If you have reached these pdf links other than through the designated, please be aware ...

This page contains personal writings of Jijo Punnoose. Some of which are sensitive and may not be palatable to every reader.

All the other articles by this author, a reader would find, technical and scientific in nature. But not so here.

It is cautioned that unless the reader has had some spiritual foundation, these articles would seem absurd. Because, spirituality is of a domain beyond rational minds.

ABOUT SAFETY

ACCIDENTS NEVER HAPPEN THEY ARE CAUSED!

As the film's director, the safety precautions on my shooting sets I took very seriously, and had continued that same onus later to my amusement park days. It could have been out of my fear of the consequences, that I have spent hours and hours studying the *Application of Murphy's Law* in design & execution of machines, and its practical application in performances and the staging of events. My realization that *safety is the responsibility of the person at the helm* happened in 1982 - the year '*the Twilight zone accident*' happened on an L.A. filmset - killing the main actor and two performing children. Also, there was a lesson in one of <u>my own</u> stars 'Jayan' dying on a shooting accident in Nov. 1980.

[My friends are sometimes surprised when I remember events from the past. I myself am surprised at the vividness of some of my earliest memories]

Palaattukoman, Elephant 1961

I would have been 4 years old in 1961 when my uncle Kunchacko and my papa Appachan were shooting film *Palaattukoman* in the forests of Sholayar. Camped in the remote hydroelectric project site of 'Peringal' dam with papa, ammachi, my younger brother jos and newborn sister jissmol, I recall fragmented visuals of a tumult happening then.

.... Elephant running off with my infant sister Jissmol hung inside a straw-spun baby cot. People running behind the elephant screaming to save the baby. The bawling, terrified face of my infant sister looking up at the elephant's open mouth... and my own mother's terror stricken face!

These visuals made some sense later in my boyhood when my mother many times narrated the whole scene a scene that was being shot a shot that went wrong. The story plot of film 'Palaattukoman' was that of a royal mother banished from her kingdom, bringing up her newborn in the forests. The scene being shot was one of her hazards in the forest. A wild elephant enters the jungle settlement and carries off her newborn left unattended sleeping in a baby cot tied under a tree. My sister was newborn and my papa resorted to stage it with her - though in the film it was supposed to be a boychild which grows up to become the hero 'Palaattukoman'. The screen mother - I remember a Telugu actress, rocks the infant to sleep and leaves to gather wood for fuel. Well, the shooting progressed to the point that the trained elephant was made to act out the script in full. But, as in the script when the crowd with outcries started chasing it, the pachyderm panicked! Hence the unintended results. The mahout's courage in jumping in front to calm the elephant saved the situation from becoming disastrous. In her narrations of this incident to me, my mother's last line would be that of my papa being tongue-lashed by his furious elder brother "What purpose did that risk serve ? a dummy of the child within the cot would have sufficed!!" My mother would stop there because, to talk ill about elders was a taboo then. And to me, just as for everybody in childhood, my papa was my hero. She wouldn't want to spoil that.

But those last lines would remain ringing in my ears. Satyan as Palaattukoman >>

-CUT- to my memories at my age of 11.

Suzy, Ropebridge 1968

Malayalam film *Suzy* 1968. Studying in the sixth standard, during the summer holidays of 1969, I remember going to Malampuzha Gardens. My brother &

sisters and a lot of our cousins of my age, all of us were accompanying when my papa took us along to picturise a song for the said film. It was a school excursion song and even I was given a line to sing in it. ജിഗ് ജിഗ് ജിഗ് തീവണ്ടി, ഒറ്റക്കണ്ണൻ തീവണ്ടി

This I did standing on top of the playground's narrow gauge train's engine. Devarajan Master's song tune was that of *"jingle bells, jingle bells"*. Incidentally, Mr. Kottarakara - who was the evil magician in Kuttichathan, played the school teacher who takes the excursion group with him.

I was with papa when he went around Palghat town organizing children (during school vacation time!) for the shooting ... their food, transport, chaperons ...etc. I stood by when choreographer Murthy explained to papa the shot divisions. I also stood watching when for one of the shots the children & Kottarakkara were being led onto the suspended steel-cable-rope footbridge hung over the dam's spillway.





A warning sign to the bridge very clearly said 50 persons maximum. My unease started when the number of children climbing on to that rope bridge went beyond 60. But none of the adults seemed perturbed. There were a lot of elders around ... dam officials, engineers, parents, ... but nobody hesitated as papa was in full command and instructing away with confidence. The rope bridge had considerably sagged, I noticed. I once again looked at the warning board and discreetly notified papa of the figure "50 persons". Pappa reacted to it in the same way my own thoughts were assuaging me ... "That number is for full-grown adults".

Even at that young age I knew there would have been some sort of a margin in the mind of the authorities who posted the sign but I also knew that **a rule is a rule!** What made me uncomfortable was a fact that the gap - the first step one took from land onto the swaying bridge (between the sagging bridge's suspended base and the solid masonry steps on the landing ground), had widened. The bridge was now becoming completely full ... as children kept getting on and lined up at the farther end from the camera and us. The base structure of the bridge was made of steel frame. Wooden slats were laid in close intervals for people to walk. I could hear the wire ropes creaking when children - as they normally do, cautiously stepped each foot from one slat to the next. (The bridge anyway did creak even in the wind just that, to an anxious me it sounded much louder then).

The gap at the landing had now become wide enough that my leg could fall through.^{*} Thankfully, with the bridge almost full (or did we run out of children to fill? I don't recollect), **a take was called**. There was no rehearsals, because it was not meant as a choreographed movement. It was an establishment shot during a music interlude the children were to be shown walking on the bridge. The song playback started from a 35mm film strip running on an optical audio machine (with glass-marking-pencils the song lines and shot numbers were marked on the celluloid film). The music came blaring through a 'horn speaker' held high. The shot was taken, but the kids had hardly advanced on the bridge for those 8 bars of music. Because, they were cautiously stepping over the slats - one by one.

Yet, choreographer *Murthymaster* said a reluctant "O.K." for that first take. But my papa after some "*Hmmm ...hmm ... hm*" which meant - 'maybe it could be done better', said aloud "*Why don't you all swing to the music rhythm and leap forward on each step you take that would look energetic shall we try again?*"

My heart jumped at that. Before myself, a 11 year old brought up on a discipline by which I couldn't contest an adult's decision in public, could react I heard a voice. "Venda, Venda ... (NO. NO)"

It was a man standing nearby, and he had said it with a certain amount of emphasis. That gave me the courage to immediately say.

"Mathi papa, ippozey vallaandu valanju" (enough papa, already it has sagged quite bad). Papa looked back and forth between me and that man gave an unsure smile absent in his repertoire, and said "Mathiyo? Shari, O.K. then Master, next shot".

That man, I don't know who it was. I don't think he was a Dam/ P.W.D. official ... it could have been one of the parents of the children.

The New Hork Times

(Such a shame, I could find no local journal report on this **Munnar Bridge Tragedy** on internet archives. Only New York Times!)

125 Children Missing As Indian Bridge Falls Reuters Published: November 8, 1984

NEW DELHI, Nov. 7— About 125 schoolchildren were missing today after a rope bridge collapsed over a swollen stream in a mountain region of the southern state of Kerala, the Press Trust of India reported.

The news agency said the bodies of at least nine girls and three boys had been recovered.

Fifteen others had been injured, several of them seriously.

It quoted the police as saying a middle-aged man who saw the bridge collapse died of a heart attack. Not even a single household of this small hill-town went untouched by a death in the family.

The police said the exact number of missing was not known but about 150 children during school break time had rushed onto the bridge, over a stream in the town of Munnar, to watch a helicopter hover overhead. The warning limiting the load on this British-era bridge went unheeded. A naval helicopter and six divers were helping the police and firemen search for the missing. The stream was high because water had been diverted from a dam and mud was hampering the rescue work, the news agency said.



There is yet another reason to this realization of mine. After a spate of aircraft accidents in which *Cockpit Voice Recordings* of various air disasters revealed that a copilot/ flight engineer <u>had failed to *emphatically* caution the pilot</u> of what he had feared, a new **Crew Resource Management** science was introduced in flight procedures. The subordinate crew were encouraged to warn the pilot of their understanding of the situation - if they foresee a



During the years 1977 - 80, Krishnan Nair a.k.a. Jayan was a popular actor of Malayalam language cinema in Kerala - a small southern state in India. Particularly famous for his macho image (called *Jayan style*) and chauvinistic appeal, he used to perform his own stunts of dangerous nature and became known as an 'action star'. With a number of film hits and a gala fan following in 1979, he had just achieved superstardom when the tragedy occurred.

Jayan having served in the Indian Navy before becoming an actor, had a penchant for risky stunt situations some of which so as to enhance his persona he would goad his films' directors into. Once such action scenes became popular in those day's conservative malayalam cinema, dangerous and thrilling stunts started being specifically incorporated in films with Jayan as the lead. In film Moorkhan ('Cobra', 1980) he broke through a brick wall riding on a motor bike. In Chandrahasam ('Moonsword', 1980) he held on to the hook of a massive ship loading crane, elevated to a height of 200 feet, before jumping off to the top of the vessel. In Ariyappedatha Rahasyam ('Untold secret', 1981) he fought an elephant. Such performances were not choreographed by professional stunt directors, but improvised by the actor himself. They lacked safety features which latter-day film shoots were required to follow as part of the industrial safety norms. And, insurance was unheard of. For instance, for the said crane shot of Javan which was improvised only after the shooting crew had reached the wharf, there lacked both a safety net and a body harness - precautions in the event the performer were to have an accidental fall. In Puthiya Velicham ('New Light', 1979) Jayan along with actor Kamal Hasan performs a stunt - jumping atop trains moving parallel to each other. After the rehearsals with stunt doubles, Kamal Hasan volunteered to do it himself. Not to be left behind, Jayan insisted he too would do it as he followed Kamal on top of one moving train to another in an apparent film chase.

Kamal did the jumps successfully; Jayan toppled over and was barely saved because he could cling to the train's edge by his finger nails. Such were the times.

On 16 November 1980, Jayan was killed in an accident on the sets of the movie Kolilakkam (Shockwave). The climactic scene of the movie was being filmed at Sholavaram car race course, Madras, Tamil Nadu. The scene called for the hero Jayan along with actor Sukumaran in pursuit of Balan. K. Nair, as Balan the villain makes his escape on a helicopter taking off from the race track. Contracted for 24 films that year, Jayan had other film shoots lined up for the day (!) With an early morning drizzle going on, and with performers Balan and Sukumaran also short of time, for this film scheduled for an imminent release director Sundaram needed only 'a master shot' of Jayan pillion-riding the bike driven by actor Sukumaran. With the bike following an airborne copter, Jayan merely had to rise up from his hind seat as if latching onto the copter's landing pad. The ensuing hand to hand fight inside the copter between the hero and the villain, Sundaram had planned to picturise later using stunt doubles. The master shot completed as required, was acceptable for the director in the first take itself.

Yet, Jayan insisted on a re-take where he would actually hang on to the copter. The agri-sprayer helicopter was flown by a pilot with no prior film or stunt-shoot experience. But he had insisted his co-passenger, actor Balan, not to move at all - so that the copter could be held steady when flying 8 feet off the ground, with Jayan hanging onto the landing pad. This take also was shot successfully. Then Jayan insisted on a third take where he would grapple with Balan while airborne. Unknown to everybody else, Jayan suggested Balan to kick him, and thus add realism to the performance ... Jayan had planned to extend his actions by climbing on to the landing pad. During this last take, Balan unbuckled himself from the seat so as to kick out at Javan. The helicopter toppled and crashed with Jayan's head getting crushed between the pad and the ground. The Pilot and Balan survived, though with major injuries. Jayan was 41 years old when he died

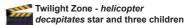


mishap about to happen. This was introduced in 1978 after the United Airlines Flight 173 disaster where the pilot ignored hints from the crew that the fuel is running out.

Again, it was as Spielberg said after the disaster in his **Twilight zone** set "Anybody has the right to call out "-**CUT-**" in a filmset, if they sense some sort of a danger. Remember, this task which we term as a 'film shoot' is only for human entertainment **no shot is** ever worth an injury or loss to life! "

▶ Inapraavukal, injury 1964

It would be easy to accuse Director John Landis for what happened in the sets of Twilight Zone - The Movie. Yes, the mistake was definitely his. But it should not be forgotten that filmshoots sometimes take place at atmospheres akin to warfare ... occurring at battlegrounds called 'locations'. I remember song 'akkarakkundo?' being shot for film inapraavukal (love birds) in 1964. I would have been 8 - 9 years old. I was granted leave from school (3rd standard) for the day when I was taken along with the shooting crew from Alappuzha to Aluva. I was playing the young age of the hero (Sathyan). There was a girl of 7 years (I don't remember her name ... even the credit titles of that film has been lost) playing the heroine's young age with me. (Sarada was the heroine - being a smalltime actress in Telugu films, this was her first major role).



Filming a segment of the 1983 movie The Twilight Zone, produced by Steven Spielberg, *Vic Morrow* (53), *Myca Dinh Le* (age 7) and *Renee Shin-Yi Chen* (age 6) died in an accident involving a helicopter being used on the set. It was flying at an altitude of 25 feet, too low to avoid the explosions of the live pyrotechnics used on set. When the blasts severed the tail rotor, it spun out of control and crashed,

killing the 3 performers. Everyone inside the helicopter survived. At the controls of the helicopter that was "bombing" the village was Dorcey Wingo, an octual Victorer actornet



actual Vietnam veteran. Wingo was new to the movie business, so even when the rehearsal explosions that buffeted his chopper scared him wittess, he swallowed his concerns, especially as

Landis who had a reputation for being dictatorial on set screamed expletives into the California night. Morrow - the hero, was an erstwhile star hoping for a comeback. The two children he was 'saving from the village' were aspiring actors who didnt know that work regulations for child performers were being flouted at the shooting venue. After the copter crashed, there was shocked silence until Renee's mother started shricking as she kneeled over her daughter's lifeless body. Morrow never got to deliver his scripted line: "*T1l keep you safe, kids. I promise. Nothing will hurt you, I swear to God.*" The accident led to legal action against the filmmakers which lasted nearly a decade. [I remember this well because when the film came out I was made fun of in my school - which anyway always happened once I was made to act in one of our movies - for having a young *girlfriend*. So much that, for film *Pearl view 1969*, I insisted that I shall play a similar role only if my own young sister Jissmol is paired to play the role opposite mine!]

The shooting was in Periyar river, Aluva (where a couple of years ago I played child to Sathyan & Ragini in the celebrated film Bharya 1962 - song "periyaarey ... perivaarey"). This song now for inapraavukal was to be completed in a single day and we had to return home to Alappuzha by the evening. Those days when 90% of shootings occurred inside studio floors, outdoor shooting was a rare and expensive affair. That was because of the logistics, the uncertainty of lighting conditions, etc. We the family members were made to pray very hard for clear skies - whenever an outdoor shooting was planned by my uncle & my pappa. I am sure it was true for all film-families of those days. Those days B&W film stock was not sensitive enough ... and hence the heavy makeup on performers to increase the contrast on facial details which as a child, I hated. Given such limitations, ideal shooting hours in the outdoors were quite limited. Add to this the fact that the shooting was taking place on water one of the most difficult of assignments.

Given below are photographs from "periyaarey..." song in Bharya 1962. Seen here with Satyan, Ragini & myself is my 'Seetha Akka' - the granddaughter of Bhima (Jeweler) who played my 'kochechi' (elder sister) in the hit film. This is not the song mentioned as that shot in 1964. I couldn't find any pictures of those. >>



The boat used for "akkarakkundo?" song of Inapraavukal was unlike the one above. It was a country canoe.



On water, the difficulty in framing a shot and in maintaining the angle of incident light *rises exponentially* when the complexity keep increasing as below.

- (1) both camera and subject on water, together.
- (2) camera on land, subject on water.
- (3) camera on water, subject on land.

(4) camera on land, two subjects (separately) on water.

(5) camera and 2 subjects on water, all separate.

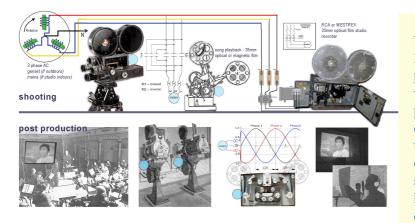
..... So on and so forth. And the *power of the exponent* goes up with the drift in the water current!

I learned this reality while shooting the *naval encounter* in film **Padayottam** during august 1981at *Punnamada* backwaters. After the first day's abysmal 3 number of shots achieved amidst nightmarish logistics, I anchored the camera and the vessels at the shallow waters around *Munroe Thuruth* island (which also served as the location base-station) for the next 7 days. The drifts could be controlled that way. The island being tiny, it was possible to avoid land in the camera angles ... and hence the waterscape seemed endless all around.

When reading about the difficulties they had in filming *Waterworld* (1995), I was shaking my head in disbelief.

Reflectors had to be positioned (while on water!) for lighting up actor's faces during closeups and mid shots. No artificial lighting were done on the outdoors then. An A.C. generator was essentially used in synchronizing the sound equipment with the heavy Mitchell Camera - both running on 60 cycles 3 phase 110 volts *(American standard). Or else, lip in the picture

won't sync with the audio. So you would understand why the director Mr. Kunchacko - my uncle, was screaming obscenities at his loyal workers and favorite unit hands to get the shots right in time to packup and go back to Alappuzha by the day's end.



* Even for post production, to sync the 35mm optical/ magnetic audio to the picture, the same method of 3 phase sinewave motors was used. It interlocked film projectors with audio machines. A common 3 phase power source ensured that the 3 phase motors in projector/ camera/ audio machines kept the same speed even when voltage variations happened. It was much like a mechanical coupling over vast distances.

[Started in the 1930s, this electrical locking system was followed till the 1980s ... by which time electronic timekeeping by crystal governors took over. And by the 1990s, digital & computer age had come].



Now, a phase-locking could keep the film running in different machines in sync. But, to catch the 'start mark' is a different matter. There was no numbering for the sprocket holes in the film stocks (unlike the *time code* which video tape would come to have). Hence, subsequent to the execution of a 'take', it would be humanly impossible to find out from which exact frames the film strips in the individual machines had started running. To solve this problem, before an actual 'take' the power source of all the machines in the chain were routed to **a common 3 phase switch** ... this switch was operated to ensure all the machines started simultaneously. It was common to hear shouts of *'interlock'* by camera assistants and sound assistants when a song shoot was going on which meant, a 'take' was about to take place. In the recording studios it would be a hushed instruction through the intercom. At the shooting spot, the interlock switch would be positioned with the song playback operator. When switched on, it would start both his machine and the camera simultaneously. At the recording studio, up in the projection cabin it would be the projector operator who would operate the interlock master switch.

[There would almost always be a 'zero-error' connected with an interlocked start. Since the electric load (capacitors, resistance) on each machine in the chain is different, the initial torque on the motors would be different and hence, there would be minute differences at the pickup, till the ideal r.p.m that facilitates a 24 f.p.s is reached in every motor. The zero error shall be in a few hundredth of a second - i.e.; a few frames (for example, +2 for song playback machine, -1 for dubbing recorders ...etc.). The zero error for a machine was always determined empirically by observation. And once fixed, it never varies for a machine in the chain.

By the 1970s, the American (RCA/ Westrex/ Magnasync) way of 'electrical phase interlock' was slowly replaced. The advancement in electronics saw French, Swiss (Perfectone/ Nagra/ Stellavox) and Canadian (Magnatech) bring pulse encoders that drove syncronous-stepper motors. With AC 3 phase (sine wave) motors getting replaced by the stepper motors (square wave), in the studios 35mm film audio machines could now be 'slaved' to a single source. Meanwhile at the location, with a pulse control track on non-sprocketed tape, an audio playback machine could be synched to film camera. With the arrival of crystal controlled motors (a crystal clock as in the digital watches), the pulse connection cable between camera and audio machine would be dispensed with.

Periyar river must be 500 meters wide at that point ... this is the length of Mangalapuzha bridge that spans the stream here. Hundreds of spectators on the river bank were being made to duck when a take was called. We (myself, the girl & few others) were on a country boat where Mr. *Muthaiyah*, playing role of the boatman, sang the song while rowing across the river to transport people from one river bank to the other. That particular shot I remember

happened before the noon break. A passing shot. The camera and the song playback machine were then positioned on one shore ... quite a long way off. Instructions were being shouted (by relay, through an array of assistant directors) to us on the boat. The instructions also had to reach 3 men belonging to the outdoor unit (*Divakaran, Vava* & one more person I don't remember), who hiding behind bushes in the opposite shore to that of the camera, were pulling our boat with a towline so as to position the boat adequately in the camera frame. We are talking of those times when walkie-talkies or cellphones didn't exist. Instructions couldn't be clearly heard over the music playback but I could realize that the farther we were from the camera, the boat had to move faster (pulled by the 3 lightmen, since Mr. *Muthaiyah* couldn't row that fast) so as to be seen traversing the river during the duration of the shot. As take after take didn't turn out as intended, frenzy arose and abuses flew from my uncle's mouth and the assistant directors were in turn yelling **"faster! faster ... damn!!"** (I suppose it would have been the same for *Twilight Zone* shooting on Landis's set. Sometimes on my sets too such frenzies had arisen. Luckily, it must have been memories of the tragedies that had restrained me from going overboard).

I remember it was a 12 bars music interlude with shehnoy & kanoon instruments (followed by charanam/ aanthra lines വെള്ള ഉടുത്തു വെളുപ്പാം കാലത്ത് പള്ളിയിൽ പോകും പ്രാവുകളേ ഇണ പ്രാവുകളേ) that was being shot. Myself and the girl were seated on the middle plank facing Mr. Muthaiyah, (facing away from the direction of the travel) as the boat was being pulled behind us. A couple of other travelers were also seated behind us. As "-CUT-" was called and the music stopped, the elders realized that the boat was going too fast even after the shot was over. As Mr. Muthaiyah just about warned us two kids to sit tight, I heard a "crunch" sound and turned back. (That bone crunching sound still rings in my ears even after half a century of this occurring). At the place we were shooting - which was a few miles down stream from Aluva town, Periyar river has sheer vertical laterite stone banks on its sides. To stop the boat from ramming into the laterite rock wall and injuring us occupants, Divakaran had jumped to push away the boat (it was a kerala vallam with pointed bows on both sides). In the process his palm got crushed between the stone and the boat's bow. As I turn around I see Divakaran writhing and collapsing into water with agony. The shooting must have stopped for about 3 minutes to sent Divakaran for medical attention ... before we resumed again to complete that shot before lunch break.

Aah ... we Indians! .. (or should I lament .. *we mallus?* or *we alappuzhaites?*) It seems we never learn from accidents. The same thing occurred again, exactly the same way! The boat pulled ... faster this time, was not stopped in time and before elders in the boat could catch hold of us kids, both of us *inapraavukal* were toppled backwards from the plank to hit the boat's bottom. Poor Vava, having seen what had happened to poor Divakaran, decided not be chivalrous. And hence he didn't make any attempt to stop the boat from smashing against the rocks this time. The girl started bawling aloud ... and reluctantly, I gave her company and together we rendered a pathos duet track that replaced the song. By the time I finished my sobs I could still see the peevish face of Vava on the bank. (My mother always entrusted us kids to Vava's care ... as he was a trusted person who would occasionally come to our home for doing house repair work when shooting was not happening at Udaya Studios).

My narrating the above is for a specific reason. To state that I won't blame any of the filmmakers (my uncle Kunchacko, my papa Appachan, John Landis, Jayan or for that matter Jijo - myself) for being adventurous or for taking risks. Who would have discovered the frontiers of the earth and explored the moon if it were not for people who were prepared to take those risks and did not shy away from dangers associated with such adventures? When I look into the lives of some of the earliest filmmakers, I realize that their

entrepreneurship was not any less risky than that of the maritime explorers who had mapped the unexplored, and made it the globe we know today. It did require some daring and that 'dare' would have reflected in the way they conducted their operations too. Having said that, I come to an aspect called prudence. Because, the science behind **safety** is not about risk assessment - that discipline is termed insurance. The science behind **safety** is mere prudence.

Being prudent doesn't stop you from taking risks.

But it tells you that

(1) You can't 'play' with human lives - including yours.

(2) There are scientific safeguards to avoid accidents.

The science behind **safety** starts with mathematics - enumerating the possible areas of failure - both in terms of human conduct & system performance.

The science behind **safet**y involves engineering - designing the system in a way it is 'fail-safe'.

It again involves mathematics - in incorporating redundancy for system & components. And finally it is about commonsense - for drawing parallels from similar situations. But knowledge alone would not prevent accidents. Because safety is not just a science ... it is an attitude.

Many a time it is mere **human lethargy** (like, avoiding wearing a helmet/ seatbelt despite the statistics the studies make known) or sheer **over-enthusiasm** (like, Space shuttle Challenger tragedy) that prevent people giving heed to voices of prudence.

For example, (1) It would have been mere prudence to anticipate the difficulties in towing the boat back and forth across river Periyar, and to make arrangements for that, if my uncle Kunchacko the director had done his homework right. That would have needed a planning of the shots beforehand. It would not have cost anything major. *Yessir,* LETHARGY!! (2) It would have been mere commonsense to realize that the boat shall hit the bank again. An attempt to caution/ drill the occupants of the boat or to make arrangements to break the boat's advance with a secondary rope from the opposite bank, would not have costed a huge amount of time. *Yessir,* OVER-ENTHUSIASM!!

Coupled with these there are two added factor for us easterners - fatalism (വരാനുള്ളത്

വഴിയിൽ തങ്ങില്ല !!) and delusion (കുഴപ്പം ഒന്നും സംഭവിക്കില്ലായിരിക്കാം !!)

These are only side-effects of an otherwise good attitude to life we easterners (especially we Indians) have. Unlike westerners, this comes from the age-old philosophy - MAYA, by which we take every misfortune (even death) in its stride. This philosophy is an ideal mindset to transcend events once they have happened but, it should not prevent us from taking 'humanly possible' precautions from making some of those events happen again. **Those who don't learn from the past are condemned to repeat it** - Edmund Burke 1729 – 1797

Another thing I remember with this incident is not related to safety, but to human nature. Alappuzha, the place of the communist uprising called *Punnapra Vayalar* has always been a cauldron for labor activism, strikes and lockouts. Labor unrest had caused many a capitalist from stop doing business in Alappuzha. Our Udaya Studios and sister concern Excel Glasses had also been subject to this predicament. Around 1968 there was a lockout declared in Udaya Studios due to a labor problem for which the union leader was Divakaran. Naturally, myself - a capitalist offspring, had to see him as an enemy. But it would always come up in my mind that it was the same Divakaran who beyond the call of duty stopped the boat that day. It gave me the realization that once the clouds of human compartmentalization is set aside - here it is the economic principles Labor Vs Capital, true humanity can be seen raining within the hearts. continued ...

- padayottam kerosine bomb 1981 march, malampuzha
- > padayottam water bomb 1981 sept, munroe thuruth punnamada
- ▶ singaram's rick falls into gutter & schemer's tuv standards
- ▶ a minor injury occurred to Tailor Das in the rotating set
- ▶ hydrogeen balloons fire safeguard kuttichathan
- kishkinta whitewater ride overturn 1994 nov, chennai

Murphy's Law and its applications for safety (designs, systems & regulations)