    of the work that are input into these systems, and I

9    just want to make sure that the Copyright Office

10   always keeps in perspective that without the input,

11   which involves copying works in their entirety,

12   there's no output.  And so we can't minimize the value

13   of the works that are used to generate AI.  That would

14   be inappropriate.  Thanks.

15             MR. BARTELT:  All right.  Thank you, Alicia.

16             And just to wrap up, I think we have about

17   two minutes left, maybe a minute each.  We'll go to

18   both Karla and Ben, and then we'll wrap up this

19   session.  So go ahead, Karla.

20             MS. ORTIZ:  Thank you.  So, again, I just

21   want to reiterate that current practicing leading

22   experts in the AI/ML machine-learning industry warn of

23   equating machines to humans.  We should heed their

24   warning.

25             Furthermore, no matter how extensive the

1    prompt will be, it still relies on the training.  And

2    machine-learning companies want to automate prompts,

3    as said various times by Stability AI's CO themselves.

4    So I don't know how much of a standard that will be if

5    it will eventually be automated.

6         And, lastly, honestly, for me, I'm concerned

7    that AI-generated material will gain copyright, that

8    the proceeds of theft will be rewarded.  And,

9    potentially, as someone who is likely to be affected

10   in a whole industry that I see from the inside being

11   affected by these tools, I'm very concerned.  Thank

12   you.

13        MR. BARTELT:  Thank you, Karla.

14        And, Ben, with our remaining minute or so

15   left, go ahead, please, and give us your closing

16   thoughts.

17        MR. BROOKS:  Yeah, just a last point on

18   the guidance.

19        MR. BARTELT:  Sure.

20        MR. BROOKS:  Look, we acknowledge and accept

21   that there is a threshold of authorship below which a

22   work with negligible human input may not qualify for

23   registration.  I think our concern is that in the

24   guidance and in the caption of the decision, the

25   Office does not necessarily account for all of the

1    ways in which human input might rise above that

2    threshold, and some of them have been discussed

3    previously on this session.

4            A creator, to get a desirable input, may

5    fine-tune that model using their own existing content

6    to evoke their own existing style.  They might provide

7    detailed prompts that narrowly define the range of

8    possible outcomes.  And they also may, as J. Scott

9    mentioned, use the image as a jumping-off point.  And

10   they may refine that initial image many times using

11   traditional editing software or further prompting.

12   Any one of these factors may qualify that work for

13   registration.  And so a user who has clear expressive

14   intent and takes steps to steer these tools in a

15   particular direction should be able to register their

16   work.

17           I will just finally add that, again, we want

18   to make it clear that training is not about stitching

19   images together, it's about learning hidden

20   relationships.  But we do understand that there are

21   other ways to improve creator control of their

22   content, and, hopefully, some of the things we flagged

23   today can be considered by the Office in your future

24   deliberations.

25           MR. BARTELT:  All right.  Well, thank you,

1    Ben.  And thank you to all of our participants in the

2    first panel.  I think we learned a lot, and we

3    appreciate you all participating.

4             So, with that, I am going to hand the mic

5    back over to Mark Gray.

6             MR. GRAY:  Thank you, everyone.  Thank you

7    to all the panelists.  This is the end of the first

8    session.  We are now going to take a 10-minute break.

9             (Whereupon, a brief recess was taken.)

10            MR. GRAY:  Hello everyone, welcome back.

11   For those of you who've only recently joined us, we're

12   going to do a quick reminder on Zoom housekeeping.

13            For panelists who are speaking but not at

14   this specific session, please keep your cameras turned

15   off, please keep your microphones on mute.

16            We will be recording the session today.

17   That recording will be made available on our website

18   in hopefully three weeks.  And we have also activated

19   Zoom's transcription function today for those of you

20   who would like to follow along with captions.

21            We're going to start our panel with brief

22   introductions for each speaker, and, optionally,

23   everyone is allowed to do a short statement if they

24   desire.  Please limit any statements to two minutes.

25   We will have to watch the clock and keep things moving

1    if you go over two minutes.

2          And after those introductions, we're going

3    to have a moderated listening session.  The panelists

4    have received the questions in advance, but keep in

5    mind those are just intended as prompts and guidance

6    for discussion.  We, of course, welcome you to share

7    any relevant perspectives or experience that you have

8    that you think is important for the Office to hear.

9          For those of you who are on the current

10    panel, please use Zoom's Raise Hand function.  We will

11    try to call you in the order that you raise your hand.

12    That will help us keep the conversation nice and

13    orderly.

14          And then, as a final reminder for those in

15    the audience, we are, unfortunately, not accepting

16    audience questions today, so, please, no need to

17    submit questions or raise your hand.  We will have

18    opportunities for public participation in the future,

19    including through a written comment period.  But, for

20    today, we are trying to focus on the panelists and the

21    information they have to provide.  So thank you very

22    much for your understanding.

23          With that, I'm going to introduce our

24    moderators for the second panel, David Welkowitz and

25    Jordana Rubel.  David is an Attorney-Advisor in the

1    Office of the General Counsel with me.  And Jordana

2    Rubel is also my colleague, who is an Assistant

3    General Counsel.

4              David, the mic is yours.

5              MR. WELKOWITZ:  Thank you, Mark.  We'll

6    start with the brief introductions.

7              Jasper AI, Alex, would you like to start,

8    please?

9              MR. RINDELS:  Yeah, thank you.  My name is

10   Alex Rindels.  I'm Corporate Counsel at Jasper.  I

11   want to thank the Copyright Office for holding these

12   really useful listening sessions.  Jasper is a

13   generative AI tech startup that develops and deploys

14   software tools to assist businesses large and small

15   and individuals in their content creative processes.

16             As it relates to the subject matter of this

17   listening session, Jasper provides a software tool

18   called Jasper Art that receives text inputs from our

19   human users and filters them through generative AI

20   foundation models from various providers and ourselves

21   and spits out output in the form of art, whether that

22   looks like photography or any other computer-generated

23   art.

24             Our users are typically within the

25   professional marketing and professional creative

1    spaces, and they use these outputted images in

2    furtherance of things like marketing campaigns.  And,

3    oftentimes, it's not just the end images that they

4    use, but they use those images for ideation to further

5    their campaign.

6              And because many of our users and customers

7    are creative professionals themselves, we receive two

8    things, a lot of positive feedback that these tools

9    have really freed up their creative processes so they

10   can think more about the things they want to create

11   and direct their efforts to the human side of the

12   creative process rather than the mechanical side of

13   it, and they're really grateful that we're able to aid

14   them in that process.

15             But then, two, we also have an ear to the

16   ground on the concerns that they have in terms of, you

17   know, their work or others' works in the creative

18   space being misappropriated and used for wrong reasons

19   or not having the right rights to use those, and we

20   really take those seriously, and we want to work with

21   our customers and everyone in the community and in the

22   Copyright Office to make sure those are handled in a

23   responsible way.  Thank you.

24             MR. WELKOWITZ:  Thank you.

25             Getty Images, Paul, would you like to begin?

1              MR. REINITZ:  Hi.  Yeah.  Thank you for the

2       opportunity to speak at today's session.  My name is

3       Paul Reinitz, and I am Legal Advocacy Counsel at Getty

4       Images.  Getty Images is an established and respected

5       member of the global media.  Our growing content

6       library includes over 520 million visual assets

7       representing the work of more than 516,000 creative

8       contributors.

9              Getty Images believes AI and generative

10      models hold the potential to provide significant

11      benefits.  However, we see significant risks if the

12      current development and deployment of these

13      technologies are left unchecked.

14             First, bad actors can use generative AI

15      tools to easily create deepfake content and distribute

16      it widely via Internet platforms without check.  This

17      undermines public fluency in facts, trust in

18      institutions, and democracy in general.

19             Second, generative models are trained on the

20      existing work of creators.  It is important that

21      longstanding IP rights that protect these creators and

22      sustain ongoing creation are not ignored.

23      Transparency and respect for third-party rights are

24      key components of mitigating these risks.  Similar to

25      the position expressed by your Office in its recent

1    registration guidance, we believe that the use of AI

2    tools in the creative process should be disclosed.

3            Further, we believe that, one, AI generative

4    content should be identified as synthetic, and two, to

5    give rights holders visibility into the use of their

6    work, records must be kept detailing how generative

7    models were trained.  The latest draft of the EU AI

8    Act codifies transparency regulations of this nature,

9    and we encourage the USCO to collaborate with the EU

10   with the goal of harmonizing standards.  We believe

11   that supporting similar policy in the U.S. is crucial

12   to the Office's mission of promoting creativity and

13   free expression for the benefit of all.

14           Thank you for your leadership in this area.

15   I know that the creative and media industries more

16   broadly welcome the opportunity to provide further

17   input.

18           MR. WELKOWITZ:  Thank you.

19           From Professional Photographers of America,

20   Luc.

21           MR. BOULET:  Thank you.  Greetings.  My name

22   is Luc Boulet, and I serve as the Government Affairs

23   Manager for Professional Photographers of America.

24   We're the world's largest and oldest photographic

25   association with a membership of 35,000 creative

1    professionals.  Our members include small businesses

2    dotting every city and town across the nation,

3    typically operating one- to two-person shops and

4    earning an average net income of $38,000 per year.

5        PPA acknowledges the profound impact of

6    artificial intelligence on our world, and we firmly

7    believe in the responsible development of this

8    revolutionary technology that will uphold the

9    principles and objectives of the copyright system.

10        We also recognize the potential harm that AI

11    may cause to the intellectual property sector, our

12    leading net export valued at an astonishing $1.6

13    trillion.  Our greatest concern with AI is the

14    unauthorized scraping of a photographer's life work.

15    This work is made public and available online by a

16    photographer to promote their business and is then

17    used to create new works by AI engines.

18        AI tools are being designed to directly

19    emulate an artist's style at the click of a drop-down

20    menu.  While style is generally not a copyrightable

21    attribute, the act of copying a photographer's image

22    is a violation of copyright.  Transparency is possible

23    and achievable.  Best practices from corporations,

24    research institutions, governments, and other

25    organizations that encourage transparency around AI

1    training already exist.

2         With this discussion, we hold two main

3    objectives.  They are, number one, it is essential the

4    rights of copyright holders are respected as AI

5    develops and AI laws and policies are formulated.  And

6    number two, new determinations on AI policy should be

7    based on the foundation of preserving the rights of

8    copyright holders and new rules and policies should be

9    carefully considered to achieve this goal.  Thank you.

10        MR. WELKOWITZ:  Thank you.

11        Next, from Morrison & Foerster, Heather.

12        MS. WHITNEY:  Thank you for inviting me to

13   participate.  My name is Heather Whitney, and I am an

14   attorney at Morrison & Foerster and a member of the

15   firm's AI Steering Committee.  Previously, I was a

16   Bigelow Fellow in Lecture and Law at the University of

17   Chicago Law School and a fellow and faculty affiliate

18   at the Berkman Klein Center for Internet Society.

19        Today, I'm speaking on behalf of my client,

20   Kristina Kashtanova, author of *Zarya of the Dawn* and

21   *Rose Enigma*.  The Office recently refused to register

22   images Kashtanova created using Midjourney,

23   essentially on the grounds that Kashtanova could not

24   be the author because they could not predict ahead of

25   time what the output would be.  In March, we submitted

 1    a copyright registration for *Rose Enigma* and are

 2    waiting to hear back on that application.

 3         My point today is a simple one.  The Office

 4    is not writing on a blank slate when it comes to the

 5    copyrightability of outputs created with the

 6    assistance of generative AI tools.  Images created

 7    with these tools are visual works, and the Office

 8    should treat all visual works the same.

 9         Today, however, the Office's treatment of AI

10    images diverges substantially from its treatment of

11    photographs, with the bar for copyrightability much

12    higher for AI images.  This inconsistent treatment

13    threatens to destabilize the registration process for

14    visual works.  This inconsistency shows up in several

15    areas, but briefly I'll mention predictability and

16    what it means to be the mastermind of a work.

17         On predictability, photographers receive

18    copyrights in photos without knowing what their photos

19    will look like ahead of time.  Garry Winogrand, one of

20    the most influential photographers of the 20th

21    Century, said that he photographs to see what

22    something will look like photographed.  Wildlife

23    photographers register photos taken by cameras on

24    motion sensors, photos where the photographer was not

25    present and had no idea what the image was going to be

1    until they looked later.  Photographers do not have to

2    predict how their works will look to be the authors of

3    them, and AI artists should not either.

4           On the mastermind, to be the author of a

5    work, the Office has stated that one must be the

6    mastermind of it.  We are all the authors.  We could

7    all register the endless, endless photos we take with

8    our phones.  If we are the masterminds of those

9    photos, where our creative contributions are so

10   minimal, it is hard to understand why AI artists, like

11   Kashtanova, are not the masterminds of images

12   generated after setting far more parameters and making

13   far more creative choices.

14           In short, whatever the test for authorship,

15   the test should be applied consistently across the

16   visual arts.  Thank you for having me.

17           MR. WELKOWITZ:  Thank you.

18           From The Niskanen Center, Daniel.

19           MR. TAKASH:  Hi.  Thank you.  My name is

20   Daniel Takash.  I'm a Regulatory Policy Fellow at The

21   Niskanen Center.  We're a 501(c)(3) public policy

22   think tank.  We work on a wide range of public policy

23   issues, from employment and poverty welfare to climate

24   and intellectual property.

25           Thank you so much to the Copyright Office

1    for putting this together.  Thank you so much to

2    everyone for attending.

3          And so I'd like to make three global points,

4    I guess, to frame my comments.

5          First, it makes absolute perfect sense that

6    the Copyright Office would be one of the first

7    agencies to host formal discussions around the nature

8    of artificial intelligence.  Just the way that this

9    field is developing and things are shaking out, they

10   have implications for copyright law, perhaps before

11   more than any other field.

12         And I would also like to commend the way the

13   Copyright Office has dealt with the practical

14   implications of artificial intelligence, especially as

15   it relates to the registration of AI-generated works,

16   both as a matter of policy and a matter of law as it

17   exists today.  I think they've gotten it right.

18         But the second point I'd like to make is

19   that as important as copyright is, I don't think it

20   should be the final word or even necessarily the most

21   consequential word on developments in AI.  This is a

22   technology that perhaps will stop developing today,

23   and it will just remain a novelty, in which case IP

24   will remain the most important framework under which

25   to regulate it.

1          But the sky is the limit, and the potential

2     of artificial intelligence across virtually all

3     domains of life are extraordinarily consequential, and

4     for that reason, I think it's important to keep it in

5     perspective.  If we're talking about general safety,

6     job dislocation, or other issues that are separate

7     from, even though they may be related to, intellectual

8     property, I think it's important that they take

9     priority in any discussion.

10          And then, finally, I would encourage

11    everyone to remain somewhat forward-looking.  The role

12    of copyright is to promote the progress of science,

13    and it would be problematic for us to use that policy

14    regime in order to limit it.

15          We can all look back and laugh at John

16    Philip Sousa, you know, bemoaning the threat of

17    phonograph-dooming music.  And I want to be abundantly

18    clear that the threats posed, that fear of creative

19    destruction, is real, sincere, and precedented, and we

20    must be prepared to say what other policy domains

21    separate from copyright law should be best used to

22    address the problems to the extent they exist.

23          Thank you.

24          MR. WELKOWITZ:  Thank you very much.

25          From Dual Wield Studios, Zara.

1          MS. VARIN:  Hi.  Thank you so much for the

2     opportunity to speak today.  My name is Zara Varin.  I

3     am the Art Director and Senior Product Designer at

4     Dual Wield Studios.  It's a company based and founded

5     on making things we love, inspired by the things we

6     love.

7          My personal background is a little all over

8     the place.  After getting out of the Marine Corps, I

9     established a career as a game developer and got a

10    foot into the licensing industry as well.  I've worked

11    on everything from video games and comics to action

12    figures, costumes, TV, movies.  The point is I've

13    gotten to work on a lot of cool stuff.

14         Before all that, though, I was a fan artist,

15    and I still am.  Uniquely, in my day job, we strive to

16    champion and partner with fan artists and indie

17    creators to elevate them in official collaborations

18    with IP holders in ways that center those fan works

19    while compensating and crediting them fairly, all

20    while safeguarding the IP's representation.  We bridge

21    the gap between licensors and fandom to ensure

22    creativity isn't stymied but celebrated.

23         Within the licensing industry, we're an

24    outlier in our prioritization of fair wages, ethical

25    production, and credit to the artists that we work

1    with.  For many artists, that credit underscores their

2    portfolio of work in acting as a resume.

3           So, in order to be effective at what I do, I

4    have to keep up with constantly changing technology

5    and tools, and I worry about the current state of

6    generative AI.  It grossly undermines credit to the

7    vast swath of works informing their data sets.

8           For artists whose name has been used to

9    populate guidance for these imitative generators,

10   their actual work is becoming mired in a sea of

11   manufactured imposters.  It purports to be built for

12   us, but the methodology informing its data sets and

13   lack of clear ethical foundation indicates otherwise.

14   When data set training is reliant upon things like

15   underpaid workers combing through horrifying content

16   to identify and tag it, it demonstrates a worrisome

17   set of priorities.

18          Lastly, the most disheartening aspect of

19   this is seeing how it has scared and dissuaded so many

20   folks, from those just starting to explore creative

21   expression to those who have spent countless hours

22   honing their skills and often sharing to encourage

23   others.  Many people whose work was used

24   nonconsensually to train these tools are being

25   jeopardized and devalued in their own industry by

1    them.

2          I think generative AI genuinely has the

3    potential to become a robust tool for creators, but it

4    requires far greater ethical application and scope

5    before it's something I'm comfortable considering

6    incorporating into my workflows.

7          I'm grateful to discuss things further with

8    all of you.  Thank you so much.

9          MR. WELKOWITZ:  Thank you very much.

10         From Vanderbilt University Law School,

11   Daniel.

12         MR. GERVAIS:  Yes.  Thanks, David.  Thanks

13   for having me as a panelist today.

14         My name is Daniel Gervais.  I'm a Professor

15   at Vanderbilt Law School where I teach AI and IP law.

16   I've written extensively on AI and IP and on the

17   regulation of AI, and also on the legal and functional

18   differences between human and machine learning,

19   intelligence, and thinking.  It's all available on

20   SSRN, so if anyone wants to have a look.  And, in

21   fact, I just posted a summary checklist of issues on

22   AI and IP to both Twitter and LinkedIn that you may

23   find useful.

24         As to today's topic, there are five legal

25   questions I'm interested in, and I don't think we'll

1   have time to get into all five, but here they are.

2           The first is, obviously, is the scraping or

3   text and data mining legal?  And, here, I'm interested

4   not just in U.S. law.  I'm also looking at foreign

5   international law.

6           Second question, does the machine infringe

7   when it produces a new work?  And I think the analysis

8   here needs to be separate for different rights in the

9   copyright bundle.  I could come back to that.

10          The third question we've been already

11  discussing, I mean, in the previous panel, and I'm

12  sure we'll get back to it in this panel, is, can the

13  machine be an author?  Here, basically, I strongly

14  support the guidance from the Copyright Office.  I'd

15  be happy to explain why.

16          The last two questions I don't know if we'll

17  get to would be, is the AI algorithm itself protected

18  by IP law?

19          And the fifth is, is the data set, if you

20  want to call it that to simplify, copyrightable or

21  protected?

22          I'm also interested, and I'll end with this,

23  at a deeper level on the alignment, by which I mean,

24  is it possible to align the future development of AI

25  in this space with the needs for humans to grow and

1    develop and to use art to communicate, both to send

2    and receive new ideas and messages?

3              So I'll end here and look forward to our

4    conversation.  Thank you.

5              MR. WELKOWITZ:  Thank you.

6              And, finally, from ASCRL, James.

7              MR. SILVERBERG:  Hi.  I'm James Silverberg.

8    I'm the CEO of the American Society for Collective

9    Rights Licensing.  I'm also a former law professor,

10   and for more than 40 years, I worked litigating

11   copyright cases across the United States.

12             ASCRL is a not-for-profit corporation that

13   represents tens of thousands of illustrators and

14   photographers.  We collect and distribute collective

15   licensing fees.  These come from collecting societies

16   in foreign countries which have implemented proven and

17   successful collective licensing systems to compensate

18   artists for non-author, non-title-specific content

19   use, that is, compensations distributed to authors in

20   spaces where the use of content is certain, but the

21   identification of the specific content or authorship

22   is not always possible or is impractical.  These

23   spaces are like the AI space.

24             ASCRL is interested in exploring legislation

25   to provide for collective licensing solutions for the

1    use of illustration and photography in AI platforms

2    and believes that subscription and advertising or

3    other fees should be collected to compensate authors

4    on a nonspecific basis for the ingestion of their

5    material into AI platforms.

6            We need to be aware that the current

7    copyright paradigm is not well suited to the promotion

8    of art and authorship in the context of how AI

9    generates visual artwork.  The constitutional

10   authorization for legislation to reserve to authors

11   the rights to their creations first found form in the

12   copyright laws.  The existing laws are focused on

13   prohibitions against copying expression and

14   permissible exceptions, like the Fair Use Doctrine,

15   with the objective of preserving the economic benefit

16   of artwork for authors with the intention of expanding

17   American culture.

18           The constitutional purpose of reserving

19   authors' rights remains outstanding, but the current

20   copyright model does not work well when dealing with

21   AI-generated works where the technical lines of

22   expression copying are not always crossed or where

23   existing fair use factors become a part of the

24   equation.

25           For example, one of the main challenges with

1    AI-generated works is that the existing copyright laws

2    are ill-equipped to preserve the economic benefit of

3    authors when their material is learned or ingested or

4    when uncopyrightable styles are appropriated.  Even

5    when infringement does occur, it can be difficult to

6    detect and identify and prohibitive costs can be

7    associated with pursuing legal action.

8            Much of our discussion today is already

9    focused on the failures, challenges, and uncertainty

10   of applying the existing law and debating its

11   application in the context of injection, and this in

12   and of itself may be proof that copyright law is at

13   best problematic and uncertain as a solution to the

14   problem of author protection.

15           For these reasons, ASCRL believes that we

16   need a new way of thinking about how we should

17   implement the constitutional premise that we reserve

18   to authors their rights and their ability to receive

19   compensation because the current copyright system is

20   not achieving and cannot really achieve the

21   constitutional goal in the AI context.

22           So, to address this challenge, ASCRL

23   recommends that we do not entirely focus on the

24   niceties of infringement, issues of interim copying,

25   fair use factors, and that we move towards

1    legislatively implementing collective licensing

2    systems like those that are currently used very

3    successfully in many foreign countries.  These systems

4    serve our constitutional objectives and facilitate

5    licensing and the use of AI and create a more balanced

6    system that recognizes the needs of the AI community

7    as well as the authors whose works or work attributes

8    are ingested into these systems.

9            We are hoping to level the playing field by

10   requiring non-title-specific, non-author-specific

11   compensation where works cannot be specifically

12   identified in order to compensate for uses where

13   specifics of use are not available.

14           MR. WELKOWITZ:  Thank you, James.

15           MR. SILVERBERG:  I appreciate your inviting

16   me on the panel, and I look forward to our discussion.

17           MR. WELKOWITZ:  Thank you very much, James.

18   And thank you all for introducing yourselves, and

19   welcome again.

20           And to begin the discussion, let's begin

21   with this first question.  How is the training of

22   artificial intelligence models affecting your field or

23   industry?  And what should the Copyright Office know

24   about the technology's use of training materials when

25   it is considering copyright issues relating to

     1     training?  Please be specific in terms of which part

     2     of the visual arts ecosystem you're talking about.

     3          Let's see.  And please use the Raise Hand

     4     feature.  Ah, good.  Zara, you're first on my screen.

     5          MS. VARIN:  Hi.  Thank you.  It's Zara.

     6          MR. WELKOWITZ:  Oh, I apologize, Zara.

     7          MS. VARIN:  It's okay.

     8          MR. WELKOWITZ:  I apologize.  Sorry.

     9          MS. VARIN:  Thank you.

    10          So I occupy several different unique spaces.

    11     I have a foot in a lot of different worlds, both as a

    12     game developer and within the licensing industry, and

    13     something that we've been seeing a lot across the

    14     board is that generative AI has kind of become a

    15     digital gold rush.  And the training for informing

    16     that digital gold rush has come from a lot of my

    17     peers.  I believe Karla touched on this during the

    18     first part of this panel.

    19          But it's very disheartening when you Google

    20     search somebody's name and what comes up now is a

    21     proliferation of images that were created utilizing

    22     their art style but were not created by them

    23     themselves.  And that's creating uncertain authorship

    24     and a great deal of uncertainty for people who are

    25     actually in these fields who are thinking maybe I

1    don't want my online portfolio available at all.

2    Maybe I should safeguard or gatekeep my work in a way

3    where I have to have password protection so that I can

4    control the access.  And it's essentially denigrating

5    a lot of the work that people have been sharing online

6    since the Internet's inception.

7            And it's incredibly disheartening as well

8    within a production environment that these training

9    methodologies are being done nonconsensually as well.

10   Even people who have attempted to reach out utilizing

11   the opt-out options that some of these models have

12   kind of after the fact offered to artists, they're not

13   having successes with opting out, or they're still

14   seeing their work featured in those models.

15           And it's, I think, very telling that if you

16   ask one of these models to create work based on an

17   artist who wasn't part of that data set, it cannot.

18   It'll try.  It'll do something.  But you're not going

19   to end up with something that is aping the style and

20   imitating something.

21           They're very sophisticated calculators by

22   taking your set of inputs, running it through the

23   algorithms to arrive at an output, but there's no

24   creativity inherent in the process.  And the training

25   data utilized to do that is where the creativity

 1     exists.  The prompt might be a couple of cool words

 2     that somebody's put together.  And I don't want to

 3     punch down on folks who are starting to learn how to

 4     do prompting.  But the training data sets themselves

 5     are pulled together from a vast quantity of many

 6     works, folks who are here representing some of them,

 7     and that's causing many creators to second guess

 8     whether they want to be creators at all.

 9               MR. WELKOWITZ:  Thank you.

10               Luc, you're next on my screen.

11               MR. BOULET:  Thank you.

12               This question implies that the visual arts

13     industry understands the extent to which AI companies

14     are using and profiting off of the works of others.

15     And this is quite the opposite.  Without a transparent

16     and open AI system, it's impossible to determine which

17     AI-generated works are incorporating the copyrighted

18     material of others.  And this leaves both the public

19     and copyright holders completely unaware of which

20     photographic works are being used by AI engines and

21     the extent of their use.  This is why it's imperative

22     for AI companies to disclose their sources and methods

23     used for when creating their final product.

24               There's growing anecdotal evidence of AI

25     work displacing works created by human authors.  A

1     publishing company looking to support their article

2     with photographic evidence may turn to AI to produce a

3     bespoke image, and others are inputting their selfies

4     into an AI server to generate their latest LinkedIn

5     headshot.

6               It's no surprise that individuals with the

7     least bargaining power are most vulnerable to the

8     negative effects of AI systems.  Photographers who

9     rely on their work to make a living often display

10    their images in digital galleries and are promised

11    with the option to opt out of having their works

12    scraped in the future.  However, these promises are

13    empty as the timeline for when they may choose to do

14    so has yet to be announced or is unclear at all.

15         Copyright owners may sometimes choose not to

16    license their work, and that wish should be respected.

17               MR. WELKOWITZ:  Thank you.

18               Paul?

19               MR. REINITZ:  Thanks.

20               So, yes, I think that the short answer is

21    that these technologies are having a big impact, and

22    we expect that the impact is going to continue.  As I

23    said in my introductory statement, we believe that

24    there's a lot of potential for these systems to help

25    creativity, but there is also a lot of potential for

1    harm.

2          Now, to talk about exactly how it's

3    impacting our industry, you know, I would like to

4    point out that, and this kind of goes into the second

5    question as well, that, you know, high-quality content

6    along with captions that explain that content is

7    really valuable in the machine learning process, and

8    because of that, you know, there's a lot of demand for

9    our content.  And we're doing licenses out there.

10   There's a big demand in our industry for people to

11   come to us knowing that we have collected rights over

12   nearly three decades of our existence and that we can

13   license safely for these usage.

14          We also see that our customers are using

15   this technology already.  We recently did a scientific

16   survey, and over half, I think it was 56 percent, of

17   our customers that were polled are already using AI in

18   their current workflow.  Now, you know, we think that

19   there are lots of great ways to use it and it can help

20   promote creativity.  But, again, you know, at the end

21   of the day, these customers are more excited about

22   licensing content from us for commercial use because

23   they know that there's legal certainty in a license.

24   And I think that hopefully we can get to a point where

25   there's confidence in these tools that somebody can

1    use the output for their creative work.

2              I'll stop there.

3              MR. WELKOWITZ:  Thank you.

4              Daniel, you're next.

5              MR. GERVAIS:  Thanks.  Three quick points.

6              The first is I think the Office in its

7    capacity as advisor to Congress and the courts should

8    bear in mind the international obligations of the

9    United States, in particular, the TRIPS agreement,

10   three-step tests, for example, in providing advice on

11   what can be done without permission or payment.

12             Second, the question of scraping, of course,

13   can happen in many different countries.  Many other

14   countries have already adopted exceptions, the EU,

15   Japan, others, Singapore.  So one way or the other,

16   you know, text and data mining will happen, but there

17   will be limits, and whatever needs to happen beyond

18   those limits will need to be licensed.  So perhaps the

19   Office can play a role in facilitating licensing.  And

20   by licensing, I don't mean just that if you're an

21   artist, you get paid once because your work gets

22   scraped and you get paid because there's a licensing

23   regime.  A license can also impose contractual limits

24   on the use and reuse of material.

25             Now anything that's scraped can lead to an

1    output that will potentially create a commercially

2    competitive product, but at least there is some

3    conversation, some exchange of consideration.

4          So I think those are the three roles I would

5    see the Office potentially playing.  Thank you.

6          MR. WELKOWITZ:  Thank you.

7          James?

8          MR. SILVERBERG:  So I wonder if we'll really

9    succeed in disentangling the many problems of AI.  Is

10    the problem really whether there's a copyright

11    infringement?  Is the problem really identification of

12    works?  Is it opt-out?  Is it content access

13    restrictions?  I think all of these things are

14    important when we're looking at the ingestion problem.

15    But is that really where we should be focusing our

16    inquiry?  Isn't the problem that we need to have a

17    clear system, call it copyright or something else,

18    that makes sure that the authors are compensated?

19          MR. WELKOWITZ:  Thank you.

20          Heather?

21          MS. WHITNEY:  Thanks.  I just want to

22    quickly mention something about the contribution of

23    artists who are using these tools in terms of how it

24    has outputs.  So I think there's a misconception that

25    all of these people are just sort of typing in some

1   generic words and then there's an output.  I strongly

2   recommend people just Google control net models,

3   Stable Diffusion, and you can see the different kinds

4   of models that are now used on top of kind of like an

5   extension of Stable Diffusion in order to have a much,

6   much greater control over the images that are being

7   used.  It's not just the model that's doing the work.

8           And if you look at what they can do with

9   these things, with these kinds of different kinds of

10  models, setting up the composition, choosing sort of

11  the angles, the lighting, all those kinds of things,

12  and you compare that to the things that are said in

13  the Compendium about what is required for someone to

14  have a copyright in a photograph, this is just

15  absolutely without question equal to or greater than

16  the kinds of things that people are doing in that

17  context.

18          So I just think it's helpful that people

19  understand the technology and how it's evolved, and I

20  think the control net models are really a way for

21  people to start to understand where that's going.

22          MR. WELKOWITZ:  Thank you.

23          Alex?

24          MR. RINDELS:  Yes.  Thanks.  I'd just like

25  to briefly respond about how the output is positively

1    affecting the industry that we're in.

2           So, in two regards, the professionals who

3    use our service as creatives, they're able to unleash

4    their creative ability that might have otherwise been

5    tied up in time-consuming creative processes.  So many

6    of them use Jasper Art to create ideas that they then

7    build upon or to create end products that they use in

8    marketing campaigns or in other business uses or

9    commercial uses, and this greatly frees up their time

10   to use their creative potential, their intelligence,

11   their efforts in other productive ways.

12          And secondly and probably more importantly

13   are the output in tools like Jasper and others,

14   Stability, it allows people in the creative space who

15   otherwise could not have created output like this to

16   create output, and I'll explain briefly.

17          So we also have a text-generating tool.  And

18   we've had numbers of customers who have dyslexic

19   disabilities or otherwise who would have otherwise

20   been unable to create output, and they regularly

21   respond to our tools and tell us how grateful they are

22   that they're now able to take what was in their head

23   and put it to paper.  And, previously, it was just

24   basically a mechanical limitation that prohibited them

25   from doing so.  And now, with tools like this, it's

1    untapped, it's unleashed their potential that

2    otherwise was untapped in the industry.

3          So, in the first part, it's freeing up space

4    for people who already have the potential to create

5    art or other output and it gives them more time.  But,

6    secondly and probably more importantly, it also allows

7    those who otherwise could not have created artistic

8    output to do so.

9          MR. WELKOWITZ:  Thank you.

10          Daniel?

11          MR. TAKASH:  Thank you.  So, with respect to

12    the images that are training, Niskanen's policy with

13    respect to all the works we put out, images included,

14    is Creative Commons provided, there's attribution,

15    because we do our best to contribute what we like to

16    think at least is good-quality work so that images can

17    be trained.  We are also fond of using AI-generated

18    images just as a substitution for stock photography

19    that we would otherwise license, or we can have some

20    bespoke images that particularly complement some work

21    that we're generating.  So we have an interest in

22    making sure that material is out there so that the

23    models can be the best that they can be.

24          That being said, we recognize that there

25    ought to be tools available and the law should

1     accommodate the use of those tools to allow the

2     authors or the rights holders of works, in this case,

3     visual artists or visual arts, although this principle

4     can be extended to other contexts, that, you know,

5     that creates some ability to remove or make it so that

6     it's much harder for their works to be learned upon.

7          That being said, we should recognize that

8     copyright law does not necessarily provide an absolute

9     veto to the rights holder, and there are plenty of

10    examples, you know, say what you will about the

11    quality or the desirability of this outcome overall,

12    where, you know, use can be even in a way that the

13    original rights holder may not approve of.

14         That being said, in order to ensure quality

15    and respect, incentives to produce arts, I think the

16    best way to square the circle is to focus on a regime

17    that deals with remuneration and financing, which

18    deals with much larger policies, as I alluded to

19    earlier in my comments.

20         MR. WELKOWITZ:  Thank you.

21         Paul?

22         MR. REINITZ:  Hi.  Thanks.  Yeah, I just

23    wanted to make a quick comment about what Daniel just

24    said.  I mean, you just said that you, you know, as a

25    consumer of stock photography, sometimes use generated

1       content as a substitution.  I think that that's fine

2       and I think that the market is probably going there.

3       But I would like to point out that if you are going to

4       be using a substitute and that model that creates the

5       generative content was trained on unauthorized

6       content, you are substituting a product without

7       compensating the artists that were needed to make that

8       model.

9               And, you know, I just, sorry, I just needed

10      to call that out because it just, it's so real, as you

11      say that, as a user of stock photography.

12              MR. WELKOWITZ:  Thank you.

13              James?

14              MR. SILVERBERG:  Just to follow up or

15      elaborate on Paul's point, which I very much

16      appreciate, the problem is also particularly paramount

17      for small businesses and medium-size businesses that

18      involve authors who do not have vast amounts of

19      content to aggregate and to license on a large-scale

20      basis.  And so, while there are content aggregators

21      that are able to do that on a much larger scale

22      because they occupy a larger market force, hundreds of

23      thousands of individual creators and authors don't

24      have the capacity to engage in a licensing transaction

25      with an AI platform, nor do they have the capacity to

1    enforce copyrights in copyright litigation or possibly

2    even to identify the use of their work.

3            And so that is why ASCRL is advocating for a

4    remuneration system that will prevent a complete

5    market displacement of these constituents and which

6    will make sure that they get compensated.

7            MR. WELKOWITZ:  Thank you.

8            Daniel?

9            MR. TAKASH:  Thank you for circling back.

10           Yes.  So just to be clear, with respect to

11   Paul's point, I am fully cognizant of the, I guess you

12   could call it, recursive nature between the body of

13   works available for training and the output of it, so

14   I'm fully aware of that.

15           I think the problems -- or not problems, the

16   challenges artificial intelligence creates with

17   respect to copyright is a difference of both degree

18   and of kind, which is why I'd like to underscore again

19   the support for something that moves away from more

20   traditional models of infringement, alluding

21   to -- I can't say I'm super familiar with the model

22   James brought up originally, but something that

23   focuses more on remuneration moving into a very

24   different technological paradigm in order to, as I

25   mentioned before, square that circle.

           1              MR. WELKOWITZ:  Thank you.

           2              Okay.  I think I'm going to turn the mic

           3     over to my colleague, Jordana Rubel, for the next

           4     question.

           5              MS. RUBEL:  Thanks, David.

           6              I guess I'll start off by maybe just asking

           7     a question that relates to the point we were just

           8     talking about, which is more solution-oriented

           9     thinking about if we get to the place where we are

          10     just talking about remedies here.  Maybe we can start

          11     with James to give a little bit more detail about what

          12     ASCRL's proposal is, and if other folks want to speak

          13     to that, you're welcome to raise your hands as well.

          14              I'll turn it to you, James.

          15              MR. SILVERBERG:  Thank you.  So I appreciate

          16     in the United States there's a general lack of

          17     familiarity with collective licensing systems,

          18     particularly in the visual space, because we don't

          19     have any.  In foreign countries, there are collective

          20     systems in a number of different areas.  I'll just

          21     mention two, for example, to illustrate how they work.

          22              One would be in the area of library lending.

          23     As we all know, in the United States, there's a first

          24     sale doctrine.  If a library buys a book, they can

          25     lend it forever and never pay for it again.  But, in

1    foreign countries, a system's been introduced as a

2    secondary or adjunct system to the copyright law

3    involving what's referred to as secondary rights.

4            For library lending, people don't know what

5    books are being lent, people don't know which authors

6    are involved in the lending, people don't know which

7    photographs are in what books or what illustrations

8    are in what books, but fees are paid into a collecting

9    society in order to compensate the authors for the

10   lending of this material.  It's done on a non-author,

11   non-title-specific basis.  We don't know exactly what

12   the fees are for other than they're for the lending

13   itself, and then algorithms are established in order

14   to make a fair allocation of the revenue to the

15   individual authors whose works might be embodied.

16           It's a form of rough justice.  It's not

17   specific.  It's not a perfect system, but it's a way

18   of creating compensation.  It is analogous to a

19   system, sort of like a SoundExchange, where fees are

20   being paid for the use of recorded music that's

21   digitally streamed, and that goes into SoundExchange,

22   one of our directors on our Board of Directors, a

23   former executive director of SoundExchange, and those

24   funds are distributed, but they're distributed on a

25   more specific basis where it's known what material is

1       used.

2              We would be proposing a system where AI

3       platforms would be distributing compensation to

4       collecting societies in order to distribute those

5       according to a fair algorithm which would compensate

6       illustrators and photographers.  And this was also

7       espoused by Authors Guild in the other listening

8       session for works in the writing space.

9              MS. RUBEL:  Thanks.

10             Daniel, did you want to respond to that, or

11      do you have any other thoughts on this topic?

12             MR. GERVAIS:  Just a footnote just to be

13      clear, James is right about public lending, but the

14      way it works is not random.  I just want to make that

15      very clear.  So, in countries where they have it, I

16      don't know, Germany, Canada, and others, the authors

17      must register their works, and then the collective

18      actually will only pay -- so they will survey certain

19      public and private libraries, usually mostly public

20      libraries, and will only pay if the book is actually

21      in those libraries.  And the reason they don't pay

22      per, you know, the number of times that the book was

23      taken out by a user at a library is partly privacy.

24             And so the second regime, though, that is a

25      little different is this thing called extended

1     licensing that I know the Copyright Office has

2     published a number of reports about where, basically,

3     a collective is given the -- basically, it becomes an

4     opt-out, essentially, so the collective basically has

5     rights to represent a class of right holders, except

6     those who opt out.  This is very, well, I can't say

7     very common, it's common in Europe, and other

8     countries are looking at it.  Some countries have

9     functional equivalents of that.

10          That is a different thing because what it

11    does is it gives a collective a right to license, but

12    the basis on which then authors will get paid or

13    publishers or whoever else has rights is not

14    predetermined.  It has to be decided case by case in

15    the appropriate way.  It's not a black box.  I want to

16    make sure people understand this isn't just a black

17    box of money that gets, you know, paid somehow.  You

18    can use data to actually apportion the funds

19    correctly.  Thank you.

20          MS. RUBEL:  Paul?

21          MR. REINITZ:  Yeah.  Thanks.  And thanks,

22    Daniel.  I was actually going to bring up a similar

23    issue.

24          I would say that, you know, I think the idea

25    of collective licensing is a good one but only if it's

1    really necessary.  Really, you know, it's a complex

2    system to set up.  There's a lot of administration,

3    and, you know, there can be a lot of inefficiency in

4    it.

5         From where I currently sit, as I described

6    in my opening statement, we're seeing a lot of

7    interest, and we're doing a lot of licenses directly

8    with people that want to or organizations that want to

9    license content.  Now I understand that that doesn't

10   work for everyone, and it's much harder for an

11   individual, you know, photographer to say do that on

12   their own, and maybe we need a solution like what

13   James is suggesting.

14        That said, you know, along with what Daniel

15   described, I think the idea of an opt-out and

16   following these models of extended collective

17   licensing is essential because, you know, if an

18   organization wants to opt out, they should be able to

19   do so.

20             MS. RUBEL:  Thank you.

21             Zara?

22             MS. VARIN:  Thank you.

23             So, to your question, it's been really

24   interesting to see this conversation contextualized

25   and framed by different industries.  So, for instance,

1    film and music and the music industry as a whole, they

2    have a far more rigorous enforcement of their

3    copyright on their works.  Artists, especially within,

4    like, the games industry or visual effects industry or

5    working as freelancers, don't have a single unified

6    front to advocate for us.

7          So there's efforts to unionize, but we don't

8    really have any sort of large collective that is

9    coming to attend events like this, that's speaking on

10   our behalf and helping to advocate for the rights of

11   artists and creators in those industries.

12         I think folks on these sorts of creative

13   teams doing freelance work and within, I think, more

14   of the cutting-edge tech industries where there's a

15   lot of overlap between utilizing technology in our day

16   to day and rapidly adapting to what that new

17   technology is could definitely use some sort of

18   remunerative residual system or something along the

19   lines of what I think James was getting at and what

20   Paul has also touched on.  But that has to work and

21   advocate alongside credit to the artists who have

22   helped build that system.  That system wouldn't work

23   without all of the pieces that have built that

24   learning model.

25         So I think step one is figuring out, how do

1    we backtrack and ensure that all of the existing

2    learning models are clear, transparent, ethical, have

3    defined what their scope is, and also define what

4    efforts they are making?  Because the onus is on them

5    for building these tools to do so in a manner that is

6    not going to undercut people that are already working

7    in those creative industries, because, again, I do

8    think there's a lot of great potential in these tools,

9    but they are tools.  They are not creative.

10             Artists necessarily are called skilled.

11   It's not talent.  Talent is kind of a very worrisome

12   eugenicist concept.  Skill is a thing that you have to

13   work at.  There is no skill inherent in the AI

14   generative process.  The only skill present is coming

15   from the works that are scraped to put everything

16   together.  So whenever we're contextualizing all of

17   this, I want folks to keep that in mind, where is the

18   human labor and where is the skill coming from?

19             MS. RUBEL:  Daniel?

20             MR. TAKASH:  Oh, sorry, two Daniels.  It

21   gets confusing.

22             MS. RUBEL:  Sorry.

23             MR. TAKASH:  Yes.  So, with respect to the

24   model for remuneration and licensing based on the

25   work, I think that cognizant of the transaction costs,

1    which are not insurmountable but are real and there,

2    and additionally, the fact that artificial

3    intelligence is nascent and may not yet, underline

4    yet, have a clear path towards commercialization and

5    ability to generate a source of revenue that can

6    easily be extracted.

7            And balancing, I think, those shortcomings

8    at present with the potential for artificial

9    intelligence, again, across the economy, you know, in

10   a wider way and getting it off the ground, I think it

11   may be worth considering, and I value everyone else's

12   input, some type of alternative source of revenue in

13   the initial phases of any type of licensing that may

14   exist.  A popular idea that comes around every now and

15   then, particularly floated by Paul Romer, would be a

16   tax on online advertising revenue, I think that's an

17   attractive opportunity for a source of revenue, but

18   something that I would like to encourage folks keeping

19   in mind at least in the early phases.

20           MS. RUBEL:  Okay.  I'm going to go to Luc

21   next because he hasn't spoken on this point, and then

22   I'll come back around to James and Paul.

23           Luc?

24           MR. BOULET:  Thank you.

25           Our position is that an AI engine cannot

1    capture the beauty of a photograph without initially

2    copying the image.  And ingestion of copyrighted works

3    by AI developers without proper authority constitutes

4    copyright infringement on a massive scale and is of

5    great concern.

6              The reason why developers are seeking out

7    copyrighted works is because professional

8    photographers create high-quality photos that are

9    exceptionally well-suited for AI ingestion, and in

10   this case, they're considered so valuable because

11   quality of input determines their quality of output.

12             And I just want to also add that the

13   priorities of individuals using copyrighted materials

14   for AI ingestion, you know, must not and should not

15   take precedence over the rights and interests of

16   creators.  The AI systems should not be built on their

17   backs without their consent.  And we must not

18   compromise longstanding laws and policies that protect

19   the rights of copyright holders in the pursuit of

20   developing AI technology.

21             MS. RUBEL:  Thanks.

22             James?  Oh, I think you're still muted.

23             MR. SILVERBERG:  I really appreciate what

24   Luc said, and I want him to be right about everything

25   that he said, but I'm a little bit concerned about the

1   copyright infringement assumption that is part of the

2   discussion about AI ingestion because there are fair

3   use issues and other issues there which make that

4   final conclusion problematic.

5           Additionally, even if there is a

6   determination in these court cases that there's an

7   infringement, I'm not really sure what the utility of

8   that is going to be for individual authors and small

9   businesses who won't be able to monetize or possibly

10  even identify the use of their material on AI

11  platforms, particularly not through expensive

12  litigation.

13          So I think it leaves us in a situation where

14  we're still looking for answers even if Luc turns out

15  to be right about everything that he said, and, again,

16  I hope he is and he may be, but we're still going to

17  have a problem.

18          And to follow up on Zara, I hope I said your

19  name correctly, to follow up on Zara's comment,

20  unfortunately, the onus may not be on the AI platforms

21  to account for what they're doing because, unless what

22  they're doing becomes clearly illegal, they have

23  loopholes through the Fair Use Doctrine or other

24  means, interim copying doctrines and other legal

25  niceties, to evade liability.  And they can sit here

1    today and present the argument that they're compliant

2    with the law and may very well be.

3         But our problem isn't whether they're

4    legally compliant and whether they're violating the

5    copyright law.  Our problem is, what do we do in order

6    to make sure that the Zaras and the Karla Ortizs of

7    the world get paid for the use of their style,

8    content, appropriation of their efforts, when the

9    current copyright system sort of is not really well

10   fitted to doing that the way I would like it to be?

11             MS. RUBEL:  Paul?

12             MR. REINITZ:  Thanks.

13             Yeah, so I also wanted to respond to Zara

14   and also the problem that James is pointing out.  And

15   I think, you know, again, as I said in my opening

16   remarks, I think, you know, one of the best solutions

17   we can do to mitigate these risks is require

18   transparency.  We need to have obligations on the

19   developers of these models to keep records of the

20   content that they trained on so that Zara or any other

21   creator can tell if their content has been used.

22             And, you know, we are very early on, but

23   this is something that we cannot go back and redo.  We

24   need to have these transparency obligations now so

25   that there isn't just the ability to basically sweep

1      this stuff under the rug, and as the legal issues are

2      decided, we need to preserve, basically, the evidence

3      of what's going on.

4              MS. RUBEL:  Alex, I'm going to give you a

5      chance to jump in here.

6              MR. RINDELS:  Thanks.  Yeah, I'd say two

7      points.

8              If society decides that we should pursue

9      some type of remunerative system for this, I think

10     being able to attach copyright protection to the end

11     works themselves would actually be a pretty efficient

12     way to collect fees for that remuneration.  So a lot

13     of our end users are constantly asking us whether the

14     images they generate can be protected by copyright,

15     and if they had to file an application like everyone

16     else and that's part of that, meaning they have a duty

17     to disclose that AI tools assisted in their generation

18     of the content, maybe there's some sort of a fee that

19     attaches to that.

20             My second point is I think it becomes very,

21     very difficult for a remunerative system, although

22     there are people much smarter than I who could

23     probably determine where and into what portion of the

24     fees, who they go to.

25             One, some AI models themselves aren't

1    storing the images so that when somebody puts in a

2    text prompt, it's not going and retrieving an image

3    and outputting it or some variation of it.  The models

4    themselves temporarily notice patterns in the images

5    and in those patterns create an algorithm, and that

6    algorithm overall is what the model is.  And when you

7    put an input for it to generate something, it simply

8    provides a reasonable approximation of what the output

9    should look like based on your text input.

10          So, for that, in that case, it would be very

11   difficult to determine whose input was used to produce

12   your output, so I think that would be difficult for

13   attributing the fees as well.

14          MS. RUBEL:  Yes, and we certainly heard that

15   from Stability AI earlier this afternoon as well.

16          Luc, you're going to be the last voice on

17   this question, and then we're going to move to talk a

18   little more about the Copyright Office's registration

19   guidance and related issues.

20          MR. BOULET:  Thank you.

21          And I would just say to James's earlier

22   point, that really leads me to the logical conclusion

23   that there has to be an open AI system, that there has

24   to be a transparency element added for the public

25   market.  And I would just add that just because it's

1    difficult to have transparency doesn't make it

2    impossible.  And, frankly, just because it is

3    difficult, that is the road you must travel in order

4    to use copyrighted content.

5              MS. RUBEL:  Okay.  Thank you.

6              Last question I want to pose to everyone, we

7    have heard, the Office has heard in response to the

8    guidance we released recently that, and I think

9    Heather started making some points earlier in her

10   responses along these lines, that there's possibly

11   some things about the technology or how the users are

12   interacting with the AI technology that the Office

13   doesn't fully understand or appreciate.

14             So I'm interested in any thoughts you have

15   about what the Copyright Office should know about how

16   the AI systems generate content, what the

17   participation of users might be in different AI

18   models, and any other feedback you have about the

19   guidance that the Copyright Office released.

20             Daniel, why don't we start with you.  Daniel

21   Gervais.

22             MR. GERVAIS:  Thank you.

23             So, first, as I said in my introductory

24   comments, I support the guidance.  I think what's

25   going on -- so, you know, machine learning is almost a

1    synonym of AI these days, and so, you know, machines

2    learn when they produce output.  There's a report

3    online I wrote for the European Commission a couple

4    years ago.  I looked at every case where people said,

5    look, the machine created this.  And at least as of

6    two years ago, there wasn't a single case where there

7    wasn't substantial human edits.

8         But it's called machine learning for a

9    reason, is that the machine will learn those edits,

10   right?  And as time passes, there will be more and

11   more productions that have what I call no human cause

12   really.  And I think it's perfectly the right decision

13   to say that doesn't have copyright.  It would be weird

14   to say you produce something, which is code that

15   produces something, so you have copyright on the code,

16   no question, right, if it's human written.  But

17   whatever the code produces, you also have copyright on

18   that.  We don't have that.  We've never had that,

19   right?  And this is, I think, a line that should not

20   be crossed.

21        So what I think the comment might be would

22   be there are ways in which humans collaborate.  The

23   doctrine's very clear.  When you take a public domain

24   picture that's not protected anymore and you do

25   something to it, we know, we can test for whether --

1       and you can test for whether there was enough done to

2       it to be registrable as a new work, right?  So the

3       test is well known.  It's just the technology allows

4       humans and the machine to collaborate, as Alex and

5       others mentioned.

6              So I would absolutely urge you to keep the

7       guidance.  Just in terms of its application, yes,

8       there may be some ways to dig deeper into technology,

9       but both the transparency and the exclusion of non-

10      human works, I think, are very important.

11             MS. RUBEL:  Heather?

12             MS. WHITNEY:  Thanks.  So just on the

13      guidance, a couple of just points very quickly.

14             So one is, as I mentioned, and I think a few

15      people mentioned on the earlier panel, it's not clear

16      when you're reading the guidance what the relationship

17      is between the analysis there and the analysis that

18      the Office presented in Kashtanova letters because, as

19      I mentioned before, that letter is completely

20      dominated by a discussion of predictability, and the

21      inability to predict what the output would look like

22      was basically fatal.

23             But then, in the guidance, there's literally

24      no mention of predictability at all.  And while it's

25      possible that the Office has decided that

1    predictability is no longer part of it, it still links

2    to the Kashtanova letter as guidance to artists on its

3    website, and I have heard from many artists through

4    Kashtanova that they're just confused about what that

5    really is supposed to mean.

6         The second thing is that the guidance itself

7    has -- if you look at what the tests are for

8    authorship within the guidance itself, they lead to

9    different outcomes depending on which one you choose

10   to look at.  So, for instance, there's a lot of

11   mention about Burrow-Giles with the idea that you are

12   the author if you are the thing, basically, it owes

13   its origin to you.  And that's, like, a pretty easy

14   thing to satisfy, and that's what's used a lot, I

15   think, in photography.  You click the button or you

16   set up the thing and click a button and now you get

17   the copyright.  It would be clear that you would have

18   a lot of copyrightable works if that were the test.

19        And then later you also say that basically

20   you won't register works that are produced by machines

21   or mechanical processes that operate randomly or

22   automatically without any creative input or

23   intervention by a human author.  Again, that's like a

24   pretty low standard, any creative input or

25   intervention.  But then, at other points, you talk

1    about this idea that you have to have ultimate

2    creative control, that it's you are the one who is

3    contributing all of the traditional elements of

4    authorship.

5            So I think that that is a difficult thing to

6    understand how these things are supposed to work

7    together.  And so, in the future guidance, it would

8    just be helpful to sort of make clear what the

9    relationship between those is.

10            MS. RUBEL:  Thank you.

11            James?

12            MR. SILVERBERG:  Yeah.  I really have to

13    echo Heather's sentiments on this point.  You know, I

14    think the Copyright Office has the guidance completely

15    correct on the fact that non-human authorship is not

16    copyrightable and is completely correct on the point

17    that human authorship is copyrightable.

18            I think where the guidance, in my opinion,

19    is a little bit off is something that Heather also

20    pointed to, I think, which is that I think the

21    guidance suggests that a substantial contribution

22    needs to be made in order for the human authorship to

23    be copyrightable.  But, under the law, I think the

24    standard for copyrightability of a work has a somewhat

25    lower threshold than substantial contribution.

1              And so I think the devil really is in

2       details.  And I think greater clarity could be given.

3       I think maybe Daniel suggested that examples be given

4       in order to help clarify what you say in order to

5       render the subject matter of your application

6       copyrightable or not.

7              And just one quick separate point.  I think

8       it would be beneficial for the Copyright Office to

9       have a policy where, in circumstances where there's a

10      bulk registration of multiple works, the author can

11      make a singular statement about what the copyrightable

12      or non-copyrightable components are in all of the

13      works so that a photographer registering 750 works

14      doesn't have to do this 750 times.

15              MS. RUBEL:  Thank you.

16              Luc?

17              MR. BOULET:  Thank you.

18              I just want to state that the U.S. Copyright

19      Office should not, from our position, and does not

20      have the capacity to be engaged in investigations into

21      the boundaries of what is disclaimed as AI-generated

22      and whether or not there was sufficient human

23      involvement in each case.

24              The current registration process for works

25      with AI contribution creates confusion around what AI

1    material should be disclosed in a registration

2    application, and then the guidance applies obligations

3    to disclose AI-generated works without drawing clear

4    lines around what those are.  And we don't want the

5    registration process to become more burdensome because

6    the Office is launching investigations into canceled

7    registrations.

8         And the cost of registration is already high

9    with confusion already taking place for many artists,

10   and that standard application severely limits the

11   capabilities of visual artists to register their works

12   in group registrations, leading to greater costs and

13   higher barriers for individual artists.

14        MS. RUBEL:  Thank you.

15        Zara?

16        MS. VARIN:  Thank you.

17        So, before all of this, in my stress prep, I

18   had the opportunity to watch some of the videos that

19   were featuring other folks from the U.S. Copyright

20   Office, and there were two issues that were cited by

21   Shira Perlmutter, I believe.  One is authorship, and

22   the other was ingestion of copyrighted works from

23   machine learning.  I've already touched on the latter,

24   so I want to go back to the authorship point, which a

25   couple of other folks have kind of alluded to and

1    mentioned here.

2         I think an important distinction is, at what

3    point does human involvement cross that threshold into

4    authorship, right?  And, right now, we don't really

5    have a clear set of guidelines for what constitutes

6    that, especially as it pertains to AI-generated

7    pieces.

8         I really appreciate the way that Creative

9    Commons phrases that copyright law's fundamental

10   purpose is to foster human creativity.  Copyright

11   helps protect folks' creative works while ensuring

12   there are clear distinctions and guidelines for what

13   constitutes a copyrightable work.  I think, with the

14   growth in this area, there's a great deal of potential

15   to revisit and redefine aspects of what those

16   distinctions even entail.

17        And as other folks have mentioned, we're not

18   necessarily going to be solving all of this, and

19   that's not entirely on the Copyright Office, but

20   you're setting precedents, and I think it's important

21   to consider that as it's going to ripple through every

22   other aspect of every single creative field and all

23   parts in between.

24        I think that there's also, whenever

25   registering stuff, things that I would want to

1    consider seeing.  The use of any and all mediums,

2    including generative AI, must be disclosed, which I

3    think that that's already part and parcel of the

4    process, but it needs to be, I think, more

5    distinctively and clearly communicated.  It's digital

6    work.  This part kind of sucks for some artists, but

7    you can record and maintain a full record of the

8    process that goes into creating something.

9            I regularly screen share or share a process.

10   I use a program called Procreate that can start to

11   finish share what the process looks like on pieces.

12   That is an option that digital artists have and I

13   think is something that, if not necessarily that but

14   something similar, could and should be considered when

15   evaluating the degree of human authorship for any sort

16   of AI-generated works.

17           I think there's another factor here that

18   we've skirted around, and that's fair use.  The fourth

19   factor in particular is pertaining to the effect on

20   the potential market, and that's of extreme concern.

21   If somebody's art style becomes a popular prompt

22   fodder and the Internet is inundated with countless

23   generated images in that artist's style, how does that

24   impact the artist?  The short version is it sucks.

25   And I've seen many people that have been directly

1    harmed and have lost work because of the lack of

2    really distinct enforcement and ethical development

3    around these AI tools.

4         So I could keep going on the list, but I

5    know that we're running out of time, and I want to

6    give other folks a chance to speak.

7         MS. RUBEL:  Okay.  Thank you.

8         I think we'll hear last from Paul.

9         MR. REINITZ:  Great, and I'll try to be

10   brief.  You know, I just want to say this has been a

11   really good discussion, and I think that really good

12   points brought up, especially on this issue.

13        I also would like to commend the Office on

14   putting this guidance out there.  I know it's really

15   hard to get your hands around it.  And, you know, one

16   of the things could have just been ignore it.  And,

17   you know, I think that you've done a really great job

18   in trying to get it out there.  Is it perfect?  No,

19   but, you know, it will get there.

20        I think one thing in terms that could be

21   helpful for you is to understand that it's not

22   necessarily all or nothing when using generative AI.

23   It's not like I have created an image and it's

24   completely generative AI.  There's also applications

25   of it where you could be considered using it to, like,

1    modify an existing image.  And I think that, you know,

2    that needs to be taken into account.

3         Yes, the disclosure still needs to exist.

4    And, you know, to simplify things, I think that there

5    should be disclosure anytime there's generative AI

6    used.  But, you know, the line might be different.

7    For instance, if somebody, you know, in Photoshop,

8    some of these tools are already using AI, right?  And

9    if someone is using AI to, say, correct sharpness or

10   color, and that's something that has traditionally

11   been okay in part of the creative process, you know,

12   using other tools, you know, that needs to be

13   considered, that that's different than creating a

14   generative image just from a prompt.

15        MS. RUBEL:  Thank you.  And thanks to

16   everybody.  This has been a really productive session.

17   We appreciate all of your comments.  And I like that

18   we've styled this as a listening session.  Really, the

19   purpose was for all of us to be able to listen to one

20   another, and thanks to everyone for sticking with us

21   and sharing your perspectives with us as well.

22        I'll pass it over to Mark briefly.

23        MR. GRAY:  Great.  Thank you, everyone.  So

24   this concludes our second panel.  Thank you very much

25   for everyone on the panel for this session.

1          (Whereupon, a brief recess was taken.)

2          MS. MANGUM:  Welcome back, everyone, and

3     good afternoon.  My name is Jalyce Mangum.  I'm an

4     Attorney-Advisor here in the Office of the General

5     Counsel.

6          We're going to begin the final session in

7     just a few.  But, first, for those of you who are just

8     joining us, I've got a few Zoom housekeeping points.

9          If you're joining this session, but you're

10    not a speaker for this particular session, please keep

11    your camera off and your mic on mute.

12         We are recording this session today, and the

13    recording will be available on our website in a few

14    weeks.  The transcription function is also activated

15    for anyone who wants to follow along that way.

16         In this session, we're going to ask each of

17    our speakers to give brief remarks on the subject of

18    artificial intelligence and visual art.  Each person

19    will be limited to two minutes, and I will be watching

20    the time to keep us moving along.

21         We'll call on the speakers in the order

22    listed on the agenda, and we're going to start first

23    with Tom Lockley at Grey Owl Audio.

24         So, if, Tom, you're on, you can get started.

25         MR. LOCKLEY:  Awesome.

1          So, before I start speaking, I would just

2    like to thank USCO as well as the panelists for coming

3    here today and speak on this issue.  AI and its role

4    in art is a deeply complex issue, and it's good to

5    hear from all stakeholders involved.

6          My name is Tom.  I'm a YouTuber, writer,

7    educator, and investor.  Over the past year, I've had

8    the chance to participate in a number of AI art

9    communities, including Midjourney and Stable

10   Diffusion.  I've also created an essay called *The*

11   *Defense of AI in the Artistic Fields* in which I

12   explore technologies like diffusion models and CLIP,

13   along with the surrounding regulatory contexts

14   involving them.

15         In my time here today, I'd like to share an

16   adjacent though nonetheless important thought.  AI is

17   a powerful tool for equity and expression in the arts.

18   Creators who lack access to expensive tools in studios

19   or who are unable to produce art in a traditional

20   manner due to illness or disability can rely on AI to

21   provide alternate and often more manageable forms of

22   expression.

23         I would know.  Something I didn't mention in

24   my introduction is that I have ulcerative colitis, a

25   disease in which a person's immune system attacks

1      their digestive tract.  This can put me out of action

2      anywhere from weeks to months.  It also manifests in

3      other ways, from joint pain to a sometimes

4      insurmountable fatigue.  I can get around half the

5      issue with tools like scheduled posts and videos, but

6      AI fills the other half.  I use it for thumbnails,

7      book covers, character concept art, and branding.  Yet

8      the amount of human direction that goes into my work

9      shouldn't be discounted.  The process does not end

10     with one prompt, and it can take anywhere from hours

11     to days for me to make a piece that matches or evolves

12     from the initial vision I had for it.

13              I'm not alone in this.  In conducting

14     research for my essay, I had the pleasure of speaking

15     with a number of creators who work through their

16     disabilities via AI, some of them for love of the

17     field, while others use their art to generate income.

18     This regulation of this nascent community can lead to

19     damaging outcomes for those who participate in it.  A

20     lack of protection for AI artists unfairly penalizes

21     them by opening the door to infringement and art theft

22     by larger players who have both financial means and

23     business motivations to lock up the industry in their

24     favor.

25              Regardless of the outcome of today's

1    conversation, lessons we take from it and the

2    precedents that we eventually set will come to define

3    the next several decades.  Let's get it right and make

4    a system that works for all types of creators.

5           Thank you.

6           MS. MANGUM:  Thank you, Tom.  We really

7    appreciate your comments and your perspective.  That

8    was really interesting.

9           Next, we've got Matthew Cunningham from

10   Cunningham Concept Design.

11          Matthew, you're on.

12          MR. CUNNINGHAM:  Hi there.  Thanks,

13   everyone, for having me and thanks for the great

14   presentation so far.  It's been really enlightening

15   listening to everybody's angle on the whole thing.

16          My background, I'm a concept designer in the

17   feature film and television industry.  You may know my

18   work from shows like *Star Trek: Picard*, Season 3,

19   Amazon's *Citadel* that just recently was released, as

20   well as a couple of *Godzilla* movies.  I also work as a

21   car designer for companies like BMW, Toyota, Hyundai,

22   you name it.  And I'm a former labor union leader with

23   the Art Directors Guild.  And I also teach design at

24   the Art Center College of Design in Pasadena, which is

25   the top design school in the world arguably.

1          My reason for being here is I'm part of a

2     larger coalition based in Los Angeles, and what our

3     concerns are fundamentally have to do with the

4     copyright violations that are being employed by

5     certain companies who are scraping the data and

6     identity of artists.  My concern is multi-pronged but

7     I would say primarily is for the artists who are

8     immediately being impacted economically, but also for

9     successive generations of artists and also for the

10    generations of past artists, where I think quite a lot

11    has been discussed regarding the ability to imitate

12    the style of artists.

13          This has very immediate economic impact, but

14    I think also, through the historical lens, going back

15    and, you know, if you visit a museum, you'll see some

16    works of artists that are quite prominent, but these

17    might become muddy waters in due time given enough of

18    an evolution with the technology.

19          So I'm just simply here to speak for artists

20    in both organized labor, unofficially, but mostly for

21    myself and my colleagues in the film industry.

22          MS. MANGUM:  Well, thank you, Matthew.  We

23    appreciate you being here and for you sharing your

24    thoughts.

25          Next, we have Brian Frye with the University

1    of Kentucky College of Law.

2              Brian?

3              MR. FRYE:  Thank you for inviting me to

4    speak.  I'm Brian L. Frye, Spears-Gilbert Professor of

5    Law at the University of Kentucky College of Law.

6              I think we're asking the wrong questions

7    about AI and copyright.  Everyone is asking whether a

8    copyright protects AI-generated works and whether

9    training an AI algorithm infringes copyright.  The

10   obvious answer is no and no.  Copyright only protects

11   works created by people.  AI doesn't even create

12   works.  It generates content, which we consumers

13   interpret as works.

14             Many years ago, Roland Barthes predicted the

15   death of the author, and AI has written the author's

16   obituary.  Likewise, training and AI algorithm doesn't

17   and shouldn't infringe copyright.  AI algorithms don't

18   copy works, they merely catalog rhetorical conventions

19   and then deploy them to create conventional content.

20             We should be asking what AI can tell us

21   about what copyright should protect and why.

22   Copyright can only protect creative works, but courts

23   and the Copyright Office have struggled to define

24   creativity.  Maybe AI can help.

25             An AI algorithm is essentially a nonsense

1       generator designed to produce banalities.  In other

2       words, AI is uncreative by design.  An AI algorithm is

3       a machine for regurgitating conventional wisdom.

4       Indeed, we are amused when an AI hallucinates and

5       fails to satisfy our pedestrian expectations.  But we

6       can be just as boring as any AI, and there's no point

7       in copyright protecting banalities.

8               Maybe AI can help us limit copyright to

9       works that are actually creative.  It's easy, just ask

10      AI to evaluate the creativity of works created by

11      people to determine whether they deserve copyright.

12      No one knows a fake like a faker, and AI is designed

13      to identify banality.  That's what makes it a killer

14      app.

15              We don't know how to identify creativity,

16      but AI can tell us what isn't creative, and maybe

17      that's good enough to tell us what is creative, if

18      anything.

19              Thanks again.  I'm on Twitter @brianlfrye.

20              MS. MANGUM:  Thank you, Brian.  Really

21      interesting comments, and thanks for the Twitter

22      tagline.  We appreciate that.

23              Next, we've got Nettrice Gaskins, who is a

24      freelance artist.

25              MS. GASKINS:  Thank you, and thanks for

1    having me.

2           In 2017, the Andy Warhol Foundation launched

3    a preemptive lawsuit against photographer Lynn

4    Goldsmith, who captured photos of the late musician

5    Prince in 1981 for *Newsweek*.  Warhol was later

6    commissioned by *Vanity Fair* in 1984 to produce a pop

7    art recreation of one of the images after licensing it

8    for $400.  However, Warhol continued to use the image

9    for his portfolio, taking his own spin on the original

10   photo.

11          In response to being sued for her own

12   copyrighted photograph, Goldsmith filed a countersuit,

13   and she lost.  New York State District Judge John G.

14   Koeltl ruled in favor of the Warhol Foundation.

15   Koeltl argued that though Warhol used Goldsmith's

16   photograph as a reference image, he removed nearly all

17   of the photograph's protectable elements.  Thus,

18   Warhol did not violate the photograph's copyright.

19          Like Warhol, my clients license images from

20   -- for me to use as references for the creation of AI

21   art.  Mimicking these references is not a goal.

22   Reimagining, recasting, remixing, and restyling them

23   are.

24          My first commission was in 2019, and I've

25   been using a variety of AI tools to make art since

1    2016, long before prompt-based tools.  I use AI to

2    produce variations on reference images, and I use text

3    prompts with keywords that the AI recognizes in order

4    to generate unique visuals.  I use image editing

5    software to revise visual elements as well as layer

6    images I've done, and I've done this since the early

7    1990s.  Just one of my AI artworks merges multiple art

8    styles and techniques, posing subjects in ways that go

9    far beyond the original image references.

10            For me, as someone with a traditional fine

11   arts background, AI broadens what is possible for

12   artistic production, and these new tools have enabled

13   me to become an art director, maker, and curator of my

14   work.  This puts me in a pipeline that previously

15   excluded me.  Thank you.

16            MS. MANGUM:  Thank you, Nettrice.  We

17   appreciate you sharing your experience.  Really

18   interesting remarks.

19            Greg Hopwood was unable to join us, so we're

20   going to skip right on to Phuc Pham from the Freelance

21   Solidarity Project.

22            MR. PHAM:  Hi, everyone.  My name is Phuc,

23   and I am here today to lay out my perspective as a

24   photo editor and a photographer, as well as to

25   represent conversations I've been having with

1    freelancers I organize alongside with in the Freelance

2    Solidarity Project, which is the Digital Media

3    Division of the National Writers Union.

4              Editors of born-digital works that are

5    primarily distributed online, freelance digital

6    content creators, not just those working in the visual

7    arts space, like photographers, animators,

8    illustrators, and graphic designers, but also in every

9    other corner of the media industry, are among those

10   the most likely to be impacted by generative AI

11   technologies.  And what I'd like to focus on during my

12   time right now is just a simple example of, like, the

13   sort of innumerable images that train these AI systems

14   to generate their output.

15             You know, these companies that develop AI

16   engines largely obscure details of how their

17   technologies work.  As such, it's nearly impossible

18   for an individual artist to seek recompense for their

19   copyrighted work showing up in these training data.

20             Those who wish to remove their images from

21   these data sets have found tools such as "Have I Been

22   Trained?" to even determine exactly which images were

23   used to train these systems.  You know, following that

24   discovery, an artist would have to register their

25   works in order to even defend a copyright claim.  You

1       know, for example, a photographer whose digitally

2       published works were scraped to train these systems,

3       those works could number in the hundreds of thousands.

4       And at $55 to register 10 images, that quickly can

5       become an exponential amount of money.

6               This process is not only economically

7       draining, could be, but would also demand time and

8       focus away from an artist who definitely won't have an

9       entire corporate department to sort of support these

10      copyright claims like you're seeing with, like, Getty

11      Images or a lot of these other bigger outfits that

12      are, you know, bringing forth lawsuits for this type

13      of usage of their work.

14              And beyond the impracticality of defending

15      individual copyright claims, as someone who works with

16      photographers to commission original works and who

17      organizes to improve industrywide working conditions,

18      I'm simply disturbed, you know, by the implications of

19      these systems and how quickly they are sort of can

20      quickly replace the human spirit and the novelty that

21      working artists bring to these types of works.  It

22      seems to me like an untenable future for visual

23      artists who are born-digital and otherwise.

24              MS. MANGUM:  Well, thank you.  We appreciate

25      your remarks.  Really interesting.

1          Next, we've got Ankit Sahn from Ajay Sahni

2     Associates.

3          Ankit?

4          MR. SAHN:  Thank you.  Good afternoon,

5     esteemed speakers and members of the United States

6     Copyright Office.

7          By way of an introduction, I'm Ankit Sahn.

8     I'm an IP lawyer based in India.  And I'm the owner of

9     the RAGHAV AI painting tool.  I filed what was perhaps

10    the first application at the USCO and the CIPO in the

11    Indian copyright office where a human and AI were

12    identified as co-authors back in 2021.  I'm grateful

13    for the opportunity to present my views today.

14         As we continue to rely on AI tools to

15    produce works of art, music, literature, and other

16    creative outputs, creators must be assured that their

17    works will be protected under copyright law.  Denying

18    copyright protection to AI-generated outputs could

19    result in a chilling effect on creativity and

20    innovation.

21         Just as when cameras were invented, humans

22    moved up the value chain by becoming photographers,

23    using AI-based tools to create demands human beings to

24    move up the value chain once again.  We must recognize

25    the increasing role that AI is playing in the creative

1    processes across all industries while also

2    acknowledging the value of human creativity and talent

3    and thus maintaining that balance.

4              The definition of human creativity in the

5    context of copyrightability, therefore, has to be

6    reconsidered.  Works created with the assistance of an

7    AI-based tool could be considered as a separate

8    category of copyright, perhaps with reduced duration

9    and scope of protection to incentivize human effort

10   and promote innovation.

11             As Mahatma Gandhi said, "The future depends

12   on what we do in the present."  Protecting AI-

13   generated outputs under copyright law is a crucial

14   step in this direction, and by providing necessary

15   protection and recognition, we can continue to foster

16   innovation, creativity, and ultimately benefit the

17   creative industries, as well as creators of these AI-

18   based tools.

19             If AI-assisted works are not protected, on

20   the contrary, it could lead to creators suppressing

21   the fact that they use the assistance of an AI tool to

22   create a work, which would in turn be unfair to

23   creators who have utilized AI tools to enhance their

24   creative outputs and in any case would not be

25   reflective of the correct factual position on the

1    copyright register on record.

2              Training on proprietary data, as many

3    speakers pointed out today, is one of the key issues.

4    Collective or possibly compulsory licensing of data

5    could be explored as a possible solution.

6              In conclusion, copyright law must evolve

7    with the times, recognizing the role that AI is

8    playing in the creative industries.  Protecting AI-

9    generated outputs under copyright law, I believe, is a

10   crucial step in this direction.

11             I am grateful once again for this

12   opportunity.  Thank you for your time and attention.

13             MS. MANGUM:  Thank you, Ankit.  We

14   appreciate your remarks.

15             Next, we're going to move on to Jeffrey

16   Sedlik from the PLUS Coalition.

17             MR. SEDLIK:  Thank you.

18             MS. MANGUM:  Jeffrey?

19             MR. SEDLIK:  Thanks.  Yes, I'm Jeff Sedlik.

20   I'm President of the nonprofit PLUS Coalition at

21   PLUS.org.  We're currently collaborating with the IPTC

22   on establishing metadata fields to communicate

23   information about works that may incorporate AI and to

24   provide for the expression of permissions and

25   constraints on the use of AI or use of visual works

1     for AI training and for generative AI.

2               I'm also the former president of the

3     American Photographic Artists and a photographer,

4     filmmaker, and professor at the Art Center College of

5     Design, where I teach copyright law and licensing.

6               Like other visual artists, copyright is at

7     the core of my business.  To sustain it and to support

8     my family, I rely on revenue from licensing my works

9     throughout the life of my copyrights.  I offer

10    licenses of my work to all manner of clients for all

11    manner of media in all manner of purposes, including,

12    importantly, artist reference use, the use of my works

13    by other artists to adapt my work in new derivative

14    works.  The exclusive right to adapt a work is often

15    overlooked but is, in fact, one of the core rights of

16    copyright, no less important, no less critical than

17    the exclusive right to reproduce, distribute, display,

18    or perform a work.

19              The practice of offering, seeking, and

20    granting artist reference licenses has been in broad

21    use for more than a century, and the use of visual

22    works as AI image prompts falls squarely within the

23    definition of artist reference use.  In fact, many of

24    us have offered up our works for paid licensing for AI

25    training and artist reference use in AI generative

    1     works for years.

    2              This fact, combined with the fact that many

    3     stock photo agencies are now routinely licensing their

    4     works for AI training, establishes that a marketplace

    5     for licensed use of visual works for AI training

    6     exists and is therefore usurped when works are used

    7     for AI training without authorization.  Meanwhile,

    8     thousands of copies of my work are included in the

    9     LAION database and other databases of, collectively,

   10     billions of images used to train AI systems, many

   11     without attribution.  The more I license my works, the

   12     more copies are included in the training sets, and the

   13     closer the appearance of generated AI works to my

   14     original creations.  But, as a professional, I must

   15     license my work in order to sustain my business.  It's

   16     a Hobson's choice.

   17              Some suggest that contrary to the core

   18     provisions of copyright law, anything on the web is

   19     fair game and that if artists don't want their works

   20     used for AI training or image prompts, we should

   21     remove our works from the web.  But the web is the

   22     primary medium for licensed use of our creations, and

   23     we necessarily depend on the web to monetize our

   24     works.

   25              It's also very important to recognize that

1    many, perhaps the majority, of copies of our visual

2    works displayed on the web are infringing copies made

3    without our knowledge or permission.  These infringing

4    copies are then blindly scraped for inclusion in

5    databases like LAION, which is arguably a database

6    built on infringements.

7              MS. MANGUM:  Jeff --

8              MR. SEDLIK:  In addition, we must not forget

9    that the widespread aggregation of visual works --

10             MS. MANGUM:  I'm sorry.  We're going to have

11   to -- I'm going to have to interrupt.  It's been a

12   little over two minutes.

13             MR. SEDLIK:  Okay.

14             MS. MANGUM:  But feel free definitely to

15   submit your remarks when there are opportunities later

16   to do so.  Thank you so much for coming.

17             MR. SEDLIK:  No problem.

18             MS. MANGUM:  Next, we're going to move on to

19   Patricia Sigmon, who is an artist and art director.

20             MS. SIGMON:  Thank you so much.  My name is

21   Patricia Sigmon, and I am a professional artist and

22   art director who has primarily worked in 2D and 3D

23   animation.  I will be speaking on my personal

24   experiences with AI-generated images and my concerns

25   about how they have compromised the ability of artists

1    to retain work, as well as how those problems may

2    multiply in the future without more regulation.

3         At a previous position as an art director,

4    my team of artists realized that character design

5    references we had been given were AI-generated.

6    Company leaders did not consult me about the use of AI

7    beforehand.  The team came to me with several

8    concerns, including fears about their jobs being

9    replaced, ongoing legislation against AI, ethical

10   concerns, and the poor quality of the images they were

11   given.  While AI-generated images seem like they would

12   be an easy shortcut for gathering references, they

13   often include nonsensical details that do not

14   translate well to designed outfits in 3D models.

15        A major concern was also that work produced

16   by artists for the company could be used to train AI

17   without their consent.  There has been ample evidence

18   from previous panelists that the goal of many people

19   who use this technology is to imitate the styles of

20   existing artists.  It is not a stretch to imagine that

21   without legal guarantees against this, a company could

22   hire artists, train AI with their work, and eventually

23   use it as a replacement for them as the output quality

24   improves.

25        I compiled all these concerns and statements

1     from the artists and brought them to the heads of the

2     company.  I was fired two days after that meeting.

3             I am part of the first wave of artists

4     affected by major companies adopting AI image

5     generators.  My goal is not to totally disavow the use

6     of this technology or prevent individuals from using

7     it.  I understand that the march of progress cannot be

8     stopped and that AI image generators have uses outside

9     a professional setting.  The problem is that companies

10    will always be more concerned with their bottom line

11    than the people they employ.  It is imperative to

12    protect the ability of artists to earn a living from a

13    craft that they've perfected through a lifetime of

14    practice without that work being cannibalized.

15            Thank you for your time and for inviting me

16    to this discussion.  I think it's really important to

17    have, and I've appreciated hearing everyone's

18    perspectives.

19            MS. MANGUM:  Thank you so much for sharing

20    your experience with us, Patricia.  We really

21    appreciate it.

22            Last but not least, we've got Delanie West

23    from Be Super Creative.

24            Delanie?

25            MS. WEST:  Thank you, Patricia.  Thank you

1    so much for that perspective.  I appreciate you too.

2              Thanks for the invitation to share my

3    perspective.  I'm Delanie West, Founding Creative

4    Director of Be Super Creative.  I have 30 years

5    experience in creative marketing, business, and brand

6    development, and I've led creative and product

7    development for U.S., European, and Japanese brands.

8    I serve in a leadership capacity at Women in Toys,

9    Licensing & Entertainment, as well as the Graphic

10   Artists Guild, and other creative industry

11   organizations, but the views I express today are my

12   own.  I'm here today to share a perspective of a small

13   business owner doing the work of developing creative

14   for product development.

15             As a value creator who celebrates this new

16   technology, I'm also concerned about the impact of AI

17   on consent, credit, and compensation.  AI can

18   revolutionize the creative process, but we must ensure

19   ethical methods to generate outputs that respect

20   intellectual property and current law.

21             I've long worked aside legal IP counsel to

22   protect and defend copyright and patents, and the same

23   process is necessary for ethical AI implementation.  I

24   ask that we embrace AI while being mindful of ethical

25   considerations and adhere to the current and future

1    intellectual property laws.

2            The use of AI in product development has

3    tremendous potential for boosting creativity and

4    productivity, but we must approach it with care and

5    responsibility to ensure practice for consent, credit,

6    and compensation.

7            In summary, AI has been a game changer for

8    product development timelines for me, but we creators

9    need the guardrails that enable users to respect the

10   rights of all parties involved.  Thank you.

11           MS. MANGUM:  Thank you so much.  We really

12   appreciate everyone who shared their perspective and

13   their experience.

14           I'm going to turn it over to Mark to close

15   us out.

16           MR. GRAY:  Thank you very much, Jalyce.

17           And to echo Jalyce's remarks, we truly do

18   appreciate, both I, as well as the rest of my

19   colleagues here in the U.S. Copyright Office, we do

20   appreciate you taking the time to talk to us today and

21   to share all of this information.  Of course, we're

22   going to continue to think about all of these issues

23   and all of the things that you've told us as we work

24   on our initiative examining issues of copyright law

25   and policy and the intersection with artificial

1    intelligence technology.

2         So looking forward, we have two more

3    listening sessions on the calendar.  Our next session

4    is on Wednesday, May 17, which will be focused on

5    audiovisual works, including movies and video games.

6    Our final session is going to be on May 31, focused on

7    musical works and sound recordings.  The audiovisual

8    session, unfortunately, is no longer accepting

9    signups.  We are wrapping up the selections for those

10   panels now.  The music session remains open until

11   May 10.  So, if you are interested in speaking about

12   musical works or sound recordings, you can find more

13   information on our website at copyright.gov/ai.

14        As a reminder, we will be making video

15   recordings of this and of the other sessions available

16   to the public on our website.  We're aiming for about

17   a three-week turnaround on those.

18        And, as we've said before and as we will

19   continue to remind people, this is not the final word.

20   This is not the final chance to speak to us.  There

21   are many more chances coming down in the future.  We

22   look forward to hearing from you and thank you very

23   much for spending your time with us today.  Thank you.
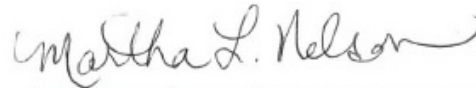
24        (Whereupon, at 4:00 p.m., the listening

25   session in the above-entitled matter adjourned.)

CERTIFICATE

CASE TITLE:      Copyright and Artificial Intelligence

                 Visual Arts Listening Session

HEARING DATE:    May 2, 2023

LOCATION:        Washington, D.C.


        I hereby certify that the proceedings and

evidence are contained fully and accurately on the

tapes and notes reported by me at the hearing in the

above case before the Library of Congress, U.S.

Copyright Office.


                    Date:  May 2, 2023


                    _____
                    Martha Nelson
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