# WHAT is wrong with this sampler?

A photographic "drive-by shooting"

It is quite some time this column was featured last—not for want of suitable "items", but rather due to a too-busy schedule. Recently, however, the following item was brought to the attention of the Editor. The photographic documentation below is the result of a photographic "drive-by shooting" from a public road.

Much can be said about this accidental sighting. The positive aspect always comes first. This *could* very well be the most inexpensive, fully automated "sampling solution" on record; so a big A+ for these aspects ;-)

But this is not all, of course. This also *could be* the most *unlucky* amateur sampler design ever (but one can never be sure). As always, what is important here is **not** *where* the photos were taken, or *which* company is currently making use of this unfortunate sampler, but **only**: "WHAT is wrong with this sampler?" Please remember, this column is published exclusively for TOS educational purposes.

The Editor presented these photos to a series of international sampling experts, asking for immediate comments, which follow:

■ "My heartfelt response would be unpublishable. This reminds me of a night at the Crown Casino—pure gambling."

■ "Wheel of Fortune"—there could not be a more apt name for this contraption.
■ "Fascinating... but is it a children's toy?"
■ "I count at least three Incorrect Sampling Errors (ISE)—most impressive."
■ "A thoroughly biased primary sampling, or rather 'specimenting'."
■ "…and also: what about the sub-sampling of the primary material cone?"
■ "As the consultant said to the client: what number do you want, pick a number any number you'd like."
■ "This is one of the worst samplers I have seen. It's a joke, sadly."
■ "The managers get a result, possible with high analytical precision, but they do not get accuracy."
■ "This is yet another example showing the critical need for education on correct sampling."
■ "This sampler performs every possible INCREMENT MATERIALISATION ERROR instead of proper sampling."
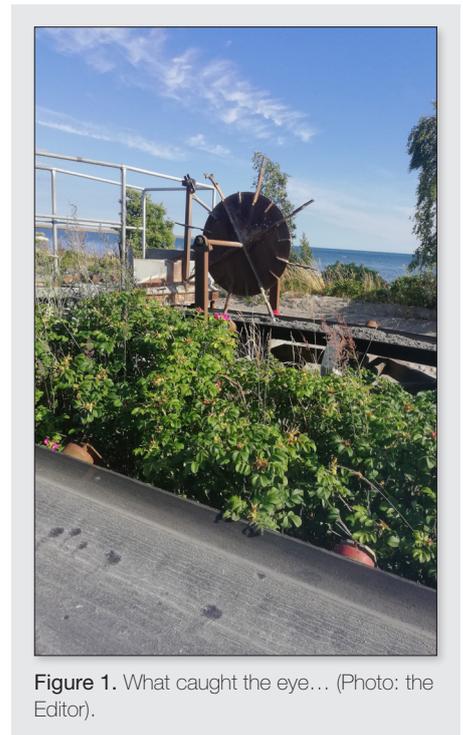**Q.E.D.**



**Figure 1.** What caught the eye… (Photo: the Editor).



**Figure 2.** Upon closer inspection… The TOS-mind boggles… One is reminded of a Monty Python sketch, in which an erstwhile architect declares: "… passing by the *rotating knives*" (Photo: the Editor).



**Figure 3.** A-ha, the full picture—a two-step sampling solution. Sub-sampling of the primary "sample cone" is also needed (Photo: the Editor).