Scale of Murphy's Disasters

Random Undergrad
Dept. of Aghori-Human Interactions
Max-Plank Institute for the Science of Decapitation

***Abstract*—Disasters are increasingly common. Most *aghoris* have experienced disasters at some point. Categorising disasters is the first step in learning to respect them. The ubiquitous *Scale of Murphy's Disasters* (SMD) is the *aghori* world's most commonly used disaster scale. This scale, however, has undergone many radical changes and is vaguely defined, causing untold suffering among *aghori* mathematicians. Here, we rigorously define the SMD and provide 3 examples of its applicability.**

The universal *Murphy Scale*, also known as *Murphy's Disaster Scale* and *Scale of Murphy's Disasters* (SMD) is a scale often used by the *aghori* elite to quantify the susceptibility to and severity of Disasters of Type Murphy (DTM).[1]

I. Murphy Magnitudes

The Magnitude of Murphy's Disasters (MMD) is defined in an unnecessarily complicated manner, and is defined as the logarithm of the ratio of angers in alternate times, as we have tried unsuccessfully to convey below.

A. Definitions

Let the number of upsettable entities in the world be N. Let the affectation[1] of the ith individual be α_i, where $\alpha_i \in [0, \infty)$. As it is difficult to work with infinitely angry entities, *aghoris* define the normalised affectation of individual i as

$$a_i = \frac{2}{\pi} \arctan(\alpha_i)$$

Therefore, $a_i \in [0, 1)$. This indicates that while entities in this world can be progressively and indefinitely angered, an infinitely angry entity cannot exist in this world. Therefore, we can safely proceed with our theory. In this case, the vector defined as

$$\mathbf{a} = \begin{bmatrix} a_0 & a_1 & \cdots & a_{N-1} \end{bmatrix}^\intercal \tag{1}$$

is referred to as the *Universal Affectation Vector* (UAV) by *aghori* mathematicians.

The set of all possible UAVs,

$$\mathcal{A} = [0, 1)^N$$

is called the *Universal Space of Affectation* (USA). Thus all UAVs belong to the USA.

[1]Note: affectation is different from affection

Let M denote the event that a Disaster of Type Murphy (DTM) has occurred. Naturally, $\neg M$ denotes the event where a DTM has not yet occurred.

Given that a DTM has occurred, the probability density of $\mathbf{a}$ after time t is

$$p\left(\mathbf{a} \mid t; M\right)$$

Similarly, when a DTM has not occurred, the same quantity is

$$p\left(\mathbf{a} \mid t; \neg M\right)$$

Since the consequences of disasters can extend far into the future, a conscientious *aghori* mathematician will choose to weight the UAV in future with increasing weight, such as

$$e^{t/\Omega_T}$$

where Ω_T is Bakwaasdas' Impending Disaster Interval (BIDI).[2] To prevent divergence in subsequent integrals, we will replace this weight by

$$e^{-t/\Omega_T}$$

which makes our integrals probably not diverge. This does not make any sense, but it makes our entire theory well-defined. A more sensible way to handle the divergence issue would be to create another universe where the function e^t does not diverge to ∞ with $t \to \infty$. The creation of such a universe is trivial, beyond the scope of this document, and left as an exercise to the reader.

The expectations of the weighted UAVs are thus given by

$$A_M = \int_0^\infty \int_{\mathcal{A}} p\left(\mathbf{a} \mid t; M\right) \|\mathbf{a}\| e^{-t/\Omega_T} d^N\mathbf{a}\, dt \tag{2a}$$

$$A_{\neg M} = \int_0^\infty \int_{\mathcal{A}} p\left(\mathbf{a} \mid t; \neg M\right) \|\mathbf{a}\| e^{-t/\Omega_T} d^N\mathbf{a}\, dt \tag{2b}$$

[2]*Aghori* mathematicians have long since tried to calculate the Impending Disaster Interval (IDI). Bakwaasdas in 501 A.D. used rigorous experiments on captive prisoners to compute the IDI, the maximum interval of time where a DTM cannot occur.[2] Bakwaasdas' estimate (1.7×10^7 seconds) was amended by Ugranarasimha Gramasimha Babaji in 1967 at the *Aghoritantra Gurukula* to 2.6×10^6 seconds.[3] In 2020, Babaji further amended this number to 8.6×10^4 seconds, and in recent times, disasters occur roughly once a day.[4]

Murphy's Incremental Loss Function (the milf operator[5]), defined as

$$\mathrm{milf}(M) = \log \frac{A_M}{A_{\neg M}}$$

captures the Murphy Magnitude (MM), which can now be used to construct the Scale of Murphy's Disasters (SMD).

II. The Murphy Scale

The SMD is a table providing qualitative comparisons in *aghori* terms for commonly observed DTMs. For the sake of simplicity, let us assume that there is only one upsettable individual in the world ($N = 1$).

Consider the following three cases

1) The Individual wants to place their clothes in a location, while a Toilet exists in the universe.
2) The Individual would like to travel between two locations in Germany and its vicinity.
3) The Individual is an Indian.

Table I explains the disasters of various Murphy Magnitudes that could occur in each context.

References

[1] Bobby Jürgen. "Murphy's Disasters: a holistic *aghori* perspective". In: *Philosophical Transactions of the Royal Aghori Society* 30 (1975), pp. 902–1166.

[2] Baba Bakwaasdas. "An initial estimate of the Impending Disaster Individual". In: *The Journal of the* Aghori *Institute of Vaitarini* 967 (501), pp. 340–357.

[3] Ugranarasimha Gramasimha Babaji. "The fact Bakwaasdas missed: re-evaluating BIDI". In: Aghori *Transactions* 4333 (1967), pp. 20–22.

[4] Baba Saitaandas and Ugranarasimha Gramasimha Babaji. "Rapidly increasing BIDI, and increasing disaster rates". In: *Aghor* 2 (2020), pp. 8–302.

[5] Fungideep Roy. "An extensive guide to the correct way of finding MILFs, and where to use them". In: *The Journal of the Cult of The Great Fungi* 55 (2008), pp. 30–32.

TABLE I
THREE EXAMPLES OF DTMS

MM	Description	Toilet-Clothes case	German travel case	Indian case
1.0 to 1.99	The Individual is largely unaffected	Clothes are placed far away from the Toilet	The Individual does not need to travel	The Individual is a blind follower of Narendra D Modi
2.0 to 2.99	The Individual experiences such mild discomfort that it is not noticed	Clothes are placed on a windowsill beside the toilet; the toilet lid is closed	The Individual can walk to the location	The Individual resides outside India
3.0 to 3.99	The Individual starts to notice the incident	Clothes are placed on top of the closed toilet seat	The Individual owns a car	The Individual is rich, Hindu, and of a high caste
4.0 to 4.99	The Individual is mildly annoyed by the incident	Clothes are placed on a wash-basin near the toilet, the seat is left open	The Individual has no time constraints, and must use public transport	The Individual is privileged, but is an outspoken opponent of the system
5.0 to 5.99	The Individual is severely but temporarily angered	Clothes are placed below the toilet bowl; the toilet seat is open	The Individual undertakes a single-train short trip with Deutsche Bahn	The Individual is of the middle-class, and owns a small business
6.0 to 6.99	The Individual's mental state is permanently altered by the incident	Clothes are placed on a windowsill beside the toilet; the toilet lid is open	The Individual takes a slightly longer trip with Deutsche Bahn, with one sufficiently long changeover, and with not much luggage	The Individual was initially moderately wealthy, but has recently suffered losses
7.0 to 7.99	The Individual enters a permanent semi-depressed state	Clothes are expensive and are placed as above	The Individual takes a long trip with Deutsche Bahn, with short changeover durations, and with heavy luggage	The Individual is female, not very wealthy, and not from a city.
8.0 to 8.99	The Individual is driven utterly and completely insane by the happenings	The expensive clothes are precariously and inexplicably placed on the edge of the toilet bowl	The Individual takes a long trip with Deutsche Bahn, with short changeover durations, and with heavy luggage, on the stormy day when the elevators cease to function	The Individual belongs to several minority groups, is not wealthy, or lives in Uttar Pradesh
9.0 and above	The Individual surrenders their humanity, and embraces *aghor*.	With the same situation as above, the inattentive Individual accidentally used and flushed said toilet	With all the predicaments as above, the last train on the trip is the last train of the day thanks to late timings or train cancellations	The Individual is an expatriate Indian from a prestigious university who invented and developed a fictional *aghori baba* who has almost successfully come to life.