MySQL & Knowledge Discovery in the SPL Database

Investigation of Nonfiction Checkouts pertaining to Arab and Middle Eastern Countries

MAT 259A

Will Sheppard

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Introduction. The United States has been involved in several armed conflicts in the Middle East and Northern Africa in the twenty-first century, whether intermittently or continuous. In particular, the US war in Afghanistan has the distinction of being the longest-running conflict in US history, beginning in October 2001 and continuing to the present. Using the Seattle Public Library database, I investigate how library patrons checkout materials relating to certain countries in these regions, in the hopes of gauging the interest of Americans in the conflicts over time. In addition, I include checkouts of a few terms the media associates with these regions to find the associations Americans make between places and concepts.

Search query:

```
SELECT
  YEAR(cout) AS Year,
  COUNT(IF(title LIKE '%iraq%', 1, NULL)) AS 'Iraq',
  COUNT(IF(title LIKE '%israel%', 1, NULL)) AS 'Israel',
  COUNT(IF(title LIKE '%afghanistan%', 1, NULL)) AS 'Afghanistan',
  COUNT(IF(title LIKE '%iran%', 1, NULL)) AS 'Iran',
  COUNT(IF(title LIKE '%palestine%' OR title LIKE '%gaza%' OR title LIKE '%west bank%' , 1, NULL)) AS 'Palestine',
  COUNT(IF(title LIKE '%syria%', 1, NULL)) AS 'Syria',
  COUNT(IF(title LIKE '%lebanon%', 1, NULL)) AS 'Lebanon',
  COUNT(IF(title LIKE '%tunisia%', 1, NULL)) AS 'Tunisia',
  COUNT(IF(title LIKE '%libya%', 1, NULL)) AS 'Libya',
  COUNT(IF(title LIKE '%somalia%', 1, NULL)) AS 'Somalia',
  COUNT(IF(title LIKE '%yemen%', 1, NULL)) AS 'Yemen',
  COUNT(IF(title LIKE '%saudi arabia%', 1, NULL)) AS 'Saudi Arabia',
  COUNT(IF(title LIKE '%terror%' OR title LIKE '%terrorism%' , 1, NULL)) AS 'Terror',
  COUNT(IF(title LIKE '%arab spring%', 1, NULL)) AS 'Arab Spring',
  COUNT(IF(title LIKE '%islam%', 1, NULL)) AS 'Islam',
  COUNT(IF(title LIKE '%war%', 1, NULL)) AS 'War',
  COUNT(IF(title LIKE '%intifada%', 1, NULL)) AS 'Intifada',
  COUNT(IF(title LIKE '%refugee%' OR title LIKE '%refugees%', 1, NULL)) AS 'Refugee',
  COUNT(IF(title LIKE '%vietnam%', 1, NULL)) AS 'Vietnam'
FROM
  spl_2016.outraw
WHERE
  YEAR(cout) BETWEEN 2006 AND 2019
  AND deweyClass >= 900
GROUP BY YEAR(cout)
ORDER BY YEAR(cout);
```
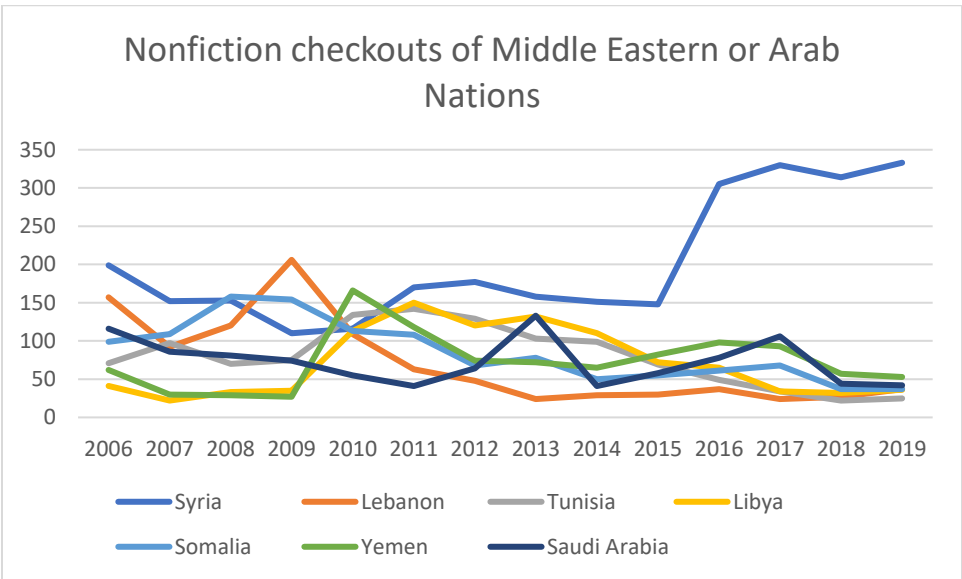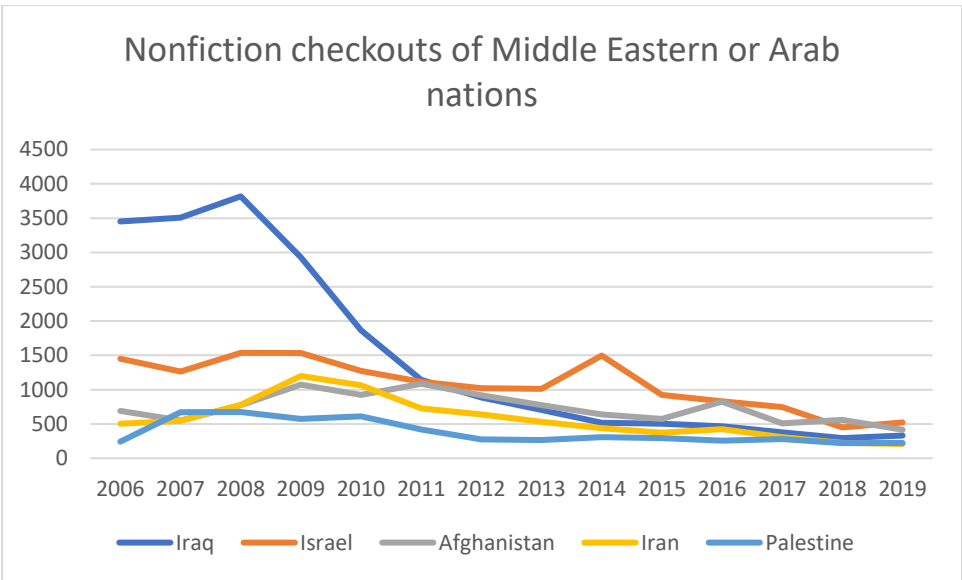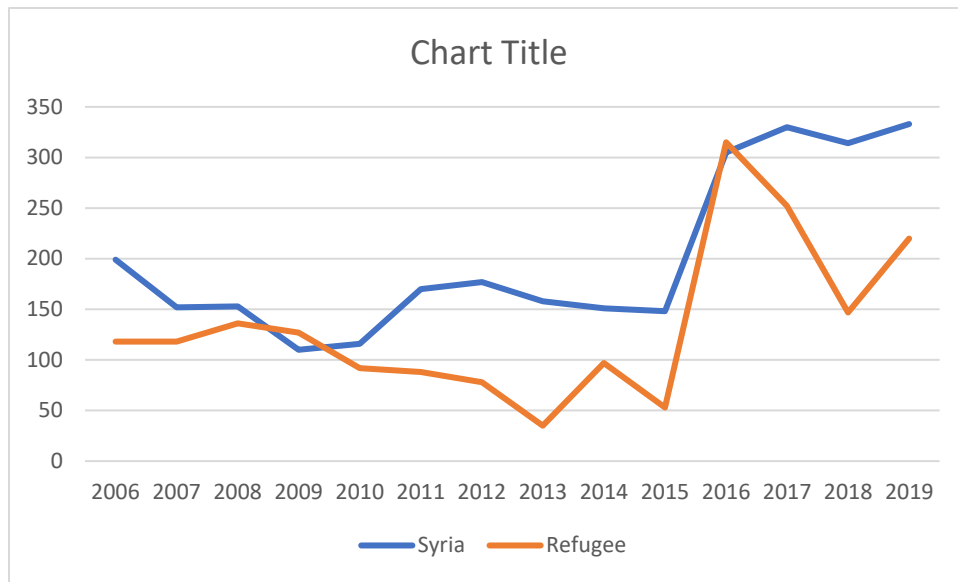
Output table and associated plots:

Year	Iraq	Israel	Afghanistan	Iran	Palestine	Syria	Lebanon	Tunisia	Libya	Somalia	Yemen	Saudi Arabia	Terror	Arab Spring	Islam	War	Intifada	Refugee	Vietnam
2006	3451	1450	691	504	243	199	157	71	41	99	62	116	1474	0	514	17686	9	118	2255
2007	3508	1262	548	543	671	152	92	97	22	109	30	86	1003	0	414	17101	21	118	2353
2008	3818	1536	772	779	674	153	120	70	33	158	29	81	1650	0	689	23964	34	136	2817
2009	2927	1533	1072	1199	574	110	206	75	35	154	27	74	1489	0	628	22976	14	127	2591
2010	1867	1275	925	1065	612	116	109	134	113	113	166	55	852	0	472	21515	8	92	2521
2011	1143	1116	1085	726	419	170	63	142	150	108	118	41	2115	0	347	20878	7	88	2206
2012	888	1020	919	640	273	177	48	129	120	68	74	64	2282	14	357	18787	2	78	2023
2013	704	1012	776	530	266	158	24	103	132	78	72	133	1232	19	381	20684	9	35	2325
2014	518	1499	640	439	306	151	29	99	110	50	65	41	853	22	246	20232	29	97	1981
2015	504	924	572	371	294	148	30	69	72	55	82	58	853	18	285	18835	24	53	2631
2016	468	828	823	422	254	305	37	49	65	61	98	78	794	24	327	16565	12	315	2092
2017	377	745	510	307	278	330	24	34	34	68	93	106	661	111	418	16310	1	252	2903
2018	294	449	559	224	220	314	27	22	32	37	57	44	367	27	308	10683	4	147	1950
2019	331	524	415	207	222	333	37	25	36	37	53	42	486	9	321	13797	5	220	1979

Nonfiction checkouts of Middle Eastern or Arab nations
(Iraq, Israel, Afghanistan, Iran, Palestine)

Nonfiction checkouts of Middle Eastern or Arab Nations
(Syria, Lebanon, Tunisia, Libya, Somalia, Yemen, Saudi Arabia)

Chart Title

Syria — Refugee

Analysis: Observe first that "Vietnam" is clearly not a country in the region of interest, nor has the US been involved in conflicts Vietnam for decades. This search term is meant only to provide a comparison of interest in present conflicts in relation to a previous one. We observe that while interest in "Vietnam" has stayed relatively constant in the period 2006-2019, interest in Middle Eastern and Arab nations has steadily decreased. This notably includes Afghanistan, despite the conflict persisting throughout this period.

The notable exception to this trend is Syria, where interest remained constant up to 2015, but afterwards roughly doubled. Notably, the trend of checkouts for "Syria" is quite similar to the trend for "refugees," suggesting that refugees in general seem to be associated primarily with Syria in the public imagination, especially around 2015-16.

Also interesting is that interest in titles related to "Israel" and "Palestine" have mostly waned in the period 2006-2019, despite the continued strife between them. In particular, while the Trump Administration moved the US embassy in Israel and made other changes to US policy in Israeli relations, this apparently did not change the number of checkouts.