

STANLEY LEARY

People & Location Photographer

Two best things about digital

www.StanleyLeary.com

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Client List

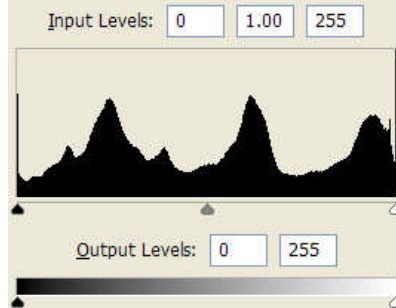
Associated Builders Contractors of Georgia
 American Die Technology
 American Power Conversion
 AmeriGlo
 Athlon Sports
 Atlanta Regional Commission
 Baptist Press
 Bank of America
 British Broadcasting Company
 Black Star Publishing
 Blessed Trinity High School
 Burke County Public Library, Inc.
 Burmeister Group
 Calvin Center
 Catholic News Service
 Celebrate Life International, Inc
 Chiropractic Economics
 Cooperative Baptist Fellowship
 Corporate Legal Times
 Country Magazine
 Creative Publishing International
 Defenderworx LLC
 Delta Airlines
 Discovery Channel
 Drug Store News
 East Carolina University
 Enzymatic Deinking Technologies
 ESPN.COM
 Faith And The City
 Florida State University
 Fordham University
 Fulcrum Construction
 Galloway School
 Georgia Council of Chiropractic
 Georgia Southern University
 Georgia State University
 Georgia Tech
 Georgia Trial Lawyers Association
 GTP Enterprises Inc
 Hollywood Reporter
 Home Channel News
 International Mission Board, SBC
 It's for Vets
 Journal of Accountancy
 J. M. Huber Corporation
 Kennesaw State University
 Kenyon College
 Ladder to the Moon
 Landmark Christian School
 Lifeway Christian Resources
 Lind-Bergeron
 Marist Catholic School
 Media2K
 Medical Association of Atlanta
 Medical Economics Magazine
 Merchandise Mart
 Mississippi State University
 Molloy Communications
 Morning Glory Farms
 MSI International
 National Education Association
 National Basketball Association
 North American Mission Board
 North Carolina State University
 Old Dominion University
 Ohio State University
 Presbyterian Today
 Princeton University

Two best things about digital

This newsletter is more technical than my other newsletters; however, I think it is worth mentioning to those who want to use their digital cameras more effectively.

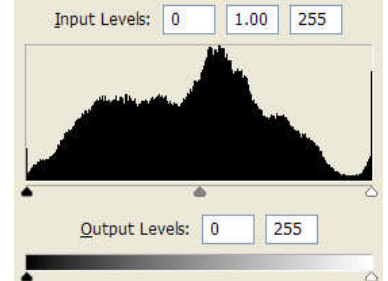
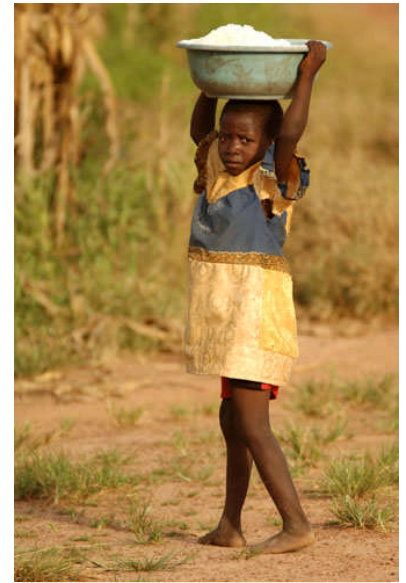
Anyone can see one of the greatest advantages the digital camera has given the photographer whether they are professional or amateur. We can see the picture *immediately!*

Seeing what you get immediately, I would argue, is not the best thing about digital, but the second best. The best thing is the histogram. It could also well be the least understood.



This shows the photo and the histogram of the photo that is visible on the back of the camera.

In order to understand histograms we first need to understand the traditional camera light meter. If we filled the frame of the camera with an 18% gray card (supplied at camera stores) we will come pretty close to perfect exposure. An 18% gray card reflects, of course, 18% of the light that falls on it. That's the amount of light



This shows an average scene. The grain is washed out on the far right of histogram.

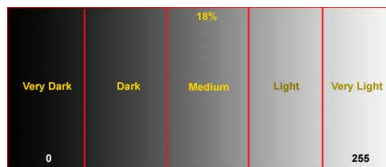
The chip inside the digital camera captures 256 distinct brightness levels between absolute black (0) and absolute white (255). The 18% gray (*the point that all exposure metering measures*) has a numeric value of about 128, half way between black and white.

The histogram gives you all the density reading of a photograph in a graph, from the 0 on the left and to the 255 on the far right. This translates into a 5 f-stop range of light or about the same as with slide film.

Unfortunately, Nature encompasses a 10 f-stop range, not the 5 f-stop range of the

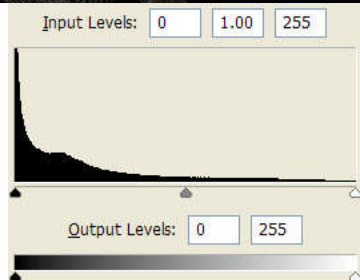
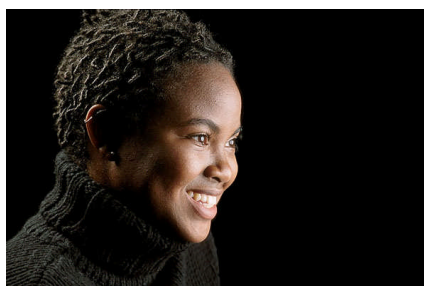
Reinhardt College
 Robert Rytter & Associates
 Roni Hicks & Associates
 Sears & Roebuck
 St. John & Partners
 St. Joseph Catholic School
 Southern Catholic College
 Southern Seminary
 Southwestern Baptist Theological Seminary
 SouthTrust Bank
 Sports Illustrated
 Stetson University
 Summit National Bank
 Sunny Crest Publishing
 SYNC Magazine
 The Community Institute, Inc.
 The Foundation Center
 The Georgia Bulletin
 The Saint Joseph's Mercy Foundation
 Thione International, Inc
 Travel Weekly Magazine
 Union University
 United Methodist News Service
 University Of Alabama Birmingham
 University of Maryland
 University Of Michigan
 University of Nations, Kona, Hawaii
 University Of Tennessee At Martin
 University of Virginia
 Upper Deck
 Vindigo
 Virginia Commonwealth University
 Volleyball Magazine
 Wake Forest University
 WireImage
 Woodward Academy
 World Council Of Churches
 World Journalism Institute
 Yamacraw

average outdoor scene reflects as well as the amount of light reflected by Caucasian skin.



Before digital, photographers knew that by “shaving” the exposure (exposing the film a little more or less than the 18% gray card reading given by their exposure meter) they could create different moods. With transparency (slide) film colors became richer when slightly under exposed or more pastel when slightly over exposed.

We soon discover that relying on how the photo looks in the screen on the camera we may be sorely disappointed with the print. In bright sun it is difficult to accurately distinguish much from the image on the back of the camera.

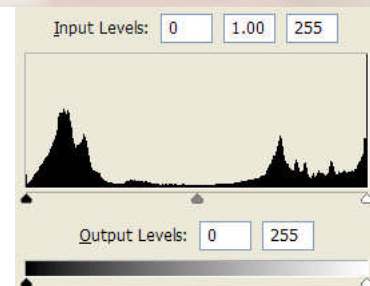


Since there are many dark areas in the photograph, the histogram leans to the far left in this example.

The histogram is a very sophisticated densitometer. A densitometer is an instrument for measuring the darkness, or light-stopping power, of exposed and processed photographic material - i.e. its density.

A densitometer gives a density reading of a small part of the photograph. It translates this into a number. With the numbers from the darkest to the brightest parts of the photograph the density can be expressed as a graph. This is how newspapers and magazines maintain

digital camera. While there is not a right exposure for interpreting any given scene there is a wrong exposure. If you are too close in the graph to the 0 then everything will be black and if you are too close to 255 then it will be washed out.




Since there is a great deal of white in the photograph, the histogram shows a lot of spikes on the right of the histogram.

As photographers we choose which of the 10 f-stops within a scene we want to show the details of to our audience. There is a *range of correct exposures*. That is one reason we can see different styles in different photographers work - different interpretations of the same subject. One of the best approaches is to capture as much of the scene without blowing away the highlights. So, by looking at the histogram you want to come close to the 255 for a scene which has whites in it like white shirts.

With the possible exception of showing badly blown away highlights there really is no such thing as a *bad* histogram. For example, if you photograph a black card a good exposure will give us a spike near 0. Conversely, if you photograph a white card the spike in the histogram will be near the 255 and a photo of the gray card will spike at 128 or dead center.

Start using the histogram review feature of your digital camera. Set your camera to display a combined thumbnail and histogram after every frame. Get in the habit of glancing at it. It's the greatest invention since the built-in light meter.



quality control of images for printing presses.

Give Stanley a call for your next project at 770.998.3504 or email him at stanley@stanleyleary.com.