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2830 words

[PHOS|CŪRA]

[phos|cūra]: (A Portrait of a) Camera App, Part One?

by Benjamin Erlandson

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It's my last morning in Skye.

The tide has come in on the bay in Portree, and the sunrise has greeted the picnic table on the porch of the hostel where I'm enjoying my breakfast of granola, yogurt, grapefruit juice, and tea before I need to pack my things and head for the town square and board the bus for the long ride to Glasgow.

Thinking of all the curious nomads I've met during these few nights at the hostel, including a traveling medic, a lumberjack, and a pair of vagabonds in an old German horse van, I'm savoring the tea and its moderate caffeine injection, already looking forward to getting back to The States and my stash of hand-cranked pour-over coffee beans. I just can't stomach coffee crystals, and most of these hostels don't seem to have coffee grinders, much less decent whole bean coffee in the nearby grocery stores. As the hints of caffeine combine with the increasing wash of sunshine across the bay, an elderly Chinese woman comes on to the porch and begins snapping photos of the bay with her smartphone. Even though I'm politely ignoring her, especially since she's made

an effort to avoid occluding my own view of the bay, I can tell she's glanced in my direction a couple of times throughout the process, and soon she's verbalizing in an attempt to get my attention. I look up, and she makes a series of hand signals that communicate her wish to have me take her photo with the bay in the background.

She's the only person during the entire month-and-a-half journey who has directly asked me to take her photo.

I find this especially surprising due to the fact that I'm usually walking around with my SLR hanging off my hip and my own phone out snapping shots when I'm not peering through the lens of the SLR. The day before, I offered to take a shot of a couple at The Quiraing after the man had taken a photo of his companion sitting alone on a nice rock overhang.

In any case, once I'd snapped a few good shots of the elderly woman standing on the hostel porch, she checked the photos, nodded a thank you, and then proceeded to run around to various spots at the edge of the bay to get different angles of shots in the increasing light of the sunrise. I chuckled to myself at the agility displayed by this woman who must be in her seventies, and I enjoyed the rest of my breakfast and went on my way, packing up and boarding the bus. This woman got me thinking again, though, of another app I think we need.

I'll call this app [phos|cūra].

Across my academic and professional lifespan, I've conceptualized many apps, systems, platforms, tools, etc. that have evolved in my own head and manifest in various ways at various times in unexpected places and conversations. Many more are sure to come. This essay is one in a series of "apps we need" essays that walk through my design concepts as a way of better understanding our own relationships with each other, machines, and information (for starters).

[phos|cūra] is one of these apps, or, as you'll see, actually more of a platform/system. I've come to realize that these apps need to get onto screen and paper and into the minds of others, with no intention of marketability or profitability. If this [phos|cūra] does move to production, I'll be thrilled to build another tool for fostering critical thinking for the progression of humanity. If not, I'll be happy to have other people think about and give me feedback on my idea.

I hope that makes sense.

Here we go.

The name [phos|cūra] is derived from the Greek root *phos-* meaning light, and the Latin *cūra*, meaning curation, thought, or care. So, let's say that [phos|cūra] is built to help us be more thoughtful, careful, curators of the light with which we experience the everyday world.

[phos|cūra] is an ad-free free app with in-app purchases. For all profits beyond the costs of production and maintenance, etc., fifty percent will be paid out in support of public arts education (with the potential for the endowment of an arts education foundation) and fifty percent will be invested in the continued development of [phos|cūra] and other apps, tools, and platforms within this family.

How does [phos|cūra] work?

Here is the basic user experience for the app-platform-system. Upon downloading, installing, and opening the app, you begin with one camera with one prime lens (perhaps 35mm) in one bag. Camera + Bag + Lens. Eventually, you'll have a collection of Bags, which are, essentially, your inventory containers. To take a photo with [phos|cūra], you'll pick a camera from a bag and choose a film roll for the camera (from your bag) if the camera hasn't already been loaded.

Note: there is a mandatory time delay to load film into an empty camera, which means those who prepare ahead of time are more likely to get the shot in a hurry.

Let's say you've loaded a roll which contains space for twelve exposures. You'll be able to capture twelve photos on this roll. Every photo is captured in raw (.dng) format, with all typical EXIF data automatically captured for each image. Once you have achieved some level of photographic experience with the app, you will have earned the right to optionally record your own additional notes for each photo captured.

With the capture of the twelfth photo, the roll is finished, and you must remove it from the camera and store it in your bag. If there are any unexposed film rolls in your bag, you now have the option to choose another and place it in the camera.

The completed roll must be sent off for development, for a reasonable fee. Expedited services can be provided for a higher fee. The raw images on your roll are sent as a package to the development server, where they are queued and processed by a human being working in a digital development lab. Obviously, connectivity is required for this, so if you're in a nice wild location with no service, your roll(s) will be sent off as soon as you're back in a place where connectivity is an option.

This isn't much different than those days when we used to have to wait to find a place to send our undeveloped film off to a lab.

Once your film roll has been developed by a human, it is sent back to your app as a contact sheet. [phos|cūra] can store as many contact sheets as is possible on the internal memory of your device plus any SD cards you may have. You can certainly provide a storage threshold, but if this is

met, you will be required to find a place in the cloud (or on your own storage media) to archive any additional contact sheets.

With each contact sheet, you can curate which photos you'd like to have printed, and whether or not you'd like to have additional touch-up work done with a second pass through the digital photo lab. Each print generated is priced based on its final size (materials) and any additional development processing time (labor), and you are immediately charged for prints upon selection order processing using the contact sheet in the app. There are no refunds if you change your mind later. *If you print an image, you pay in full, upfront.*

If you choose to share your photos (in compressed digital format, such as .jpg or .png) from the contact sheet, you have a few options through the web platform, where you have a free account that you can activate through the [phos|cūra] app or website. As is typical, you can create public and private galleries for sharing with different audiences. All viewers of your galleries have the option of ordering their own prints—or ordering prints you've suggested based on a working relationship with a human photo processor you've grown to trust. With a paid platform subscription, you can unlock any number of gallery archetypes with a variety of features, such as the ability to turn on and off certain aspects of the EXIF data included with each image. In the free version of the [phos|cūra] platform, it's all or nothing: include or strip the EXIF data.

All of your galleries, sheets, rolls, and prints are tracked as curation decisions, and patterns of these decisions are used to evaluate your growth as a photographer. And, in another sense, your curated and presented space on the [phos|cūra] platform is an exhibition of your (growth of) abilities of composition, exposure, shot selection, etc. over time, as well as a representation of

your working relationship(s) with any number of photo developers working throughout the [phos|cūra] system.

Are you still with me?

Let's take a more detailed look at the underlying rules concerning how [phos|cūra] functions.

Then maybe we'll speculate about a few basic user archetypes. Or perhaps we'll save that step for a follow-up essay.

The Bags.

There is no limit to the number of bags you can possess within your [phos|cūra] app, however you may only have three bags active in [phos|cūra] at any time. Different bags have different storage configurations and capacities for cameras, lenses, and film rolls, and other than the first bag that comes with [phos|cūra] upon install, all bags must be purchased. Based on the choice of bag capacities and the contents and number of active bags—you don't have to have three active at one time—an approximate gear weight is calculated, and this translates into a delay factor to handicap how nimbly you can select any camera from this configuration to shoot any given photo.

Cameras and Lenses.

A primary function of [phos|cūra] is to make the camera hardware on your phone function like traditional cameras and lenses. In addition to the camera body and prime lens that you're afforded when you download and install [phos|cūra] on your device, all sorts of historic models of cameras can be made available as in-app purchases, so long as their features can be easily emulated on your device's hardware using the app software. You can certainly purchase as many cameras and lenses as you'd like, with the option to rent cameras and lenses for specific

periods of time—at a lower rate than purchase, of course—just as one can do with regular cameras and lenses at a variety of websites. This means you can try out many combinations of camera bodies and lenses before paying the full purchase price.

How would these cameras and lenses be priced out? *Does that even matter at this point?*

Film Rolls.

[phos|cūra] comes preloaded with four 12-exposure film rolls: two ISO 100 rolls (one color and one B&W) and two ISO 200 rolls (one color and one B&W). Only one roll of film can be loaded in each camera model available/owned. The roll cannot be swapped out until all shots on the roll have been exposed. Film is available for purchase and use in your cameras in rolls of 12, 24, or 36 exposures, either color or black and white, with film speed options of 100, 200, 400, 800, and 1600 ISO. This means a total of 30 film roll types are available, with the potential for more as emulation options expand. As a basic concept for pricing, consider \$0.50, \$0.75, and \$1.00 for 12, 24, and 36 exposures respectively (regardless of color or B&W), with an ISO x-factor of 100:1, 200:2, 400:3, 800:4, and 1600:5. This means a 36-exposure roll of ISO 1600 film would cost \$5.00, while the 12-exposure roll of ISO 200 film would cost \$1.00.

External Hardware.

Tripods and flashes are essential for good photography, especially considering the type of photography you're trying to accomplish (such as macro insect photography or human portraiture). [phos|cūra] is designed to work with a variety of external hardware implements—tripods, flashes, lens adapters, filters, etc.—that are embedded with connectivity such as NFC or Bluetooth to allow for performance data transfer into [phos|cūra].

Essentially, we want to know that you've used these implements as part of your ability growth feedback cycle. Getting data on how these implements are used as part of your photographic process is an essential part of the [phos|cūra] experience. Many of these implements will be available for purchase through [phos|cūra], and [phos|cūra] is obligated to work with a variety of leading hardware manufacturers to ensure compatibility with its data framework.

A few more simple rules that get at the heart of [phos|cūra]: 1) no multishot, 2) no selfies, 3) no cropping, and 4) no previews. [phos|cūra] has a built-in time delay between shots, ranging between three and five seconds (and potentially up to one to two minutes). This means you can't just hold down the button and hope to get a good shot. Timing your shots is key. However, there is the option to buy one or more camera/lens model combinations that will unlock a multi-shot feature, but this is an option that must be earned through demonstrated skill over time. By default, the front-facing camera on all devices is completely disabled while [phos|cūra] is running. It is impossible to take selfies while using [phos|cūra]. If you would like to create a self-portrait, you must frame accordingly, use a tripod and timer, and hope you don't waste too many shots to get the composition, focus, and exposure just right. You could also ask another person to take your picture using your device. Before you do so, you'll need to indicate that you're handing off the camera to another person, that way their performance doesn't cloud your own feedback algorithms.

For all cameras available in the [phos|cūra] system, the aspect ratio of the final shot is dictated by the camera used. There is no option for cropping a shot during development. It is your responsibility to place your camera in a position to capture the properly composed shot, whether you're shooting handheld or using a tripod.

Photos you capture with any camera in [phos|cūra] cannot be viewed until the development of the roll is complete and you've received your contact sheet back from the [phos|cūra] team.

Over time, this feature should help you be more judicious in your shot selection and composition.

And then there are points.

Users of [phos|cūra] earn points for completing different tasks, and points are also assigned based on an assessment of measured patterns of any user's behaviors with the app. If any growth of ability is demonstrated, additional points are assigned to the user's account. Some of these assessments are human-driven, and others are accomplished entirely by algorithms. For example, certain aspects of the technical quality of one or more photographs (exposure, composition, etc.) can be automatically assessed based on image data, while more subjective qualities of the image are better decided by one or more humans.

As a [phos|cūra] user, you have the potential to earn ample points based on the quality of your photos, the quality of shot sequences on a given film roll (e.g., more consistency of shot quality on a roll means more points), the quality of the choices you make about your contact sheets, and even how quickly and effectively you can transition yourself from automatic mode to manual mode—even locking yourself out of automatic mode by choice—and maintaining a trajectory of improvement and appropriate experimentation once in manual.

The points you earn can be spent on additional gear within the [phos|cūra] marketplace: bags, cameras, lenses, film, and hardware such as tripods. It's worth considering the option that points can be cashed out, likely as some sort of digital currency, such as lumen on the Stellar network (or BitCoin, etc.).

The points go both ways, though.

Perhaps you earn one thousand dollars worth of points (say, 10,000 points) for migrating to manual mode. Then, at some point, you decide to switch back to automatic mode. You'll have to forfeit 10,000 points from your current total or pay \$1000 back into the [phos|cūra] system via an in-app purchase.

In any case, much like points can be earned and forfeited, gear can be bought and sold between users in the [phos|cūra] marketplace.

This seems like a good place to end the introduction of the [phos|cūra] platform, leaving an exploration of these sorts of trade transactions—as well as the concept of photo labs as enterprise-level collectives of technicians and photographers within the [phos|cūra] platform—for a future essay.

Want to help get [phos|cūra] off the ground? Let's start the conversation. Be in touch!