

On the existence and identification of a “best” gin A spirited exploration of conjoint measurement and social choice theory

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Peter and I have bonded over gin and “gineology.” A few:

Anty Gin DK	Greenhook US	Tanqueray SC
Aster PL	Heritage PL	Uncle Val's US
The Botanist SC	Le Gin FR	Whitley Neill EN
Brockman's EN	Leopold's US	Williams Elegance
Caorunn SC	Malfy IT	Zymurgorium M
COIT US	Mikkeller DK	
Conker EN Daffy's SC	Monkey 47 DE	
Drumshambo IE	Napue FI	
Few American US	Neversink US	
Empress US	Nikka Coffee Still JP	
Fifty Pounds EN	Plymouth EN	
Fred Jerbis IT	Roku JP	
Gin Mare ES	Sea Stories PL	
	St. George US	

Genever: first mention 1200s, arose late 1500s,
Old Tom in 1700s, London Dry in 1800s

1695–1735 London Gin Craze



Typically 6-50 botanicals

- floral/herbal: lavender, rose, orange blossom, jasmine, honeysuckle, chamomile, basil, elderflower, heather, cornflower, fuchsia, hawthorn, hibiscus, clover, cherry blossoms, orange blossoms, lime blossoms, violets, lily, tea, rosemary
- citrus: lemon, lime, orange, blood orange, grapefruit, yuzu, kaffir lime,
- other fruit: cucumber, rhubarb, tomato
- evergreen: juniper, fir, spruce
- seeds/roots/bark/stamen/pollen: coriander, cinnamon, cumin, anise, nutmeg, cardamom, saffron, Szechuan pepper, black pepper, almond, licorice, wormwood, cassia, orris, cubeb, grains of paradise, ginger, acacia seeds, cacao, fennel, guarana, poppy, tonka bean
- umami: seaweed, oysters, mushrooms, capers, reggiano, nuts

Style: genever, Old Tom, London Dry, contemporary/western, Plymouth, navy strength, aged, spiced, seasonal gins, local gins

Base spirit: wheat, rye, barley, corn, grapes, apples, honey, . . .

Processes: pot still, column still, maceration, herbs in pot or vapor path, cuts, aging

Aged? Type of barrel?

Appearance: Clear? Colored? Louche? Legs?

Nose

Palate: taste and mouth feel—unctuous? thin?

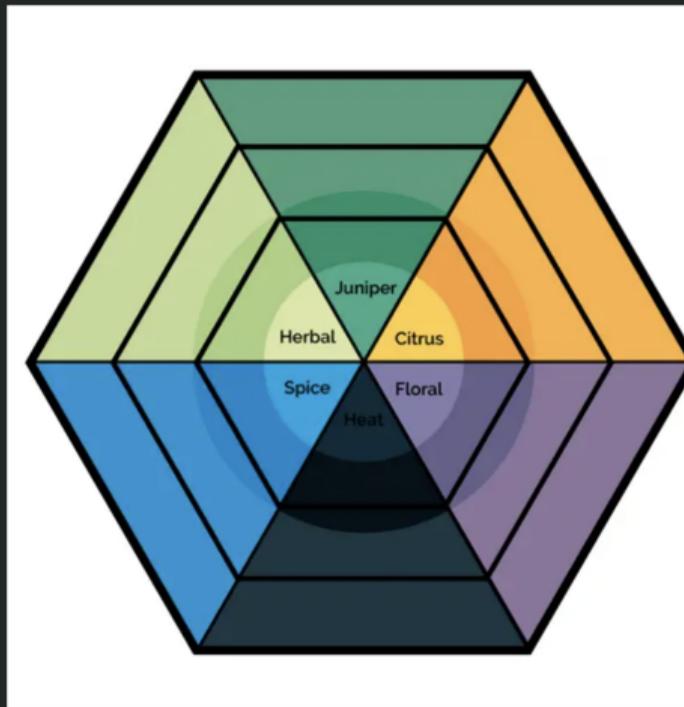
Finish: flavor, duration of lingering

ABV: 40-43, 44-50, Navy strength (57+)

Gin Flavor Diagram

in 2012 I began researching how consumers talked about gin. How they talked about it with bartenders, folks at the liquor store and themselves. This was the beginning of the Gin Flavor Diagram.

The first version of the [GIN FLAVOR DIAGRAM](#) was released in 2012 on THE GIN IS IN to help describe the flavor of gins that were being reviewed in the terms that consumers themselves used. In the



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Is there a “best” gin?

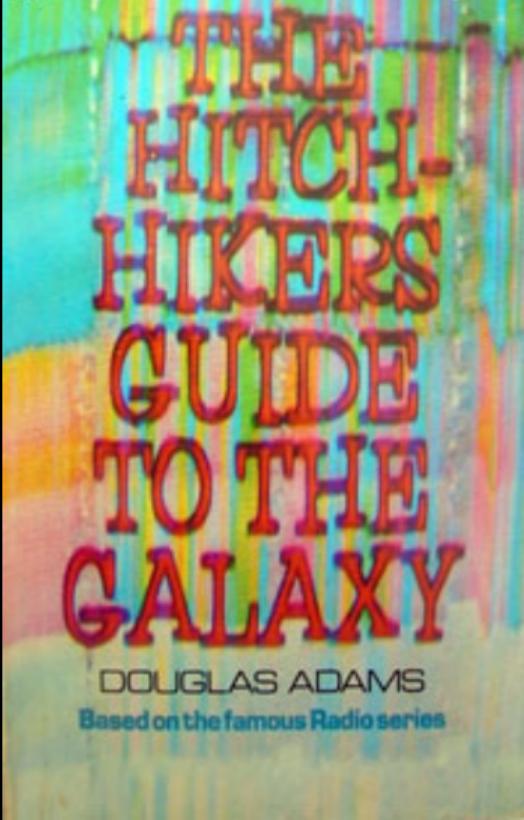
Is there a “best” gin?

Set aside the issue of whether it's to sip neat, drink with ice, make a martini, have with tonic, or make a Negroni

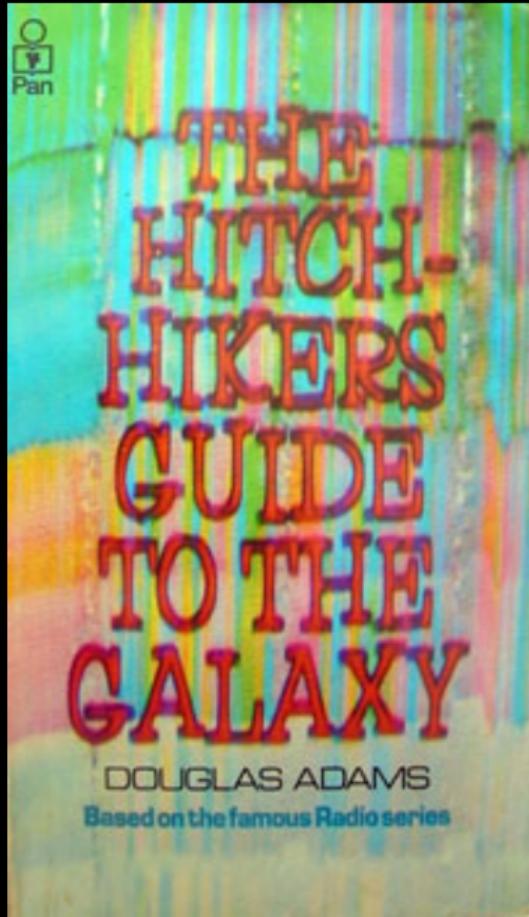
Is there a “best” gin?

Set aside the issue of whether it's to sip neat, drink with ice, make a martini, have with tonic, or make a Negroni

Set aside personal differences: Is there a “best” gin in Peter's opinion?



Douglas Adams' Bistromathics: the math involved in splitting the bill at a bistro. Anything is possible.



Douglas Adams' Bistromathics: the math involved in splitting the bill at a bistro.
Anything is possible.

Gineology: the math involved in defining and identifying a “best” gin.
Nothing is possible.

Can gins be ranked in a total order?

Total order \leq on a set \mathcal{S} :

Reflexive: $\forall s \in \mathcal{S}, s \leq s.$

Transitive: if $s, t, u \in \mathcal{S}$ then $s \leq t$ and $t \leq u$ implies $s \leq u.$

Antisymmetric: if $s, t \in \mathcal{S}$ then $s \leq t$ and $t \leq s$ implies $s = t.$

Totality: for $s, t \in \mathcal{S}$, either $s \leq t$ or $t \leq s$

(Without antisymmetry, “preorder”)

Reducing multidimensional measurements to a 1-D scale

Multidimensional rankings: conjoint measurement (Luce & Tukey, 1964), Polynomial conjoint measurement (Tversky, 1967)

Illustrate with 2 attributes, juniper J (low, middle, high) and other botanicals B (floral forward, citrus forward, spice forward).

Single cancellation axiom:

Let $b, c \in B$ and $j, k \in J$.

If $(b, j) \geq (c, j)$ for some $j \in J$, then $(b, k) \geq (c, k)$ for all $k \in J$; and if $(b, j) \geq (b, k)$ for some $b \in B$, then $(c, j) \geq (c, k)$ for all $c \in B$.

If you prefer more juniper in a floral gin, you must also prefer more juniper in a citrus gin.

Double cancellation axiom:

If $(b, j) \geq (c, k)$ and $(c, \ell) > (d, j)$ then $(b, \ell) > (d, k)$.

If you like a floral gin with medium juniper more than you like a citrus gin with low juniper and you like a citrus gin with high juniper more than you like a spicy gin with medium juniper, then you must also like a floral gin with high juniper more than you like a spicy gin with medium juniper.

Even 1-d ranking can behave oddly:

Can you taste the same gin twice? Variability:

- batch
- temperature (& its influence on dilution)
- mixer
- weather, mood, time of day, food, ...

Intransitive gin?

MATHEMATICAL GAMES

The paradox of the nontransitive dice and the elusive principle of indifference

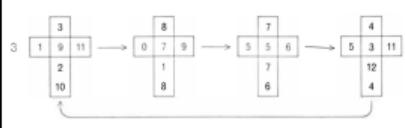
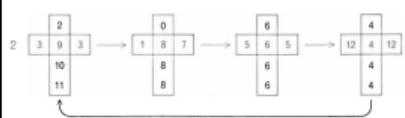
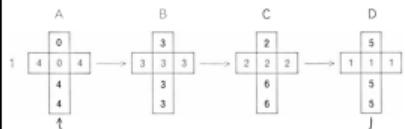
by Martin Gardner

Probability theory abounds in paradoxes that wrench common sense and trap the unwary. Many of them have been discussed in "Mathematical Games." This month we consider a startling new paradox involving the relation called transitivity and a group of paradoxes stemming from the careless application of what is called the principle of indifference.

Transitivity is a binary relation such that if it holds between A and B and between B and C, it must also hold between A and C. A common example is

the relation "heavier than." If A is heavier than B and B is heavier than C, then A is heavier than C. The three sets of four dice shown "unfolded" in the illustration below were devised by Bradley Efron, a statistician at Stanford University, to dramatize some recent discoveries about a general class of probability paradoxes that violate transitivity. With any of these sets of dice you can operate a betting game so contrary to intuition that experienced gamblers will find it almost impossible to comprehend even after they have completely analyzed it.

The four dice at the top of the illustration are numbered in the simplest way that provides the winner with the maximum advantage. Allow someone to pick any die from this set. You then select a



Nontransitive dice

die from the remaining three. Both dice are tossed and the person who gets the highest number wins. Surely, it seems, if your opponent is allowed the first choice of a die before each contest, the game must either be fair or favor your opponent. If at least two dice have equal and maximum probabilities of winning, the game is fair because if he picks one such die, you can pick the other; if one die is better than the other three, your opponent can always choose that die and win more than half of the contests. This reasoning is completely wrong. The incredible result is that regardless of which die he picks you can always pick a die that has a 2/3 chance of winning, or twice as good odds as your friend!

The paradox (insofar as it violates common sense) arises from the mistaken assumption that the relation "more likely to win" must be transitive between pairs of dice. This is not the case with any of the three sets of dice. In the first set the relation "more likely to win" is indicated by an arrow that points to the losing die. Die A beats B, B beats C, C beats D, and D beats A! In the first set the probability of winning with the indicated die of each pair is 2/3. This is easily verified by listing the 36 possible throws of each pair, then checking the 24 cases in which one die beats the highest number.

The second set of dice, also designed by Efron, have the same nontransitive property but fewer numbers are repeated in order to make an analysis of the dice more difficult. In the second set the probability of winning with the indicated die is also 2/3. Because ties are possible with the third set it must be agreed that ties will be broken by rolling again. With this procedure the winning probability for each of the four pairings in the third set is 23/34, or .674.

It has been proved, Efron writes, that 2/3 is the greatest possible advantage that can be achieved with four dice. For three sets of numbers the maximum advantage is .674. After four sets are obtained with dice because the sets must have more than six numbers. If more than four sets are used [numbers to be randomly selected within each set], the possible advantage approaches a limit of 3/4 as the number of sets increases.

A fundamental principle in calculating probabilities such as dice throws is one that goes back to the beginnings of classical probability theory in the 18th century. It was formerly called "the principle of insufficient reason" but is now known as "the principle of indifference," a crisper phrase coined by John Maynard Keynes in *A Treatise on Probability*.

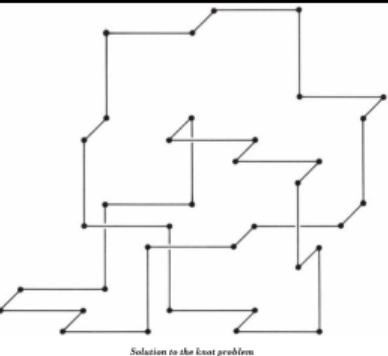
(Keynes is best known as an economist, but his book on probability has become a classic. It had a major influence on the inductive logic of the late Rudolf Carnap.) The principle is usually stated as follows: If you have no grounds whatever for believing that any one of n mutually exclusive events is more likely to occur than any other, a probability of 1/n is assigned to each.

For example, you examine a die carefully and find nothing that favors one side over another, such as concealed loads, nonspherical shape, beveling of certain edges, stickiness of certain sides and so on. You assume that there are no equally probable ways the cube can fall; therefore you assign a probability of 1/6 to each. If you toss a penny, or play the Mexican game of betting on which of two sugar cubes a fly will alight on first, your ignorance of any possible bias prompts you to assign a probability of 1/2 to each of the two outcomes. In none of these samples do you feel obliged to make statistical, empirical tests. The probabilities are assigned a priori. They are based on symmetrical features in the structures and forces involved. The die is a regular solid; the probability of the penultimate edge on each side is actually zero; there is no reason for a fly to prefer one sugar cube to another and so on. Ultimately, of course, your analysis rests on empirical grounds, since only experience tells you, say, that a weighted die would affect the odds, whereas a face colored red (with the others blue) would not.

Some form of the principle of indifference is indispensable in probability theory, but it must be carefully qualified and applied with extreme caution to avoid pitfalls. In many cases the traps spring from a difficulty in deciding what are the equally probable cases. Suppose, for instance, you shuffle a deck of four cards—two red, two black—and deal them face down in a row. Two cards are picked at random. What is the probability that those two cards are the same color?

One person reasons: "There are three equally probable cases. Either both cards are black, both are red or they are different colors. In two cases the cards match, therefore the matching probability is 2/3."

"No," another person counters, "these are four equally probable cases. Either both cards are black, both are red, card x is black and y is red or x is red and y is black. More simply, the cards either match or they do not. In each way of putting it the matching probability clearly is 1/2."



Solution to the knot problem

The fact is that both people are wrong. (The correct probability will be given later in this month. Can the reader calculate it?) Here the errors arise from a failure to identify correctly the equally probable cases. There are, however, more confusing paradoxes—actually fallacies—in which the principle of indifference seems intuitively to be applicable, whereas it actually leads straight to a logical contradiction. Such cases result when there are no positive reasons for believing a event to be equally probable and the assumption of equiprobability is therefore based entirely, or almost entirely, on ignorance.

For example, someone tells you: "There is a cube in the next room whose size has been selected by a randomizing device. The cube's edge is not less than one foot or more than three feet." How would you estimate the probability that the cube's edge is between one and two feet as compared with the probability that it is between two and three feet? In your total ignorance of additional information, is it not reasonable to invoke the principle of indifference and regard each probability as 1/2?

It is not. If the cube's edge ranges between one and two feet, its volume ranges between 1^3 , or one, cubic foot and 2^3 , or eight, cubic feet. But in the range of edges from two to three feet, the volume ranges between 2^3 (eight) and 3^3 (27) cubic feet—a range almost three times the other range. If the principle of indifference applies to the two ranges of edges, it is violated by the equivalent ranges of volume. You were

1 = $\lfloor \pi r^2 \rfloor$	11 = $\lceil (\pi n \times n) + \sqrt{n} \rceil$
2 = $\lfloor \pi r^2 \rfloor - \sqrt{n}$	12 = $\lceil [n \times n] + [n]$
3 = $\lceil n \rceil$	13 = $\lceil (\pi n \times n) + n \rceil$
4 = $\lceil [n + \sqrt{n}] \rceil$	14 = $\lceil (\pi n \times n) + n + \sqrt{n} \rceil$
5 = $\lceil [n \sqrt{n}] \rceil$	15 = $\lceil [n \times n] + [n + n] \rceil$
6 = $\lceil [n + n] \rceil$	16 = $\lceil [n \times n] + n + n \rceil$
7 = $\lceil [n^2] \rceil$	17 = $\lceil [n \times n \times n] \rceil$
8 = $\lceil [n \times n] - \sqrt{n} \rceil$	18 = $\lceil [n \times n] + [n \times n]$
9 = $\lceil [n \times n] \rceil$	19 = $\lceil [n \times n] + (n \times n) \rceil$
10 = $\lceil [n \times n] + [\sqrt{n}] \rceil$	20 = $\lceil [\pi \sqrt{n}] + [n + \sqrt{n}] \rceil$

How the first 20 integers can be "pied"

Intransitive dice tournament is not quasirandom

Elisabetta Cornacchia* Janusz Hazla†

Abstract

We settle a version of the conjecture about intransitive dice posed by Conrey, Gabbard, Grant, Liu and Morrison in 2016 and Polymath in 2017. We consider generalized dice with n faces and we say that a die A beats B if a random face of A is more likely to show a higher number than an independently chosen random face of B . We study random dice with faces drawn iid from the uniform distribution on $[0, 1]$ and conditioned on the sum of the faces equal to $n/2$. Considering the “beats” relation for three such random dice, Polymath showed that each of eight possible tournaments between them is asymptotically equally likely. In particular, three dice form an intransitive cycle with probability converging to $1/4$. In this paper we prove that for *four* random dice *not* all tournaments are equally likely and the probability of a transitive tournament is strictly higher than $3/8$.

1 Introduction

Intransitive dice are an accessible example of counterintuitive behavior of combinatorial objects. For our purposes, a *die* is a vector of n real numbers $A = (a_1, \dots, a_n)$. The traditional cube dice have $n = 6$. Given two n -sided dice A and B , we say that A beats B , writing it as $A \succ B$, if

$$\left(\sum_{i,j=1}^n \mathbb{1}[a_i > b_j] - \mathbb{1}[a_i < b_j] \right) > 0.$$

In other words, A beats B if a random roll (uniformly chosen face) of A is more likely to display a larger number than a random roll of B . The term “intransitive dice” refers to the fact that the “beats” relation is not transitive. One well-known example due to Efron [Gar70] with $n = 6$ is

$$A = (0, 0, 4, 4, 4, 4), \quad B = (3, 3, 3, 3, 3, 3), \quad C = (2, 2, 2, 2, 6, 6), \quad D = (1, 1, 1, 5, 5, 5),$$

where one checks that $A \succ B \succ C \succ D \succ A$. In particular, this set of dice allows for an amusing game: If two players sequentially choose one die each and make a throw, with the player rolling a higher number receiving a dollar from the other player, then it is the second player who has a strategy with positive expected payout.

The intransitivity of dice is a noted subject in popular mathematics [Gar70, Sch00, Gri17]. It has been studied under various guises for a considerable time [ST59, Try61, Try65, MM67, SJ94]. There is a multitude of constructions of intransitive dice with various properties [MM67, FT00, BB13, AD17, SS17, BGH18, AS21],

Preference models:

Multinomial logit

$$\Pr\{R_j = k\} = \frac{e^{\beta_k \cdot X_i}}{\sum_{j=1}^K e^{\beta_j \cdot X_i}}.$$

Rasch Rating Scale model:

Special case of multinomial logit.

$$\Pr\{X_{ni} = x\} = \frac{\exp \sum_{k=0}^x (\beta_n - (\delta_i - \tau_k))}{\sum_{j=0}^m \exp \sum_{k=0}^j (\beta_n - (\delta_i - \tau_k))}$$

where δ_i is the deliciousness of item i , τ_k is the k th scale threshold, m is max score.

τ_0 set implicitly by the other values of τ_i .

Special case of multinomial logit.

Leading the field: Fortune favors the bold in Thurstonian choice models

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Schools with the highest average student performance are often the smallest schools; localities with the highest rates of some cancers are frequently small; and the effects observed in clinical trials are likely to be largest for the smallest numbers of subjects. Informal explanations of this “small-schools phenomenon” point to the fact that the sample means of smaller samples have higher variances. But this cannot be a complete explanation: If we draw two samples from a diffuse distribution that is symmetric about some point, then the chance that the smaller sample has larger mean is 50%. A particular consequence of results proved below is that if one draws three or more samples of different sizes from the same normal distribution, then the sample mean of the smallest sample is most likely to be highest, the sample mean of the second smallest sample is second most likely to be highest, and so on; this is true even though for any pair of samples, each one of the pair is equally likely to have the larger sample mean. The same effect explains why heteroscedasticity can result in misleadingly small nominal p -values in nonparametric tests of association.

Our conclusions are relevant to certain stochastic choice models, including the following generalization of Thurstone’s Law of Comparative Judgment. There are n items. Item i is preferred to item j if $Z_i < Z_j$, where Z is a random n -vector of preference scores. Suppose $\mathbb{P}\{Z_i = Z_j\} = 0$ for $i \neq j$, so there are no ties. Item k is the favorite if $Z_k < \min_{i \neq k} Z_i$. Let p_i denote the chance that item i is the favorite. We characterize a large class of distributions for Z for which $p_1 > p_2 > \dots > p_n$. Our results are most surprising when $\mathbb{P}\{Z_i < Z_j\} = \mathbb{P}\{Z_i > Z_j\} = \frac{1}{2}$ for $i \neq j$, so neither of any two items is likely to be preferred over the other in a pairwise comparison. Then, under suitable assumptions, $p_1 > p_2 > \dots > p_n$ when the variability of Z_i decreases with i in an appropriate sense. Our conclusions echo the proverb “Fortune favors the bold.”

Keywords: coupling; discrete choice models; extreme value; maximum (or minimum) of random variables; most dangerous equation; order statistic; preference scores; small schools phenomenon; stochastic domination; test of association; Thurstone; winning probability

Let your senses vote?

- Approval gin?
- Condorcet gin? Winner of majority of pairwise comparisons.
- Ranked-choice gin?

Arrow's Impossibility Theorem

Each of Peter's senses has an ordered set of gin preferences.

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Rule for choosing “best” gin is a function of those sensory preferences.

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Bartender: "We have Tanqueray 10 and Hendricks."

Peter: "I'll have Tanqueray 10."

Bartender: "We also have Sipsmith."

Peter: "In that case, I'd prefer the Hendricks."

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Can't gin up such a rule.

Duty-free tasting and shopping: the Secretary Problem

Can carry one bottle of gin through customs.

Will go through N airports on your trip.

Can taste one gin in each duty free shop on your trip; can't go back. Buy or not?

Optimal strategy (for random permutation): taste N/e gins, then buy the first that's at least as tasty as any you've had.

Algorithms to stock your bar

arXiv:2004.06248v2 [cs.LG] 8 Aug 2020

Improved Sleeping Bandits with Stochastic Actions Sets and Adversarial Rewards

Aadirupa Saha¹ Pierre Gaillard² Michal Valko³

Abstract

In this paper, we consider the problem of sleeping bandits with stochastic action sets and adversarial rewards. In this setting, in contrast to most work in bandits, the actions may not be available at all times. For instance, some products might be out of stock in item recommendation. The best existing efficient (i.e., polynomial-time) algorithms for this problem only guarantee an $O(T^{2/3})$ upper-bound on the regret. Yet, inefficient algorithms based on EXP4 can achieve $O(\sqrt{T})$. In this paper, we provide a new computationally efficient algorithm inspired by EXP3 satisfying a regret of order $O(\sqrt{T})$ when the availabilities of each action $i \in \mathcal{A}$ are independent. We then study the most general version of the problem where at each round available sets are generated from some unknown arbitrary distribution (i.e., without the independence assumption) and propose an efficient algorithm with $O(\sqrt{2^K T})$ regret guarantee. Our theoretical results are corroborated with experimental evaluations.

1. Introduction

The problem of standard multiarmed bandit (MAB) is well studied in machine learning (Auer, 2000; Vermorel & Mohri, 2005) and used to model online decision-making problems under uncertainty. Due to their implicit exploration-vs-exploitation tradeoff, bandits are able to model clinical trials, movie recommendations, retail management job scheduling etc., where the goal is to keep pulling the ‘best-item’ in hindsight through sequentially querying one item at a time and subsequently observing a noisy reward feedback of the queried arm (Even-Dar et al., 2006; Auer et al., 2002a;

However, in various real world applications, the decision space (set of arms \mathcal{A}) often changes over time due to unavailability of some items etc. For instance, in retail stores some items might go out of stock, on a certain day some websites could be down, some restaurants might be closed etc. This setting is known as *sleeping bandits* in online learning (Kanade et al., 2009; Neu & Valko, 2014; Kanade & Steinke, 2014; Kale et al., 2016), where at any round the set of available actions could vary stochastically based on some unknown distributions over \mathcal{A} (Neu & Valko, 2014; Cortes et al., 2019) or adversarially (Kale et al., 2016; Kleinberg et al., 2010; Kanade & Steinke, 2014). Besides the reward model, the set of available actions could also vary stochastically or adversarially (Kanade et al., 2009; Neu & Valko, 2014). The problem is known to be NP-hard when both rewards and availabilities are adversarial (Kleinberg et al., 2010; Kanade & Steinke, 2014; Kale et al., 2016). In case of stochastic rewards and adversarial availabilities the achievable regret lower bound is known to be $\Omega(\sqrt{KT})$, K being the number of actions in the decision space $\mathcal{A} = [K]$. The well studied EXP4 algorithm does achieve the above optimal regret bound, although it is computationally inefficient (Kleinberg et al., 2010; Kale et al., 2016). However, the best known efficient algorithm only guarantees an $\tilde{O}((TK)^{2/3})$ regret,¹ which is not matching the lower bound both in K and T (Neu & Valko, 2014).

In this paper we aim to give computationally efficient and optimal $O(\sqrt{T})$ algorithms for the problem of sleeping bandits with adversarial rewards and stochastic availabilities. Our specific contributions are as follows:

Contributions

- We identified a drawback in the (sleeping) loss estimates in the prior work for this setting and gave an insight and margin for improvement over the best known rate (Section 3).

Recommendation engines:

- Model empirical preferences as, say, multinomial regression.
- Model empirical preferences using Conjoint Analysis (but do the assumptions hold?)
- LLMs?

'My friend Peter likes London Dry Gin. He prefers a balanced gin, not juniper-forward. He likes both citrus and floral notes, but prefers citrus. He sometimes drinks his gin with tonic and sometimes neat. I've never seen him order any other gin cocktail. His favorite readily available gin is Tanqueray 10. He also likes Monkey 47, Caorunn, Chase Elegant English Gin, and Zymurgorium Manchester Marmalade Gin. He is not fond of Navy Strength gin. And he finds Nikka and Roku too bitter.

Please recommend three gins Peter is unlikely to have tried, one from eastern Europe, one from southern Europe, and one omakase, and recommend whether to drink the omakase choice neat or with tonic.'

LLM	Eastern Europe	Southern Europe	Omakase
Ginini Pro	Baczewski Poland	Gin Mare Spain	Ferdinand's Saar Germany neat
GinGPT	Little Urban Distillery Czech Republic	Malfy Gin Con Limone Italy	Procera Blue Dot Gin Kenya neat

Ginini Pro

Peter sounds like he has a sophisticated palate for gin! He appreciates balance, prefers citrus over juniper-forward profiles, and enjoys both citrus and floral notes. His fondness for Tanqueray 10, Monkey 47, Caorunn, Chase Elegant English Gin, and Zymurgorium Manchester Marmalade Gin, along with his aversion to Navy Strength, Nikka, and Roku (due to bitterness), gives us a good roadmap.

Here are three recommendations, keeping in mind gins he's unlikely to have tried:

Eastern Europe: Baczewski Gin (Poland)

Why it fits Peter: Baczewski Gin, from Poland, is a classic London Dry style but often described as well-balanced, with a good interplay of botanicals. While it does have juniper, it's not overwhelmingly forward. It tends to feature prominent citrus notes (often lemon and orange peel) and subtle floral or herbal undertones, fitting Peter's preference for citrus over floral but still appreciating both. It's less common than many Western European gins, so Peter is likely to not have encountered it.

Flavor Profile: Expect a clean, crisp gin with bright citrus and a gentle herbaceousness, along with the classic juniper backbone that is balanced rather than dominant.

Why he'll like it: It shares a similar approachable London Dry profile with Tanqueray 10, but with its own distinct Eastern European character. The citrus focus should appeal to him, and it's not known for bitterness.

Southern Europe: Gin Mare (Spain)

Why it fits Peter: Hailing from Spain, Gin Mare is a prime example of a contemporary Mediterranean gin. It's famous for its savory and aromatic profile, utilizing botanicals like Arbequina olives, rosemary, thyme, and basil, alongside more traditional juniper and citrus. While it's not explicitly "floral," its herbal notes can often provide a similar aromatic complexity that would appeal to someone who enjoys floral gins, while the robust citrus presence (especially orange peel) is very strong. It's widely available in some regions but still unique enough that many gin enthusiasts haven't tried it.

Flavor Profile: Savory, aromatic, with distinct olive and herbal notes complemented by a clear burst of citrus. It's incredibly smooth.

Why he'll like it: This gin offers a completely different, yet still balanced, experience from his current favorites. The strong citrus element, combined with unique Mediterranean botanicals, should intrigue him without being overly juniper-forward or bitter. It's a departure but within his preferred flavor wheelhouse.

Omakase Choice: Ferdinand's Saar Dry Gin (Germany)

Why it fits Peter: While Germany is technically Central Europe, Ferdinand's Saar Dry Gin offers a truly unique and sophisticated profile that fits the “omakase” (chef’s choice) criteria. It’s distilled with Riesling grapes from the Saar region, which imparts a subtle fruitiness and a delicate, almost floral, sweetness. It’s far from juniper-dominant and beautifully balances citrus (often lime and lemon) with a range of floral and herbal botanicals, including lavender and rose. This gin is known for its elegance and complexity.

Flavor Profile: Delicate, aromatic, with prominent citrus and floral notes, a subtle grape sweetness, and a smooth, refined finish. It’s very well-integrated and not bitter.

Drink Recommendation for Ferdinand's Saar Dry Gin: Neat. This gin is crafted with such care and has such a nuanced, delicate flavor profile that adding tonic, while not necessarily bad, could easily overpower its subtle complexities. Peter appreciates drinking gin neat sometimes, and Ferdinand's is an excellent candidate for this.

Encourage him to try it neat first, perhaps with a single large ice cube and a lemon peel

GinGPT

Thanks for the detailed profile — that helps a lot. Based on Peter's preferences (balanced rather than juniper-heavy, citrus-leaning, floral-friendly, no harsh bitterness, and aversion to overproof gins), here are three gins he's unlikely to have tried, each fitting your regional request and taste profile:

Eastern Europe:

Little Urban Distillery Gin (Czech Republic)

Profile: This small-batch gin from Prague is beautifully balanced, with a citrus-forward palate (lemon zest and grapefruit) and delicate herbaceous and floral layers.

Why it fits: It's a refined London Dry style without the aggressive juniper hit. It has the elegance and balance Peter seems to appreciate in Caorunn and Tanqueray 10.

Try it: Neat or with a light Mediterranean tonic and a lemon twist.

Southern Europe:

Malfy Gin Con Limone (Italy)

Profile: Distilled with Italian lemons from the Amalfi Coast and juniper, this gin is sunshine in a glass — zesty, crisp, and soft on the palate.

Why it fits: Heavy on citrus but not synthetic or overpowering, it bridges the gap between craft and accessibility. Think Tanqueray 10's citrus with a lighter, more playful tone.

Try it: With tonic — preferably Fever-Tree Light or a rosemary tonic — and a lemon peel.

Omakase Pick:

Procera Blue Dot Gin (Kenya)

Profile: Made with African juniper and botanicals sourced across the continent, this ultra-premium gin is complex, citrus-forward (think fresh lime leaf), with soft spice and a creamy, almost nutty finish.

Why it fits: It's not bitter or harsh, beautifully distilled, and strikes a similar "elegant but expressive" note like Monkey 47 or Chase Elegant.

Try it: Neat — served slightly chilled to highlight its layered flavor and smooth texture.