



# Embedding Comparison Dashboard

Type in four equations (e.g., `love - hate`, `king - man + woman`), press Tab or Return to update, and compare them on shared charts.

Equation 1

`love - hate`

Equation 2

`love / hate`

Equation 3

`hate / love`

Equation 4

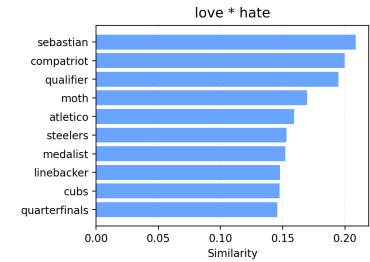
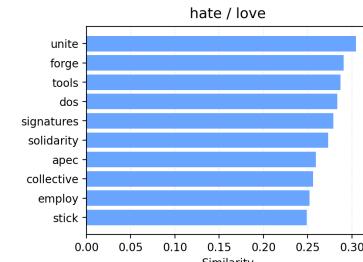
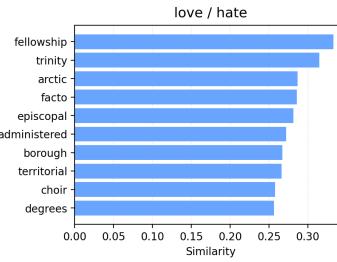
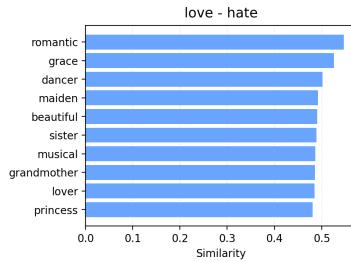
`love * hate`

Select Top-K Similar Words

10



## Top-K Semantic Matches per Equation



## Detailed Tables (Vectors & Stats)

`love - hate` — Top-10 Word Vectors (100 dims)

`love / hate` — Top-10 Word Vectors (100 dims)

`hate / love` — Top-10 Word Vectors (100 dims)

`love * hate` — Top-10 Word Vectors (100 dims)

	dim_1	dim_2	dim_3	dim_4	dim_5	dim_6	dim_7	dim_8	dim_9	dim_10	dim_11	dim_12	dim_13	dim_14	dim_15	dim_16	dim_17	dim_18	dim_19	dim_20
romantic	0.0666	0.4144	-	fellowship	0.7444	-0.2351	0	unite	0.4261	0.1217	-0.22	sebastian	-0.2173	0.4262	1.					
grace	-0.1581	0.3223	0	trinity	0.4678	-0.3385	0	forge	0.9463	0.1668	-0.12	compatriot	-0.3317	-0.0918	0.					
dancer	0.0898	-0.3574	-0	arctic	0.6499	-0.3297	0	tools	0.5446	0.933	-0.5	qualifier	-0.5405	-0.1384	0.					
maiden	0.1843	-0.1257	0	facto	-1.0292	-0.5201	-0	dos	-0.9326	-0.1057	-0.08	moth	0.3787	-0.0256	0.					
beautiful	0.176	0.4698	-0	episcopal	-0.1593	-0.9747	0	signatures	0.0735	0.1731	-1.03	atletico	-1.1712	1.0625	1.					
sister	0.1087	-0.2427		administered	-0.3818	-0.1915	0	solidarity	0.1673	0.7088	-0.65	steelers	0.4911	0.2074	0.					
musical	0.29	0.3383	-1	borough	1.1643	-1.4683	0	apec	0.214	0.4211	-0.16	medalist	0.6142	0.6976	0.					
grandmother	0.0414	-0.1055	0	territorial	0.1781	-0.9092		collective	0.0147	0.117	-1.03	linebacker	0.4323	-0.1972	0.					
lover	0.0437	-0.2838	-0	choir	-0.4242	-0.0152	-0	employ	-0.0968	-0.0932	-0.20	cubs	0.1387	0.6647	0.					
princess	-0.2385	0.0925		degrees	-0.3126	0.2921	-0	stick	-0.6791	0.8881	-0.52	quarterfinals	-0.5538	0.2093	0.					

`love - hate` — Per-Dimension Summary (mean, median, std, var)

`love / hate` — Per-Dimension Summary (mean, median, std, var)

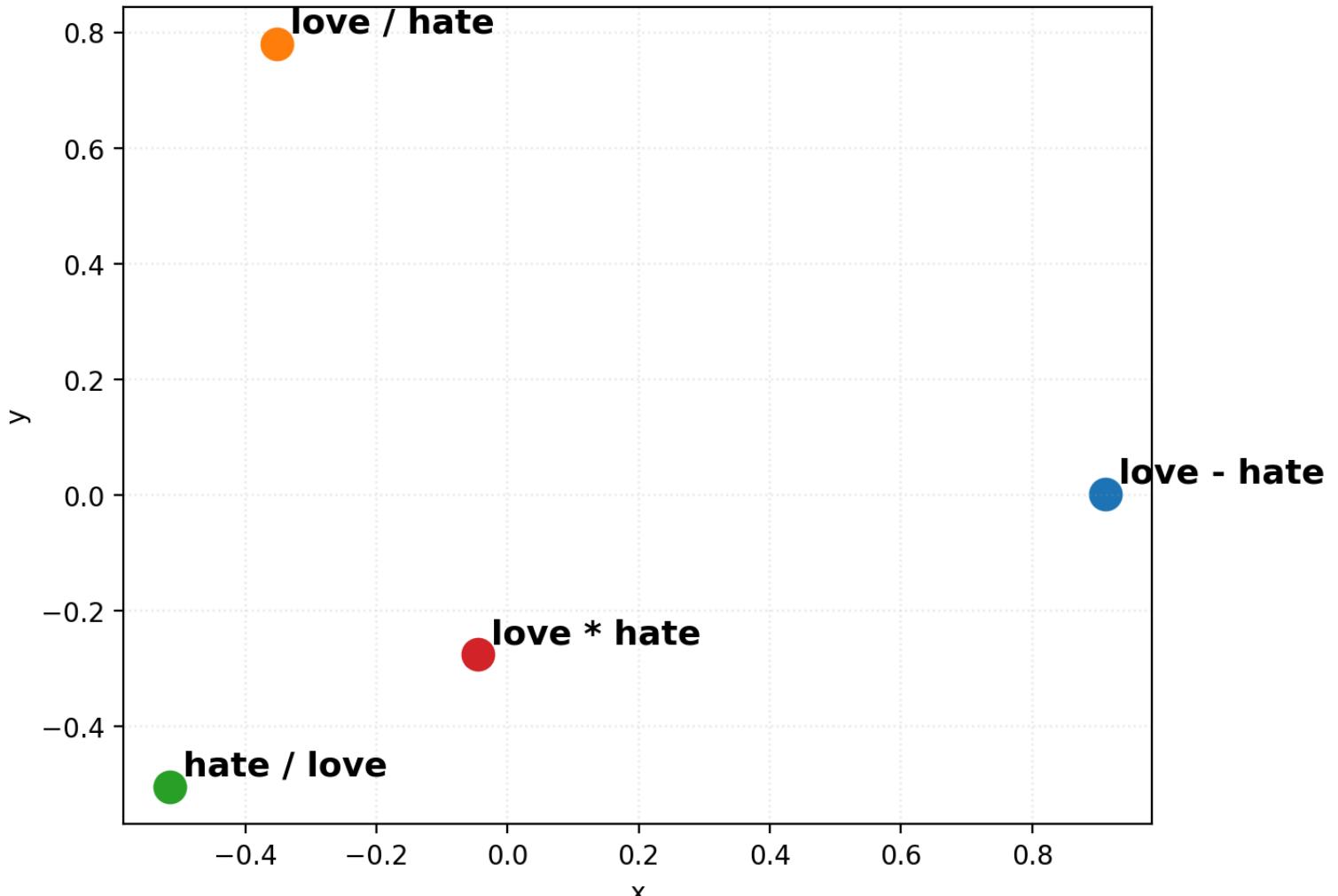
`hate / love` — Per-Dimension Summary (mean, median, std, var)

`love * hate` — Per-Dimension Summary (mean, median, std, var)

	mean	median	std												
dim_1	0.0604	0.0782	0.1	dim_1	0.0897	0.0094	0.6	dim_1	0.0678	0.1204	0.5	dim_1	-0.0759	-0.0393	0.5
dim_2	0.0522	-0.0065	0.2	dim_2	-0.469	-0.3341	0.4	dim_2	0.3331	0.17	0.3	dim_2	0.2815	0.2084	0.4
dim_3	-0.3507	-0.2233	0.6	dim_3	0.1695	0.1844	0	dim_3	-0.4574	-0.3694	0	dim_3	0.7937	0.724	0.5
dim_4	0.2848	0.3325	0.4	dim_4	0.2306	0.141	0.6	dim_4	0.1094	0.2079	0.4	dim_4	-0.123	-0.0967	0.5
dim_5	-0.0085	-0.0283	0.3	dim_5	-0.0027	0.0752	0.3	dim_5	-0.0667	-0.0005	0.3	dim_5	0.0344	-0.0309	0.4
dim_6	0.3657	0.3743	0.3	dim_6	0.2486	0.163	0.4	dim_6	0.1591	0.1854	0.4	dim_6	0.0334	0.025	0.3
dim_7	0.0302	0.1065	0.3	dim_7	0.1263	0.1774	0.3	dim_7	0.2828	0.346	0.4	dim_7	-0.2479	-0.2547	0.5
dim_8	0.1988	0.0248	0.4	dim_8	-0.2803	-0.158	0.6	dim_8	0.0508	0.0293	0	dim_8	-0.294	-0.245	0.6
dim_9	0.1341	0.1158	0.1	dim_9	0.1136	0.3001	0.6	dim_9	0.0596	-0.0407	0.5	dim_9	0.6258	0.6369	0.3
dim_10	0.1147	0.115	0.3	dim_10	0.1525	0.1657	0.5	dim_10	-0.304	-0.1301	0.5	dim_10	0.1215	0.1069	0.2

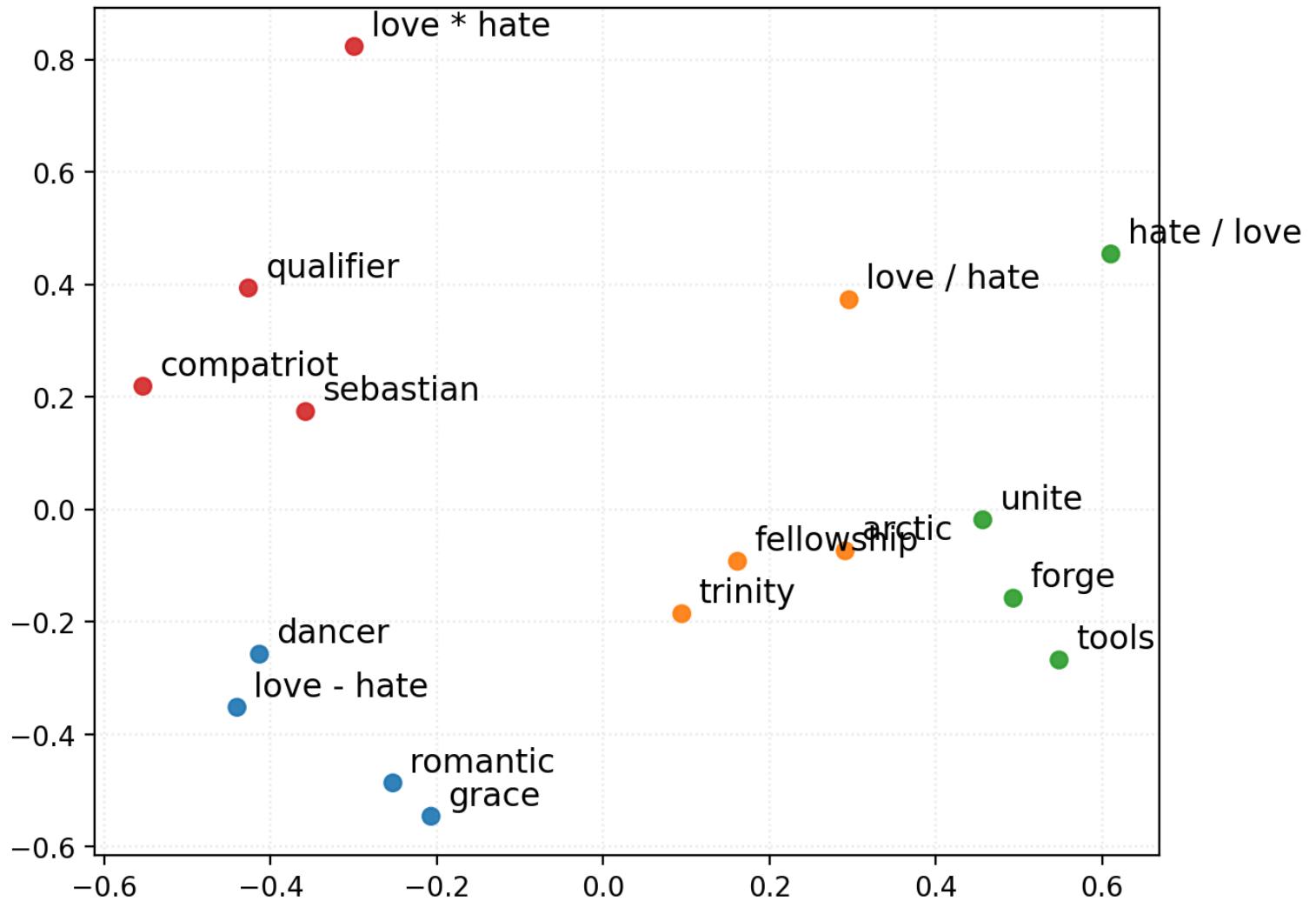
## Semantic Space (2D PCA)

Semantic Space (2D PCA)



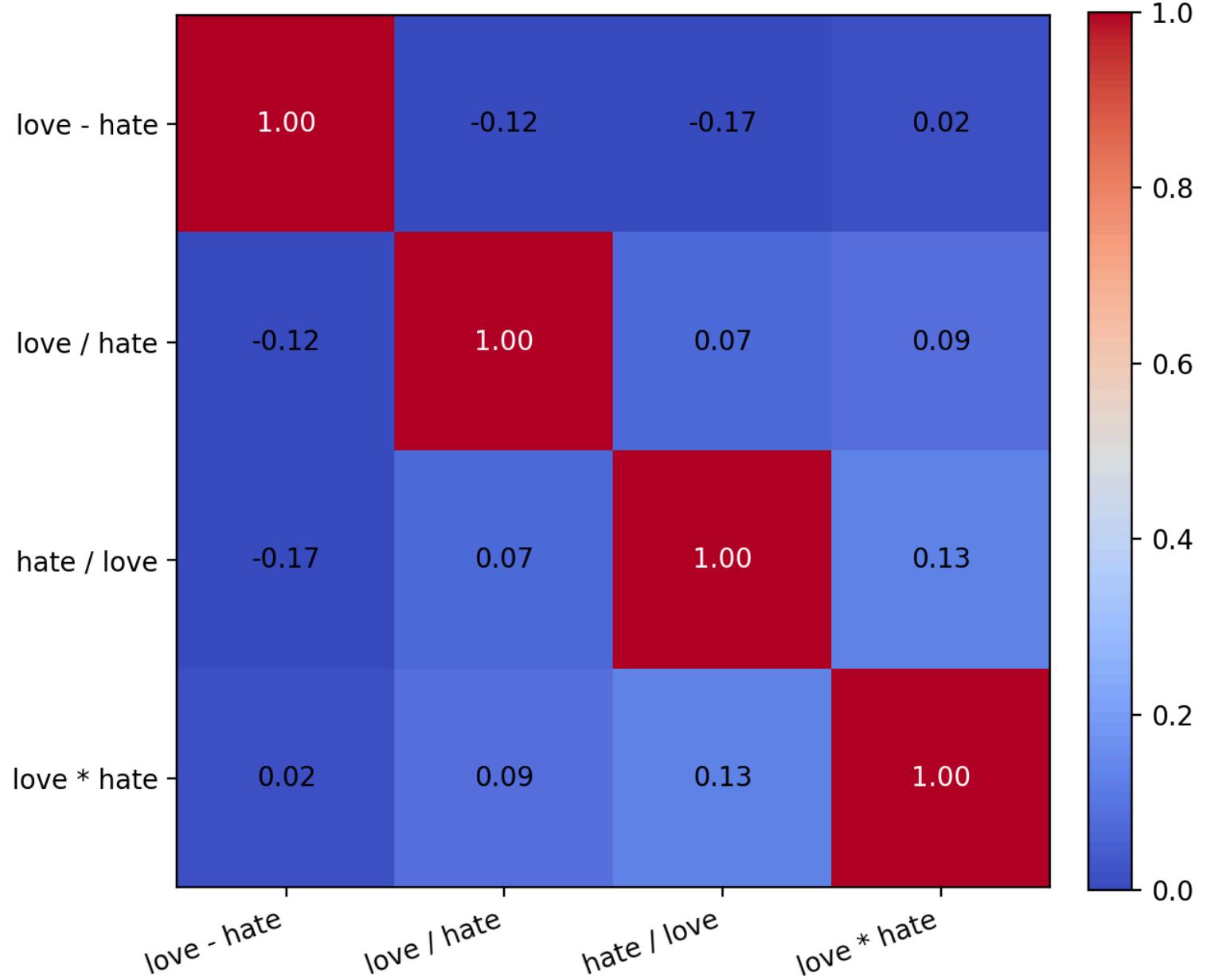
## PCA Projection (Equations + Top-3 Words)

# PCA Projection (Equations + Top-3 Words)



## Cosine Similarity Matrix (Equations)

# Cosine Similarity Matrix



Loaded 10,000 words from `glove_top10k_100d.txt` — vectors: 100 dims.