



CHITRAMALA

Digital Magazine of Photography Club, Basirhat College



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CREATIVITY

Autumn Issue



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Special Thanks to Mr. Firoz Islam, Guest Lecturer, Department of Zoology for his continuous cooperation.

From the Desk of the Editor

Basirhat College is one of the premier educational institutions under the affiliation of West Bengal State University. It has marked its presence in the field of education for quite a long period of time in the district as well as in the state. Basirhat College always encourages various activities like NCC, NSS, Yoga, Outdoor Sports etc. other than classroom teaching-learning. Along with these the college has established a Photography Club "You Click" to encourage the seeing what others cannot see and showcase the beauty of our own home called "The Earth". In our club we focus on the techniques to learn the basics of Photography, we take our students for photo walks, arrange seminars and workshops. To top these all "You Click" has also started a bi-lingual (English/Bengali) magazine called "Chitramala". Motivation of this magazine is to uplift the passion for photography among the students and other photo enthusiasts.

Paramita Mallick

Editor

সম্পাদকের মনের কথা

পশ্চিমবঙ্গ রাজ্য বিশ্ববিদ্যালয় দ্বারা মান্যতা প্রাপ্ত প্রথম সারির শিক্ষা প্রতিষ্ঠানগুলির মধ্যে বসিরহাট কলেজ অন্যতম। জেলা এবং রাজ্যস্তরে শিক্ষার বিস্তারে এই মহাবিদ্যালয়টি প্রতিষ্ঠার পুণ্যলগ্ন থেকেই অগ্রণী ভূমিকা নিয়েছে। এই প্রতিষ্ঠানটি পঠন পাঠনের সঙ্গে সঙ্গে NCC, NSS, যোগাসন ও অন্যান্য ক্রীড়া অনুশীলনের মাধ্যমে ছাত্র ছাত্রীদের সামগ্রিক বিকাশের দিকে সর্বদা মনোনিবেশ করেছে। এই গুলির সাথে নতুন সংযোজন এই কলেজের Photography Club "You Click". চারপাশে অবিরাম ঘটে যাওয়া ঘটনা লেন্স বন্দি করতে আর এই অনিন্দ্য সুন্দর গ্রহ যাকে আমরা পৃথিবী বলে জানি, যা আমাদের এক ও একমাত্র ঘর, তার অনাবিল সৌন্দর্যকে সবার সাথে ভাগ করে নেওয়াই আমাদের এই Photography Club "You Click" মূল উদ্দেশ্য। আলোকচিত্রের বিভিন্ন খুঁটিনাটি শেখা, ছাত্রছাত্রীদের নিয়ে photowalk এ যাওয়া, seminar ও কর্মশালা আয়োজন করা ইত্যাদি বহুবিধ কার্যক্রমের মাধ্যমে আমরা আলোকচিত্রপ্রেমীদের উৎসাহিত করার চেষ্টা করি। এই সবকিছুর পাশাপাশি আলোকচিত্রের নেশাকে আরও একটু বাড়িয়ে তুলতে আমরা একটি আলোকচিত্র সংক্রান্ত পত্রিকা প্রকাশ করছি যার নাম "চিত্রমালা"। "চিত্রমালা" সকল সৌন্দর্য প্রেমী মানুষের কাছে সমাদৃত হবে এই আশা রাখি।

Paramita Mallick

সম্পাদক

Difference between 3D and 2D Imaging

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Although the World around us is 3 dimensional, the representation of it is mostly 2 dimensional. The pictures we draw on flat papers; the photos we shoot with our mobile phones are 2 dimensional in nature. Even the image of this 3d World formed in our retina is 2 dimensional. Retina then translates that image into electrical signal in our brain to give us a perception of surroundings.

Dimensions:

In physics and mathematics, dimension represents the least number of coordinates(numbers) required to describe a point, for example position of a cricketer in field. A line represents 1D, one dimension, whereas a circle represents two dimensions and a sphere represents to three-dimensional space. The terms 'three-dimensional' (3D or 3-D) and 'two-dimensional' (2D or 2-D) are commonly used in reference to science.



Pic.1: 2D Egyptian Art.

Mathematics, photography and other graphic image technology. Dimensions are used to define the extent of an object; it helps us to realize whether the object is flat or not. The two dimensions of an object are described by its length and width/breadth and the objects on the picture appear flat. 2D pictures are usually referred to as plane figures or plane shapes. 2D shapes have areas but not volume. Straight lines make up the sides of the 2D shapes. 2D shapes are drawn using X-axes, and Y-axes.

3-D pictures contain another dimension called depth/height. It gives us the ability to estimate an object's distance. This type of pictures give us the realistic feel, as the perception of objects or environments resembles the way we see through our own eyes. To create 3D pictures painters use the technique of perspective, while 3-D movie makers use two superimposed images on the same screen. However, such pictures give only the illusion of depth/height, as the canvas or the screen remains flat always. 3D shapes like balls, bottles, football etc. do have area and volume as they occupy some space. 3D shapes are drawn using X-axes, Y-axes, and Z-axes. 3D images are created by duplicating the effect of two human eyes working in tandem (one behind the other), which allows the perception of depth. Early 3D technology used this process with dual-camera or dual-lens system. Modern computer technology can create realistic effects in both 3D and 2D.



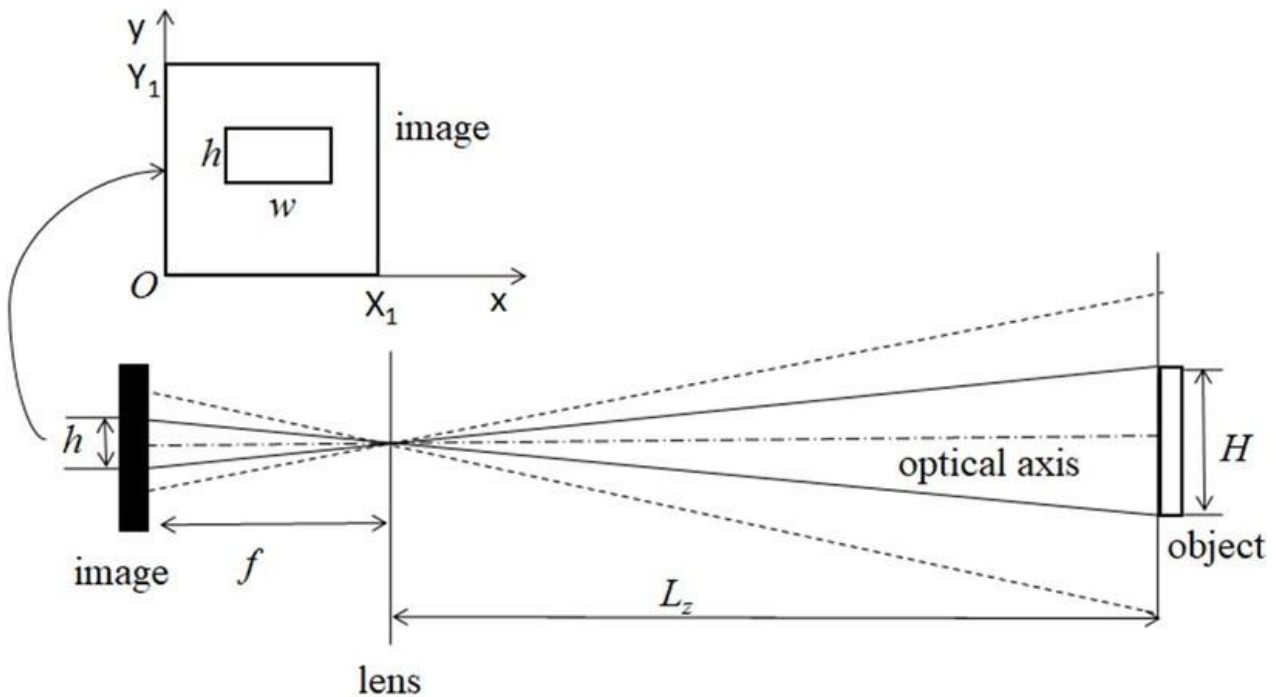
Pic2: Depth is introduced in the Picture

Difference between 3D and 2D Camera:

Technology:

In 3D imaging technology multiple cameras which capture 2D images, are used instead of a single one. 3D cameras are arranged in such a way that they can capture the object from different angles. The multiple images taken by these cameras are not combined into one

final image. Instead, they are first processed digitally. This is the most crucial step is necessary to create a final 3D image. Finally, after the processing of the images, they are combined into a single 3D image. This final image when viewed from any angle, lookslike a real object. 2D cameras capture images to reproduce them further on flat, 2D surfaces, such as flat printing papers or display screens. This is achieved by reducing or flattening the depth of the image. Our natural vision creates a 3D effect of the real world because our eyes are placed slightly apart from each other, which allows the brain to process two different views of the same object by processing two different images.



Pic3: Image Formation by Two-Dimensional Camera

In 2D imaging technology, a camera with a single lens is used. These cameras creates an image in two dimensions-height and width. Once an image is captured with these cameras, it is typically processed by comparing the variations in contrast of the captured image. There are certain technical limitations error in focussing, depth of the image, lighting conditions and parallax error etc. Accuracy in the dimensional analysis of the object is more accurate in 3D imaging. This makes it useful in various commercial usage like in logistics hubs where information about the accurate dimensions are very much essential. Over time, 3D imaging techniques has gained popularity as it is more successful to mimick the real world.

References:

1. https://www.researchgate.net/figure/The-2D-imaging-model-of-a-camera_fig5_342771353
2. <https://www.phase1vision.com/blog/2d-or-3d-for-your-machine-vision-application> Picture credit:
Pic1. <https://www.livescience.com/why-ancient-egyptian-art-2d>

Smartphone Photography

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Using your phone to take images is known as smartphone photography. The beauty of smartphone photography is that it democratizes photography, making it accessible to a wide range of people, regardless of their budget or technical expertise. It's a versatile and convenient way to document moments and express your creativity through photography. Whether you have the latest flagship smartphone or an older model, you can still enjoy and make the most of smartphone photography.

Absolutely, smartphone photography has become incredibly popular and accessible to people of all skill levels. Here are some reasons why smartphone photography is so widely embraced:

Portability: As you mentioned, smartphones are small and lightweight, making them extremely convenient to carry around. This means you can capture moments as they happen without the need for bulky camera equipment.

Always Available: Your smartphone is always with you, ready to capture any spontaneous or unexpected moments. This accessibility is one of its greatest advantages.

Ease of Use: Most smartphone cameras are designed with user-friendliness in mind. They come with automatic settings and features that make it easy for anyone, regardless of their photography expertise, to take decent photos.

Instant Sharing: You can immediately share your smartphone photos on social media platforms, send them to friends and family, or back them up to the cloud. This instant sharing capability is a big plus in the age of social media.

Editing Apps: There is a wide range of photo editing apps available, allowing you to enhance and retouch your photos directly on your phone. This gives you creative control over the final result.

Versatility: Smartphone cameras are versatile and can be used for various types of photography, including portraits, landscapes, macro, and even professional-level photography with some skill and the right accessories.

Cost-Effective: Most people already own a smartphone, so there's no need for an additional investment in camera gear, making it a cost-effective way to explore photography.

Continuous Improvement: Smartphone manufacturers are continually improving the cameras on their devices. Each new generation of smartphones typically comes with better camera technology, which means your phone's camera capabilities can improve over time without you needing to buy a new camera.

To make the most of smartphone photography, it's essential to learn some basic photography techniques, experiment with composition, lighting, and subject matter, and explore the various features and settings your smartphone camera offers. With practice and creativity, you can capture stunning and meaningful moments with the camera that's always in your pocket.

iPhone Vs Android :

Here are some key points to consider about each:

iOS (iPhone):

Exclusive Ecosystem: Apple's iOS is exclusive to iPhones and a few other Apple devices. This creates a tightly integrated ecosystem where hardware and software are designed to

work seamlessly together.

Accessories and Ecosystem: Apple's ecosystem includes a wide range of accessories, including cases, headphones, smartwatches, and more, designed specifically for iPhones. This ecosystem also includes services like iCloud and the App Store.

Consistency: iOS offers a consistent user experience across all Apple devices, making it familiar for users who own multiple Apple products.

Updates: Apple tends to provide regular and long-term software updates for its devices, ensuring that older iPhones receive the latest features and security updates for several years.

Android:

Diverse Manufacturers: Android is used by many smartphone manufacturers, leading to a wide variety of Android devices with different hardware specifications and features. This diversity gives consumers more choices.

Customization: Android devices often allow for greater customization, both in terms of the user interface and the ability to install apps from various sources.

Accessories: While the Android ecosystem may not be as tightly integrated as Apple's, there are still a significant number of accessories available for Android smartphones, including cases, chargers, and headphones.

Rapid Innovation: Due to competition among manufacturers, the Android market experiences rapid technological advancements, leading to the introduction of new features and hardware innovations.

Software Updates: Android software updates can vary widely based on the manufacturer and model. Some Android devices receive timely updates, while others may lag behind.

In summary, the choice between iOS and Android often comes down to personal preference and priorities. iPhones offer a tightly controlled ecosystem with a strong focus on user experience and accessory compatibility. Android devices provide a broader range of options, greater customization, and competitive hardware features. The ongoing competition between these two ecosystems benefits consumers by driving innovation and choice in the smartphone market.

How to use your Smartphones to create light trail photography:

Light trails photography is indeed a fascinating technique that can add a dynamic and captivating element to your night-time smartphone photography. Here's a brief guide on how to create light trails using your smartphone:

Equipment and Preparation:

Stable Surface or Tripod: To capture long-exposure shots, you'll need a stable surface or a tripod to keep your smartphone steady. This is crucial to avoid any blurriness in the non-moving parts of the image.

Manual Mode or App: Some smartphone camera apps have a manual or pro mode that allows you to control settings like exposure time (shutter speed). If your phone supports it, use this mode for better control over your shots. Alternatively, you can use third-party camera apps that provide manual controls.

Setting up the Shot:

Choose the Right Location: Look for a busy street or an area with moving lights, such as cars or bicycles. This is where you'll capture the light trails.

Composition: Frame your shot with the light source (e.g., moving cars) in mind. Consider how the light trails will flow through the frame and how they will interact with the surrounding environment.

Camera Settings:

Shutter Speed: The key to capturing light trails is a long exposure. Set your smartphone's shutter speed to a slow setting, usually anywhere from 1 to 30 seconds, depending on your phone's capabilities.

ISO: Keep the ISO as low as possible to reduce noise in the image. Lower ISO values, such as 100 or 200, are ideal for long-exposure shots.

Focus: Manually set the focus to infinity or choose the appropriate focus point to ensure that the entire scene is in focus.

Taking the Shot:

Use a Timer or Remote Shutter: To minimize camera shake when pressing the shutter button, use a timer or a remote shutter release if available on your smartphone.

Capture Multiple Shots: Take several shots with different exposure times to experiment and find the one that captures the light trails best.

Post-Processing:

Editing Apps: After capturing your shots, you can use photo editing apps to enhance your light trails photos. Adjust exposure, contrast, and saturation as needed. You can also crop and straighten your image if necessary.

Stacking: If you want to create more complex and dramatic light trail images, you can stack multiple exposures in post-processing to combine multiple light trails into a single image.

Light trails photography can be a fun and creative way to capture the energy and movement of a city at night. With practice and experimentation, you can create stunning images that turn ordinary scenes into captivating works of art.

How to take great Smartphones photos in harsh/low lightning conditions:

Here are some tips for handling challenging lighting conditions:

1. Low Light Conditions:

Use Artificial Lighting: In low-light situations, consider using external lighting sources, such as flash or continuous LED lights, to illuminate your subject. You can also use available ambient light creatively, such as streetlights or candlelight, to add mood to your photos.

Increase ISO: If you're using a camera with manual settings, you can increase the ISO setting to make your camera's sensor more sensitive to light. However, be cautious, as higher ISO values can introduce noise into your images.

Stabilization: To avoid camera shake in low light, use a tripod or any stable surface to keep your camera steady. Additionally, consider using image stabilization technology if your camera or smartphone offers it.

2. Harsh Sunlight:

Use Shade: Look for natural shade or create shade with a diffuser to soften and reduce the harshness of direct sunlight on your subject. This can help prevent overexposed highlights and harsh shadows.

Golden Hours: Shoot during the "golden hours," which are the first and last hours of daylight. The light during these times is soft, warm, and less intense, creating a flattering and appealing look.

Use Fill Flash: In bright sunlight, you can use fill flash to fill in shadows and balance exposure. Some smartphones have built-in fill flash options, or you can use external flash units with traditional cameras.

3. Mixed Lighting:

White Balance: Adjust the white balance settings on your camera or smartphone to compensate for different light sources. This helps ensure that colors appear accurate in your photos.

Control the Light: If possible, try to control or modify the various light sources in the scene, such as turning off or dimming artificial lights that clash with natural light.

4. High-Contrast Scenes:

Use HDR: High Dynamic Range (HDR) photography involves capturing multiple exposures of the same scene and combining them to preserve details in both the highlights and shadows. Many smartphones offer HDR modes.

Graduated ND Filters: In traditional photography, graduated neutral density (ND) filters can help balance exposure in high-contrast scenes by reducing the intensity of light in specific areas of the frame.

5. Practice and Experiment:

The more you practice and experiment with different lighting conditions, the better you'll become at adapting to them. Try different techniques and settings to see what works best for your specific situation.

Remember that mastering challenging lighting conditions often requires both technical knowledge and creativity. Experimenting with different approaches and learning from your results is a valuable part of improving your photography skills, whether you're using a dedicated camera or a smartphone.

6. Some Sample images for reference



Magazine Gallery

Teachers' Corner



Solitude

Picture Courtesy: Prof. Paramita Mallick



Star Trail

Picture Courtesy: Prof. Asok Kumar Roy



Diwan-E-Aam, Agra Fort

Picture Courtesy: Dr. Jyotirmoy Sikdar



Black Necked Dove

Picture Courtesy: Prof. Chinmoy Ghosh





Dusk

Picture Courtesy: Prof. Firoz Islam



Crepuscule

Picture Courtesy: Dr. Sudip Mondal



Mosaic

Picture Courtesy: Prof. Goutamlal Mukhopadhyay



Magazine Gallery

Students' Corner



Curiosity

Picture Courtesy: Sahin Mondal



Incandescent

Picture Courtesy: Shrabani Kabasi



Nectar filling

Picture Courtesy: Abhijit Bachchar

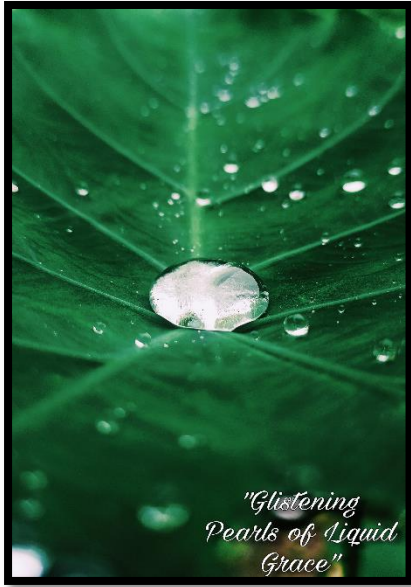


Football

Picture Courtesy: Lina Sardar



Picture Courtesy: Nilnayana Sarkar



Glistening Pearls of Liquid Grace
Picture Courtesy: Shrabani Kabasi



Furrow
Picture Courtesy: Bishal Mondal



Photo of the Month (October 2023)



Picture Courtesy: Nilnayana Sarkar
5th Semester, Physiology Honours



Rules and Regulations for Image Submission in Magazine

1. Image File Specifications:

1. jpg files only
2. 1200 pixels for the LONGEST edge
 - o For a horizontal picture = width
 - o For a vertical picture = height
3. File size around 500kbs or smaller, please optimize your images for web
 - o This is done easily using Photoshop Export > Save for Web
 - o See below for detailed instructions or how to optimize for web with various software
4. No borders or watermarks - Please do not include borders or watermarks, ask if you have questions about what is acceptable

2. File Naming:

1. Please name the files with your first name and last name (given name then surname) and a number. Use the same name that you list in your email as your name.
2. No spaces, dashes, parenthesis or other non letter/number characters. You can put an underscore or dash between first and last name if you would like.
3. Please check that you did not put an extra .jpg in your file name, if your computer hides file extensions try checking the file name after you attach it to your email. name.jpg NOT name.jpg.jpg

Example for "Susan Smith" = SusanSmith1.jpg, SusanSmith2.jpg etc.

3. Email:

1. Subject line of your email should indicate which issue you are submitting your work to - issue # and issue name
2. Please send your images in 1 email
3. Please try to attach the image files not embed them, a zip file can be used if your application only embeds files.
 1. Embedded files do not always show up in the email when it loads, some files may be missed as a result.
 2. A zip file is fine, no .rar files please
 3. Please do not share them using Google Drive, or other file sharing applications
4. Please put all submission information as text in your email not as attached documents. Only images should be attached.
5. Please do not send PDFs or other text files.

4. Please Include With Your Entry:

1. Name - not in all capital letters please. First (given) name, then Last (surname) name.
2. Location - where you live currently
3. Titles for your photographs in a numbered list.
 - o Please write out EACH title as you would want it to appear. If they all have the same title write out each one.
 - o Please have the list numbers match your file numbers.

- You can include a series or project name with each title.
 - Keep in mind titles can be a great way to provide context for your work if it is part of the group exhibition.
4. URL for your portfolio website if you have one.
 - We dont include social media, blogs or non portfolio sites at this time.
 - Please spell out the URL
 5. Contact information - If you do not have a portfolio site URL you can provide an email address OR instagram handle This will be used on the contributors page if your work is included.
 6. If the issue you are submitting to has the theme "Portfolio" you will also need to include a project statement for your work. For other issues it is optional.

