Number 12

# OLYMPUS®

The International Magazine of Photographic Information 1989

# VisionAge

### The Ultimate in Compact Cameras – The AZ-200 Super Zoom

A nimble compact with 2x zoom and a unique flash system that reduces "red-eye syndrome."

### From Myanmar – A Visual Report Overflowing with Poetic Emotion

Capturing the essence of Barmese culture.

### How to Photograph Your Pet

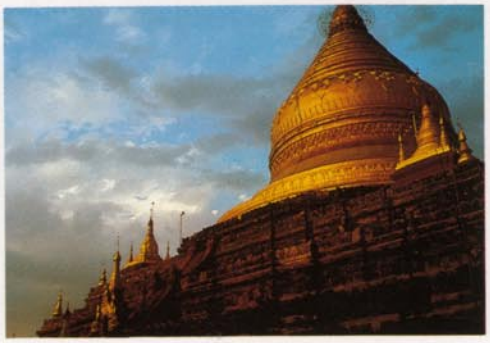
Effective advice from a professional for anyone who has a pet.

### Exploring the Unexplored – Camera at Work

A "Canyoning" adventure reveals a vision never seen before.

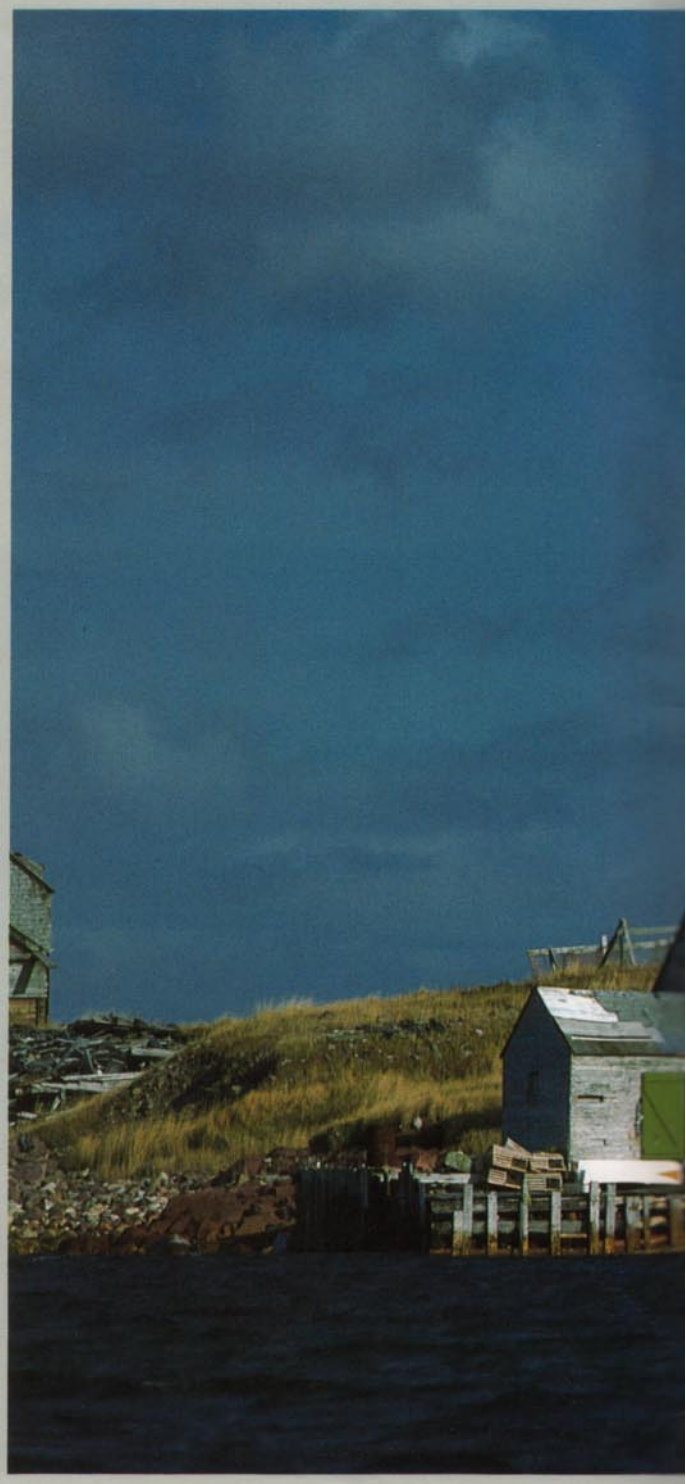
### The XA Story – A Final Chapter in the Surprising History

We have discovered the driving force behind the mainstream compact camera boom.



# VisionAge





## Foreword from the Editors

We are pleased to bring you Olympus VisionAge No. 12. This issue has again devoted a special article to introduce yet another product from the new Olympus compact camera lineup (please see TECHNICALLY SPEAKING at the beginning of this issue).

The AZ-200 Super Zoom is a camera surpassing the conventional common sense of compacts. It has a 2x zoom with a wholly unique flash system not found on other compact cameras in its class. Particularly outstanding is its ability to greatly reduce "the red-eye syndrome." Whether you're a veteran or a novice, the AZ-200 Super Zoom's easy-to-use functions are a pleasure to operate. The AZ-200 Super Zoom marks a new age in compact cameras.

The TECHNICAL REPORT of this issue explains how to take close-up shots, pictures of animals and more. It is introduced together with expert professional advice in the PHOTO TECHNIC SERIES. In the NATURE PHOTOGRAPHY article, one of the regular features of Olympus VisionAge, we discuss the whale as a topic of world concern. And as a visual record for our 12th issue, the PRO'S CORNER section features the oriental mood of Myanmar.

The Olympus XA Story concludes with this issue. It is the last article in a fascinating series about achievements that shaped photography's past and present direction.

Regarding the questionnaire in Olympus VisionAge No. 11, we have received an abundance of useful replies for future issues. We

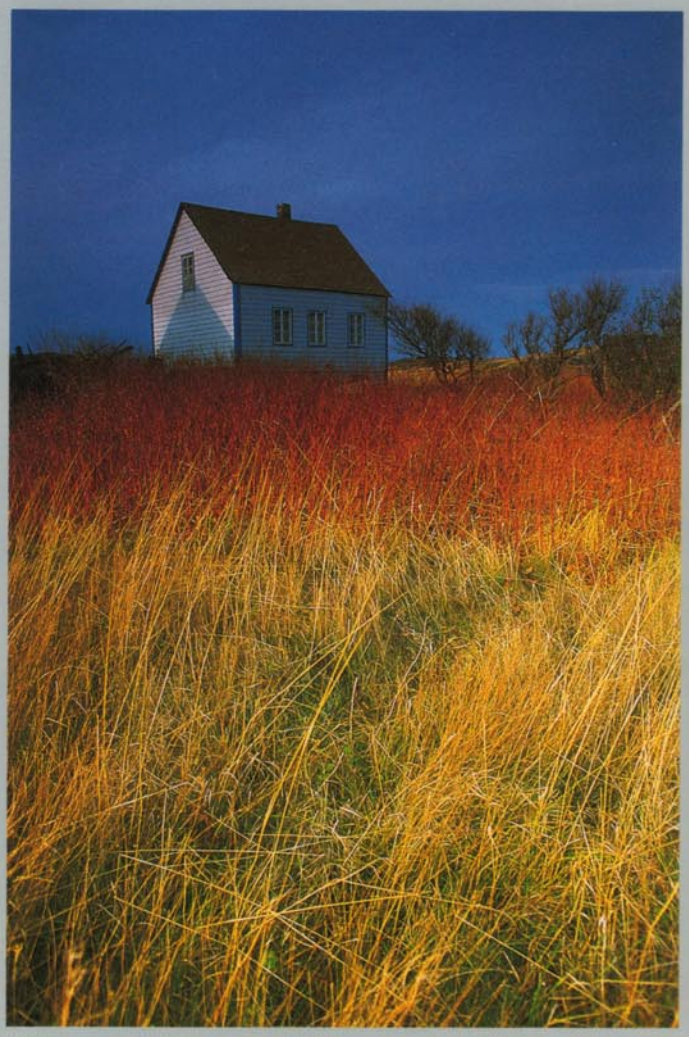
**Daniel Allisy/*France***

thank you for your invaluable opinions and will do our best to utilize the ideas of our readers.

We appreciate your cooperation and continued support.

The Editors of Olympus VisionAge

VisionAge is published semiannually by:
VisionAge Editorial Office, Olympus Optical Co., Ltd.
San-Ei Bldg., 22-2, Nishi-Shinjuku, 1-Chome, Shinjuku-ku, Tokyo 163-91, Japan.

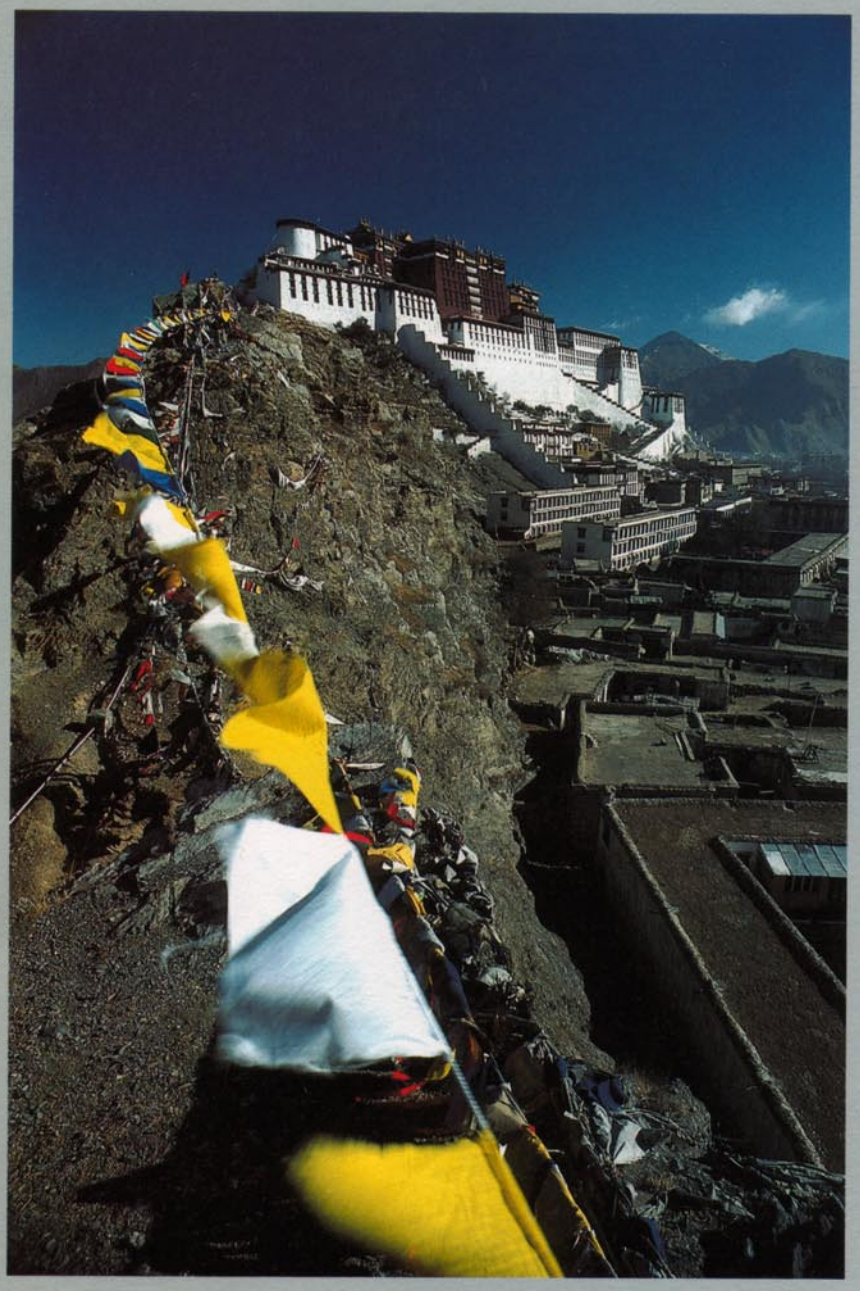


## Daniel Allisy/*France*

*In his chosen field Daniel Allisy is the expert — and an exciting field it is. In fact, he has achieved the ideal of many people, combining both his work and hobby, by becoming France's foremost photographer of everything to do with sailing and the sea. Writer of the sea photography column "Voiles et Voiliers," Allisy has also written a technical book on his chosen subject, and in 1983 founded the "Sea and See" photo agency whose staff includes top professionals in France and abroad. He has written a number of books, reports on sailing adventures and races, and also writes for several magazines around the world. He has exhibited several times, and his photos have appeared in more than 100 different magazines.*

## Carl Uytterhaegen/*Belgium*

*Flemish photographer Carl Uytterhaegen is known for documentary studies. An exhibition of his photos of Welsh mining communities toured Wales in 1981, and his studies of miners' dwellings in the French town of Auchel have been collected and published in book form as* Les Corons d'Auchel.



**Petri Kaipainen/*Finland***

*Born in 1954, Petri Kaipainen studied an unlikely combination of subjects — photography and engineering — in Helsinki. Then in 1978, at the age of 24, he began work as a press photographer. He now combines a steady press photography job with the big Finnish publishing company, Yhtyneet Kuvatehdet Oy, with frequent free-lance photo and journalism assignments for a variety of magazines. Only a year after beginning his career he was singled out in 1979 for the "Respected Young Journalist Prize of the Year." He was also cited in 1983 for Finland's "Press Photo of the Year."*

# The AZ-200 Super Zoom Story

**An Interview with Tatsuya Suzuki, Manager of the Olympus Product Development Department, Consumer Products Division, and Staff.**


*This summer, Olympus announced the AZ-200 Super Zoom, a fully automatic 35mm compact camera equipped with a 38mm–80mm zoom lens and the world's first built-in variable-power flash. Recently,* VisionAge *spoke with one of the key members of the AZ-200 Super Zoom development team, Mr. Tatsuya Suzuki. This is the story he told . . .*

*From left, Inoue, Yoshida, Akitake, Higuchi.*

VA: In developing the AZ-200 Super Zoom, what market forces and consumer trends guided you?

R&D: Well, the AZ-1 Zoom — which we introduced in 1988 — had been very well received, and we knew we wanted the new camera to be an even bigger success. But there were technical limits to how much we could improve the AZ-1, and we wanted to break-through to a new level of performance.

One way to achieve a breakthrough is to design a totally new type of camera, like we did when we developed the AZ-300 Super Zoom. So when we began working on the AZ-200, we went back to the drawing board and started from scratch.

The object wasn't to extend zoom performance to a particular focal length or anything like that, but rather to review all over again what constitutes a superior lens-shutter camera — and then design such a camera, and build it.

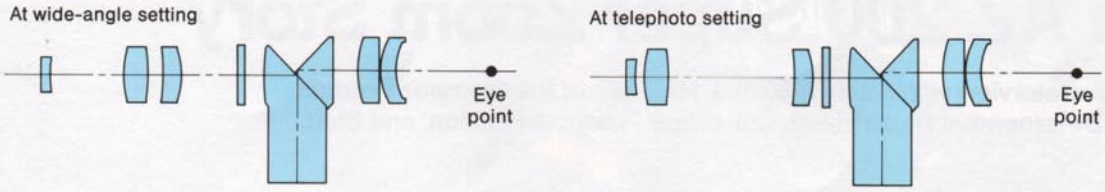
Naturally, though, the lens was a key area of development, and we're quite pleased with what we came up with there. But we also wanted to improve flash capability, because that's another area that many photographers have trouble with.

*Tatsuya Suzuki.*

VA: Could you tell us a little about the lens?

R&D: Let's see . . . I suppose work on the lens started five or six years ago. At the time, we were working on a zoom lens for an autofocus SLR — a camera later introduced as the OM-707 — and one of the development team members commented that the combination of zoom and autofocus functions would be perfect for the lens-shutter camera market, where mistake-proof convenience and ease of use are critical product benefits.

**Viewfinder Lens Positions**




The problem was how to go about achieving what we wanted without winding up with a bulky, heavy lens. The answer, not surprisingly, was greater precision. By manufacturing each component of the lens assembly to stricter tolerances, we were able to reduce size and weight without sacrificing performance. The result is a 38mm–80mm zoom lens that's light, small and versatile — with 60-cm close-up capability at any focal length. All in all, we're quite pleased.

VA: What about the flash?

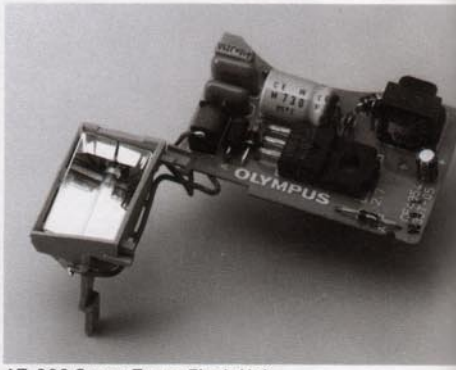
R&D: Although the 2x zoom is certainly one of the AZ-200's prime attractions, its most remarkable feature — and the one I suspect people will notice the most — is the flash. In fact, the flash was developed with the average person in mind, and significantly reduces the number of problems that amateur photographers have to contend with.

VA: What kind of problems do you mean?

R&D: Well, one thing that has always troubled photographers has been the problem of red-eye . . . I say "problem," but perhaps I should say the "fact" of red-eye. Because red-eye is a phenomenon that occurs naturally with some subjects, in some situations. And the closer the flash is positioned to the lens — as it inevitably must be in a compact camera — the more pronounced the effect becomes.

VA: What causes red-eye?

R&D: It's caused by bright light from the flash entering the eye and illuminating the retina, the surface of which is lined with a dense network of blood vessels. This accounts for the red color. Since the subject's pupils tend to be widely dilated when a flash photo is taken — because there is usually very little ambient light — the camera can actually "see" the red of the retina




*AZ-200 Super Zoom Flash Unit*

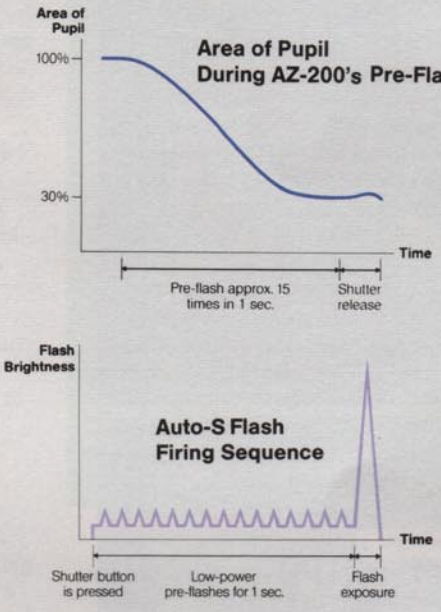
surface. It's not visible to the naked eye because the human eye doesn't respond fast enough. But the camera can see it — and the resulting photograph simply records the "fact" that the retina is red in color. The hard part was figuring out how to keep the "truth" from showing.

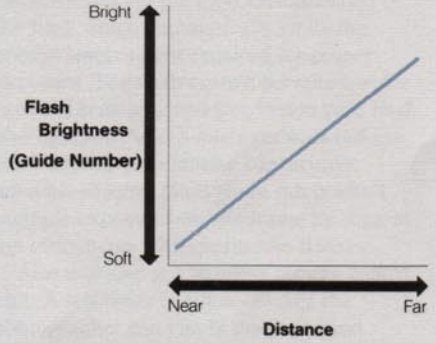
The solution we eventually arrived at — and it was a solution that turned out to have a lot of other benefits as well — was to develop a flash system that causes the pupils to contract right before a picture is taken. It does this by emitting a series of carefully timed pre-flashes right before the shutter is released. As a result, the pupils of the subject's eyes contract, and red-eye effect is greatly reduced.

VA: What are some of the other benefits you mentioned?

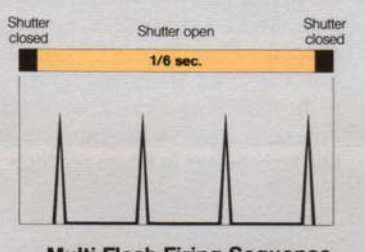
R&D: Well, the pre-flashing was made possible by the development of a new Insulated Gate Bipolar Transistor, or IGBT, which allows the flow of current to be switched on and off extremely rapidly. But the IGBT had another advantage. It permitted the *voltage* — and therefore the brightness of the flash — to be strictly regulated as well.

**Auto-S Flash Mode** — *Because the pupil of the human eye dilates in darkened surroundings, the bright light of a camera flash can enter the eye, strike the retina and be reflected back to the camera lens, resulting in the "red-eye syndrome" often seen in flash photographs. To overcome this problem, the variable-power flash built in to the AZ-200 Super Zoom emits a burst of approximately 15 low-powered pre-flashes immediately before the shutter is released. In this instant, the pupil contracts, preventing excessive light from entering the eye and reducing the red-eye effect. In developing this new flash mode, scientific analysis of the brightness frequency and number of pre-flashes was carried out to determine the best combination for optimum pupil contraction and minimal eyestrain.*




**Close-Up Flash Capability** — *Flash brightness on the AZ-200 Super Zoom is regulated according to the distance to the subject, as measured by the AF system. At full power, the flash is bright enough to reach subjects up to 4.1 meters away (At 38mm using regular ISO 100 film). For closer subjects, the variable-power flash IGBT device gradually reduces flash intensity. So even at the AZ-200 Super Zoom's minimum focusing distance of 0.6 meters, flash photos come out properly exposed and without any color wash-out. This capability is available in Auto and Auto-S modes.*




**Multi Flash Firing Sequence**

**Multi Flash** — *In a single 1/6 sec. exposure, the flash fires four times at 50 millisecond intervals, creating multiple strobe images on a single frame of film. The fixed shutter speed of 1/6 second is ideal for capturing one complete swing in golf or tennis, while the power of these flashes is regulated to ensure optimal exposure.*

This meant that by linking the IGBT to the autofocus system, we could design a variable-power flash system that would automatically regulate the brightness of the flash according to the distance to the subject.

The most exciting thing about this was that it made close-up flash photography easy. Up until now, flash close-ups were always tricky, even for professionals. But with its IGBT, the AZ-200 can provide the exact level of brightness required for a correct exposure. This advantage, while not as noticeable to the average consumer as the pre-flashing, is certainly an important one from a photographic and technical standpoint.

VA: I believe this is also the first time you've equipped one of your compact cameras with a multi-spot autofocus system. Can you tell us a little about it?

R&D: Here again, we were addressing a problem encountered by many amateur photographers when they shoot with conventional autofocus cameras. Conventional AF systems can only measure the distance to an object if it is in the exact center of the frame. Obviously, this means that when a photographer takes a picture of two people standing side-by-side, the camera is liable to focus on some irrelevant background detail that just happens to occupy the center of the frame.

The AZ-200's AF system prevents this from happening by using three separate infrared beams to measure the distance to the subject. To ensure focusing accuracy in the widest range of situations, we did an enormous amount of research, and took literally thousands of sample photographs, to determine the optimum angle of dispersion for the three infrared beams. As a result, we believe that the

**AZ-200 Super Zoom Autofocus Beam Dispersion Pattern**

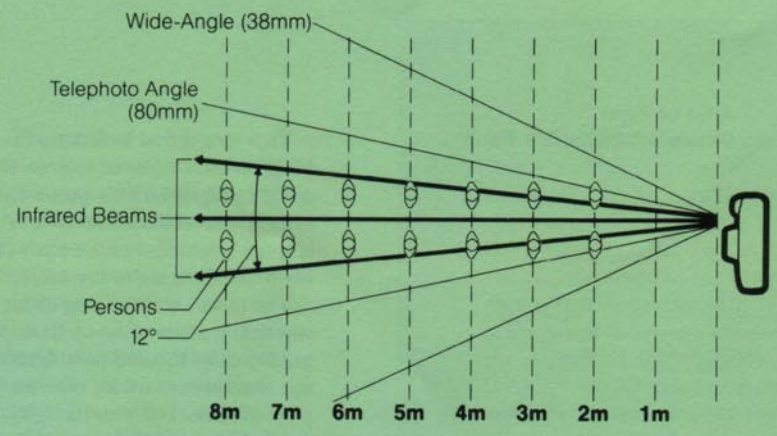
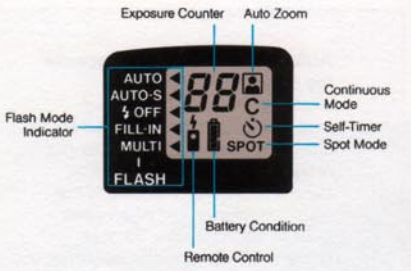
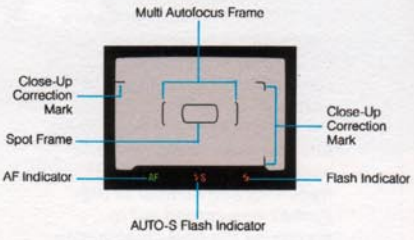



*Diagram shows multi-spot AF beam dispersion pattern when shooting two subjects standing side-by-side, 0.5 meters apart. (In Spot mode, only center beam operates.) Unlike previous multi-spot AF systems, the AZ-200 Super Zoom's system can distinguish the two subjects at distances as close as two meters. And unlike single-spot systems, it won't be "fooled" by the 0.5 meters gap between the two subjects.*

**LCD Panel**




**Viewfinder**




AZ-200's AF system can outperform any other multi-spot autofocus system available today.

VA: What about special features? Didn't you have to cut back on "extras" to achieve the flash and autofocus system improvements you've described?

R&D: No, quite the contrary. The IGBT control system we developed for the flash, for example, made it possible for us to develop a Multi Flash mode. In this mode, the AZ-200's flash fires four times during a single exposure — making it simple for virtually anyone to take multiple-image strobe photos.

Here again, we took a lot of sample pictures to determine the best shutter speed and flash interval to use to achieve this "strobe" effect. In the end, we discovered that four flashes and a 1/6-second shutter speed gave the best results, so that's what we used.

Another interesting feature we were able to add was a wireless remote control. This is something that we had been thinking about for some time, and since the AZ-200 offered such a high level of performance overall, it seemed appropriate to top it off with a really "fun" feature.

There are several ways we envision people will use the remote control — the foremost being as an alternative to taking self-timer photos. But the possibilities are endless, and we're hoping that the public will have a lot of fun figuring out what they all are.

VA: Well, the AZ-200 Super Zoom certainly seems to have a lot going for it, and from the sound of it, there's a lot more to the technology inside than meets the eye. Will you be featuring any of this techonology in future products as well?

R&D: Yes, I think it's safe to say that much of the technology will be turning up in future models. The variable-power flash and multi-spot autofocus systems show particularly broad potential for application. In addition, we will continue to refine the production techniques that we developed to create the AZ-200's ultra-compact zoom lens, and see how they can be applied to best advantage. In fact, it's probably not an overstatement to say that the AZ-200 Super Zoom is a major advancement in the state of the photographer's art. VA

# The AZ-200 Super Zoom a Full-Auto 2x Zoom Compact Camera with Multi-Functional Flash System

**by Akio Kojima**

## All About the AZ-200 Super Zoom

A fully automatic camera with a zoom lens is more times than not, heavier and larger than conventional compact cameras. However, the debut of the Olympus AZ-200 Super Zoom goes against the grain of ordinary technology with its lightweight, compact design and surprisingly thin body. Its slimness is attributed to a re-engineering of each mechanical function such as the film winding mechanism. Thanks to the technology employed, the entire system maintains the high level of performance you can expect from Olympus. The AZ-200 Super Zoom incorporates a 2x zoom lens linked to an easy-to-see viewfinder.

Portability is a singularly nimble advantage for a camera in this class. It goes anywhere you do to find the shutter opportunities you're looking for. Whether you've out walking, at parties, on trips or just taking family photos, the AZ-200 Super Zoom is a perfect all-purpose camera.

The AZ-200 Super Zoom features numerous new functions not found in conventional cameras. Among the most distinguished is the flash which automatically emits the precise level of light required for proper exposure. The flash system permits a wider range of creativity and freedom in your flash photography. Auto-S mode reduces red-eye syndrome by pre-emitting consecutive amounts of light. Multi mode can produce multiple exposures on one frame by separating movements with continuous flashes.

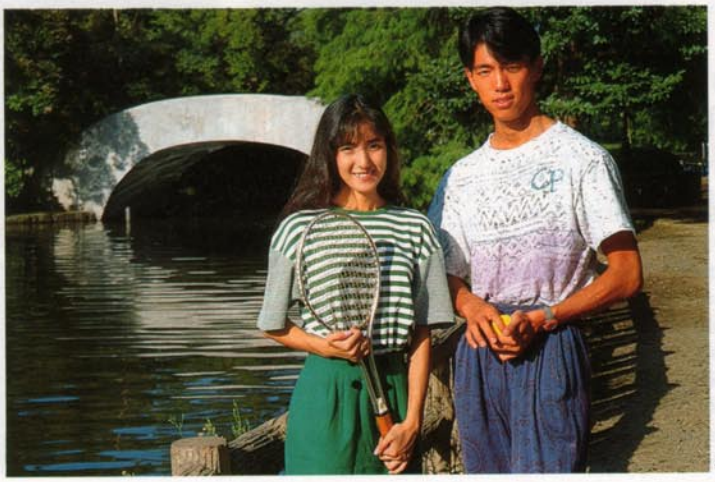
Also included is a wireless remote control unit. A self-timer is not necessary, the photographer can join in the photo and trigger the shutter at any time.

Following is a report sampling all these functions.

*2x zoom that can capture different expressions from the same camera position.*

38mm

50mm



80mm

The multi autofocus system prevents focusing errors caused by aligning an infrared beam between subjects.

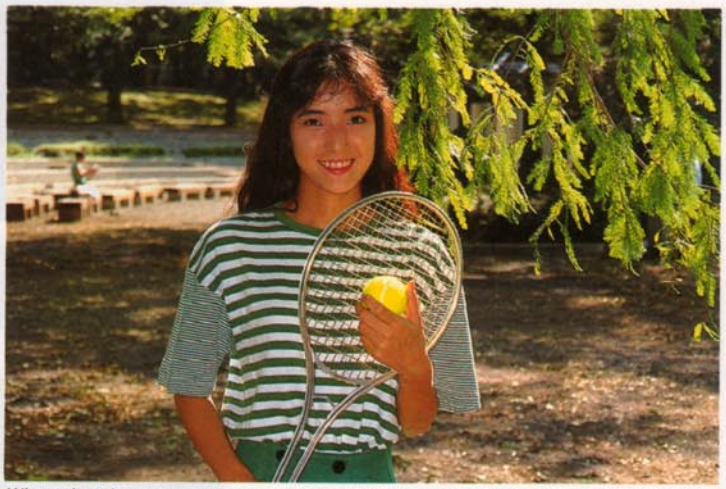
## 38–80mm Zoom Lens and Finder

Because the 38–80mm lens zoom area virtually covers the entire focal spectrum most commonly used, this is about the only camera you'll ever need.

Thanks to the optical technology used in the actual image finder, which moves with the zoom, the AZ-200 Super Zoom performs as well as an SLR. For example, macro photography with a distance of 60 cm between you and the subject enables you to capture the subject in the entire zoom area. The 80mm zoom allows the photographer to close in on a human face and can also take advantage of the natural beauty of, say, flower photography.

This camera has an auto zoom function which is a popular feature on the Olympus AZ-300 Super Zoom. This mechanism allows you to zoom in or zoom out for a bust shot, even though the shooting distance varies.

The multi autofocus has a wide AF measurement area to assure precise focusing regardless of subject position.



When shooting your subject against a bright background, the flash automatically compensates for shadowed darkness.

## Multi AF Ensures Correct Distance Measurement

The AZ-200 Super Zoom employs active-type AF measuring for the distance to subject using an infrared sensor. A standard infrared AF system will use a single beam to focus only on what appears in the center of the frame. For example, if you take a picture of two people sitting side by side, the photographer may inadvertently direct the infrared beam between them, resulting in a photograph focused on distant objects in the background.

To prevent mis-focusing, the AZ-200 Super Zoom emits three infrared ray beams in different directions, and measures the subject at three different points on a horizontal line in the frame. That data is used to calculate distance and precisely focus. This function is particularly useful for moving subjects. Precisely centering a moving

subject in the frame can be difficult, but Multi AF eliminates that problem.

On the other hand a need still exists for AE lock. There may be an unwanted object in the frame (for example, an object positioned between the photographer and the subject). The AZ-200 Super Zoom lets you switch focusing modes to center beam only. In this case, light measurement switches from ordinary center-weight to spot metering. Depending on necessity, you can perform either AF/AE lock functions by using the SUBJECT button with SPOT mode.

*Shooting indoors near a window: under this kind of complicated window-side lighting condition, use Flash Fill-in Mode to prevent darkness of the subject.*

## Pre-Emitting Flash Is an Effective Way to Reduce Red-Eye Syndrome

The red-eye syndrome often occurs with automatic compact cameras. It occurs because light from the flash passes the human pupil to the retina and is reflected back to the camera lens in red. The red-eye syndrome is intensified when the flash is closer to the light axis of the lens, or when the pupil is wide due to darkness. Cameras with a flash built into the body result in a more common occurrence of red eyes than do cameras with pop-up flashes, which are larger in size because they incorporate a pop-up mechanism.

The built-in pre-emitting flash on the AZ-200 Super Zoom greatly reduces this problem altogether. It takes one second for an open pupil to react to a continuously emitted flash. Once the pupil has adjusted to the light, the shutter opens and the picture is taken — no red eyes. Having actually used Auto-S flash mode, I noticed the dramatic results. I didn't have one red-eyed subject.

There is also an unexpected advantage to the Auto-S flash. Sometimes it's difficult to get the attention of all individuals in a group photo, but with the pre-emitted flash all heads turn to the lens and the shutter catches the bright shining faces.

*Auto-S mode reduces red-eye syndrome with automatically pulsing pre-flashes.*

*Multi flash lets you record movement with the use of multiple flashes in a single frame.*

## Multi Flash Captures Four Separate Motions on One Frame

With an intermittent flash control system, the AZ-200 Super Zoom features an easy-to-use multi flash photography function. Just set the flash mode on MULTI, and release the shutter; for the 1/6 second that the aperture is open, you'll get four consecutive flashes at 50 millisecond intervals, which in turn lets you capture four separate positions of motion multi-exposed in one frame (see example).

*The AZ-200 Super Zoom allows close-up flash photography without overexposing your subject.*

*With the use of remote control you can include yourself in the photo without waiting for a timer.*

## Flash Automatically Adjusts Light Level Emission According to Shooting Distance

With ordinary compact cameras the light emitted by the flash is always constant, resulting in overexposure of the photo when shooting at close range. Even though the aperture is set at a minimum, the visible effect is a loss of delicate color and shading; human faces turn out pale, the vividness of flowers in bloom lose their brilliance. The AZ-200 Super Zoom employs a varied flash that automatically adjusts the level of light emission according to the shooting distance. Even at the minimum 60cm shooting range, exposure reveals a natural tone of color.

In Auto and Auto-S modes, the AZ-200 Super Zoom's flash system senses variable lighting conditions, such as backlight or sidelight, and automatically adjusts the flash to enhance the subject. This feature is especially useful for beginners — positive results every time.

On the other hand, the photographer, depending on purpose and expression, may want to create a specific mood by using a natural source of light from a window or a soft-white electric bulb. In that case Flash Off mode will shut the flash system down altogether. Due to a slow shutter speed, a tripod will most likely be necessary to prevent camera blur.

When shooting in natural daylight the flash will not come on automatically. If you feel the need to compensate for darkness of shadows, Fill-In mode lets you turn on the flash no matter what the lighting conditions are.

With a wide range of flash functions, the AZ-200 Super Zoom is perfect for veteran and novice photographers alike. It allows you to be creative without getting too complicated.

## Commemorative Photography Is a Pleasure with Remote Control

The compact wireless remote controller is the size of a small cigarette lighter and is built in to the grip handle of the camera.

When using a conventional self-timer, the photographer must set the mechanism, rush into the scene, strike a quiescent pose and hold it.

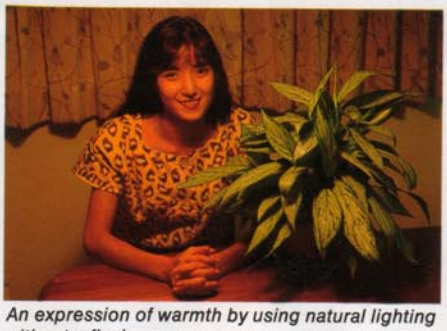
The wireless remote shutter control solves these problems. The photographer can join the group photo and fire when ready.

The remote control unit is easily hidden in the palm of the hand or the photographer may utilize a variable time-lag feature. The unit can be programmed for one or three seconds allowing the photographer to push the button and place the remote control out of view.

I personally used this function for a self portrait and found it to be very convenient.

Having demonstrated the uses and features of the AZ-200 Super Zoom, I have decided to include it among my equipment as a subsystem for professional use. VA

*By using the remote control continuous mode you can take an additional photo one or three seconds after the first. Note the difference in the two photos.*



*An expression of warmth by using natural lighting without a flash.*

# How to Photograph Pets

**by Kunika Tsushima**

**Kunika Tsushima**

*Born in Okayama Prefecture, Japan. Kunika Tsushima began taking pictures in 1959, and started to photograph animals in 1961. She toured zoos and animal preserves in ten European countries, six states in America, Canada, New Zealand, Africa, China and Taiwan. She has written 50 books about photographing animals as well as other subjects and is a member of the Japan Photographers Association, a screening member of Nikakai Photography department and is the Secretary-General of Kaze-no-kai Society.*

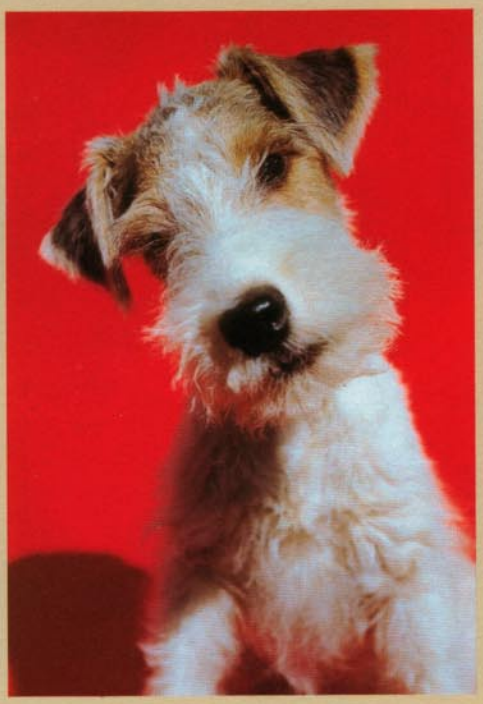
A pet plays a major role in the lives of many people and more times than not is raised as part of the family unit. It becomes a sibling so to speak — like a child who is cared for and loved. This is clearly evidenced in family photos of many proud owners of pets. You'll see they appear in photos on the fireplace mantle, in the living room or anywhere in the house where photos are displayed. They're even found in the annual family portrait.

With few exceptions, most pets are diurnal in nature. They show excitement in the morning when they are greeted by their caretaker. They tend to sleep in the afternoon. Like humans, the pet enjoys variety and activity through the day. You can see their expressions of joy and tenderness. They even become bored and lethargic at times with a redundancy of the same activity day in, day out — like when a human gets up for work in the morning.

When you photograph a pet, you must prepare the necessary surroundings. As with a small child, an animal is not usually enthusiastic about posing for a photograph. It must be done quickly and strategically to capture your pet in the natural state it is accustomed to.

The difference between photographing pets and humans is that you can't give detailed instructions to a pet. It would be quite difficult if not impossible to readily explain to the pet how to pose, where to look or to say "cheese" on the count of three. To photograph a pet you have to be prepared to press the shutter at just the right moment. You must humor your pet to keep the atmosphere natural — to keep your pet's actions natural.

When attempting to take a picture of your pet, you often find yourself approaching the animal for a close-up shot. As you close the distance between the lens and your pet, it may become excited or frightened thus temporarily altering its natural personality. For this reason, a telephoto or zoom lens (preferably 70–100mm) is one of the most useful photographic tools for capturing the essence of your pet's actions without forcing a pose. It gives you the range you need in order to observe and photograph from a distance.



*Fox Terrier*
*A fox terrier sits contentedly on his favorite chair.*

## Dogs and Cats

Dogs and cats are representative pets which have habits of varying degrees, depending upon breed. For example different dogs have different expressions, some dogs have a long face or a round head, some have a unique walking style. Whatever the case may be, dogs, cats and humans alike, all have individual features which make them personable in their own way. When photographing dogs and cats you need to watch them closely to bring out those features which set them apart from the rest.

*Pointers*
*It's sometimes difficult to take a group shot of pointers as they all look in different directions. One effective method to capture the attention of the dogs simultaneously is to use a whistle. For this photo, a feather tip is used in front of the camera to lure the pointers as they are hunting dogs. The slight movement and smell of the feather perks up the dogs' senses, brightening their eyes and exciting their expression.*

*Maltese Mother with Puppies*
*This is an example of flowing photography. Here the dogs are set free to run on the lawn and the camera moves with the speed of the dogs. The breeder was asked to call the dogs' names from the right side of the scene.*

## Camera, Lens and Film

You will also notice, when photographing a pet, that there is a lot of movement in your subject. In addition to the telephoto lens, you may find it necessary to use a fast shutter speed and a small aperture. In turn, this requires sensitive film. There is a drawback however, highly sensitive film cannot reproduce the sharpness, resolution and contrast of less sensitive film. A less sensitive film has sharp than its more sensitive counterpart, which is composed of larger particles. This is the nature of film and therefore represents a trade-off between high definition and capturing a still subject.

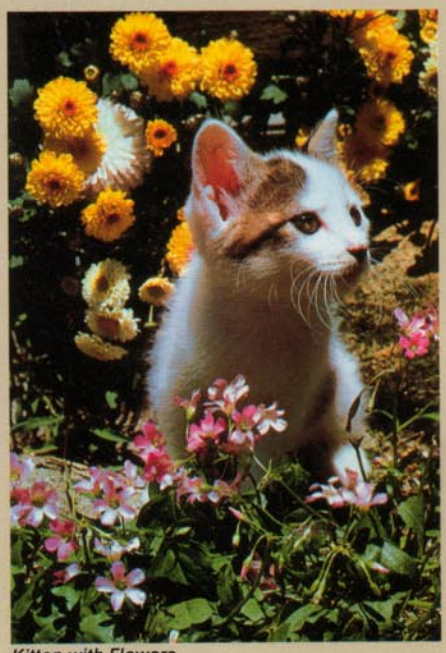
There are also several other factors to consider in choosing film. If your pictures are mainly for the photo album, negative color film is usually the most preferred. However for photo contest entries or enlarged prints, reversal film is more desirable. Reversal film has absolute color reproduction — as you see it, which lets you determine precise print degree and definition. When using negative film, the color definition can be manipulated and developed under the judgment of the lab technician. Prints from the same negative may come out vastly different in terms of color definition and brightness. It depends on the lab. Reversal film simply gives you a more delicate feeling and sense for color.

*Bulldog Puppies*
*Once the puppies are released onto the lawn, they tend to move in all directions living up to the fact that dogs (especially puppies) cannot understand and follow instructions. To overcome this situation, a basket is used to keep them together. Having already had the opportunity to romp on the lawn, they curiously moved into the basket by themselves providing the photo opportunity desired.*

*Kitten and Rabbit*

*The kitten at first appears very warm, toward the chicks and the rabbit. As the chick responds, the kitten meows. It's virtually impossible to capture the same action twice, as the animals become bored with too much of the same situation. Photos should be taken quickly while the pets are still discovering their immediate surroundings.*

*Kitten and Chicks*



*Kitten with Flowers*
*The flowers in the foreground are natural and the ones placed behind the kitten are cut and stuck in the ground. When making a photographic model for your subject you should always consider what's going on in the background.*

*Exploring Kitten*
*Kittens often take curious expeditions into the garden. On such outings the kitten may discover insects and other natural inhabitants. These photos were taken naturally, where the camera lens was lowered to the kitten's eye level.*

## Focus and Exposure

When photographing pets, the primary point of focus is the eyes. You should follow the movements of the pet as you focus on its eyes. Having a keen sense for your pet's actions is quite helpful. It enables you to react more quickly and focus on the animal's movement, so you're prepared for that opportune moment. It requires a sense of intuition and of course timing on the part of the photographer.

In the case of animals, focus and exposure together are of utmost importance. Virtually all pets are covered with hair, which photographically represents a texture of strands. You should take into consideration, capturing the texture of single strands. Sometimes exposure lacks this sense. Fixing exposure to capture the texture of the hair will greatly improve the quality of your photos.

Use of a fully automatic camera poses some interesting situations too. It would appear that this could be the most optimal system for photographing pets as the camera automatically fixes focus and exposure. However, it requires a certain degree of practice. As long as the center of view is on the eyes of the subject, focus and proper exposure should be alright. But, in order to attain the proper setting you must push the shutter button down halfway for the auto function to operate. This means keeping the camera still on the point of focus. The same problem arises in terms of exposure. Unless the exposure is set with the AE lock, background exposure becomes stronger. VA

*Parrot and Dove*
*When the parrot was placed outside with food as a lure a dove unexpectedly entered the picture. Another photo opportunity.*

*Parakeet*
*When shooting birds which must remain in captivity, the door of the cage should be opened so as not to obstruct the view of the lens. To prevent the birds from escaping, a piece of paper or cardboard with a hole cut for the lens can be used to cover the cage door opening.*

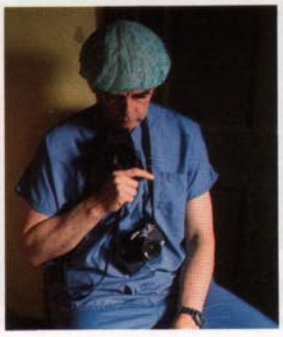
*Rabbits*
*Rabbits, hamsters, mice and squirrels – for all these small animals, use of food as a lure is usually sufficient to bring the animals into view.*

THE WAY OF THE PROFESSIONAL

# Photographic Education

## An Interview with David Hurn

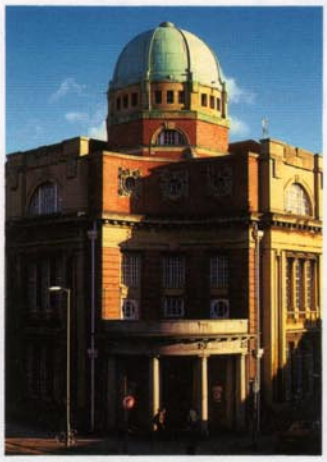
*Buckingham Palace Green Garden Party OM-4 90mm*



### David Hurn

*David Hurn was born in 1934. His first major photographic assignment was coverage of the Hungarian Revolution in 1956. Since then he has worked extensively for most of the world's leading publications. He now lives in Wales spending his time in very personal stories.*

THE WAY OF THE PROFESSIONAL



*Dwardian Building*
*Housing Documentary photo course.*

David Hurn is a self-taught photographer. He came to prominence with his classic reportage pictures of the Hungarian Revolution. He has continued to be one of Britain's most accomplished and influential photographers. He works independently, in the true sense, primarily working on his own ideas and not relying on sponsorship. In 1967 he accepted an invitation to be a member of Magnum, the exclusive cooperative of like-minded photographers. He has been given many awards including in 1979 the UK/USA Bicentennial Arts fellowship. His book *David Hurn, Photographs 1956–1976* sold all copies. His pictures are in a variety of the world's major museums' photographic collections. He was a member of the Arts Council of Great Britain Photographic Committee from 1972–77, serving on the Arts Committee for two years, and was a member of the Council for National Academic Awards from 1978–87. In 1978 he set up the two-year Documentary Photography course at Gwent College of Higher Education.

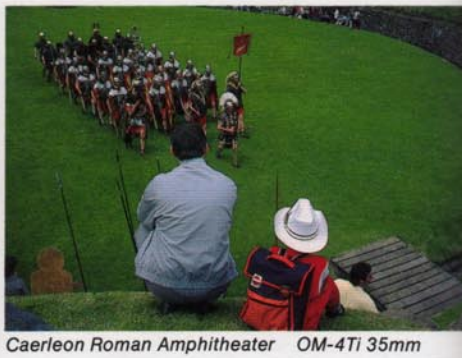
The following are extracts from an interview with David Hurn about photographic education.

*Q:* How did you get involved in photographic education?

*DH:* I suppose it grew from a long-standing disenchantment with photographic education as I knew it in the early 1970s. I was producing a lot of photographs that the young could identify with and consequently was invited to talk to many students. I was amazed to find how few colleges employed full-time lecturers who had active contact with the outside professional world at a standard that an advanced student could gather worthwhile experience from. For these lecturers, photogaphy seemed to revolve around either scientific technique or talk. The talk seemed, to me, to be in a strange language, not about what were the real issues in the world, not about feelings, not about photographs or even how to use

*Town Band, Caerleon OM-4Ti 35mm*

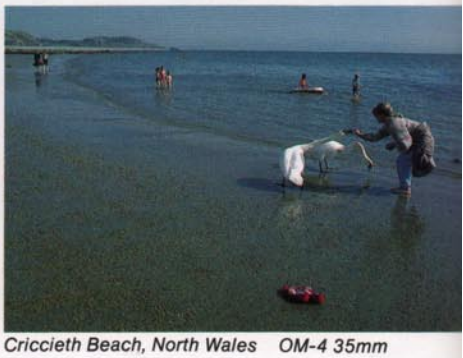
*Caerphilly Castle and Artist OM-4Ti 35mm*



*Caerleon Roman Amphitheater OM-4Ti 35mm*

*Local Produce Show, Wales OM-4 35mm*

*Westonbirt Arboretum – Autumn OM-4Ti 50mm*



*Criccieth Beach, North Wales OM-4 35mm*

these photographs, but about periphery interests and discussed in sentences full of large, seldom-used words. What's the point of trying to communicate if you can't do it simply without putting between yourself and those trying to listen, an ornate screen of verbosity or a concrete wall of jargon? It is a use of language seemingly designed to exclude rather than inform. The result could only be to put one off ever wanting to actually participate in the process of taking pictures. To be blind to the possibilities of other arts is narrow-minded and in Fine Art many of the very best practitioners were also teachers. It was clearly not so in photography. This was where the change had to be. Individuals teaching in photographic education often had great sincerity, but that in itself was not enough. What was required was the sincerity linked with true and up-to-date experience. Today, on a few courses the situation has changed, but it was sad then. Evidence showed me that virtually all of the photographers that I admired and knew were self-taught. I knew one who had been "taught" and he assured me that the college he had been to had nearly destroyed him forever. Thus, for me, the important question was, is it possible to teach photography? Over a six-month period I sat down with picture editors, with gallery directors, and with the best photographers from all spectrums of the medium to find the qualities they thought most useful and important, and then equated this advice with my own thoughts and experience. As I was not directly involved with education I had nothing of educational theory to distract me. So, it is true that I invented the course, but it is not true that it is my personal philosophy — it comes from professional philosophy. I simply put the pieces together.

*Dingle Races, Ireland OM-4 24mm*

*Kerry Horse Sales, Ireland OM-4 35mm*

*Q:* The course is called Documentary Photography. What do you mean by that?

*DH:* Students come to Newport and entrust their potential to us, and we, the staff, give them our experience, this they sift through, hopefully to be enriched rather than be diminished. At the start of the course I felt that to give my best I had to deal with that which I felt most passionate about — not photography that was inward-looking — not photography that attempted to sell products — but photography that comes out of curiosity about the real world. To keep the title simple, I called it "Documentary." Of course, I was aware it was a dangerous word, — in a world that seems to love to wrap true meaning up in verbosity it can mean many different things to many people. For the purpose of the course it was, and still is, defined as "the work produced by photographers who are primarily interested in investigating and communicating, through photographs, information about the people, the landscape and the events of the world around them, rather than primarily about themselves." The word "primarily" is very important.

*Q:* How do you teach photographic technique?

*DH:* One must not deal with technique out of context of the work that is being done. It is a means to an end, not an end in itself. Technique must always be taught with reference to photographs that the student is working on at any particular time, so that they see theory put into practice in their own pictures. Technique does not only involve exposure, and focus and lighting, but also the disciplines of working to a brief, grappling with analysis, accepting deadlines, captioning, filing and good business. These are all skills you must have whether you are exhibiting your pictures in a gallery, in magazines or even if you use other people's pictures as a researcher, picture editor, art-director, critic or as a welfare worker. The techniques of one's medium are the medium's mechanisms for helping one see and communicate clearly. A photographer who cannot say clearly what he wants to say in his picture is either an apprentice, a fraud or a fool. The getting to the final stage in a set of pictures means immense labor, it requires strength of discipline, perseverance and the ability to put up with disappointment and frustration. One needs the willingness to start again when things are not right. We have all woken in the middle of the night with the flash of inspiration about some novel we would like to write; some music to compose; but the difference between inspiration and the final product is an awful lot of training, a lot of finger exercises, practice and throwing-away first drafts — in our case pictures. All these things are technique. There are always many frustrating failures, but how superficial the irritation or exasperation when compared with the feeling of success.

*Q:* What about equipment?

*DH:* The simpler the equipment the better. All our students are asked to start on the course owning their own basic camera with a normal lens, either 35mm, 40mm or 50mm. They use this single camera and lens combination for the first three or four months, after which they will also need a slightly wider angle lens, 28mm or 24mm. Finally, after about six months, a short telephoto is normally required, between 85mm and 135mm. In our college store we have basic equipment, which acts as a backup, should anyone damage their own equipment. This enables students to keep working. We stock OM-1 and OM-2 cameras together with either 35mm F2 or 50mm F1.4 lenses. They have stood up to ten years of student use and abuse. We have a wonderful relationship with Olympus UK and they treat our students as professionals and give us a 24-hour turnaround service. In reality, we don't often use the arrangement, as very little seems to goes wrong. When the course started I advised that we stock with Olympus equipment simply as it seemed sensible for the students to see that they could be using the same equipment as myself, a matter of confidence. We have had no reason to regret that decision. I, personally, now use OM-4 Ti's but the theory's the same. The trick, in buying equipment, is not to until you can't possibly do without the item in question. You not only have less unwanted toys but you can afford to buy the best when necessity calls. For the budding professional a set consisting of two bodies and the 28mm F2, 40mm F2,

*David Hurn giving a lecture.*

and 85mm F2 lenses would cover most requirements and have the added advantage that the filter sizes are the same. Above all, this set is as inexpensive as one can devise. If you have an Olympus camera body and need another lens, then the best lenses are always their own. My basic outfit now consists of three OM-4Ti bodies (one has never been out of the box) plus an OM-3, in theory as a safety backup. I use mainly a 24mm F2, a 35mm F2, a 50mm F1.4, and a 90mm F2 Macro — a wonderful lens. If I had a wish, it would be that the 40mm was F1.4 and had a 55mm filter thread. I would then carry one normal lens instead of two. At the moment I use the 35mm for horizontals but, unless I bend my knees, it gives, what I feel is, unsightly distortion used vertically so it is simpler to use the 50mm. The 40mm could be a good compromise, I am surprised it is not a more popular focal length. The college and I independently have the 18mm, the 35mm shift, and the 24mm shift lenses. If I didn't already use Olympus cameras I would change to them simply to get this last lens. I love it, though for perfection I wish it had rear interchangeable filters. The college also has macros, zooms and the 500mm. Ultimately we hope that the college store will stock all the lenses that students cannot be expected to own. Thus, in their second years, should they really need it for their chosen interest, the students will have equipment to test before actually buying for themselves. For lighting I mainly use a T32 flash gun with a bounce card. I have just got a F280 but have yet to fathom out how it works. It is important to only have what you really need, professional equipment is getting more and more complicated and unless you can use your tools with the confidence a pianist uses a piano you will find yourself not expressing the finest music.

*Q:* Where is the course housed?

*DH:* The nature of a Documentary Photography course is such that it must be situated in the middle of a community. The course in Newport is lucky in that it is housed in the most beautiful building in the town. Edwardian, with real charm, and topped with a dome like a miniature St. Paul's Cathedral. Students can be involved in any aspect of the town within a few minutes walk of the front door. The course is part of the Faculty of Art and Design which includes courses in Graphics, Fashion and Textiles, Film and Video and Three-Dimensional Design and Fine Art. Should any student need them, the skills from all these courses are available through a series of open workshops and lectures.

*Q:* What is the secret of the success of your course?

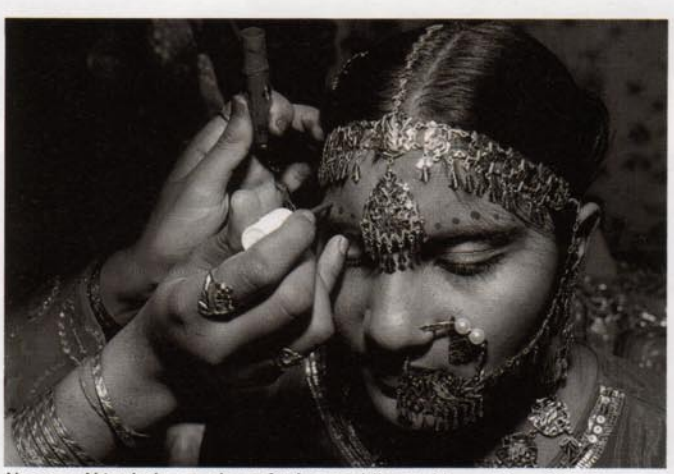
*DH:* I am sure it is the mixture of the students and staff. The best of both. We have many applicants but take very few students. I think, due to the clarity of our aims, the students whom we take know what their individual goals are so all work extremely hard and to a high standard. Between our staff we embrace a wide, high-level professional experience that results in our work being used, frequently, in most of the areas that students aspire to.

*Q:* How do you chose your students?

DH: Well, as I have said before the main thing

*Like magic, a surgeon's hands seem to glow in the intense light of the operating theater. (Photo by Widmaier.)*

*The first morning of school for Joshua Davies. (Photo by Richard Maude.)*



*Nassem Aktar being made up for her wedding to Mazar Ali on 30th June, 1985. (Photo by Susanna M. Harrison.)*

Tutorial Room

Louise and Kare Norman. (Photo by Sue Packer.)

you need in being a photographer interested in the world is a strong sense of curiosity, analytical ability, tenacity, and a sense of form. It is almost impossible for us to gain an insight into a student's qualities without an interview, so we attempt to see all potential candidates. It allows us not to be constricted by qualifications especially as 20% of our students have none. For students from abroad, interviews are sometimes difficult so for these applicants we have to ask for detailed written explanations of why one should want to specifically join us. Even so, we still try to arrange for someone we trust, in the candidate's home country, to do a final interview. We welcome applications from enthusiastic and self-motivated individuals of any nationality, but it is essential that all students speak English.

The danger for students from afar, that have not traveled, is that they are tempted to be tourists rather than involved learners. On a course like ours, where we get three years' work into a two-year pot, any tendency to tourism becomes a disaster. Costs for non-EC students are high. However, of the twenty-two students a year we take, two are usually from abroad. Regardless of which country they originate from, we seek to recruit a wide range of students, and actively encourage mature people who already have gained some form of work experience. The basic idea is to expand this experience and knowledge of their own area with the skills needed to be a photographer. The average age of our students is in the mid-twenties, however, younger candidates who show enough merit and involvement in their subject are also offered places. Although it is often thought that fewer women than men enter the profession, it has been our experience that women do particularly well on the course. A documentary photographer who is aiming for the highest level must have a combination of qualities that have already been mentioned but are worth repeating: curiosity, the ability to analyze, intellectual integrity, tenacity, and love of the medium. It is our opinion that photographic excellence and the ability to earn a living are not mutually exclusive. In fact, the highest photographic excellence seems to come from those who make a living within photography. We want those who have ambition to be the best. We need candidates who already have considerable experience or specialist knowledge in their particular field and who consider that this experience will complement their own work as a photographer. Examples may be involvement in social work, health and welfare, travel, politics, the environment, landscape, journalism, etc. In other words, we do not take students who wish to be "photographers" without knowing what the term really means to them. We look at graduates of any discipline who feel that the ability to take photographs would be a positive aid in their work eg. sociologists, botanists or teachers. Thus it is possible to be accepted on the course — even without photographic experience. If applicants do bring portfolios, then we first look to see how the subject matter of their pictures links with their stated possible aims. We also look for sensitivity and hopefully a feel for beauty of form. It may sound complicated but, in fact, the process works well.

*Q:* What would you like to do in the future?

*DH:* Well, I am very happy at the moment. It's good to know you have a positive effect on some lives. I don't think this is pompous. It is simply that past students tell us that that's true. Teaching allows me to do my own work yet decide what I really want to do. No more of those fill-in assignments I see so many having to do at an age they shouldn't have to. It would be fun to be asked to advise on setting up the course elsewhere. I would like to take more pictures and to do some more workshops, but only in countries that I have never been to. I have never been to Japan. . . .

VA

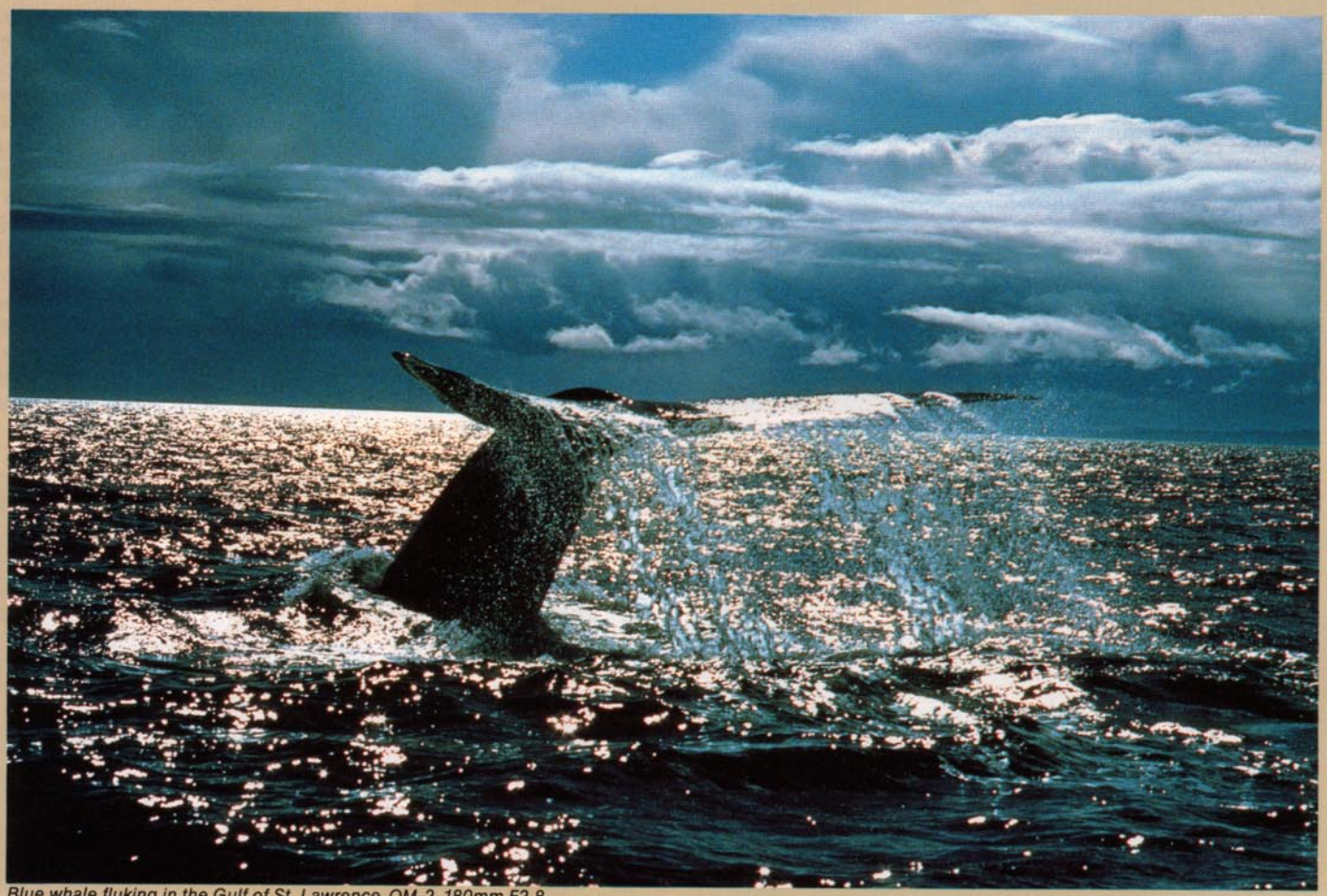
WWF ©

# Photo-Identification of the Blues

**by Richard Sears**

### Richard Sears

*Richard Sears is the director of Mingan Islands Cetacean Study, a nonprofit research organization involved in the study of cetaceans. He has carried out field studies of marine mammals in the Gulf of St. Lawrence, Gulf of Maine, Caribbean, Sea of Cortez (Mexico), and off the Pacific coasts of Panama and Costa Rica since 1976. Mr. Sears is best known for his work on the blue whale, for which he developed the technique of individual photo-identification. He has contributed and appeared in numerous articles concerning cetaceans, including those in* National Geographic *and has had photographs published in more than thirty books.*

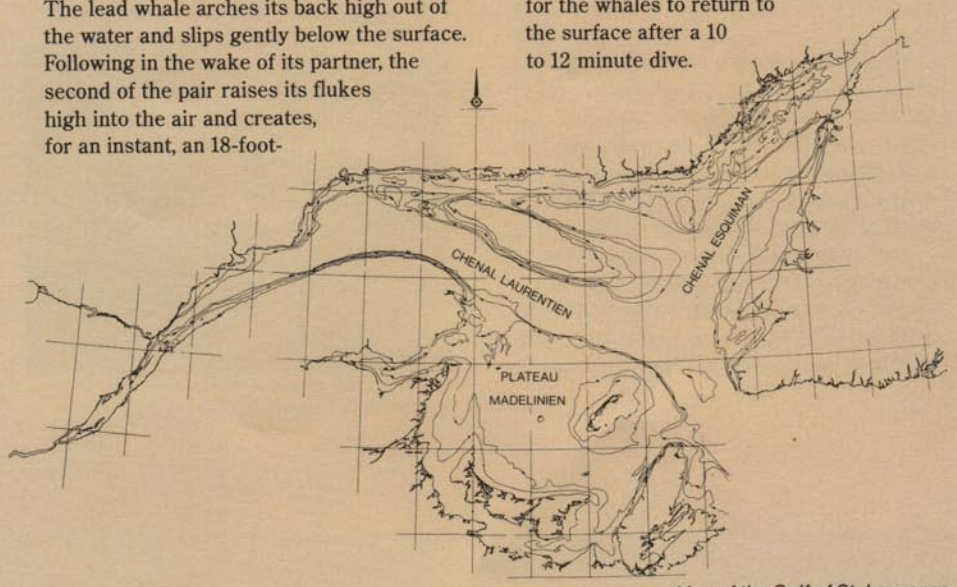


*Blue whale fluking in the Gulf of St. Lawrence. OM-2, 180mm F2.8.*

A blue whale erupts through the surface barely 20 feet to our right. Its breath explodes from its blowholes like a cannon shot, sending a column of spray 30 feet into the air. Emerging just off the bow of our inflatable, a second blue whale arrives at the surface and drenches us with its spout. Stretching their full length before us, each a full 80 feet, they begin to circle gracefully to the right. Their sudden presence has caught us off guard for a moment, however, we come to life, raise our cameras and fire off several frames of the lead whale's left side. We then steer to the right, shielding our cameras from the effects of their spouts, ready to photograph their right flanks.

Gliding beneath the surface between breaths, they reflect a rich hue of turquoise. The lighting is perfect for photography. Above the surface they are a silvery-blue, almost metallic color, their mottled pigmentation stands out sharply.

Creating a 3-foot bow wave, their heads come out a bit higher as they prepare to dive. The lead whale arches its back high out of the water and slips gently below the surface. Following in the wake of its partner, the second of the pair raises its flukes high into the air and creates, for an instant, an 18-foot-wide cascade of water. As the tail disappears from sight, the cameras are silenced, and we are left in their turbulent wash. For a moment we are still, while we dwell on the flukes, which only moments before towered over us. We then record our behavioral observations, reload our cameras, and wait for the whales to return to the surface after a 10 to 12 minute dive.




*Map of the Gulf of St. Lawrence.*

*Blue whale spouting. OM-4, 180mm F2.8 .*

WWF

We are along the Quebec North Shore in the Gulf of St. Lawrence, in the vicinity of the Mingan Islands. Our study of blue whales and other marine mammals common to this region in summer is now in its eleventh year. And is the first long-term study of the blue whale in the world.

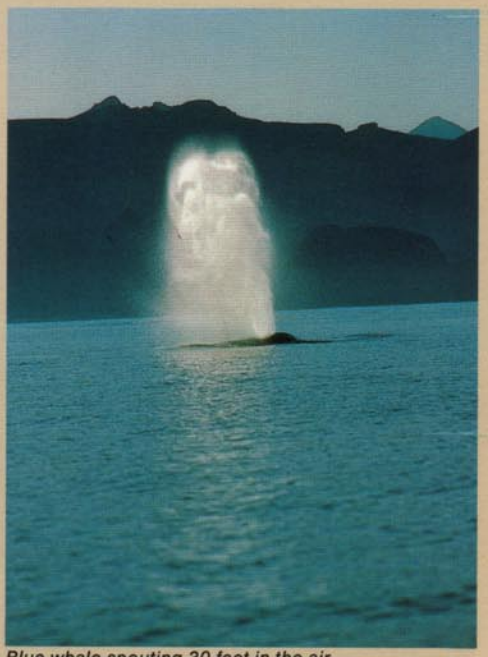
Photography is vital to our study of the blue whale, because we are able to identify individuals through pictures of their natural markings. The mottled pigmentation characteristic of this species is different from one whale to another and as in the use of fingerprints for human beings, enables us to distinguish between blue whales. This technique is extremely valuable, because it enables us to learn about their life histories without having to employ intrusive techniques. Studies of free-ranging baleen whales, such as the blue whale, without the use of implanted identification tags is a relatively new occurrence, originating in the mid 1970s. Prior to that most, if not all, knowledge of this and other large cetaceans had depended on the whaling industry. It was, therefore, largely a study of dead and not live whales.

*Mingan Island cetacean study crew tacking "Blue" – Lens: 100mm F2.8.*

We have created a catalogue of 207 photographically identified blue whales from the Gulf of St. Lawrence. A sort of mug-shot book of blue whales if you like. The use of photo-identification has enabled us to better understand the distribution, migratory patterns, population size and general behavioral patterns of the blue whale.

Blue whales are found in the Gulf of St. Lawrence from March to December, particularly along the Quebec North Shore between the Saguenay River and the Strait of Belle Isle. They return to the Gulf each spring, as the winter ice breaks up, to feast on planktonic crustaceans known as

*Blue whale fluking as it dives. OM-4 100mm F2.8.*



*Blue whale spouting 30 feet in the air. OM-4T, 180mm F2.8.*

*Blue whale fluking. OM-4T, 180mm F2.8.*

*Blue whale surfacing. OM-1, 65–200mm F4 zoom.*

euphausiids. These shrimp-like organisms — also known as krill — are found in great abundance throughout the year in the Gulf. The blue whale feeds almost exclusively on krill throughout the world, unlike some of its relatives, such as the finback and humpback whales, who will also eat several species of fish.

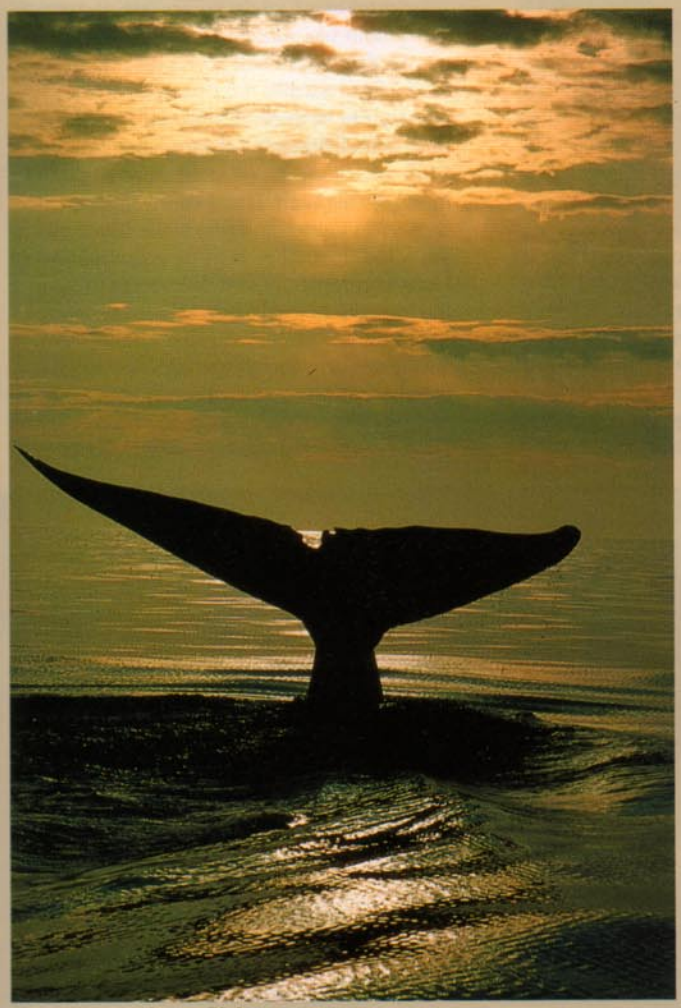
The blue whale is the largest animal in existence on the planet and can reach just over 100 feet in length and may reach as much as 120 tons in weight. It has been estimated that an adult blue whale could eat better than four tons of euphausiids in a day.

When calves are born after an 11 to 12 month gestation period, they can measure 20—25 feet and weigh 2—3 tons. Nursed by its mother on milk containing nearly 50% fat, a calf can reach a length of 50 feet and a weight of approximately 50 tons by the time it is weaned 8 to 9 months later.

The blue whale is a baleen whale and gulps its food, taking in a volume equivalent to tens of tons of water and krill per mouthful. The water is expelled or strained through flexible horny plates hanging down in rows of 250—400 from each side of the upper jaw.

Protected worldwide since 1965 this species is still extremely rare. Worldwide estimates — speculative at best — range from 4,000 to 12,000. There may have been as many as 300,000 globally before the onslaught of whaling at the turn of the century, which decimated as many as 30,000 a year during the 1930s. Combining the catalogues of photo-identified individuals for both the western North Atlantic and the eastern North Pacific Oceans, we can at least be certain that 530 exist.

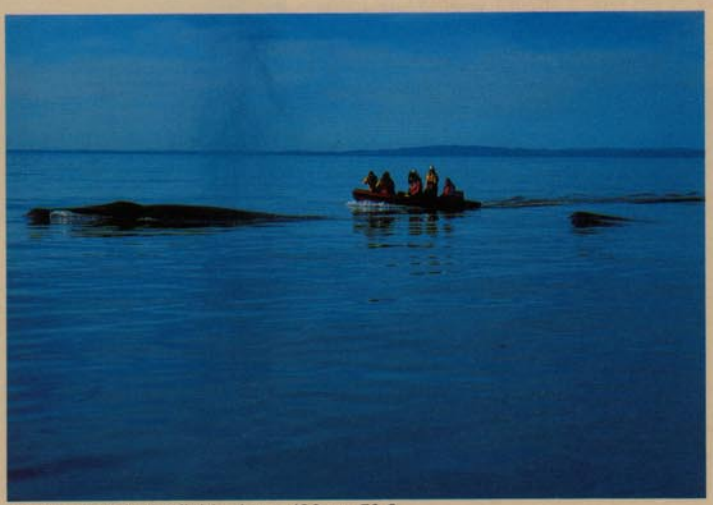
We have been lucky enough to find in the Gulf of St. Lawrence a small population of blue whales, members of which return to the Gulf each year. They can be observed by the public and biologists alike along the Quebec North Shore from the St. Lawrence Estuary to the Mingan Islands. We must learn, however, to better protect and monitor this fragile environment, otherwise, the blue whale and other forms of life unique to the St. Lawrence ecosystem may disappear from these waters in the not too distant future. VA



*Flukes. OM-2, 100mm F2.8.*

*Blue whale on the surface. OM-4T, 24mm F2.8.*

*Aerial photo of a blue. OM-4T, 180mm F2.8.*



*Researchers in the field — Lens: 100mm F2.8.*


# It Will Always Be Burma to Me

**by Barbara Alper**

As I sit here looking through *The New York Times*, an article about Burma stands out. Much to my amazement, I read that Burma has officially changed its name to Myanmar! But when I visited, it was still called Burma. I went there in search of something new, something exotic, something different. As a photographer I get excited and energized through travel and exposure to different life-styles, peoples, and cultures, as well as the look of different lands. Friends had been to Burma recently and recommended it, and they were able to supply me with tips. What little I knew about Burma (a country wedged between Thailand, India and China) led me to believe that it would truly be like no other place; it was even described as a country still existing in another century and as yet unaffected by the modern world. My interest was piqued through research — lots more than I'd done for previous trips — and I prepared for a very unusual experience.

The independent traveler is allowed only a seven-day visa; any arrangements for accommodations and travel within the country can be done only through Tourist Burma, the ubiquitous government agency. They encourage group travel (thus allowing them greater control) and carefully limit the number of tourists allowed in the country at any given time, since housing is limited. But I like to move at my own pace, so as to have the freedom to spend as much or as little time with one subject as I like without having to worry about missing the bus; group travel is not for me. Being on my own would make getting around a bit more difficult, but I wasn't expecting this trip to be a picnic.

*Fisherman, Inle Lake*

*Scenic Inle Lake.*

**BARBARA ALPER**

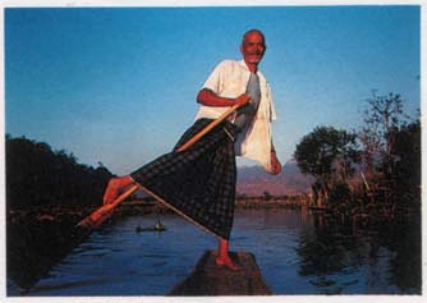
*Barbara Alper, born in Detroit, is a traveler by nature. After graduating from Michigan State University she moved to Boston, where in 1975 after brief careers in social work and securities trading, she decided to take photography seriously. She studied briefly at the M.I.T. photo department, as well as on her own, then began free-lancing as a photojournalist. Since then she has traveled to such varied places as the Côte D'Ivoire, Europe, Asia, the Caribbean and throughout the United States. Her work is seen in a number of publications as well as exhibitions and collections. For the last ten years she has been living in New York City. She is a member of ASMP and her work is represented in the United States by Stock Boston and Telephoto, and in Japan by Mega Press Agency.*

*Going to Taunggyi market. 35mm F2.*

*Taunggyi market. 24mm F2.8.*

There was a lot to pack into seven days, but how often does one go to Burma? The one afternoon in Rangoon (they're now calling it Yangon), the capital at the southern tip of the country and the required port of entry, was spent walking around Shwedagon Pagoda, one of Burma's holiest sites. It's a wonderland that even Disney couldn't duplicate. Gold buddhas, mirrored tiles, mosaics, marble, and tin filigree adorn the many temples, each one intricately built and different from the next. As a small foreign woman toting several cameras, I was apparently a bit of a curiosity. The Burmese people are not shy, so they never hesitated to approach me, asking where I was from, inquiring about my cameras, and then inevitably requesting that I take their picture! How wonderful! (Burma having been ruled by Britain until 1937, most of the people speak English.) These folk *like* having their pictures taken. They're very pretty people who were always saying to me how beautiful *I* was. They thought this because of my white skin, which is something to be revered in their culture. In fact, they wear a white chalk-like makeup (which also serves as a sunscreen) so that they too can look white. Some people would put it on very artistically, making different patterns; others simply tried to apply it evenly. If only they realized how beautiful they were without it.

From Rangoon I was able to get a seat on the overnight train to Pagan. At first this seemed like a real adventure, riding on an antiquated train with people walking up and down the aisle selling everything from boiled (drinkable) water and hard-boiled eggs to strange-looking, red cooked chickens with the heads still attached. But after 10 hours of this the novelty wore off; the seats became very uncomfortable, and sleep came only in short spurts. Enough with train trips; it would be flying the rest of the way, despite all the warnings about the dangers of flying Air Burma. (The planes were in a state of considerable disrepair; each time I landed I felt lucky to be alive.)

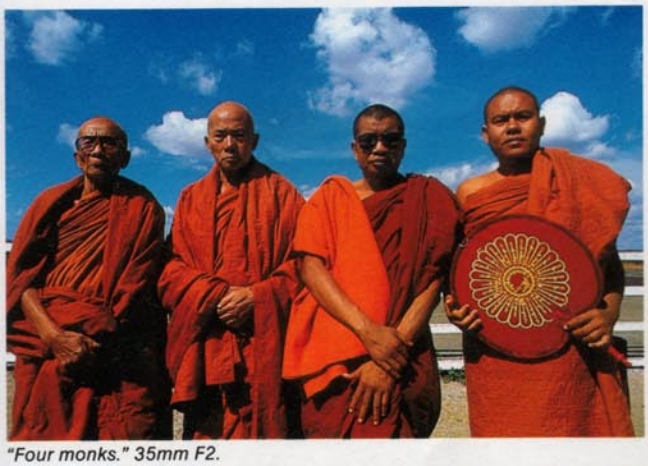


*Maung-Oo the boatman.*

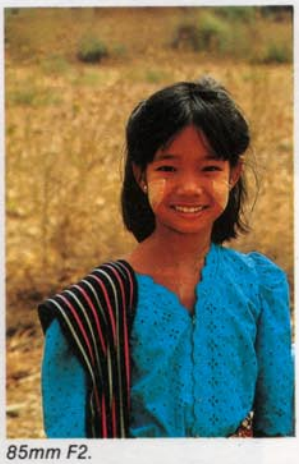
Pagan is a magical place. Stretching back from the Irrawaddy River and situated in the middle of the country, it fit the description of what living in centuries past was like. Horse carts are the means of passenger transportation around town, and are also available for excursions out among the ruins; ox carts are used to transport goods. (Rangoon is a big city in comparison; it has cars, buses and trains.) Pagan is best known for its hundreds of decaying pagodas, scattered for miles across the landscape. The town itself is partially surrounded by the remains of its ancient wall, and has two main roads; people live in shacks with dirt floors, and many still cook on open fires. There is a 'public' school for the children to attend, and also a crafts school that teaches etching on lacquerware, one of their 'arts'.

I hired a horse cart and driver for a day to go around to the key temples and pagodas, planning the trip strategically so as to end at the perfect spot for sunset. There we were, clip-clopping along; the only other sound besides our horse's hoof beats was that of an occasional passerby — another horse cart or a trishaw. (A trishaw is a bicycle with a side seat attached to it.) The pagodas have existed for nearly a thousand years, and they have a very peaceful quality about them. If you feel the need to speak, the only appropriate way is to whisper. One doesn't want to disturb the silence, and besides, people do still actively use the temples for prayer.

The difference between a temple and a pagoda is that a pagoda is a solid structure that cannot be entered, whereas a temple can be walked in, or climbed! In order to get a good panoramic view of Pagan and really get a true sense of the place, about an hour before sunset I climbed with all my equipment up a very dark, broken stairway in one of the temples to get to the balcony surrounding the top. My flashlight was working at first, but then it died, and the stairway became treacherous. I moved much slower, taking each step carefully. Given their age, these places have survived amazingly well; nevertheless, the stairs were dark, narrow, steep, and broken. I made it, and the view was well worth the risk. In front of me



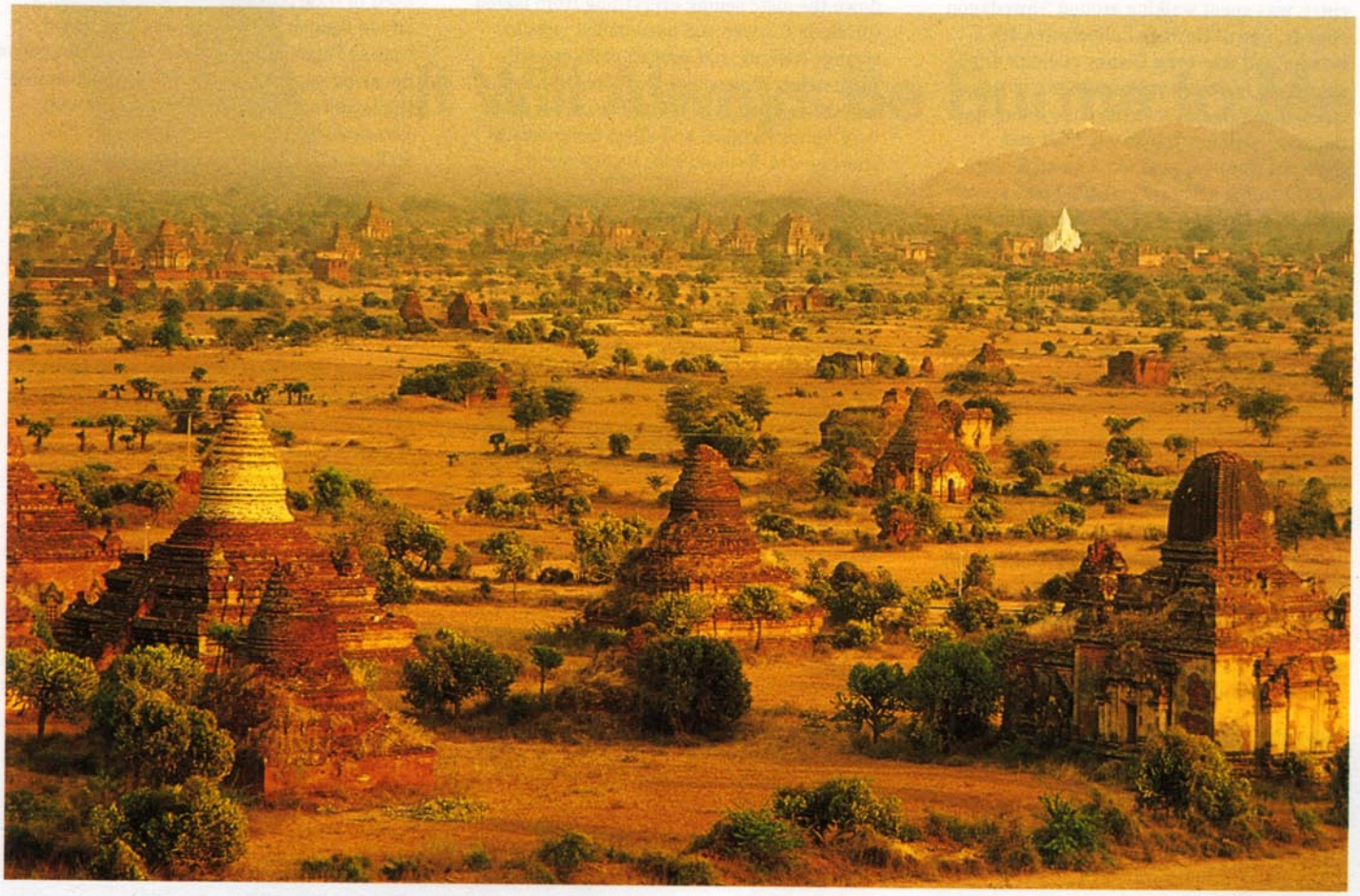
*"Four monks." 35mm F2.*



*85mm F2.*

*Floating market, Inle Lake.*

*Transporting goods in Pagan. 180mm F3.5.*

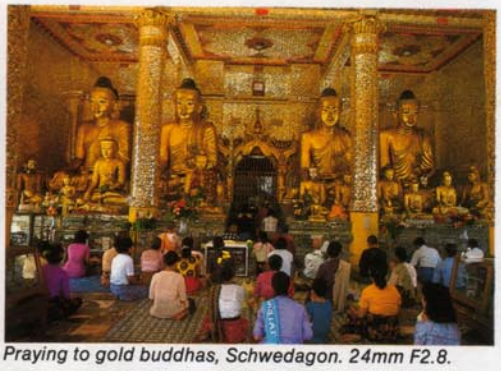


Pagan-scape.

stretched miles and miles of temples and pagodas, tinted gold by the setting sun. There was a sense of calm and stillness, interrupted only by the far-off sounds of birds chirping and wind rustling a few leaves; outside of that the only noise came from my camera clicking. If the schedule hadn't been so tight, I would have enjoyed spending more time in Pagan. Unfortunately, that will have to come on the next trip.

After an obligatory stopover in Mandalay, a *hot,* crowded, noisy city filled with buses, trishaws, horse carts and lots of people on bicycles, I was off to Inle Lake, something I had been anticipating. Also known as Yaunghwe, it is situated in the eastern highlands of the Shan States. I was especially looking forward to witnessing something I had only read about: the one-legged rowing, a style unique to the region. After checking into my room, I made inquiries about hiring a boat to go for a canal ride that evening. I was told about a boatman named Maung-Oo and where I might find him to take a short ride before sunset. When I finally located him, it turned out that he spoke no English, but we were able to communicate

Tin filigree and gold, Shwedagon.



Praying to gold buddhas, Schwedagon. 24mm F2.8.

Departure from Heho Airport, last day in Burma. 24mm F2.8.

anyway. Because of certain rules stemming from a fear of political insurgents active near the lake and the desire to protect tourists, the independent boatman is allowed to take a tourist on the small canals leading to Inle Lake, but not out on it. Only the larger Tourist Burma boats take tourists on lake trips each morning. I decided to do that too, but in the meantime an evening boat ride with Maung-Oo would be fine.

It was quiet, with no other boats around, and only the sounds of the oar swishing in the water and what sounded like thousands of birds hidden in trees singing away. Maung-Oo sat for most of the ride, then knowing that I wanted to photograph him demonstrating the art of one-legged rowing, he stood up and began. It's strange to see and hard to describe: standing on one leg and wrapping the other around the oar, he put a hand on the top of the oar for control. Then, swaying his hip to help move the oar, he rowed. Not only was he a sight to see, but coming up next to the boat a few minutes later was a teenage boy riding on the back of a water buffalo! Pretty amazing (and what an unusual pet to have). I really was in another world.

The next morning, before joining a group of nine others for a three-hour boat tour of Inle Lake, I wandered around the town and by chance got to observe one of the country's religious rituals: feeding the monks. They walk through the streets in single file, with their bowls held in front of them; when they come to a house they stop to have their bowls filled with rice, soup, and other foods by the resident. This is considered to be a good deed and wins the donor points in the afterlife.

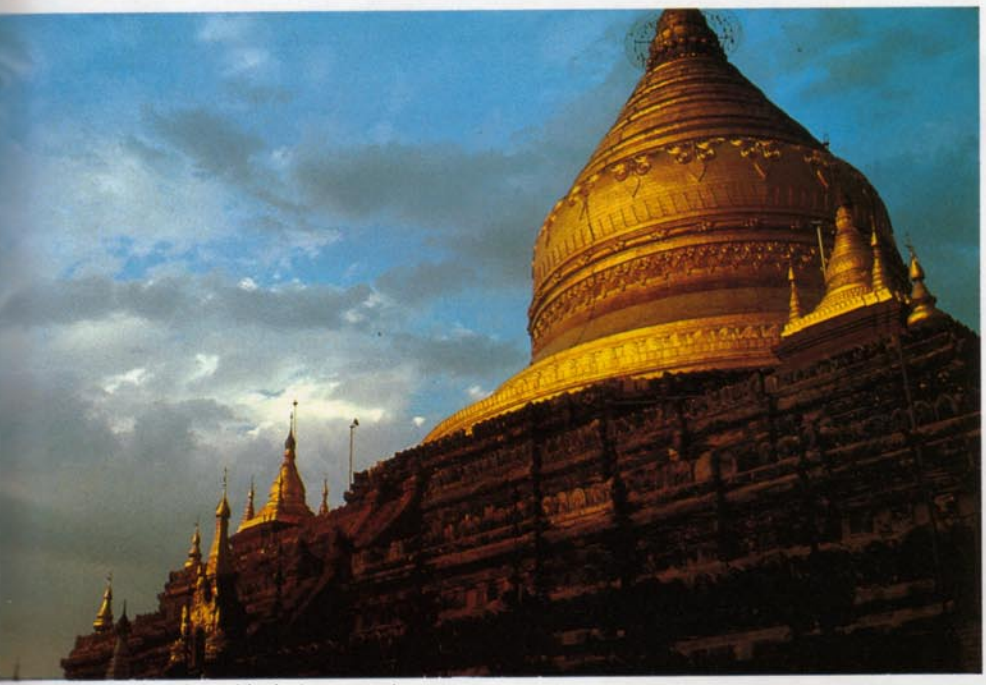
After watching this I met up with the others for our boat trip, where we witnessed what living on the lake was like. Houses are

*Feeding novice monks.*

built in the water on stilts; there is a floating garden which moves as you walk across it, as well as a floating market. Here many boats float up and down the river, selling everything from bananas to hats and so-called antiquities to the tourists as well as the people living there. On the wider part of the lake we watched the fishermen use conical nets to catch fish, and kids doing one-legged rowing coming back from the market. Watching, I was excited by what I was seeing and was looking for a way to capture that perfect picture, but it was a tricky situation to shoot; the boat was constantly moving, the light kept changing, and I had to switch lenses depending on how close or far we were from the scene. I got carried away and shot lots of pictures, but in the end I was pleased with the results. [I carry around what I consider to be the minimum amount of equipment: three camera bodies; two OM-1s, one OM-4T (one for b&w, one for color, one spare), one XA, and five lenses ranging from a 24mm to a 180mm. Given that it's all Olympus equipment, the weight is a bit more bearable, especially when climbing steep, narrow stairs or riding in shaky boats. In fact, aside from the high quality of the lenses, the light weight is the main reason I started out with Olympus equipment 14 years ago.]

The last day in Burma was spent in transit. While waiting at Heho Airport for the plane back to Rangoon I met a group of monks waiting for the same plane. Not only were they colorful in their bright orange robes, but the sky was a wonderful deep blue with a few scattered clouds, which made for a perfect backdrop. Here was a picture waiting for me. One of the monks spoke English, so I was able to ask if I could take their picture together in a group. At first I used my Polaroid to show them what I was doing. It's a handy tool to have, and they were amazed by it as well as pleased to have their own souvenir. Having this last encounter was the perfect way to end my trip.

This is a wonderful, enchanting and quirky place. No matter what *they* call it, it will always be Burma to me. VA



*The weather cleared for just a moment at Shwezigon Pagoda near Pagan.*

*Reclining Buddha, Shwedagon.*

*24mm F2.8.*

Workshop Report

# Jacques Schumacher Demonstrates Cover Photography With the AZ-300 "Color Foto" Workshop for Cover Photography

*Jacques Schumacher instructing the participants of the Color Foto cover workshop on the secrets of successful cover photography in his Hamburg studio.*

A first-class photographer, two top models and sixteen readers of *Color Foto* magazine confronted themselves with an unusual task at a weekend workshop in Hamburg. They wanted to photograph a cover picture for *Color Foto* with the help of an Olympus *AZ-300. This meant a challenge above all to the one in charge of that workshop, Jacques Schumacher, who has become renowned in many countries by the numerous *Stern* covers he has done and by his advertising campaigns far off the beaten track.

What most participants had supposed to be the greatest obstacle in this ambitious undertaking turned out to be no reason to worry: their photo equipment, the Olympus AZ-300. To cut the story short — the camera did an unusually good job.

After thorough instruction on the technical equipment and the variety of creative capabilities of this extraordinary camera system by Rita Helmholtz, photo engineer and Olympus marketing manager, no problems arose from practical work in the studio. On the contrary, initial skepticism turned into admiration, since the camera's easy handling allowed the photographers to fully concentrate on the models.

*Heiner Henninges of Color Foto commenting on the particular standards to be met by a cover picture.*

For lighting Jacques Schumacher chose filtered artificial light, so that the integrated flash of the AZ-300 was not needed. The group shot their photos using tripods in order to avoid shakes and to ensure optimal sharpness.

The "gravest" problem in the end was selection. It was almost impossible to choose the picture most suitable for the cover — there were just too many perfect ones. To tell the truth, this harvest would have been enough for a whole year's editions of *Color Foto*. VA

*Proof of the effectiveness of the AZ-300: the Color Foto cover created in Schumacher's studio.*


*As a result of practical work initial skepticism turned into enthusiasm.*

*Results are being critically discussed and evaluated from a large-scale projection in Schumacher's studio.*

*Infinity Super Zoom 300 in North America.

# Fumio Matsuda's "Advice on Anything and Everything" Part (6)

**by Fumio Matsuda**

## "Photographic Expression of Brightness and Darkness"

People have a sensual perception of brightness and darkness which is different from what the camera "sees." Because of this, I think many of you have ended up with photographs that turn out with a severely different sense of brightness and darkness than you sensed when actually taking picture.

Live television broadcast at twilight is a good example of how pictures appear brighter than reality. Suppose you are an announcer at a daytime sporting event; as the sun goes down, your sense of brightness and darkness will be very acute as you notice the artificial lights overcoming the naturally fading daylight. The television viewers cannot experience the same sense because the on-screen picture maintains a constant and artificial brightness. And that is fine, for the intention of the broadcasters is to bring you a bright and clear picture. But the photographer's intention may differ. A photographer many times wishes to reproduce the precise conditions of brightness and darkness that is sensed on location. The theme of this article is based on "photographic expression of brightness and darkness."

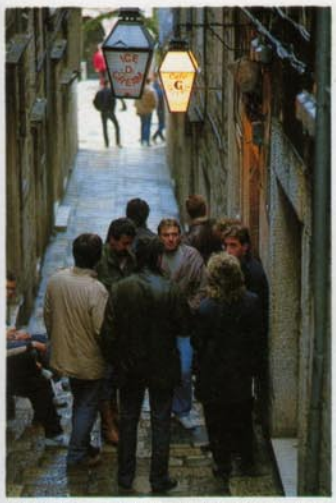
It is naturally important to control exposure to suit the human sensing of light, but even more important to place priority on matching the lighting conditions of the subject to its surroundings. Take a scene at dusk for instance, you personally sense twilight and wish to capture the sense of darkness on your subject. If you set an insufficient exposure to capture an afterglow (twilight) effect, the subject of your photograph comes out insufficiently exposed. The only way to overcome this problem is to use the influence of artificial light to create the sense of evening darkness. Artificial light competes with contrasting darkness better than natural light in terms of exposure.

An expert will wait for early dusk, until the street lights and window lights overcome the lambency of twilight. Artificial light provides a contrasting effect against the somber early evening glow adding a sense of luster to your subject.

As dusk becomes nighttime, natural light gives way to blackness and artificial light reflects virtually all that can be seen. The photo effect on the subject at this point resembles spotlight conditions.

In photography you have to trade brightness for darkness to get the balance you're looking for. Some examples should make this more clear. VA

*The photo appears to portray a nighttime scene, however, the remaining light of the sky is also evident. In this example the subject has first priority. (Without compensation, Auto.)*

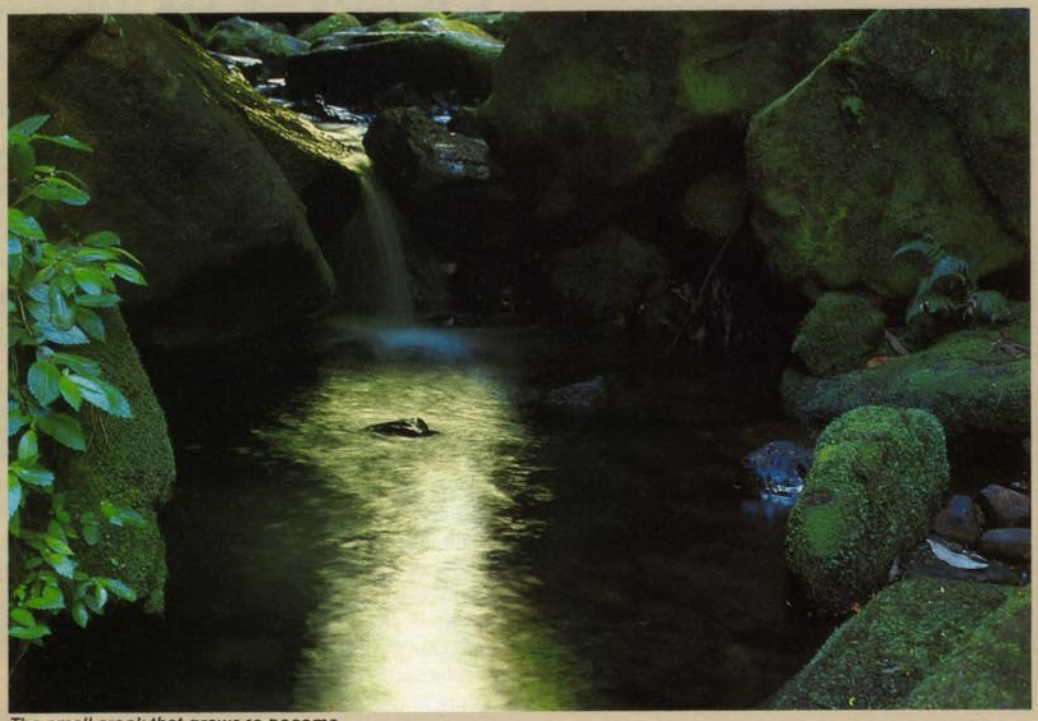


*Selection of subject when the light of streetlamps is stronger than twilight. (–1 compensation, Auto.)*

*The presence of brightness and darkness under direct sunlight is similar to the conditions prevailing under direct artificial lighting, and is therefore limited simply to brightness or darkness only. (–2 compensation, Auto.)*

*The street stalls can already be seen under bright electric light thus playing a strong contrasting role. (Without compensation, Auto.)*

*Flash techniques along with fireworks reproduce the actual sense of the moment. Using a 1/4-sec shutter speed, the sparks from the fireworks are captured. To capture the children with the proper lighting, a flash with extended cord should be placed near the children, above the fireworks. (Aperture f8, 1/4-sec shutter speed, ISO 64.)*



*The small creek that grows to become Claustral Canyon. 50mm, 1 sec. f11.*

# Canyoning

**by Mark Hay**

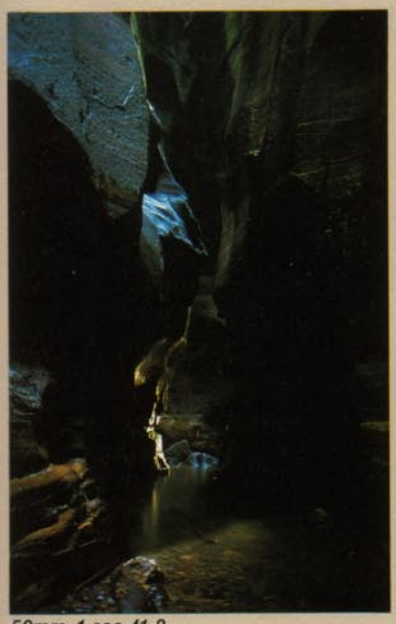
To the west of Sydney lie the Blue Mountains, a large sandstone plateau. In the central and northern areas are many creeks which occasionally flow through narrow sections with steep walls. In some places you feel the walls leap up, in others the creek drops suddenly down. It is here, where the creeks are much deeper than they are wide that they are called canyons.

My first taste of canyoning came through a friend who'd taught me rappeling. He'd heard of a place called, "Claustral Canyon" and wanted to explore it. Armed with some

**Mark Hay**

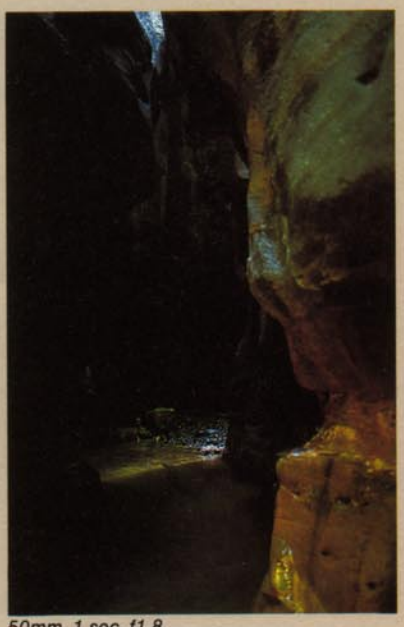
*Born in Australia, Mark Hay came to Japan as an exchange student in 1976, at which time he gained photographic experience. Upon returning to Australia, he indulged in skydiving. He became known for taking mid-air photos by attaching a camera to his skydiving helmet, his photos drew significant attention. As an adventure photographer, he continues to visually record unique activities and explore previously unexplored regions with his camera equipment.*

*Climbing and rappeling various waterfalls in the canyon.*



*50mm, 1 sec. f1.8.*

*50mm, 2 sec. f1.8.*



*50mm, 1 sec. f1.8.*

notes from a canyon guide published in *"Wild"* (Australia's wilderness adventure magazine), a topographic map, lunch and cameras we set off.

The track we had to follow quickly turned steeply downhill until it joined a small creek. The eucalypts (gum trees) had given way to moss-covered rocks and huge ferns as the walls steepened. We tried to stay dry by rock-hopping and walking along narrow ledges. However, we eventually came to a section where neither was possible — the first swim.

I have heard canyoning described as a summer sport and soon found out why — the water was freezing. Many sections of canyon are so narrow that overhead sunlight penetrates for only a few hours per day. The rocks and water below have little chance to become warm. We rappeled three waterfalls, walked through dark cavernous bends and rounded a corner to be awestruck by 50-meter-high walls covered with dark green ferns and moss, accompanied by the echoing roar of the waterfalls we'd just rappeled. Then followed a tunnel swim and a long, steep walk out. I always take a wet suit as it is foolish to visit such places only to become so cold you can't wait to get out. One must be comfortable enough to have time to savor the spectacle. We once stepped into a particularly deep section where a shaft of light penetrated the narrow gap overhead all the way to the floor. The short life span of this beam was further shortened by passing clouds. We had to wait quite some time for the golden shaft to return.

Since that first naive introduction I have done many trips and have found that canyons vary in nature. They may involve any combination of walking, rock-hopping, wading, swimming, rafting (to save long swims), climbing and rappeling. All this while carrying food, dry clothes, ropes and cameras.

I use an old Olympus 35RC that was given to me by a friend who found it while trekking near Yosemite. I really like the lightness and simplicity of this camera. I also have an OM-1N which I used for years helmet-mounted for skydiving. New friends

*The author deep in the canyon. Photo by Petra Bojahra.*

*Tunnel swim. 50mm, 1 sec. f1.8.*

*Walls of ferns and waterfalls. 50mm, 1 sec. f2.8.*

*Foam from a small waterfall backs up at a logjam. 50mm, 1/60 sec. f2.8.*

*Canyon landscape. 50mm, 1/60 sec. f5.6.*

*The creek passes through fern gardens. 50mm, 1/125 sec. f11.*

have brought new sports, and with them new subjects to photograph and new challenges, especially looking after cameras in a semi-wet environment.

On that first trip I had my camera wrapped in some plastic bags and it suffered light water damage. I look back and see how uninformed all round we were then. There are many waterproofing devices available today. I've found I need something that is quick and easy as I'm in and out of water regularly. So many visual delights unexpectedly appear and beg to be photographed. The camera cannot be too securely shut away. I use either a waterproof bag or a watertight 25-liter drum, which fits very snugly into my pack. Both allow quick access. I always

*A cold swim as the canyon ends.*

Fast, flowing water. 50mm, 1 sec. f8.

Rafting a canyon.

have a small towel in the drum or bag so that wet hands can be dried before cameras are handled.

A flash is a must in many situations. It has the benefits of brilliantly illuminating bright, colorful clothing (a must), freezing waterfalls in silvery droplets and leaving backgrounds dark and beckoning. Spectacular as these shots are, I prefer to use natural light. These photos seem to capture more of the true atmosphere of the canyon. Amazing results can be achieved by intentionally over- or underexposing. A tripod is therefore essential, and I have often had mine erected in up to waist-deep water.

I always use Fuji 100 ISO. It seems to lend itself to the greens of the ferns and mosses, the dark blues of the misty canyon air and the frothy white of moving water. Most shots are on a low f-stop and slow shutter speed.

On many occasions I've asked friends rappeling teeth-chattering waterfalls to stop halfway down while I waited below. The lens is wiped clear of mist droplets, then I turn and quickly shoot before the lens becomes too wet.

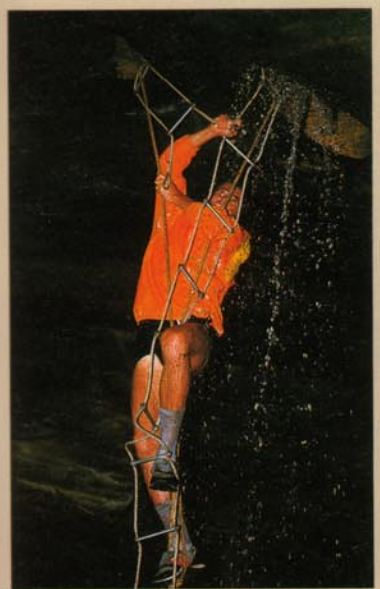
While skydiving, I've always taken free-fall photos only on clear, blue days, always avoiding bad conditions. However, down canyons, overcast or even rainy days can be a plus, creating a different, special atmosphere. Dormant waterfalls on wall faces come alive. Existing falls take on a new character — all to the louder cavernous thundering.

The cold, the wet, the heavy pack, the hassles of keeping the camera dry — why go to so much trouble? For me it is primarily to have something to show for the effort I've invested and the personal reward I've received.

I've done many sports, among them white-water rafting, sailboarding, skiing, ballooning and skydiving. Exciting as all have been, none have so awakened the spirit of adventure as canyoning. It is a mixture of discovery — feeling that surely nobody could have been there before you, and of anticipation — what amazing spectacle lies around the next bend in the creek bed or twist in the canyon wall?

The photo will never capture the atmosphere created when it was taken in semi-darkness, waist deep in shivering water, dwarfed by giant walls of rain-forest vegetation with waterfalls sounding like roaring trains.

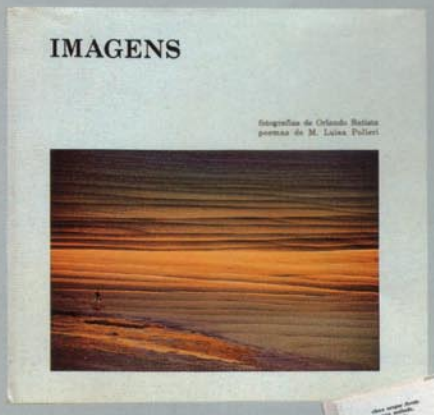
If I can bring some small part of this out with me, I am happy. For me, the greatest reward of canyon photography is for a friend who shares the love of adventure to gasp when he sees the photo and say, "Take me there!" VA



Using rope ladder to go up through a small waterfall. Photo by Petra Bojahra.

Resting between moss-covered rocks. Photo by Petra Bojahra.

# IMAGENS: Photographs by Orlando Batista, Poems by M. Luisa Polleri




This work represents a combination of the individual talent and collaborative effort of two artists: internationally renowned photo-journalist, Orlando Batista and celebrated Portuguese poet, M. Luisa Polleri.

IMAGENS interweaves thought-provoking poetry with visually enhancing photography. It sets forth a manifestation of visual drama and tranquillity that both stimulates and relaxes. Discreet shadows and profound colors, autumn leaves and the summer breeze, IMAGENS is a rhapsody of scenes in the world which surrounds us.

Orlando Batista, born in Lisbon in 1931, has dedicated over 30 years of his life to photography. His work has been published in a variety of specialized magazines and used in publicity campaigns for Olympus and Nikon. His photography has won numerous awards in Portuguese and international competitions.

M. Luisa Polleri, also from Lisbon, earned herself a degree in law at the Classical University in 1966. In 1987 she published her first book of poems entitled "Uma Temtativa" (An Attempt).

Castoliva Editora Ltda., 1988
Maquette and cover: Jose Goudo
Photo composition and printing: Grafica Maladouro
Legal deposit no. 22965/88
December of 1988
Size: 290mm x 308mm 100 pages

# Inseltag: Impressions from Hansjorg Hinrichs' Olympus

Hansjorg Hinrichs, born in Steinach on Lake Constance, Germany, in 1949, is an uncompromising photojournalist and trip organizer who has trekked the South Seas for over ten years in his quest for remarkable photographs. Between journalistic adventures, Hinrichs lives in Appenzell, where he operates a unique school for travel photography as well as a company called INTERTRECK-Adventure Excursions.

This collection is the impressive result of a yearlong effort of one photographer and his Olympus camera. Page after page of carefully composed tropical impressions stimulate the senses. This work awakens and guides the reader through the island gardens of the South Pacific. It draws a close-up portrait of the jungle people of Papua New Guinea and the temple priests of Bali.

Truly a wonderful display of a real and living paradise.



ISBN: 3-908537-02-9
Size: 305mm x 215mm 52 pages


# The Olympus XA Story (5)

**by Kunio Yanagida**
**(Translated by John S. Brodie)**

## Pitfalls

Now it was an urgent priority for the development group to get a prototype of the new camera completed and ready for testing. But, as might have been expected considering all the sophisticated functions they were trying to cram into a body just 10.2cm wide by 6.45cm high and 4cm thick, when it actually came to assembling the prototype they discovered more than a few 'design oversights'. One of them was the problem of loading the film.

One day Maitani called to the young Tsunefuji, who was responsible for developing the shutter, "Come over here for a minute!"

"Yes. What is it?" Tsunefuji asked as he came up to Maitani's desk. Handing Tsunefuji the prototype Maitani said, "Put in the film." With a suspicious look on his face Tsunefuji proceeded to open the prototype's rear cover and load the film. But, much to his embarrassment, he couldn't release the shutter. And unless the shutter was released, it was impossible to wind on the film.

"How do you propose to advance the film? If you can't advance the film, the camera isn't going to be much use," Maitani said cuttingly.

"Damn!" Tsunefuji burst out. "I never even thought of that. I just naturally assumed the film would wind on automatically!"

In Tsunefuji's design when the barrier — which played the same role as the traditional lens cap — was closed, a safety device automatically locked the shutter. The kind of camera they were aiming at was one you could slip in your pocket and carry around everywhere you went. Obviously, it was of prime importance to have some kind of safety device to prevent the sensitive electronic shutter going off unintentionally.

The difficulty was an electrical circuit that only took into consideration the idea that the shutter must not release if the barrier is closed, which made loading the film a literal impossibility. This kind of 'oversight' isn't something that only crops up when designing a new camera. Every engineer who takes up the challenge of creating a new technology has to experience it in some way or another at least once in his career.

Eventually the problem of film loading was solved by developing a circuit that would override the shutter safety lock when the camera back was opened, in this case

allowing the shutter to be released even in the dark.

Another similar kind of design 'pitfall' they fell into concerned the positioning of the backlight exposure compensation lever. In the original design, the lever was located so that it could be operated by the thumb of the left hand, in the same way as with an SLR. What they only realized when they actually tried to use it on the prototype, was that because the camera was so much smaller than an SLR, in this position the lever got in the way when you tried to look through the viewfinder, and was difficult to operate into the bargain. So of course the lever had to be relocated somewhere else.

When you try to design a host of new mechanisms and systems according to the same logic as for a traditional camera, these kinds of problems are bound to occur. And the engineers went ahead in the only way possible, touching up the design a little here, making a change or two there, and slowly but surely bringing the prototype closer to its final form as a finished product.

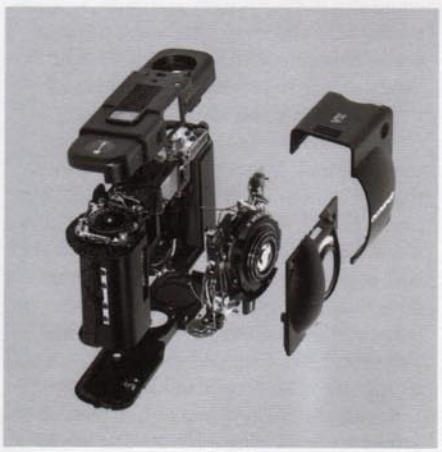
"Everything should be original," insisted Maitani. And in his unrelenting perfectionism he went further than anybody else. For example, the self-timer was equipped with an innovative red lamp and electronic tone device. When the self-timer was activated, for the duration of the 12-second delay a little red lamp flashed and simultaneously an electronic tone beeped on and off.

This 'audio-visual indicator' adopted an LED (Light Emitting Diode) about the size of a pencil head for the red lamp and a kind of tiny speaker about the size of a dime called a PCV (Piezoelectric Ceramic Vibrator) for the electronic tone. Both were Maitani's own ideas.

The MSI integrated circuit utilized to control all the various functions incorporated in the camera managed to compress the capacity of several hundred vacuum tubes within the size of a thumbnail. Even to mention only the principal functions under its control makes up an impressive list. They include:

*Exposure Time
*Self-Timer
*Audio-Visual Device
*Power Source and Voltage Checker
*Backlight Exposure Compensation
*Flash
*Rear Cover and Shutter Circuit
*Barrier and Power Source Circuit
*Viewfinder Indications
and more.

In fact, if you like, you could say the camera itself has now become a high precision electronic device.



## The Barrier Hurdle

One day in March 1978 Maitani slipped the almost perfected prototype into his black shoulder bag and drove off from the Hachioji Institute.

He drove onto the Chuo Expressway, the main highway into Tokyo from the west. With spring just around the corner the winter cold was already less harsh, but the hills and fields along the route were still bare of vegetation.

Arriving at the Head Office in Hatagaya, with his bag slung nonchalantly over his shoulder Maitani made his way to the office of the Head of Sales Division.

There were just a few top management people present. It was still a full year before the new product was scheduled to go on sale, so even inside the company it was essential to observe the strictest secrecy. Maitani spent a full hour explaining the camera mechanisms and operation in detail.

Now they had a chance to see the real thing, the management side too became instant enthusiasts.

Recently, from time to time the Olympus Sales Division had been getting telephone inquiries of uncertain origin. The subject of the inquiries varied from the relatively innocent, "When will the new camera you're making now go on sale?", to more prying questions that tried to put the listener off guard with such turns of phrase as, "I just wanted to check about your new camera. It will be autofocus, won't it?"

For the most part the callers identified themselves as Olympus camera fans, but there was no way of being sure. They might just as well have been people from camera magazines or camera industry publications out for a scoop or, even less welcome, rival manufacturers trying to ferret out information.

Occasionally, the caller would even use the name of an Olympus director to try to worm answers out of people in lower management such as section chiefs and assistant managers.

A moment's carelessness could have fatal consequences.

Clearly, by this time the camera world had reached a consensus that Olympus must be up to something or other to follow up their success with the OM Series.

With the coming of June the company organized a Production Technology Project Team at the Suwa Factory to set up the mass production system for the new camera. The team was centered around engineers based at Suwa, a pleasant lakeside site in central Japan's mountainous Nagano Prefecture.

Although the leader assigned to the team was Second Camera Section Chief Nakamura from Hachioji, the men on the spot who were actually responsible for getting things into high gear were Morito Imai, a graduate of the Machinery Faculty of Waseda University's Science and Engineering Department who joined Olympus in 1961, Kenzo Hagiwara, who joined the company in 1953 after graduating from Suwa Seiryo High School, and Yasutaka Dobashi, a graduate of the Sangyo Noritsu Junior College, who had been with the company since 1960.

Their biggest headache in preparing the new camera for factory production proved to be that same brilliantly innovative 'barrier'.

For the most part the body could be made of cast or pressed plastic. The same applied, in principle, to the barrier.

There is a vast difference between making a prototype and making a product for the market. A prototype is a one-off undertaking. It is made entirely by hand, so making a somewhat complex kind of shape poses no particular problem. But start talking about mass-producing the same thing in quantities of tens or hundreds of thousands, and you're discussing a horse of a different color. In order to make a part of a component out of cast plastic, you have to design it so the mold sections can be slipped away cleanly, either up and down or to either side. In the case of the barrier, however, in addition to its delicate and complicated curved shape the construction also necessitated clasp-like extrusions to permit the lateral sliding action involved in opening and closing the camera. This made it totally impossible to cast with the conventional two opposed mold sections.

Dobashi, the man with the unenviable job of designing the mold, went through agonies trying to find a solution.

Even making the mold for the convex front section was no simple job. The man responsible for this part was Takashi Fujimori, who had specialized in tailor-making metal-working tools ever since joining the company in 1960 on graduation from Nagano Prefecture's Okaya Minami

High School.

Fujimori came up from Suwa to the Hachioji Institute and told Maitani, "I've been trying to cast a mold from your clay model, but however hard I try I just can't get a perfect fit with this bulge on the front. And they told me at the factory, 'Don't bother to come back until you've worked it all out!' "

"Really? Well, in that case you can use my desk," replied Maitani.

Fujimori took up the invitation, and stayed glued to Maitani's desk from morning to evening for a whole week, concentrating single-mindedly on the problem of working out how to create a suitable mold. Eventually his perseverance was crowned with success, and he was able to pack up and go back home.

Dobashi, too, had managed to beat the deadline and, by summer, developed a method to satisfactorily cast the complicated barrier shape. The final solution involved opening up the mold sequentially in no less than seven different directions. The construction of the mold was so intricate that later specialist designers would examine the plastic barrier and be amazed that it had been possible to cast it at all.

It is indeed difficult to overestimate how much the high standards and conscientiousness of engineers at the factory level in thus pursuing the ultimate in production technology, contribute to the fine detail and high quality of Japanese manufactured products. They are the ones who give Japan its impressive potential for realizing design ideals on a solid mass-production basis.

## A Tougher Job than Designing the Zero Fighter Plane

In September of the year 1978, Photokina, the world's most famous and prestigious photo exposition, was held at its regular venue of Cologne, West Germany, and Olympus exhibited a prototype of the new camera. After considerable discussion the decision to name the new camera the 'XA' had been made in August.

The reasons given for the choice were that 'X' is the most distinctive sounding letter in the English alphabet, and that it conveys a hint of futuristic, leading-edge technology. The 'A' didn't have any special significance, except that it went well with the 'X', and of course it offered the obvious nuances of 'Ace', 'Number 1', and suchlike. The naming was also strongly supported by the American sales organization.

Exhibiting the XA at Photokina provided an opportunity to formally announce it before it actually went on sale, and a splendid occasion to gauge the reaction of camera specialists and enthusiasts from all over the world.

As expected, the XA was extremely well received, the experts praising it as 'magnificent'. Maitani, who was present at Photokina in person, was enormously gratified but resisted the temptation to become conceited by his success. He thought to himself, "Testing for the sake of testing is all very well, but until you actually try the camera out from a photographer's point of view, you can't be sure if it is any good or not." And so on the way back he made a detour to Italy, visiting Venice, Rome and other cities and using the XA as much as he possibly could.

This practical experience paid off by pointing up a number of areas for improvement, including the viewfinder display method, and the length and weight of the focus setting lever. These details were taken in hand as soon as he got back to Japan.

What with the enthusiastic reception at Photokina, and the wave of special features on the XA in camera magazines in subsequent months, by the time the camera went on sale in April of the following year (1979) market interest in the XA was aroused to something approaching fever pitch.

Other camera makers around that time would generally start production of new camera models at a rate of five or ten thousand units a month. XA production, on the other hand, began at a bold 20,000 a month, in spite of which a huge order backlog built up overnight in Japan and America alike. Even when Olympus hurried to push production over the eventual target figure of 30,000 per month, for a long time they just couldn't catch up with the demand.

In May of the next year, 1980, the XA was joined on the market by the new XA2, which featured full auto operation from focusing to aperture and shutter speed settings.

But, even as the new products were scoring such a resounding success, it was time for the designer to get back to the drawing board and start work on the next model, one that would have to surpass his own finest efforts once again.

One day somebody said to Maitani, "Before the war someone set the designer of the Zero fighter plane an almost impossible task: to make a plane that would fly at more than 500 kilometers an hour, at a time when the world's fastest plane had a top speed of around 400 kilometers per hour. But he took on the challenge head on, and faced with such iron determination the impossible became possible, and the Zero became the best fighter the world had ever seen. Looking at you, Mr. Maitani, I have the feeling you and the Zero fighter designer have quite a bit in common."

Maitani pondered this for a long time before replying, "There's just one difference. In the case of the fighter designer, the severe performance specifications were imposed from outside, by the army. But in our case it is we ourselves who set the strict performance standards. In a way, that is even tougher."

In September 1980, Maitani again went to West Germany to attend Photokina. This time he was overwhelmed by the fact that not only all the Japanese camera makers, but companies from all over the world had come out with 'capless and caseless' XA look-alikes. VA

*This article is translated into English through the courtesy of the author, Kunio Yanagida, from his article "The Man Who Changed History by Compact Design" which appeared in the Japanese weekly magazine* Shukan Gendai *in 11 installments from February 1980. This article is based on facts learned during Mr. Yanagida's wide-ranging information-gathering efforts in Japan's camera industry, including Olympus Optical Co.'s Development Division. Mr. Yanagida is well known among the Japanese as a news commentator of NHK (Japan Broadcasting Corp.) and as a writer.*

# The AF-1 Super — An Altogether Top-Rate 35mm Compact

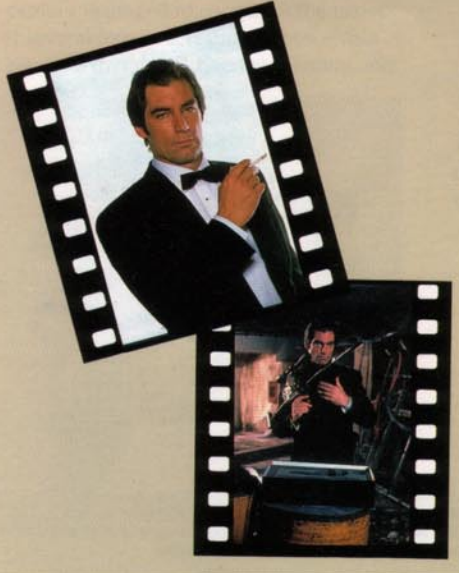
The innovative AF-1 Super is one of the most easy to use all-purpose, anytime, anywhere 35mm cameras on the market. Its distinctive design, weatherproof casing and exclusive sealing system contains exceptional autofocus, auto-flash features to go with newly developed modes for close-up and continuous photography.

Developed from AF-1 technology, the AF-1 Super extends the capabilities of its 1986 forerunner, which established the tone early on for compact cameras by winning numerous accolades and awards. Ideal for the beach, the pool or the ski slopes, the AF-1 Super is easy to pack and a snap to use.

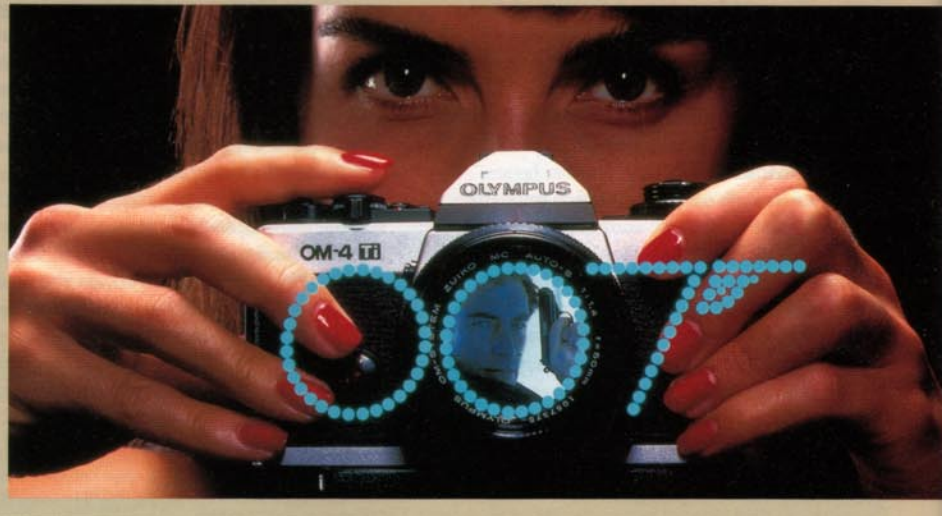
As one of the highest value-for-money cameras in its product category this lightweight full-auto compact is made especially for the anywhere, anytime, worry-free photographer.


# License To Thrill

## Olympus Sponsors New Bond Film — OM-4Ti Plays Starring



An Olympus camera takes on a starring role in the title sequence of the new James Bond film, *License to Kill*. The main titles run fifteen minutes into the film and follow a



# With the AZ-4 Zoom, Creative Photography Has No Limit

Altogether the AZ-4 Zoom is both wide-angle and 4-times telephoto. Built on the technology which developed the internationally acclaimed European Compact Camera of the Year '88 — '89, the AZ-300, Olympus brings you the AZ-4. Fully equipped and fully automatic, the AZ-4 is one of a new breed of cameras more all-in-one high-tech than ever.


Up front is a 35 — 135mm 4-times power zoom lens, controlled via ergonomic dial, allowing total creativity. The AZ-4 lets you shoot macro too — as close as 0.49m (17 in.) from the subject. You never need to change lenses or attach lighting accessories because it's fully automatic. When the zoom lens is adjusted, shutter speeds and F-stops shift too. The lens operates on three programs: Wide Program for depth of field, Standard Program for general shooting and Tele-Program for shutter-speed priority. Of course program shift is manually operable as well.

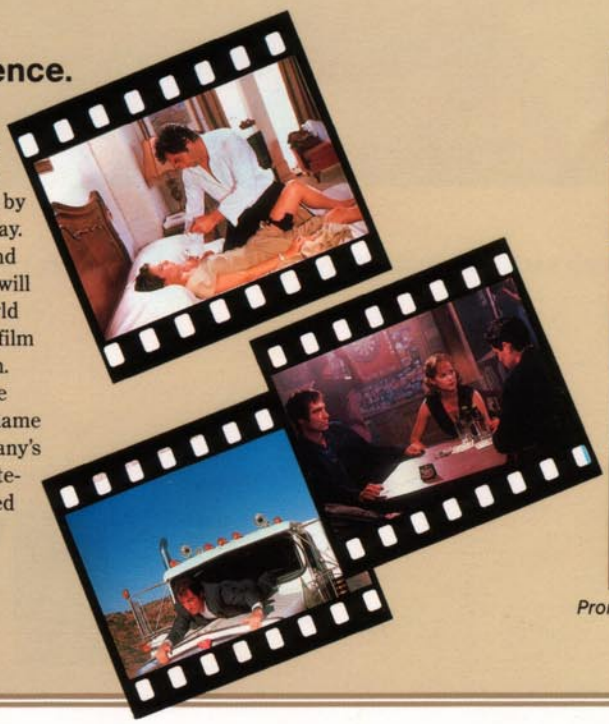
Advanced photography is completely in your control with a variety of advanced functions. The TTL viewfinder lets the photographer shoot the subject exactly as it appears. Shutter speeds range from 1/2000 to 32 seconds. There's spot metering, manual focus, 200mm telephoto potential, pop-up flash, double exposure, diopter adjustment and more.

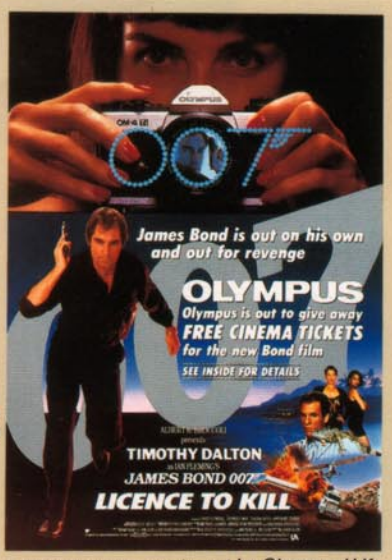
The AZ-4 Zoom goes beyond conventional photography — really. You'll find that it accommodates every creative idea you can imagine.

## Role In Exciting Title Sequence.

breathtaking series of stunts in the best Bond tradition. With the audience on the edge of their seats, an Olympus OM-4Ti appears on screen as the title track sung by top pop artist Gladys Knight begins to play.

Bond movies are famous worldwide, and *License to Kill* starring Timothy Dalton will be seen in virtually every cinema the world over. A video release will follow, and the film rights will eventually be sold to television. All this guarantees Olympus unbelievable worldwide coverage. With the Olympus name emblazoned across the screen, the company's name is linked with all the glamour, excitement, and innovation so readily associated with Bond.






*Promotional poster produced by Olympus U.K.*

OLYMPUS 70 Anniversary 1919-1989


The zoom with variable-power flash – photography's bright new star!

*Photographic, Medical, Microscopic, Industrial & Business Equipment*

**OLYMPUS**

OLYMPUS OPTICAL CO., LTD. Tokyo, New York, Hamburg, London

X10E-12-0989D Printed in Japan