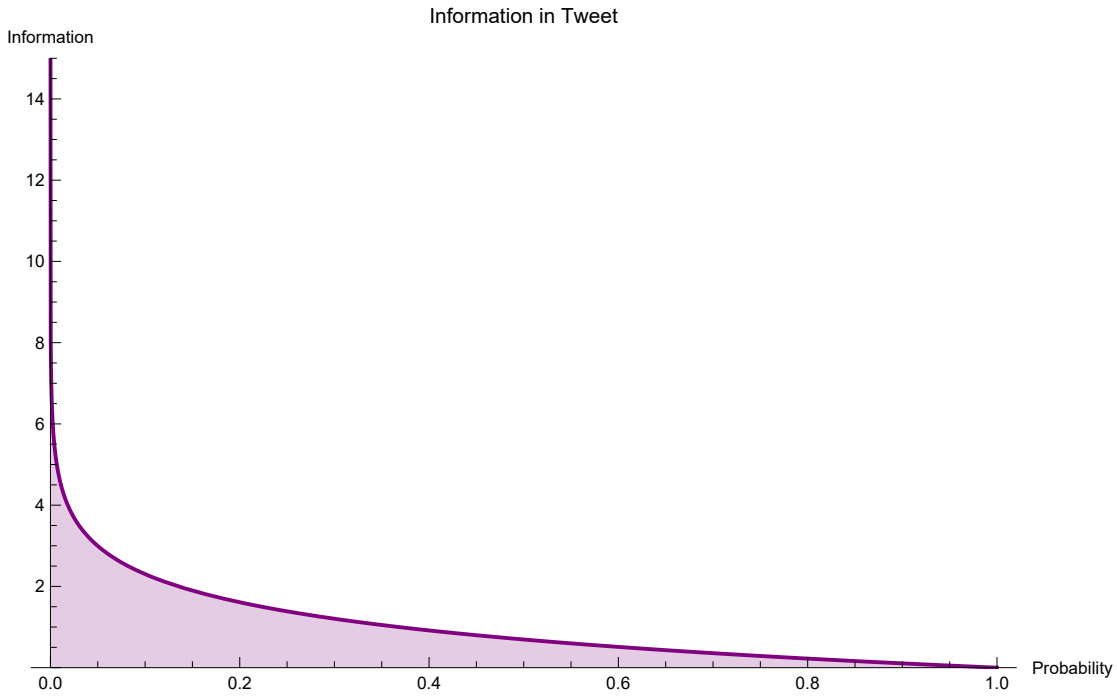
Entropy in Tweet (and Conversation, Book, Chapter...)

Assume uniform distribution of probabilities.
You want the probability of the word to be low.
You want the language to be uncommon.
Although, you do need a distribution of probabilities of the words.

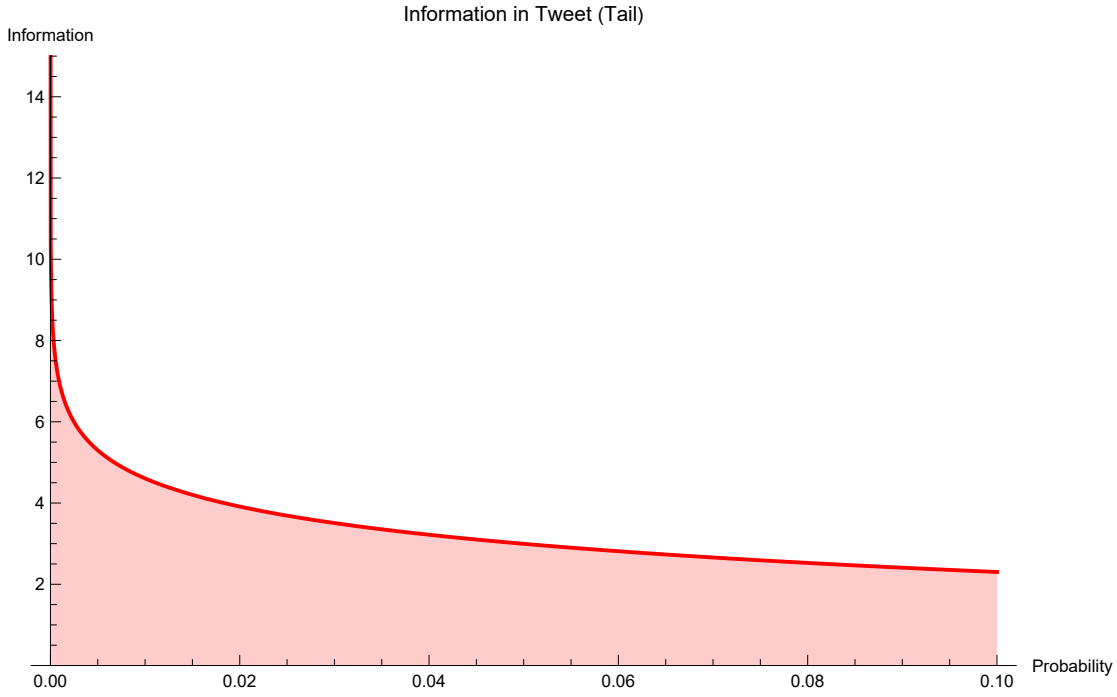
In[•]:=
```
Plot[-Log[p], {p, 0, 1},
 PlotRange → {0, 15},
 AxesLabel → {Probability, Information},
 PlotStyle → Purple,
 Filling → Axis,
 PlotLabel → "Information in Tweet",
 ImageSize → Large]
```

Out[•]=



In[•]:=
```
Plot[-Log[p], {p, 0, 0.1},
 PlotRange → {0, 15},
 AxesLabel → {Probability, Information},
 PlotStyle → Red,
 Filling → Axis,
 PlotLabel → "Information in Tweet (Tail)",
 ImageSize → Large]
```

Out[•]=



In[•]:=
```
TableForm[Table[{p, -Log[p]}, {p, 0, 1, 0.01}],
 TableHeadings → {None, {"Probability (p)", "Dimensionless entropy (nats)"}}]
```

Out[•]//TableForm=

Probability (p)	Dimensionless entropy (nats)
0.	Indeterminate
0.01	4.60517
0.02	3.91202
0.03	3.50656
0.04	3.21888
0.05	2.99573
0.06	2.81341
0.07	2.65926
0.08	2.52573
0.09	2.40795
0.1	2.30259
0.11	2.20727
0.12	2.12026
0.13	2.04022
0.14	1.96611
0.15	1.89712

0.16	1.83258
0.17	1.77196
0.18	1.7148
0.19	1.66073
0.2	1.60944
0.21	1.56065
0.22	1.51413
0.23	1.46968
0.24	1.42712
0.25	1.38629
0.26	1.34707
0.27	1.30933
0.28	1.27297
0.29	1.23787
0.3	1.20397
0.31	1.17118
0.32	1.13943
0.33	1.10866
0.34	1.07881
0.35	1.04982
0.36	1.02165
0.37	0.994252
0.38	0.967584
0.39	0.941609
0.4	0.916291
0.41	0.891598
0.42	0.867501
0.43	0.84397
0.44	0.820981
0.45	0.798508
0.46	0.776529
0.47	0.755023
0.48	0.733969
0.49	0.71335
0.5	0.693147
0.51	0.673345
0.52	0.653926
0.53	0.634878
0.54	0.616186
0.55	0.597837
0.56	0.579818
0.57	0.562119
0.58	0.544727
0.59	0.527633
0.6	0.510826
0.61	0.494296
0.62	0.478036
0.63	0.462035
0.64	0.446287
0.65	0.430783
0.66	0.415515
0.67	0.400478
0.68	0.385662

0.69	0.371064
0.7	0.356675
0.71	0.34249
0.72	0.328504
0.73	0.314711
0.74	0.301105
0.75	0.287682
0.76	0.274437
0.77	0.261365
0.78	0.248461
0.79	0.235722
0.8	0.223144
0.81	0.210721
0.82	0.198451
0.83	0.18633
0.84	0.174353
0.85	0.162519
0.86	0.150823
0.87	0.139262
0.88	0.127833
0.89	0.116534
0.9	0.105361
0.91	0.0943107
0.92	0.0833816
0.93	0.0725707
0.94	0.0618754
0.95	0.0512933
0.96	0.040822
0.97	0.0304592
0.98	0.0202027
0.99	0.0100503
1.	0.

In[•]:=
```
TableForm[Table[{p, -Log[p]}, {p, 0, 0.01, 0.0001}],
 TableHeadings → {None, {"Probability (p)", "Dimensionless entropy (nats)"}}]
```

Out[•]//TableForm=

Probability (p)	Dimensionless entropy (nats)
0.	Indeterminate
0.0001	9.21034
0.0002	8.51719
0.0003	8.11173
0.0004	7.82405
0.0005	7.6009
0.0006	7.41858
0.0007	7.26443
0.0008	7.1309
0.0009	7.01312
0.001	6.90776
0.0011	6.81245
0.0012	6.72543
0.0013	6.64539
0.0014	6.57128
0.0015	6.50229

0.0016	6.43775
0.0017	6.37713
0.0018	6.31997
0.0019	6.2659
0.002	6.21461
0.0021	6.16582
0.0022	6.1193
0.0023	6.07485
0.0024	6.03229
0.0025	5.99146
0.0026	5.95224
0.0027	5.9145
0.0028	5.87814
0.0029	5.84304
0.003	5.80914
0.0031	5.77635
0.0032	5.7446
0.0033	5.71383
0.0034	5.68398
0.0035	5.65499
0.0036	5.62682
0.0037	5.59942
0.0038	5.57275
0.0039	5.54678
0.004	5.52146
0.0041	5.49677
0.0042	5.47267
0.0043	5.44914
0.0044	5.42615
0.0045	5.40368
0.0046	5.3817
0.0047	5.36019
0.0048	5.33914
0.0049	5.31852
0.005	5.29832
0.0051	5.27851
0.0052	5.2591
0.0053	5.24005
0.0054	5.22136
0.0055	5.20301
0.0056	5.18499
0.0057	5.16729
0.0058	5.1499
0.0059	5.1328
0.006	5.116
0.0061	5.09947
0.0062	5.08321
0.0063	5.06721
0.0064	5.05146
0.0065	5.03595
0.0066	5.02069
0.0067	5.00565
0.0068	4.99083

0.0069	4.97623
0.007	4.96185
0.0071	4.94766
0.0072	4.93367
0.0073	4.91988
0.0074	4.90628
0.0075	4.89285
0.0076	4.87961
0.0077	4.86653
0.0078	4.85363
0.0079	4.84089
0.008	4.82831
0.0081	4.81589
0.0082	4.80362
0.0083	4.7915
0.0084	4.77952
0.0085	4.76769
0.0086	4.75599
0.0087	4.74443
0.0088	4.733
0.0089	4.7217
0.009	4.71053
0.0091	4.69948
0.0092	4.68855
0.0093	4.67774
0.0094	4.66705
0.0095	4.65646
0.0096	4.64599
0.0097	4.63563
0.0098	4.62537
0.0099	4.61522
0.01	4.60517