### Journapocalypse

WHERE GOOD IDEAS UNDERGO APOPTOSIS

Since 1653 B.C.



### A Unified Theory of Optimal Booze Drinking

#### **Abstract**

In an effort to crush the fun and whimsy from drinking using high-powered statistical analysis, we present here a rigorous scientific analysis of optimal drinking strategies for inexpensive alcoholic beverages. We clearly have too much time on our hands.

#### Introduction

Scientific analysis of optimal drinking strategies has a long history (see, for example, refs 1-4), but to date has inexplicably produced no Nobel Prizes. In an effort to increase our Nobel tally (currently at zero), we present here a detailed analysis of optimal drinking strategies for the drinker on a budget.

#### **Beverage Quality Metrics**

In the world of fine-beverage appreciation, there are those who intuitively understand the cultured, subtle craftsmanship of a high-quality beer. These individuals should stop reading now, if by off chance they have somehow obtained this paper and are actually reading it (for example if they are a doctor examining a bag of personal effects trying to determine the cause of demise). There are other individuals who want a beer that will not immediately cause gagging, but who also have the suspicion that their payment for the beverage will need to include a significant number of pennies.

These individuals will be facing a difficult decision, as most beers in their price range will be horrible. But this poor sap still has options – there are tolerable cheap beers, and then there are bad cheap beers. It is possible (with sufficient study) to navigate the far cheapest corners of the beer aisle without undue damage to one's person. The metric of choice, for the individual in this situation, is the quality-of-beverage versus the cost per ounce (usually in allotments of 40). It is a remarkable,

heretofore unstudied, and certainly MacArthur-Genius-Grant-Deserving fact that certain beers are actually *worse* than their cheaper counterparts.

In Figure 1 below, we plot the cost of a beverage (in cents per ounce) versus the subjective quality of the beverage (in induced gags per hour):

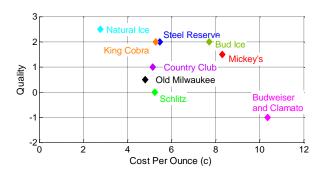


Figure 1: The lesser of nine evils

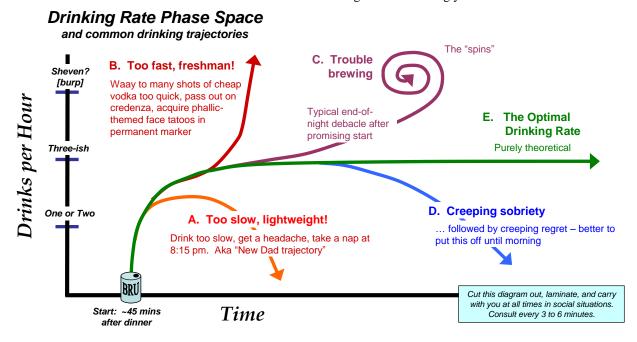
As can clearly be seen in the figure, certain beers are cheap and yet relatively tolerable (e.g. King Cobra or Natural Ice), yet others are horrendous soul-mutilating and wallet-shredding nightmares (e.g. Budweiser and Clamato juice, which should come with a roll of police tape). Future work will focus on adding more brews to this compendium of quality, for future reference.

#### **Phase-Space of Drinking Rate**

Now that you have selected your least-of-allevils beverage of choice, you can focus on achieving the optimal drinking rate – at the ideal number of alcoholic drinks per hour, you will avoid the pitfalls of drinking too much too fast (e.g. wipeout at 8:45 pm) and drinking too little (e.g. headache and nap at 8:45 pm). Analysis

of optimal drinking velocities is best done in time vs. velocity phase space, as shown in figure 2 below.

The phase-space analysis shown here uses dynamical nonlinear nonequilibrium superimpressive systems analysis techniques to map out the most common trajectories of a night of drinking, and helps delineate the narrow path of optimality. Consult this diagram often during your bacchanalia.



Here we describe in more detail five common night-of-drinking trajectories, as shown in figure 2 above:

- A. <u>Too Slow, Too Early</u>: The rare individual who drinks too slowly will get a headache, feel tired, and will head for home at about 8:12 pm for a nap. The schlep will then wake up at about 10:45 pm, fully refreshed, wondering why the hell they didn't stay at the party. Uncommon for anyone under 30.
- B. Way Too Fast, Way Too Early: Rapid consumption too early in the night by an overeager partygoer results in a compression of the standard course of 5 6 hours of drinking into about 20 minutes the individual passes through stages of elation, inappropriate laughing, crying, finally ending with passing out, regrettably in a room of dwindling inhibitions and ready permanent markers.
- C. Good Start, but Trouble Brewing: Perhaps the most typical trajectory, this path results from a more gradual increase in drinking rate through the evening leading to gradual worsening of the night, eventually culminating in high-velocity orbiting of an attractor region known as "the spins".
- D. <u>Creeping Sobriety</u>: As the individual on this trajectory slowly sobers up through the course of the night, clarity will return, followed by regret an outcome better put off until morning.
- E. The Optimal Drinking Rate: The individual on this trajectory maintains a blissful easygoing "buzz" indefinitely, successfully warding off the negative effects of both shameful sobriety and undue drunkenness. Needless to say, this is purely theoretical, never to be achieved in practice, a point we are glad we made at the end of the page rather than at the beginning when you could have skipped to the next section.

# Thermodynamics of Malt Liquor Ingestion

Inevitably, drinkers on a budget will discover the tempting realm of malt liquors, that promise a full night of fun for the cost of a pack of gum. This is a terrible decision, one you will live to regret, but strategies can be employed to stave off the inevitable damage to your liver and reputation.

It is well known in the gastronomical arts how gentle warming of a quality beverage improves the flavor, for example how the warmth of your hand releases subtle grace notes in the bouquet of a fine merlot. For malt liquors, this is to be avoided at all costs. Flavor is your enemy. Warming up the "grace notes" of a malt liquor reveals the volatile petrochemicals and industrial solvents used in the brewing process, additives chosen mainly because they're cheaper than tap water. Your goal is to avoid any warming of the beverage and concomitant flavor release – you will fail, but you bought that thing so you might as well try.

The progression of awful flavor development is relatively slow and tolerable for the first two-thirds of the bottle, but accelerates rapidly once the fluid level drops below the bottom of the label. By the last inch or so, the temperature rises rapidly, approaching boiling for the last few sips (hence the frothy disgusting nature of the last dregs). The optimal starting temperature is therefore a few millikelvin above freezing – you want it as cold as possible while maintaining liquidity (because a frozen malt liquor-sickle is even more horrible than room-temperature malt liquor).

In figure 1, we plot beverage temperature as a function of fluid level. The cheaply-printed label provides several convenient landmarks if you are unable to keep this figure with you during consumption, or are unable to hold up this paper.



Malt liquor vaporizes, escapes from atmosphere into outer space

Strategies

You should minimize any heating effects from your body heat to avoid needless exposure to flavor before absolutely necessary. You should therefore hold the bottle with as little contact to skin as possible, at the very top of the neck – ideally by pinching a few microns of glass between your index finger and thumbnail.

Speed is of the essence in drinking this beverage – you have between 10 and 15 minutes to down the whole thing. Your goal is to develop enough drinking momentum to make it close to the bottom of the label before your brain's higher cognitive functions realize what you're doing and put a stop to it. Regardless of how fast you swill, however, the last swallow will be a putrid boiling wash of horror.

## The Next Day: Hangover Mitigation and Consequences

Even for those who achieve great heights in drinking optimalitationality, the piper will be paid the following morning. Hangovers will be dreadful the next day in proportion to how much fun you had the night before, and will usually coincide with the gong festival going on just outside your bedroom window (starting at 6:15 am to take advantage of morning air acoustics). While hangovers cannot be avoided, we can attempt to minimize their effects using proper mitigation strategies. None of these strategies, however, will work.

In Table 1 below, we list some of the most commonly-used hangover remedies and a brief description of their effectiveness. Cut out and laminate as needed.

We should reiterate – no remedy will work. Close the blinds, put something shallow and non-taxing on the T.V. (e.g. "VH1's 100 Most Awkward Celebrity Torsos"), and suffer. And if you're reading this for the first time *during* a hangover, clearly too late to help, we would like to mention in the way of punishment for not studying earlier that a friend of ours once lost a Band-Aid in a vat of Arby-Q they were making, and you later ordered a sandwich from the very same batch. We thought it was totally gross.

Table 1. Hangover Remedies, and Effectiveness Thereof

Hangover Remedy	Result
Take 2 aspirin with 2 cans of coke	Vomit up 2 aspirin and 2 cokes
Drink lots of water the night before	Massive intolerable bloating
Hot shower	Crushing realization that life isn't fair, when you discover that relaxing hot showers make hangovers far, far worse
Hair of the dog	I am <i>not</i> drinking Old English at 7:45 am
Various potions and chemicals you can buy in health stores	Odd-colored poo for the next three days
Quarter-mile sprint repeats at dawn	Instant and complete relief from all hangover symptoms
Head out to greasy spoon diner for breakfast	After seeing your buddy's undercooked fried eggs arrive at the table, you order arugula for the first time in your life
Suddenly realizing it's a work day,	Immediately: cold sweat
and you're due to give a presentation in uh[glance at watch] 2 hours ago	30 minutes from now: after sweat dries, wondering if other people can smell that smell also (they can)
Exhibit some restraint the night before, for a change	Welcome to adulthood

#### References

- 1. Standerson W. K., Egerton, S. Z., Malarany, W. W. "Beer farts: An unaddressed weakness", *The Journal of Biowarfare Agent Defense*, 8 (2): 145-169. (Note includes scratch n' sniff examples. Do not scratch figure 3 indoors.)
- 2. O'Meara S., Grahamson. S, Zanche, D. "Oh my freaking god this keg is heavy! Did we get Budweiser or molten lead?" Excerpted from the book *Another Embarassing Moment for Guys Who Don't Exercise Enough*, O'Meara and O'Meara, eds.
- 3. Varderkaarkiersan E. J., Sartarviartsiaan, V. Z., and Smith, J. "Numerical methods for highly obfuscatory data dimension expansion", Journal of Very Complicated Stuff, Vol 823, Issue 39, p. 452 1932.
- 4. Minor, William. "Dottie Dodgion: Forty years of swinging" Modern Drummer, Jan 1996, 126-129.
- 5. Personal communication, Odd guy at the party with dreadlocks (despite being white and from suburbs).
- 6. Williams, B. D. Works every time.
- 7. Steingard, Q. "A journal article with impressive full-color graphs that you don't understand", *Journal You Keep On Your Desk To Look Impressive*, v 12 p 45-49.
- 8. Williams, F. "Gonna make you sweat till you bleed, dope enough, indeed". C+C Music Factory Annual Report, 2005 edition.
- 9. Quinalson, Q., Green, Z., Hobarthet, P. "Efficiency of beer goggles in the near-infrared range", *Annals of Screwing Around With Optics*, vol 1 issue 4 p. 11.
- 10. Steingard, Q. "Another paper with some graphs, error bars, and a couple tables, maybe an equation or two. Plus tons of crap in the online supplementary data." *Sophistry News*, v. 124 p. 98232.
- 11. Schliekelmannn, N. N. "Analysis of next-morning party smells: peach schnapps spill on coffee table, cigarette butts floating in half cup of beer, lukewarm keg dregs, and nameless horrors in the toilet", *Stuff You Absolutely Should Not Read With a Hangover*, v. 12 no. 95 issue 3, p. 100202.
- 12. More personal communication, Odd dreadlock guy at the party. Man he won't shut up. How the hell am I going to get away from this guy? v. 12 p. 34-35.