

NVPS NEWSLETTER

GREAT PEOPLE and GREAT IMAGES SINCE 1998



September 2023 Issue

This month's meeting

September 25 – Nick Otto

**Theme: Street documentary photography
(images that tell a story about people,
events, or locations)**

Nick Otto spent almost a decade living and photographing in China for publications around the world. He spent 10 years in San Francisco before accepting the staff photographer position at the *Napa Valley Register* in Napa, which he now calls home. Before taking the staff job at the *Register*, Nick was contributing regularly to the *Washington Post* and the *San Francisco Chronicle* among other publications. He has been recognized for his work covering both the homeless issue and fentanyl crisis in San Francisco as well as for his recent work covering life in Napa County this past year.



His journey has shown him the depths of human despair and the power of human resilience, but most importantly it has taught him that there is no substitute for compassion and empathy.

To view examples of his work visit:

<http://www.nickotto.visura.co>

NVPS meetings are on the fourth Monday of each month starting at 7:00 pm in the Oak Room at the Napa Senior Center, 1500 Jefferson, Napa.

For the meeting, members may submit two photos. This month the theme is *people*. Submit by the Saturday before the meeting according to the guidelines at the end of the newsletter.

Note, no newsletter for October or December.

Member news

NVPS October 23 Meeting

Making a return visit, Lowell Downey, co-owner of Napa-based Art & Clarity with Janna Waldinger, will be the guest presenter at the October general meeting.

For more than 25 years Lowell has created and overseen photography shoots for corporate branding, annual reports, executive headshots, food and wine imaging, international projects, magazine covers, editorial productions, weddings, and personal family photographs in a studio. He also produces business and nonprofit videos. For the last decade he has been providing aerial photography services. His world photography assignments have included India, Dubai,

Bolivia, Chile, Switzerland, India, and Italy. He lectures on the arts, photography, environment, and responsible business practices and was awarded two book commissions by AltaMED Health Services in Los Angeles, two museum commissions, and has had multiple exhibitions of his art over the last 20 years.



In addition, Art and Clarity's workshops, the *Art of Seeing Adventures*, where individuals join the couple for excursions into natural settings, were highlighted by the *New York Times* as one of the top 10 photography adventures in the world.

He strives to be a *best-practices* consultant helping others maintain a responsible environmental footprint. He serves as president of the board of ICARE (Institute of Conservation, Advocacy, Research, and Education), and he documents the watershed of Napa County working alongside biologists and scientists.

To see examples of his work visit:

www.artclarity.com

Articles

Understanding Resolution ©2023 Joseph T. Sinclair

Why is dpi (dots per inch) meaningless when setting a standard for digital photos displayed on digital devices?

Dpi is a physical standard for physical prints. The standard resolution for commercial-quality color prints is 240 dpi. For fine-art prints, it's 300 dpi. It's the number of dots per inch on paper (or anything printed); the more dots per inch, the higher the resolution. Most people can't see more than 300 dpi.

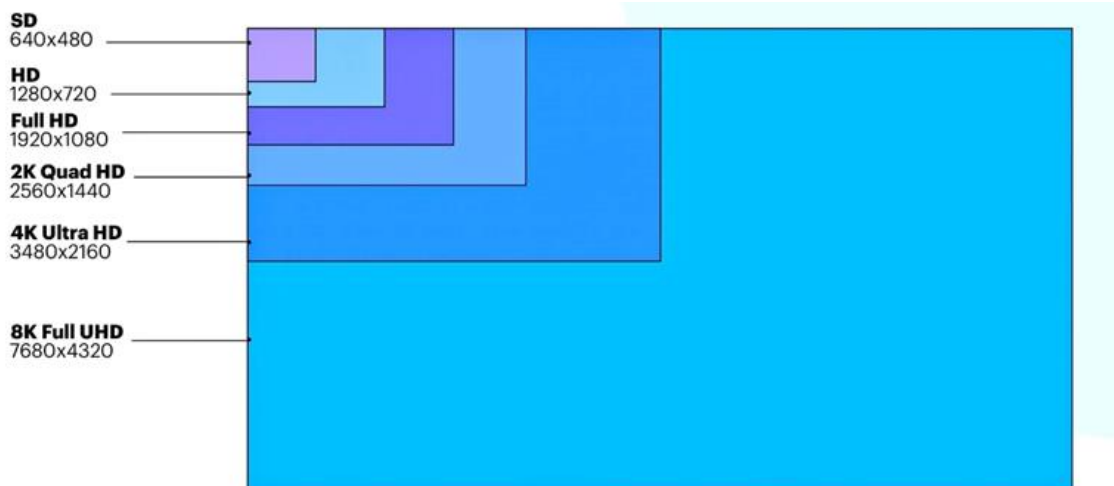
Ppi (pixels per inch) is a physical standard for a *specific* digital device. The range of ppi for devices goes from 72 ppi for old computer monitors, to 94 ppi for modern monitors, to 180 ppi for 4K monitors, and to 430+ ppi for some smartphones. You don't know what the ppi of an image is unless you know the specs of the *specific* device on which a user views the image. If your photo is to be viewed on a range of digital devices, you need to use a resolution that works well on all (i.e., a compromise).

Note that for practical purposes, dpi is equivalent to ppi. Dpi measures dots of ink on a print. Ppi measures dots of light on a *specific* digital device's screen.

Digital resolution

The pixel dimensions of a photo define it digitally (its resolution). Nothing else. To define it as a physical print, you can use dpi. To define it as an image on a *specific* digital device, you can use ppi. But to define a digital photo as a digital image, you use the pixels dimensions, and nothing more (i.e., not dpi or ppi).

Thus, a size standard for showing photos at photo club meetings might be 1920 pixels on the long side (full HD size). No dpi or ppi are needed or are relevant for a digital-size standard.



Enlarging

How do you know whether a digital photograph needs to be enlarged for making prints? Let's say your digital photo is 4000 pixels by 3000 pixels. If you print at 240 dpi, the long side is 16.67 inches ($4000 \div 240$). If you print at 300 dpi, the long side is 13.33 inches ($4000 \div 300$). If you want a larger print, you need to enlarge the

digital photo. And we all know enlargement suffers degradation in quality. (If you want a smaller print, you don't have to worry much about degradation.)

The algorithms for enlarging get better over time. In days gone by, the rule was: don't enlarge over 30%. Today many experts claim you can enlarge as much as 400% without losing significant quality. How much you enlarge is a personal choice based on your photo-editing knowledge and the quality of the digital photo you need for a specific purpose.

Let's say you want to enlarge your 4000 x 3000 digital photo print to be 20 inches on the long side at 240 dpi (keeping in mind that it's only 16.67 inches in the native resolution).

First, you determine that 20 inches at 240 dpi is 4800 pixels. The aspect ratio is 4:3. Thus, the short side goes from 3000 to 4000 ($4 \times 3000 \div 3 = 4000$). The enlarged digital image is 4800 x 4000.

Second, the original number of pixels in your digital photo is 12000 (4000×3000). The number of pixels in the enlargement is 19200 (4800×4000). Therefore, you need to enlarge the digital photo 60% ($19200 - 12000 = 7200$) and ($7200/12000 = 0.6$). Therefore, you make a 60% enlargement in order to print it with 20 inches on the long side.



How do you know when a digital photo needs to be enlarged for digital devices? Let's say your digital photo is 1920 x 1080 (full HD size). There is no one-size-fits-all. First, you have to pick a *specific* digital device as your target. Your 1920 x 1080 photo will display as 26.67 inches on the long side on an old monitor ($1920 \div 72 = 26.7$) going back many years. On a Pixel 7 Pro smartphone (6" x 2.75" @ 520 ppi [manufacture's spec]), your 1920 x 1080 digital photo will display 3.7 inches on the long side ($1920 \div 520$). That's not enough to fill the 6" screen of the Pixel 7 Pro. So the specific viewing device dictates whether your digital photo will need to be enlarged. In other words, a 3.7 inch image doesn't fill the 6 inch screen of the smartphone. Thus, you need to enlarge.

In the case of the Pixel 7 Pro, the screen resolution is 3120 x 1440 (according to its specifications). That means the screen requires a digital image of 3120 x 1440 to fill the screen completely. Any digital photo smaller than 3120 x 1440 will need to be enlarged to look its sharpest on the full Pixel 7 Pro screen.

But wait

Is the above true? *It depends.* The smartphone's display software will automatically enlarge your photo to look good on the full smartphone screen. That raises the question: do you want to do the enlargement yourself, or do you want to leave it to the smartphone's display software to do the enlargement?

That's a question that only you can answer. Letting a device's software do the enlarging means it's out of your control.

Standard

A standard that made sense in general for displays on digital devices at one time in the past was the full HD 1920 x 1080 pixel size (HDTV). But we're now in a new era in which many digital devices have a very high ppi. That calls for a new standard. And the new standard for general use should be 4K. Thus, the new standard is 3840 x 2160 (Ultra HD). The old standard HDTV (full HD) is now obsolete.



A new standard makes sense for up-to-date devices (e.g., smartphones). But a new standard is not necessarily required for all devices.

For instance, if a 1920 x 1080 image is seen on a screen that's 5 feet wide (60 inches), the image is 32 ppi ($1920 \div 60$). But the distance away of the viewer has to be taken into account. Where a viewer sees an image sitting 16 feet away, the viewer needs only to see it at 35 ppi to see it as sharp as can be (reference the chart below). Thus, the screen mentioned above at 32 ppi is about as sharp as it can be, unless a person sits closer.

Viewing Distance	Min Resolution
0.6m / 2ft	300 dpi
1m / 3.3ft	180 dpi
1.5m / 5ft	120 dpi
2m / 6.5ft	90 dpi
3m / 10ft	60 dpi
5m / 16ft	35 dpi
10m / 33ft	18 dpi
15m / 50ft	12 dpi
50m / 160ft	4 dpi
60m / 200ft	3 dpi
200m / 650ft	1 dpi

It's simple

All things considered, your digital photograph's resolution is simply its pixel dimensions. It's only when you want to print it that dpi is a consideration or when you want to target a *specific* digital device that ppi is a consideration.

The MB size of a photo file is not a consideration except in situations where memory space is limited or internet access is slow. A photo 1920 x 1080 as a .jpg can be different in MB-size depending on what quality it is. At 10 (no great loss of quality) it will have more MBs than at 8 (a slight loss of quality). A photo 1920 x 1080 as a .tif will have substantially more MBs than the same photo as a .jpg file.

Conclusion

If all this seems too complicated, there's one thing to keep in mind. About 70% of people who read an ebook read it on a smartphone. It's reasonable to assume that as many (70%) will see your photos on a smartphone rather than some other digital device. Thus, a smartphone should be your target device for determining the size of your photos for viewers who are to see them on digital devices.

The software in most smartphones or tablets automatically adjusts the size of a photo (reduces or enlarges it) to fully fit the image-display on the screen of the device.

Nonetheless, for the highest quality, using a standard resolution of ultra HD (3480 x 2160, which goes by the name of 4K) is your best bet. It's the highest quality on digital devices with a high ppi, such as smartphones.

As a practical matter, however, you don't necessarily have to do anything special except be cognizant of how resolution works. The digital device does the work for you.

AI in photography ©2023 Joseph T. Sinclair

Photoshop beta (v.25.1) is now in effect. Photoshop now incorporates *Generative Fill* and *Generative Expand* powered by Adobe Firefly. These are AI generators. (They are there whether you want them or not. Or you

can use the now obsolete Photoshop v.24.7 only if you can't accept change.) A new age has arrived. Put on your seatbelt. If your photo software doesn't use AI generation now, it will soon.

What can AI generation do? Photoshop AI doesn't necessarily create new photos from words, although it can do that. It creates new images (from words) that you can use for a small part or a large part of an existing photograph.

For example, for many years in Photoshop (and other photo software) you have been able to substitute a sky from one photograph into another photo, which you are processing. With AI you can do the same, only with words.

The never-ending stream of new photo processing technology is very painful for many of us. AI is the latest. But let's look at our situation analytically.

First, it's something new and untested. It has a high learning curve both from a technical point of view and a conceptual point of view. At a time when many photographers are struggling to adapt to the digital revolution in photography, who needs another technology to master.

Second, AI defies tradition. As I mentioned in an article in an earlier newsletter, we don't even have an accepted standard vocabulary with which to discuss recent revolutions in photography rationally. But we

know what is controversial today is likely to be *de regueur* tomorrow.

Third, you can look at AI as just another tool for photo processing but one that uses words rather than software manipulation.

Keep in mind that Ansel Adams manipulated his photos in the darkroom well beyond what most other photographers were doing at the time. That practice eventually made him a *god* of photography. Beware, if you criticize Adams, you will be effectively expelled from the brotherhood of photographers today. It seems clear to me, however, were Adams alive today, he would be one of the leading advocates of using Photoshop. And he would be taking a serious look at AI for photography.

In contrast, today there are some very talented photographers who advocate that a photograph is only a true photograph if it has not been cropped, if it has not been manipulated in photo software, and if it's in a traditional format (e.g., standard aspect ratio).

My conclusion is that one needs to keep an open mind. Photography is 179 years old. There's no question that it has evolved substantially as a technology and will continue to do so. To pick a certain place in that evolution (excluding AI) to stake out your photo processing practice is OK but limiting. And if you haven't staked out a limiting photographic practice

yet, why would you exclude AI as a potential legitimate processing tool?

AI is scary. There is no shortage of experts who are predicting it will bring the end of the world. That has no relevance to photography, however. For photography it's just a new tool and potentially a useful one. Historically, photography has been a technology to be used for good or evil. And AI will continue that tradition. The only question is, will it become a major tool or a minor one? That has yet to be decided.

As a photography organization, it seems natural for NVPS to be open to new ideas and new technologies relevant to taking photographs. The generations that follow us will have no trouble adopting and adapting new technologies to photography. With that in mind, it seems like a good idea to devote a portion of our time and effort to evaluating and reporting on AI. Or how else are we going to recruit new (younger) members?

Featured photographer

Karen Noyes









Officers & staff

Elected Board members

President - Phil Venable

Vice president - Terry Smith

Secretary - George Bartolome

Membership Secretary – Nancy Hernandez

Treasurer - Gary Sampson

Appointed board members & chairs

Member-at-large - Lanny Johnson

Program chair - Mitchell Glotzer

Website manager - Carolyn Younger

Newsletter - Joe Sinclair

Exhibit chair - open

Ongoing-exhibits chair - George Bartolome

Hospitality coordinator - open

Field trips - Irena Miles (Karen Noyes, Ann Seronello,
Geoff Hansen)

Workshops - Phil Venable

Publicity - Zach Berkowitz

Zoom coordinators - Roland Dumas, Phil Venable
Digital projectionist - Angie Johnson (Roland Dumas,
Peter Guenther, Phil Venable)
Facebook posting - Karen Noyes
Fundraiser chair – open



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Newsletter Submittal Guidelines

Submittal deadline

The submittal deadline for newsletter text + photos (content) is the third Monday of the month.

Members' photos for the meeting

Members may submit images for the meeting and should be prepared to make a brief verbal explanation. To submit your photos for a meeting, send your images to the regular critique site in the usual format (no more than 1920 pixels on the longest side) no later than the Saturday prior to the monthly meeting. The file name for an image should be:

members first&last name_title or theme_order
number

Examples: John Everest_Harvest Time_01 and John Everest_After the Harvest_02

Send the files to: NVPS.Photo.Critique@gmail.com. Only photos taken by members accepted.

Newsletter head photo

If you desire to provide a head photo for one issue, submit a JPG 1920 pixels horizontal. The vertical can be between 450 and 1100 pixels. Anything outside these parameters cannot be used. The file name should be your name plus the title of your photo, the word *head*, and the date:

name_title_head_date

Send the file to jt@sinclair3.com with the subject-line: HEAD PHOTO (in all caps). Only photos taken by members accepted. And photos that have been published before on the NVPS website or in the NVPS newsletter are not eligible.

This month's meeting

Follow the guide for *Articles*.

Field trips & workshops

Announce of field trips and workshops should include all information including leader + contact info, date, time, meeting place, miles to location, cost, and nature of the photography as well as a general description. These are *participation* events. Announcements can run in successive issues *before* the event.

Events

This is an announcement of a photo exhibit, contest, or photo op of interest to members or one that includes a member or multiple members. It can run in successive issues *before* the exhibit.

This category also includes a call for member participants in future photo exhibits or contests with complete information on applying and participating.

If an event is a duplicate of full information elsewhere, it should be a brief announcement with a hyperlink.

Member news

This is a one-time *brief* announcement of a member's *past* achievement, such as an exhibit, a photo experience, a travel-photo experience, a photo learning experience, and the like. Use a hyperlink to indicate where full information is available.

If this is the sole information on a substantial achievement, it can be written like an article with full information; but it shouldn't be a duplicate of full information published elsewhere (use a hyperlink instead).

NVPS administrative news or other news is also appropriate for this category.

Articles

Articles (e.g., magazine-like articles) written by members can be posted in the newsletter for one issue. They will be assumed to be published by permission. They must be relevant to photography, of course.

Articles published by non-members are likely to be copyrighted. See *Copyrights* for the treatment of non-member articles.

Generally, only one article per issued will be published with membership-written articles given preference.

Equipment

Equipment for sale or giveaway can be listed here for one newsletter issue. Provide full information.

Photos for newsletter

Photos submitted for the newsletter should be: no more than 1920 pixels on the longest side. File names should be:

author_title of photo_date

Photos taken by members will be assumed to be published by permission. Photos taken by non-members are likely to be copyright protected. See *Copyrights* for the treatment non-member photos.

Send the photo file *attached* (not *embedded*) to jt@sinclair3.com with the subject-line: PHOTO (in all caps). Due to incompatibilities between Apple and Windows, photos that don't conform to the specs in this paragraph may be unusable and thus required to be sent by ZIP file.

Photo captions

If you want captions for you photos, include them in the photo file name.

Submissions

For all information (text) submitted, use a file name that identifies the subject matter and author. Send the file to jt@sinclair3.com with the subject-line: NEWSLETTER (in all caps).

Subject-line email

Unless you use the subject-line words requested for text or photos, your submission might be lost in the 300 junk emails received each day.

In the email, explain your submission. Example: *This photo goes with my article on shooting wildlife.*

Copyrights

For articles and photos by non-members, NVPS must have written permission for publication. The exception is articles or photos in the public domain; for such articles or photos, the author and source of the public domain archive should be stated.

One exception to copyright protection is the use of copyrighted text or images in teaching, such as an article on photography.

One way to circumvent copyright problems is to use a hyperlink to the article or photo published elsewhere.

Typography

Use italics for emphasis. Use emphasis sparingly. Don't use bold or all-caps. Bold and all-caps are difficult to read. Nonetheless, all-caps are acceptable for acronyms and designations.

Suggestions

Suggestions for the newsletter format or otherwise should be sent to jt@sinclair3.com with the subject-line SUGGESTION in all caps.

Your editor

Your current newsletter editor is half-deaf with a short-term memory (25 seconds on a good day and getting shorter each month), lives in Vallejo (doesn't know Napa very well), and receives about 400 emails every day. Although the newsletter editor reserves the right to edit submissions, the newsletter editor's job is to *receive* content (information + photos) for the newsletter, not create it. So, please submit publish-ready content according to these guidelines.