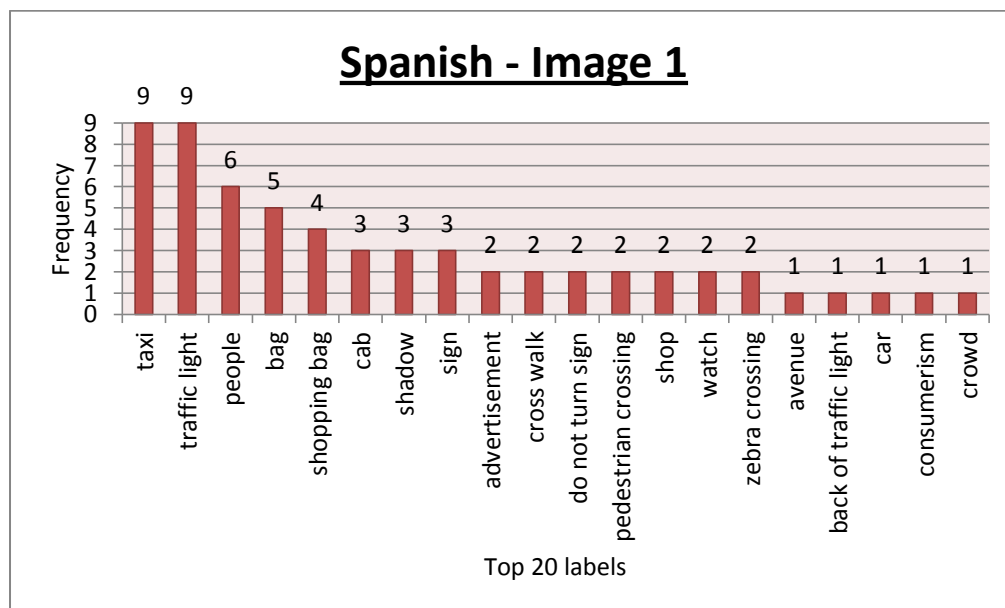
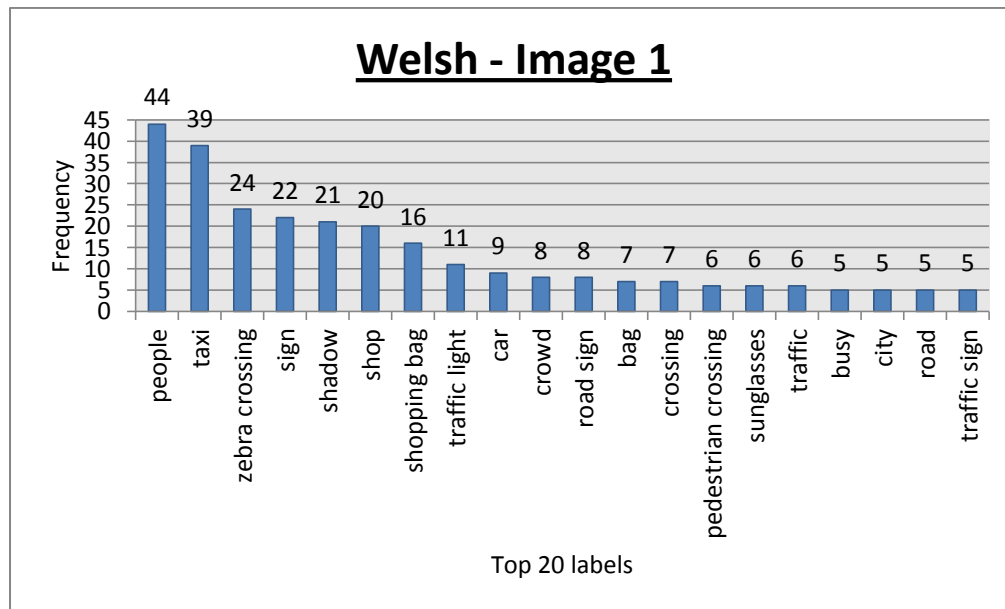
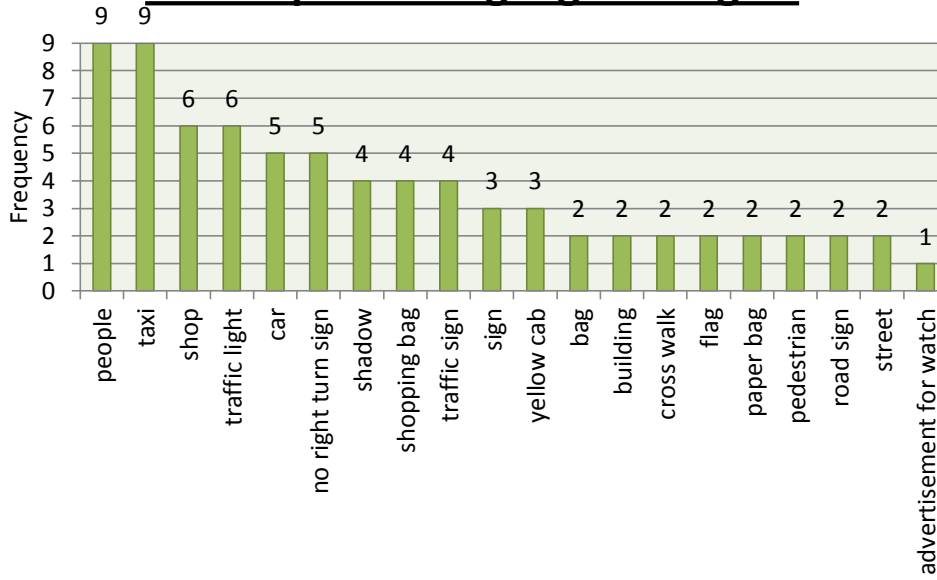


## Image 1

### Top 20 most frequent annotations

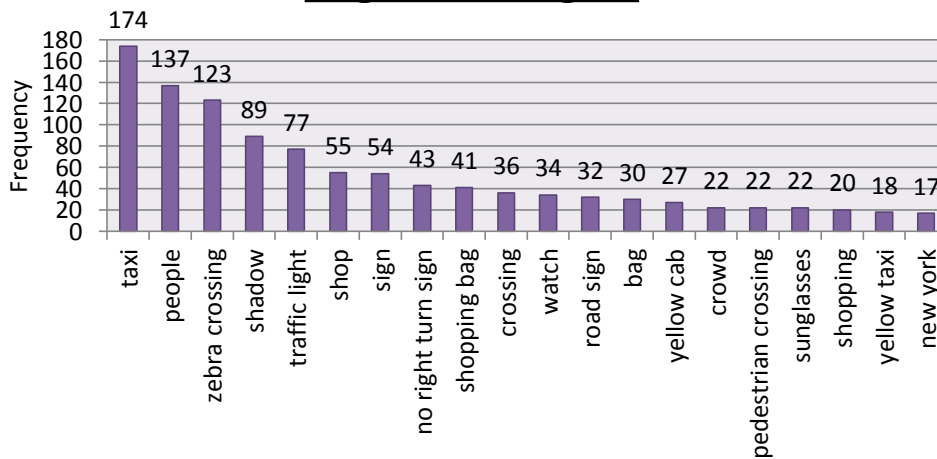


## Other spoken language - Image 1



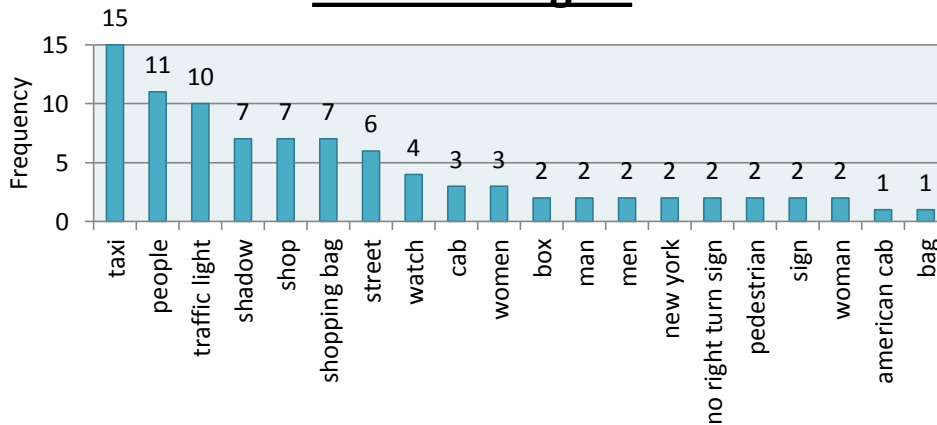
Top 20 labels

## English - Image 1



Top 20 labels

## Arabic - Image 1



Top 20 labels

## Collocation

Arabic		
Stem	Collocation	Frequency
traffic light	2	10
shopping bag	2	7
no right turn sign	4	2
new york	2	2
white cross path	3	1
brown paper bag	3	1
man wearing sunglasses	3	1
overcrowded zebra crossing	3	1
everyday city life	3	1
new york city	3	1
new york cab	3	1
yellow taxi	2	1
zebra line	2	1
jewellery advertisement	2	1
shopping store	2	1

Welsh		
Stem	Collocation	Frequency
zebra crossing	2	24
shopping bag	2	16
traffic light	2	11
road sign	2	8
pedestrian crossing	2	6
yellow cab	2	5
traffic sign	2	5
no parking sign	3	3
yellow taxi	2	3
busy street	2	3
new york	2	3
no right turn sign	4	2
man wearing sunglasses	3	2
green jumper	2	2
white scarf	2	2

Tamil		
Stem	Collocation	Frequency
no right turn sign	4	1
advertisement for watch	3	1
people shopping	2	1
traffic light	2	1
watch advertisement	2	1
many people	2	1
road sign	2	1

Spanish		
Stem	Collocation	Frequency
traffic light	2	9
shopping bag	2	4
do not turn sign	4	2
pedestrian crossing	2	2
zebra crossing	2	2
cross walk	2	2
girl with small carton box	5	1
back of traffic light	4	1
many people wearing sunglasses	4	1
woman wearing green cardigan	4	1
people looking right	3	1
man wearing glasses	3	1
people buying	3	1
lady wearing green	3	1
two country flags	3	1

Other language		
Stem	Collocation	Frequency
traffic light	2	6
no right turn sign	4	5
traffic sign	2	4
shopping bag	2	4
yellow cab	2	3
cross walk	2	2
paper bag	2	2
road sign	2	2
woman wearing neon jumper	4	1
woman wearing white scarf	4	1
woman with shopping bag	4	1
woman wearing red sweater	4	1
commercial for watch	3	1
neon green sweater	3	1
man wearing sunglasses	3	1

German		
Stem	Collocation	Frequency
lady touching her face	4	1
back of traffic light	4	1
woman wearing red shirt	4	1
shopping bag	2	1
cross walk	2	1
traffic light	2	1

English		
Stem	Collocation	Frequency
zebra crossing	2	123
traffic light	2	77
no right turn sign	4	43
shopping bag	2	41
road sign	2	32
yellow cab	2	27
pedestrian crossing	2	22
yellow taxi	2	18
new york	2	17
watch advertisement	2	15
street sign	2	15
traffic sign	2	13
man wearing sunglasses	3	8
sign post	2	7
white scarf	2	5

## Co-occurrence

Arabic		
Stem1	Stem2	Count
shadow	street	5
traffic sign	watch	4
man wearing sunglasses	taxi	3
brown paper bag	traffic light	2
flag	street sign	2
new york	shopping bag	2
shadow	woman	2
shop	vehicle	2

English		
Stem1	Stem2	Count
people	taxi	135
taxi	zebra crossing	91
people	zebra crossing	73
taxi	traffic light	71
people	shop	60
shadow	taxi	55
people	shadow	51
people	sign	51
people	traffic light	51
sign	taxi	50
traffic light	zebra crossing	47
shop	taxi	44
shopping bag	taxi	40
crossing	taxi	35
shadow	zebra crossing	31

Other language		
Stem1	Stem2	Count
building	people	12
cab	people	8
people	traffic sign	8
shadow	traffic sign	5
paper bag	taxi	4
box	taxi	3
cab	traffic sign	3
carrier bag	taxi	3
box	people	2
building	cab	2
building	traffic sign	2
commercial	people	2
green jumper	taxi	2
taxi	woman wearing white scarf	2

Spanish		
Stem1	Stem2	Count
cab	traffic light	7
cab	shopping bag	5
cross walk	traffic light	3
store	traffic light	3
cab	cross walk	2
cab	watch	2
cross walk	people	2
primark bag	zebra crossing	2

Tamil		
Stem1	Stem2	Count
store	taxi	4
advertisement for watch	store	2
advertisement for watch	taxi	2
many people	traffic light	2
many people	watch advertisement	2
people shopping	taxi	2

Urdu		
Stem1	Stem2	Count
flag	traffic	4
flag	watch advertisement	3
bag	man	2
bag	woman	2
cab	flag	2
cab	human	2
cab	traffic	2
cab	watch advertisement	2
flag	human	2
human	traffic	2
human	watch advertisement	2
man	yellow	2
traffic	watch advertisement	2

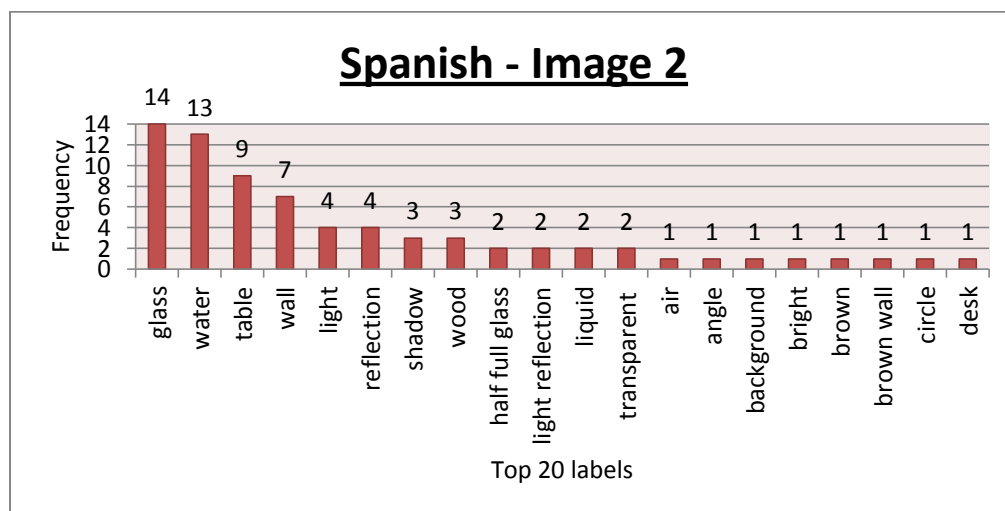
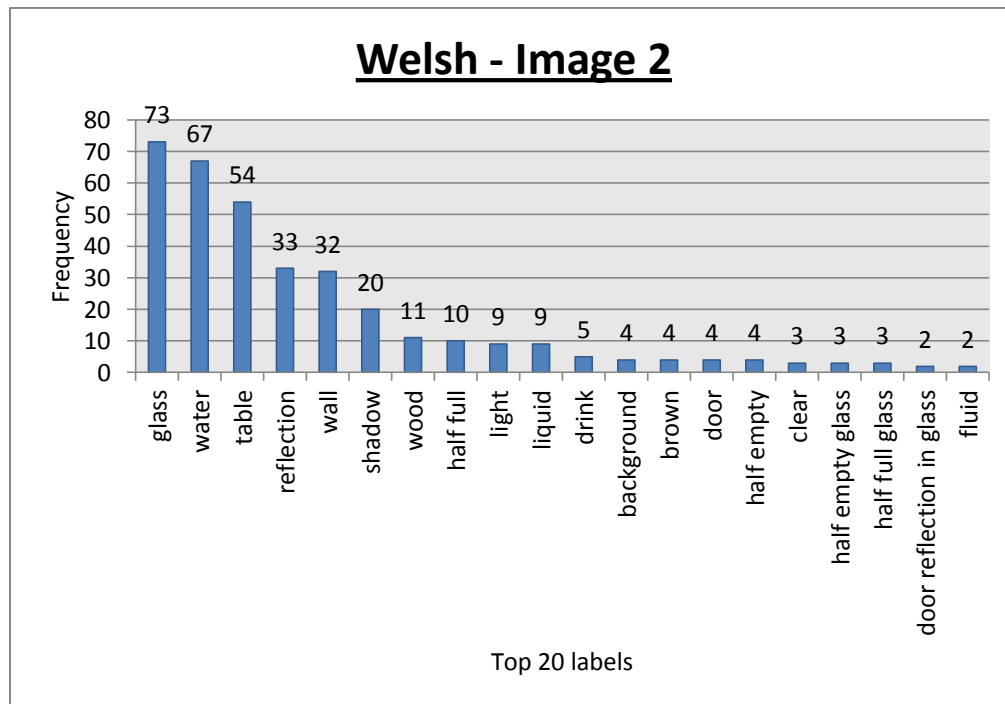
Welsh		
Stem1	Stem2	Count
shadow	shop	17
crossing	shadow	13
shadow	yellow cab	11
car	shadow	10
pedestrian crossing	shopping bag	7
shadow	shopper	7
sign	sunglasses	7
shop	traffic sign	6
shop	yellow cab	6
man wearing sunglasses	zebra crossing	5
shop	sunglasses	5
shopper	yellow cab	5
busy	crowd	4
busy street	pedestrian crossing	4
crowd	people	4

# Co-occurrence PMI

S1 = Stem1 frequency, S2 = S2 frequency, C = co-occurrence frequency											
Welsh						Urdu					
Stem1	Stem2	S1	S2	C	PMI	Stem1	Stem2	S1	S2	C	PMI
green jumper	paper bag	2	1	4	2.886491	bag	man	1	1	2	1.477121
advert	shopping	1	2	3	2.761552	bag	woman	1	1	2	1.477121
new york	sign	3	2	5	2.506279	man	yellow	1	1	2	1.477121
brown coat	yellow cab	1	5	4	2.488551	cab	watch advertisement	2	2	4	1.176091
busy street	nice day	3	1	2	2.409369	flag	watch advertisement	2	2	3	1.051153
men	traffic light	1	11	7	2.389166	cab	flag	2	2	2	0.875061
traffic light	woman wearing brown coat	11	1	6	2.322219	cab	human	2	2	2	0.875061
traffic light	women	11	1	6	2.322219	flag	human	2	2	2	0.875061
flag	traffic light	3	11	7	2.297396	cab	traffic	2	2	2	0.875061
light	movement	2	2	2	2.284431	flag	traffic	2	2	2	0.875061
Other language						English					
Stem1	Stem2	S1	S2	C	PMI	Stem1	Stem2	S1	S2	C	PMI
cab	people	1	9	2	2.146128	busy	traffic	10	12	5	2.846399
building	cab	2	1	2	2.021189	busy street	pedestrian	2	4	3	2.792041
cab	traffic sign	1	4	4	2.021189	pedestrian	vehicle	4	2	3	2.792041
box	taxi	1	9	8	1.970037	traffic signal	yellow taxi	2	18	1	2.7031
box	people	1	9	3	1.544068	road crossing	yellow taxi	3	18	6	2.689736
carrier bag	taxi	1	9	3	1.544068	cross walk	new york city	4	2	2	2.61595
green jumper	taxi	1	9	3	1.544068	men	women	3	4	3	2.61595
shadow	traffic sign	4	4	5	1.516039	road sign	shoe	32	2	5	2.587921
building	traffic sign	2	4	2	1.419129	men	zebra crossing	3	123	1	2.502242
commercial	people	1	9	2	1.367977	brown paper bag	watch	3	34	9	2.488163

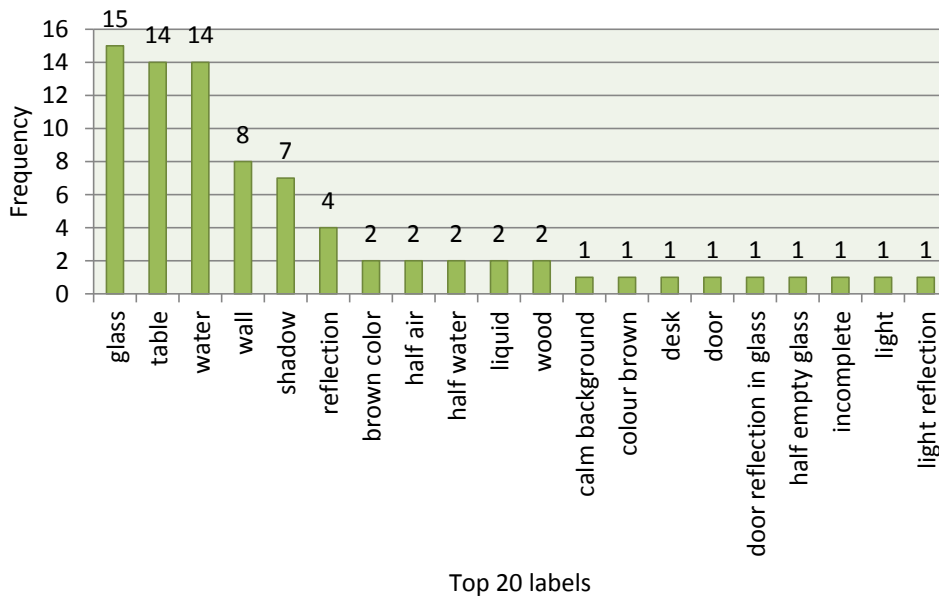
## Image 2

### Top 20 most frequent annotations

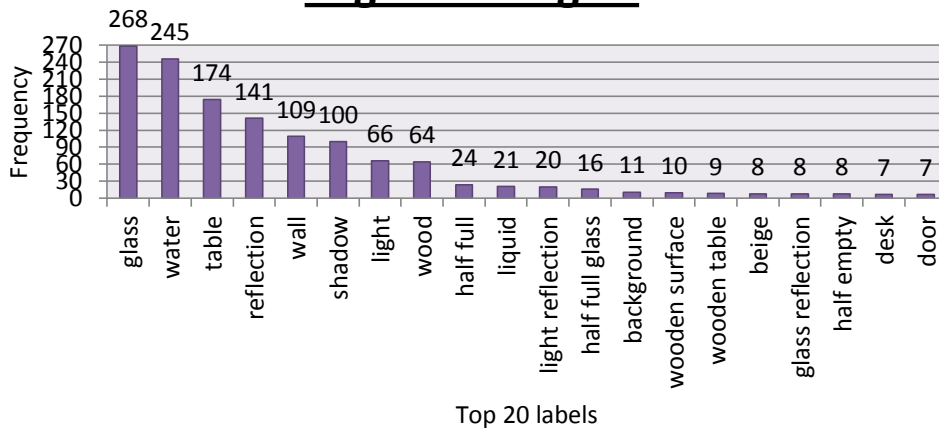




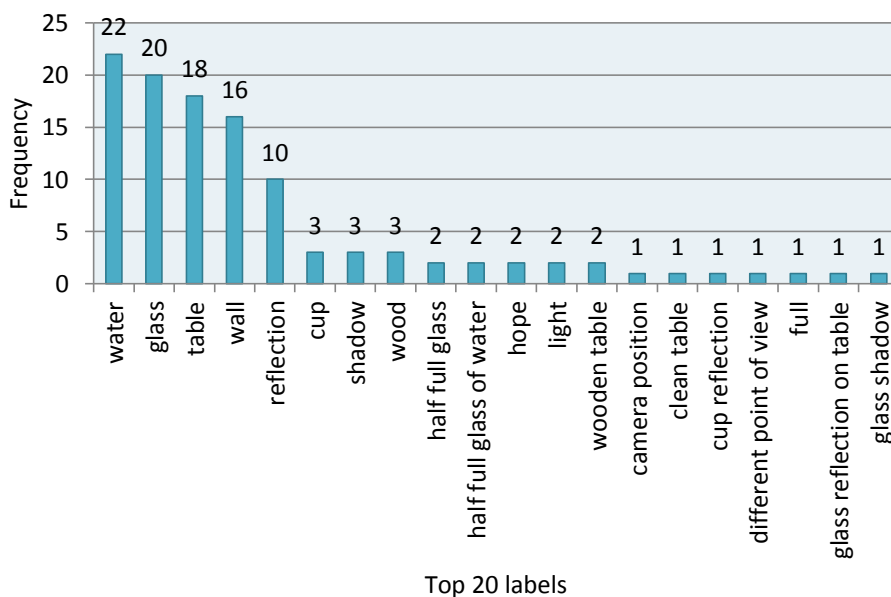
## Other spoken language - Image 2



## English - Image 2



## Arabic - Image 2



## Collocation

Arabic			Welsh		
Stem	Collocation	Frequency	Stem	Collocation	Frequency
half full glass of water	5	2	half full	2	10
half empty glass of water	5	1	half empty	2	4
glass reflection on table	4	1	half empty glass	3	3
light reflection from glass	4	1	half full glass	3	3
pessimist half empty glass	4	1	light reflected from glass	4	2
optimist half full glass	4	1	glass reflection on table	4	2
no water in glass	4	1	door reflection in glass	4	2
different point of view	4	1	light reflection	2	2
half full glass	3	2	wooden table	2	2
half empty glass	3	1	circle on top of glass	5	1
water reflection	3	1	light area around glass	4	1
shadow of glass	3	1	half full container	3	1
optimism versus pessimism	3	1	shadow behind glass	3	1
white wall	2	1	reflection on table	3	1
half full	2	1	highlight on glass	3	1

Tamil			Spanish		
Stem	Collocation	Frequency	Stem	Collocation	Frequency
half full glass of water	5	4	half full glass	3	2
reflection on table	3	2	light reflection	2	2
piece of paper	3	1	light shining in glass	4	1
glass of water	3	1	glass shadow on table	4	1
table top	2	1	glass on surface	3	1
black object	2	1	wall in background	3	1
			half full	2	1
			brown wall	2	1
			white wall	2	1

Other language			German		
Stem	Collocation	Frequency	Stem	Collocation	Frequency
half air	2	2	line between space and liquid	5	1
half water	2	2	half full glass	3	3
brown color	2	2	glass airspace	2	1
door reflection in glass	4	1	white background	2	1
half empty glass	3	1	half full	2	3
shadow of glass	3	1	geometric form	2	1
lonely reflection	2	1	wooden table	2	2
calm background	2	1			
light reflection	2	1			
peach wall	2	1			
colour brown	2	1			
wood surface	2	1			
mirror image	2	1			

English		
Stem	Collocation	Frequency
half full	2	24
light reflection	2	20
half full glass	3	16
wooden surface	2	10
wooden table	2	9
half empty	2	8
glass reflection	2	8
half empty glass	3	7
door reflection	2	5
clear liquid	2	5
half full glass of water	5	4
door reflection in glass	4	4
glass reflection on table	4	4
reflection on table	3	4
white wall	2	4

## Co-occurrence

English		
Stem1	Stem2	Count
glass	water	347
glass	table	263
table	water	248
glass	wall	166
glass	reflection	165
wall	water	158
reflection	water	145
table	wall	136
reflection	table	105
glass	wood	76
glass	light	65
light	water	62
water	wood	62
reflection	wall	61
shadow	wall	55

Other language		
Stem1	Stem2	Count
glass	shadow	113
shadow	water	98
shadow	table	79
light	shadow	19
half empty glass	water	8
brown color	glass	2
brown color	half air	2
brown color	half water	2
brown color	table	2
door reflection in glass	shadow of glass	2
glass	half air	2
glass	half water	2
half air	half water	2
half air	table	2
half water	table	2

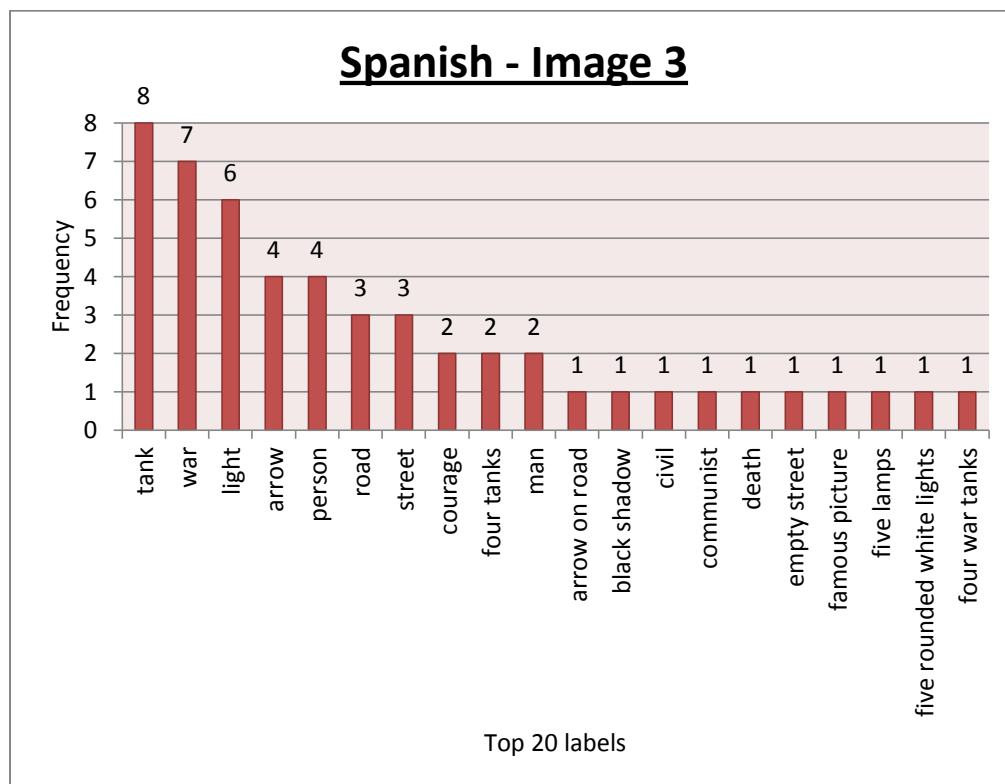
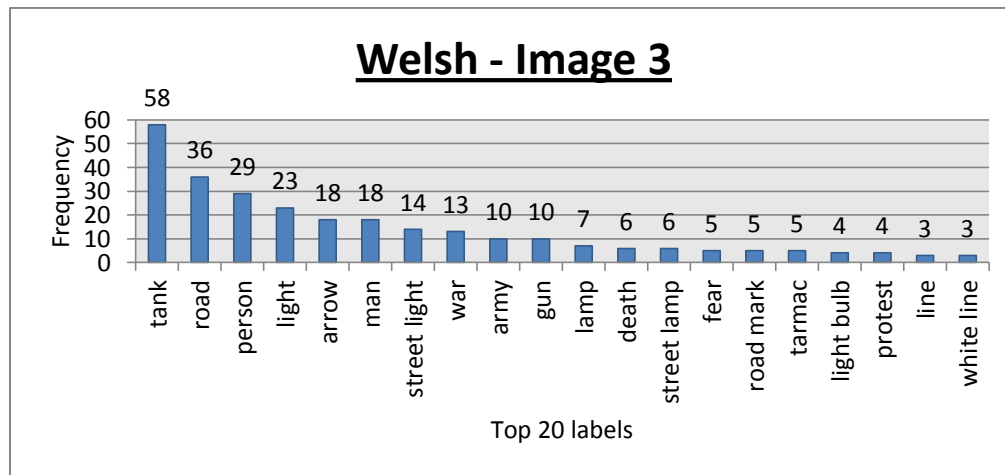
Welsh		
Stem1	Stem2	Count
glass	half full	29
half full	water	23
half full glass	water	15
door	water	10
half full glass	table	10
door	glass	9
door	table	9
glass	half empty	9
half empty	water	9
half full	reflection	9
half empty	half full	8
door	reflection	7
glass	half empty glass	7
half full	wall	7
circle	glass	6

# Co-occurrence PMI

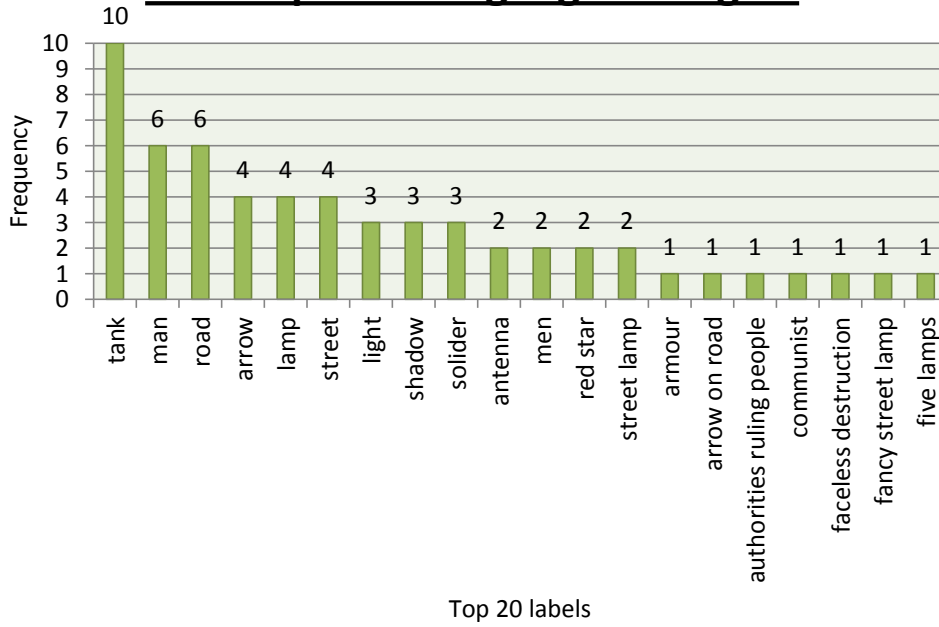
S1 = Stem1 frequency, S2 = S2 frequency, C = co-occurrence frequency											
Welsh						English					
Stem1	Stem2	S1	S2	C	PMI	Stem1	Stem2	S1	S2	C	PMI
glass reflection on table	light reflected from glass	2	2	10	3	cup	cup reflection	5	1	6	3.300335
half full container	light reflected from glass	1	2	2	2.60206	clear	transparent	2	1	2	3.221153
door	shadow	4	20	29	2.161368	half glass of water	table	2	174	347	3.219904
circle	shadow	1	20	7	2.146128	glass	wood grain	268	3	248	2.710349
clear	half empty	3	4	4	2.124939	colour	shine	4	6	7	2.68604
half empty glass	half full glass	3	3	3	2.124939	glass	white background	268	2	145	2.653357
half full glass	light	3	9	9	2.124939	colour brown	water	1	245	62	2.624379
half full	transparent	10	2	6	2.079181	glass of water	reflection on table	3	4	3	2.619093
half empty	half full	4	10	9	1.954243	light	surface	66	4	65	2.612463
glass	thirsty	73	1	9	1.69298	glass reflection	table	8	174	263	2.49747
Other language											
Stem1	Stem2	S1	S2	C	PMI						
rim	wood	1	2	98	3.644439						
light	shadow	1	7	113	3.162223						
door reflection in glass	shadow of glass	1	1	2	2.255273						
shadow	water	7	14	79	1.860644						
brown color	half air	2	2	2	1.653213						
brown color	half water	2	2	2	1.653213						
half air	half water	2	2	2	1.653213						
half air	table	2	14	8	1.410174						
shadow	table	7	14	19	1.24177						
half empty glass	water	1	14	2	1.109144						

### Image 3

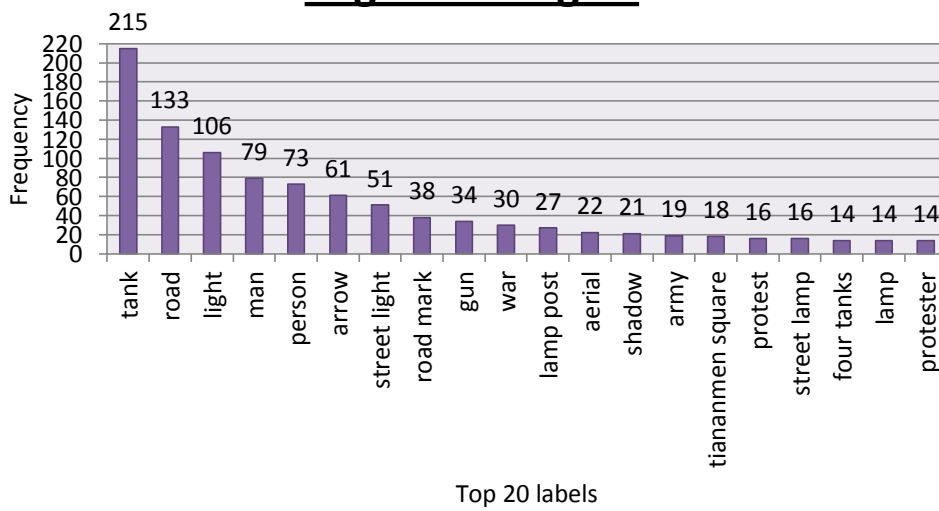
#### Top 20 most frequent annotations



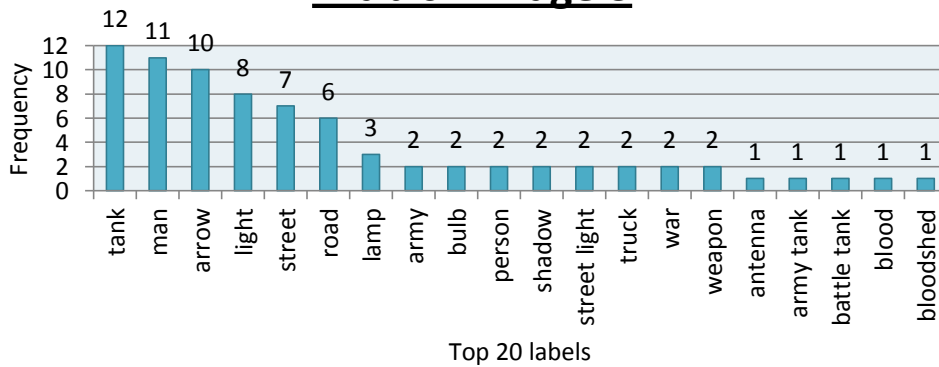
### Other spoken language - Image 3



### English - Image 3



### Arabic - Image 3



## Collocation

Arabic			Welsh		
Stem	Collocation	Frequency	Stem	Collocation	Frequency
street light	2	2	street light	2	14
pedestrian standing in front of tanks	6	1	street lamp	2	6
man in front of tank	5	1	road mark	2	5
pedestrian in street	4	1	light bulb	2	4
four army tanks	3	1	white line	2	3
white street sign	3	1	armoured vehicle	2	2
four killing machines	3	1	red star	2	2
chinese army tank	3	1	road arrow	2	2
man with bag	3	1	lamp post	2	2
lack of hope	3	1	four tanks	2	2
sign of war	3	1	road sign	2	2
fourth tank	2	1	person standing in front of tanks	6	1
third tank	2	1	person in front of tanks	5	1
street lamp	2	1	woman in front of trucks	5	1
battle tank	2	1	person standing in way	4	1

Spanish			Tamil		
Stem	Collocation	Frequency	Stem	Collocation	Frequency
four tanks	2	2	arrow on lane	3	1
tiananmen square protests of 1900	5	1	star on tank	3	1
man wearing black hat	4	1	five tanks	2	1
five rounded white lights	4	1	man obstructing	2	1
size of men	3	1	four tanks	2	2
arrow on road	3	1	road arrow	2	2
missile in air	3	1	light bulb	2	2
four war tanks	3	1			
road with tanks	3	1	Patois / Creole		
street light	2	1	Stem	Collocation	Frequency
human right	2	1	four chinese type 59 tanks	5	1
one direction	2	1	shadow of tree	3	1
famous picture	2	1	wood on road	3	1
lamp post	2	1	white light bulb	3	1
tank direction	2	1	road mark	2	2



Other language			German		
Stem	Collocation	Frequency	Stem	Collocation	Frequency
street lamp	2	2	guy standing in front of tanks	6	1
red star	2	2	four tanks in row	4	1
man standing up for rights	5	1	man wearing black hat	4	1
man wearing white shirt	4	1	stick on road	3	1
person wearing white shirt	4	1	tank driver	2	1
man looking at tank	4	1	street light	2	1
authorities ruling people	3	1	road light	2	1
fancy street lamp	3	1			
shadow of tree	3	1			
arrow on road	3	1			
man hole cover	3	1			
lone struggle	2	1			
faceless destruction	2	1			
street light	2	1			
person outside	2	1			

English		
Stem	Collocation	Frequency
street light	2	51
road mark	2	38
lamp post	2	27
tiananmen square	2	18
street lamp	2	16
four tanks	2	14
arrow on road	3	6
army tank	2	5
white line	2	5
piece of wood	3	4
star on tank	3	4
road sign	2	4
street marking	2	4
man in tank	3	3
shadow of tree	3	3

## Co-occurrence

Arabic		
Stem1	Stem2	Count
bulb	tank	3
light	red star	3
light	truck	3
person	street	3
street	street lamp	3
blood	war	2
bulb	man	2
fourth tank	tank	2
man in front of tank	tank	2
tank	third tank	2

English		
Stem1	Stem2	Count
road	tank	163
light	tank	119
man	tank	97
light	road	84
person	tank	84
person	road	70
arrow	tank	67
man	road	61
light	person	54
light	man	49
arrow	light	44
street light	tank	44
arrow	road	38
gun	tank	36
arrow	person	35

Other language		
Stem1	Stem2	Count
light	solider	8
antenna	man	5
arrow	solider	3
man	solider	3
men	road	3
antenna	arrow	2
antenna	light	2
arrow	men	2
five lamps	four tanks	2
lamp post	white arrow	2
man wearing white shirt	tank	2
men	tank	2
people	street lamp	2
person	shadow of tree	2
road	sign	2

Portuguese		
Stem1	Stem2	Count
lamp	street	5
lamp	shadow	4
shadow	street	4
human	lamp	2
shadow	war tank	2
street	war tank	2

Spanish		
Stem1	Stem2	Count
light	street	7
four tanks	street light	3
hat	tank	3
guy	tank	2
light	stick	2
stick	tank	2
street	war	2

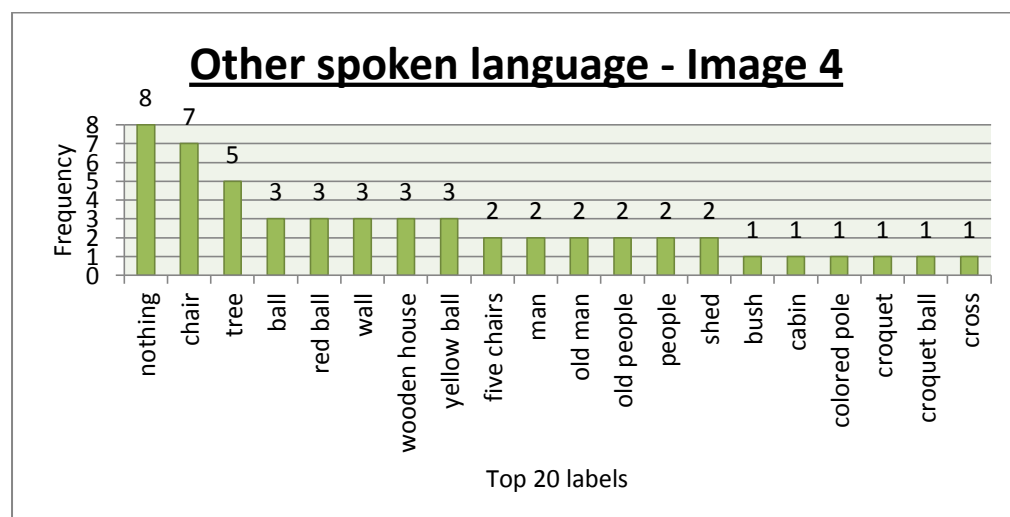
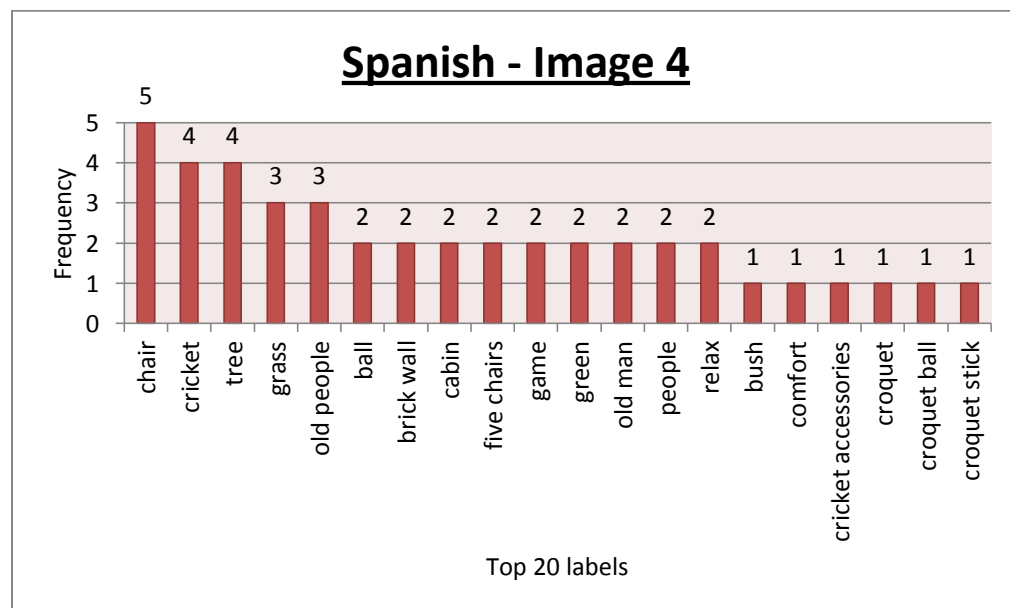
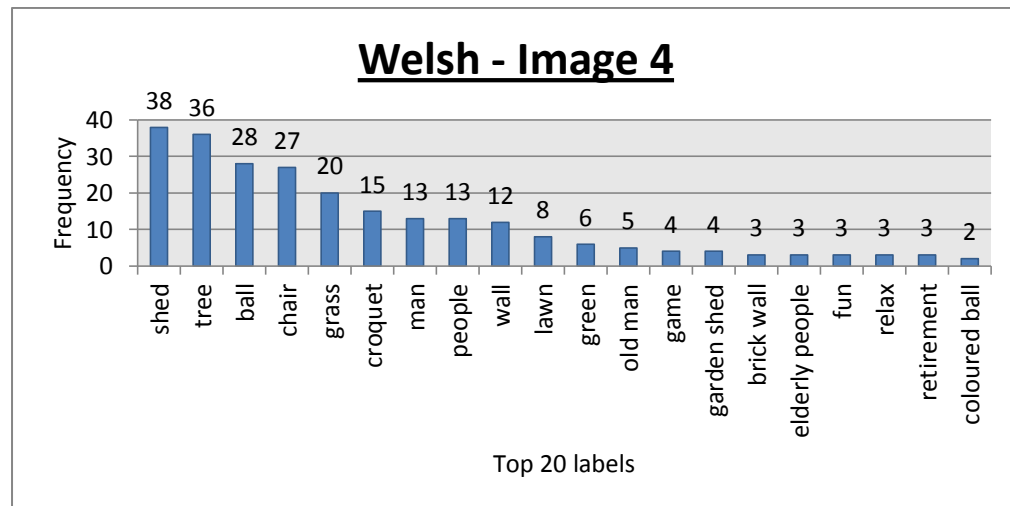
Welsh		
Stem1	Stem2	Count
protester	tank	12
person	street lamp	11
army	light	9
light	line	8
line	person	8
fear	war	7
tank	tarmac	6
army	gun	5
four tanks	man	5
arrow	war	4
light	white line	4
person	war	4
person	white line	4
tank	terror	4
army	lamp	3

## Co-occurrence PMI

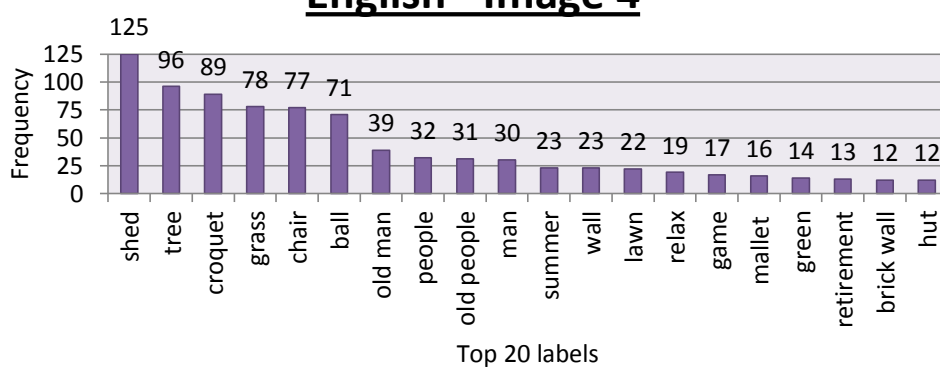
S1 = Stem1 frequency, S2 = S2 frequency, C = co-occurrence frequency											
Welsh						English					
Stem1	Stem2	S1	S2	C	PMI	Stem1	Stem2	S1	S2	C	PMI
red star	road arrow	2	2	7	2.8112 4	communist	corrupt	7	1	13	3.4652 98
lamp post	star	2	1	2	2.5682 02	army tank	road sign	5	4	19	3.1741 76
armored vehicle	red star	2	2	2	2.2671 72	four tanks	stick	14	2	16	2.9534 14
armored vehicle	road arrow	2	2	2	2.2671 72	camouflage	line	10	8	35	2.8374 31
light bulb	street	4	1	2	2.2671 72	threat	war	2	30	21	2.7405 21
road mark	tarmac	5	5	1	2.2116 54	hat	war	2	30	16	2.6224 21
red star	street light	2	14	8	2.0241 34	aerial	wheel	22	9	44	2.5432 4
four tanks	man	2	18	9	1.9661 42	pain	war	2	30	13	2.5322 45
military	protest	2	4	2	1.9661 42	camouflage	direction	10	3	6	2.4974 83
person	white line	29	1	6	1.8839 55	street light	tiananmen square	51	18	16 3	2.4457 97
Other language						Arabic					
Stem1	Stem2	S1	S2	C	PMI	Stem1	Stem2	S1	S2	C	PMI
five lamps	four tanks	1	1	2	2.2041 2	blood	war	1	2	2	2.0969 1
person	shadow of tree	1	1	2	2.2041 2	street	street lamp	7	1	3	1.7289 33
lamp post	white arrow	1	1	2	2.2041 2	light	red star	8	1	3	1.6709 41
people	street lamp	1	2	2	1.9030 9	person	street	2	7	3	1.4279 03
light	solider	3	3	8	1.8519 37	light	truck	8	2	3	1.3699 11
antenna	man	2	6	5	1.5228 79	fourth tank	tank	1	12	2	1.3187 59
antenna	light	2	3	2	1.4259 69	man in front of tank	tank	1	12	2	1.3187 59
road	sign	6	1	2	1.4259 69	tank	third tank	12	1	2	1.3187 59
men	road	2	6	3	1.3010 3	bulb	tank	2	12	3	1.1938 2
arrow	solider	4	3	3	1.3010 3	bulb	man	2	11	2	1.0555 17

## Image 4

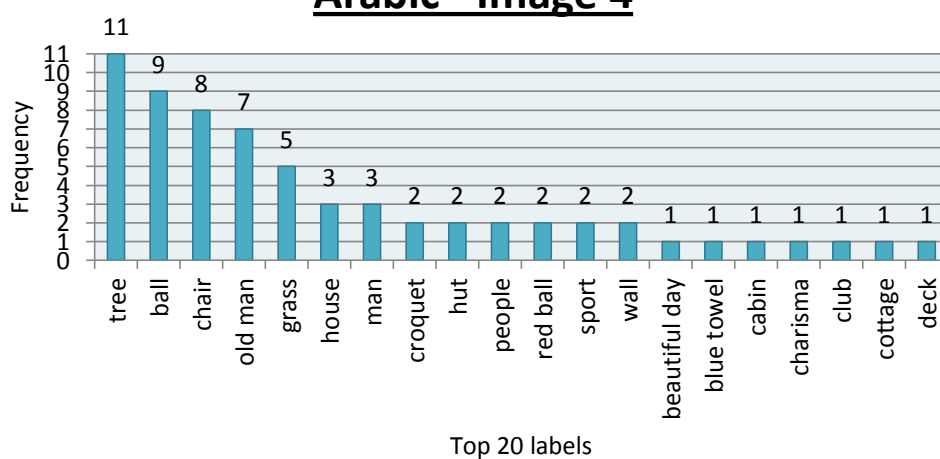
### Top 20 most frequent annotations



### English - Image 4



### Arabic - Image 4



## Collocation

English			German		
Stem	Collocation	Frequency	Stem	Collocation	Frequency
old man	2	39	yellow ball	2	3
old people	2	31	old man	2	3
mallet	2	16	croquet gate	2	1
summer house	3	12	red ball	2	1
brick wall	2	12	wooden building	2	1
yellow ball	2	10			
plastic chair	2	9			
croquet mallet	2	8			
croquet ball	2	7			
elderly people	2	7			
garden shed	2	7			
man playing croquet	3	6			
question mark	2	6			
red ball	2	6			
croquet stick	2	6			

Other language			Spanish		
Stem	Collocation	Frequency	Stem	Collocation	Frequency
yellow ball	2	3	old people	2	3
red ball	2	3	old man	2	2
wooden house	2	3	brick wall	2	2
old man	2	2	five chairs	2	2
old people	2	2	two elderly women friends	4	1
five chairs	2	2	woman wearing sunglasses	3	1
old people having a good time	6	1	ray of sunlight	3	1
old man playing croquet	4	1	green grass	2	1
little tool shed	3	1	english domination	2	1
two people sitting	3	1	old age	2	1
white plastic bag	3	1	open air	2	1
colored pole	2	1	relax time	2	1
trimmed grass	2	1	yellow ball	2	1
old couple	2	1	fallen branch	2	1
grey frame	2	1	cricket accessories	2	1

Tamil			Welsh		
Stem	Collocation	Frequency	Stem	Collocation	Frequency
people sitting on chair	4	1	old man	2	5
jacket hung on side	4	1	garden shed	2	4
colourful central pole	3	1	elderly people	2	3
person playing	2	1	brick wall	2	3
wooden hut	2	1	garden chair	2	2
old man	2	4	yellow ball	2	2
			croquet set	2	2
			lawn chair	2	2
			coloured ball	2	2
			old people	2	2
			old aged pensioners socializing	5	1
			towel resting on cabin side	5	1
			people sitting in background	4	1
			people sitting on chair	4	1
			coloured stick in grass	4	1

Arabic		
Stem	Collocation	Frequency
old man	2	7
red ball	2	2
two people in background	4	1
small wooden house	3	1
three old people	3	1
relaxed old men	3	1
long lasting life	3	1
two men sitting	3	1
three people	2	1
sunny day	2	1
yellow ball	2	1
beautiful day	2	1
green tree	2	1
old people	2	1
old couple	2	1



## Co-occurrence

Arabic		
Stem1	Stem2	Count
croquet	leisure	3
ball	men	2
cabin	red ball	2
cabin	yellow ball	2
hut	people	2
man	red ball	2
retirement	sunny day	2

English		
Stem1	Stem2	Count
shed	tree	75
ball	shed	63
chair	shed	60
grass	shed	58
croquet	shed	56
chair	grass	47
croquet	tree	35
croquet	grass	33
people	tree	33
old man	shed	27
ball	man	26
shed	wall	26
man	shed	25
old man	tree	24
chair	croquet	23

Other language		
Stem1	Stem2	Count
chair	old man	18
house	old man	4
old man	yellow ball	4
grey frame	nothing	3
nothing	white space	3
old people	park	2
red ball	wooden house	2

Urdu		
Stem1	Stem2	Count
ball	people	20
grass	people	18
chair	house	6
grass	house	6
ball	house	5
house	people	4

Spanish		
Stem1	Stem2	Count
cricket	grass	3
cricket	old people	3
house	tree	3
ball	player	2
bush	five chairs	2
cabin	old man	2
chair	men	2
chair	sport	2
people	sport	2

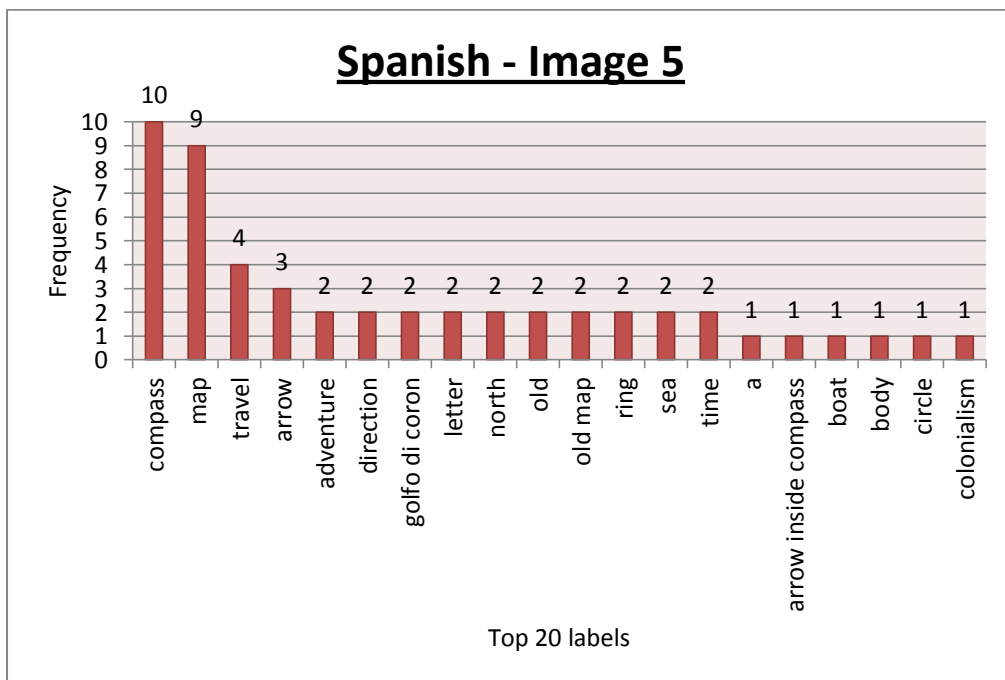
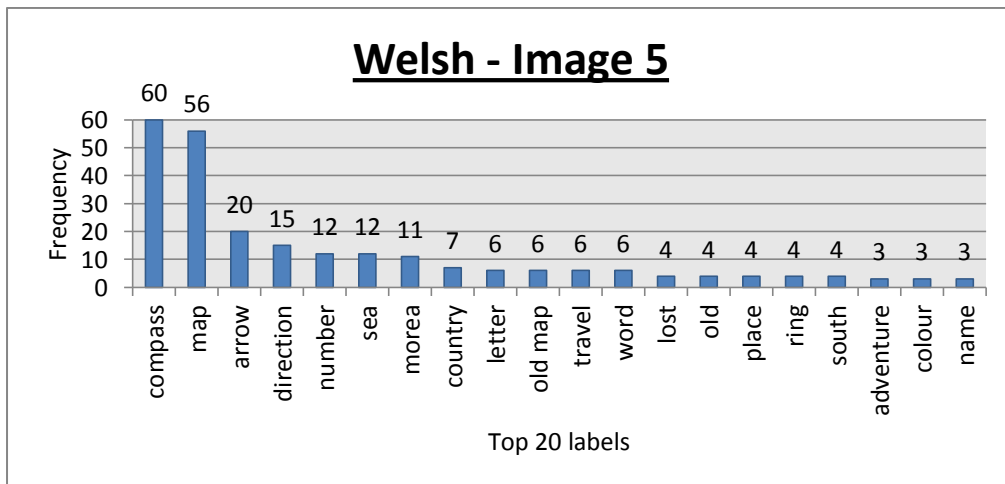
Welsh		
Stem1	Stem2	Count
chair	tree	55
ball	chair	51
ball	tree	47
grass	tree	47
ball	grass	36
chair	people	30
tree	wall	28
ball	wall	16
brick wall	chair	8
croquet	garden	5
croquet	garden shed	5
green	retirement	5
green	tree	5
retirement	shed	5
chair	green	4

# Co-occurrence PMI

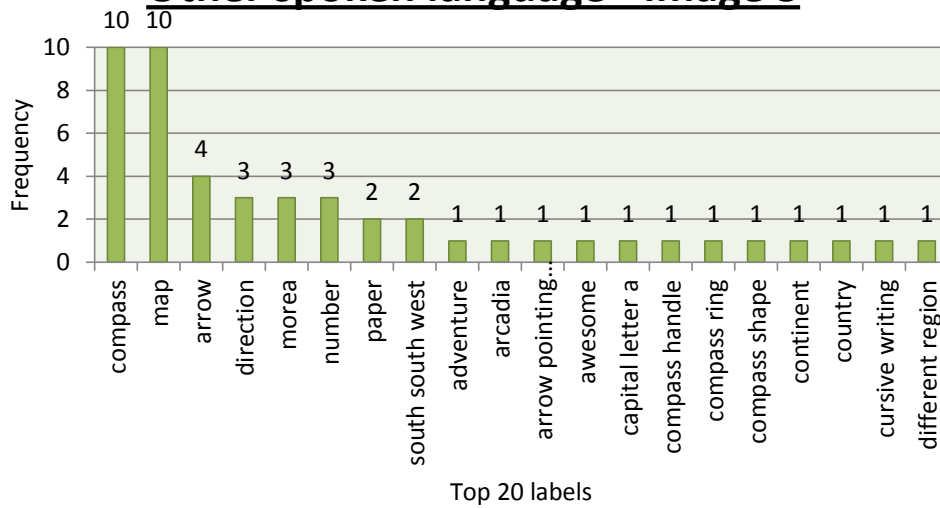
S1 = Stem1 frequency, S2 = S2 frequency, C = co-occurrence frequency											
Welsh						English					
Stem1	Stem2	S1	S2	C	PMI	Stem1	Stem2	S1	S2	C	PMI
concentrate	sunshine	1	1	4	4.2284	jumper over deck rail	nice grass	2	2	2	3.8762
fun	green	3	6	5	3.0413	nice grass	three old people	2	2	1	3.8304
relax	sunshine	3	1	5	2.7781	shoe	spaghetti	3	1	1	3.7415
man	yellow ball	13	2	2	2.5884	potential	white	2	11	7	3.7098
wooden shed	yellow ball	1	2	2	2.5563	flat cap	white plastic chair	2	2	5	3.2741
concentrate	relax	1	3	2	2.3802	couple	stick	1	3	2	3.0011
ball	fun	28	3	3	2.1883	hoop	mallet	4	18	4	2.9920
ball	garden shed	28	4	4	2.1791	space	white	4	11	2	2.9487
garden chair	garden shed	2	4	7	2.1303	peace	quiet	2	2	6	2.8762
brick wall	lawn chair	3	2	3	2.0791	jumper over deck rail	three old people	2	2	2	2.8762

## Image 5

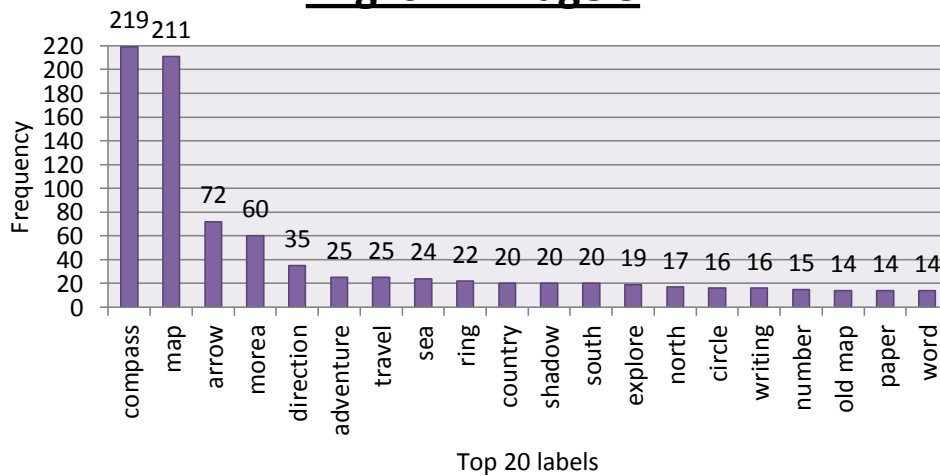
### Top 20 most frequent annotations



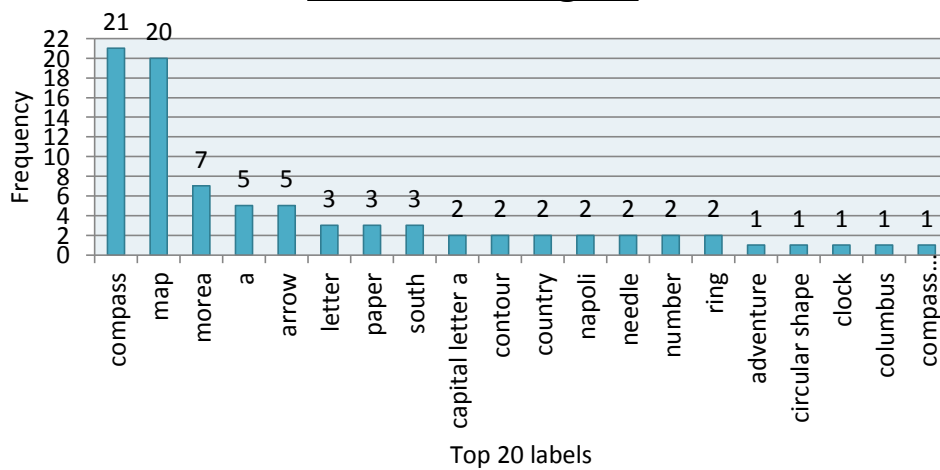
### Other spoken language - Image 5



### English - Image 5



### Arabic - Image 5



## Collocation

Arabic			Welsh		
Stem	Collocation	Frequency	Stem	Collocation	Frequency
capital letter a	3	2	old map	2	6
compass bearing hundred and ninety degrees	6	1	key ring	2	2
map of greek peninsula	5	1	compass pointing between south and south west	7	1
lord of the rigs	4	1	dial pointing between south and south west	7	1
land to ocean barrier	4	1	south south west direction	4	1
letters i and a	4	1	switch to set compass	4	1
map in foreign language	4	1	writing morea on map	4	1
writing on map	3	1	drawing of a man	4	1
name of city	3	1	pointing two hundred degrees	4	1
sense of direction	3	1	name of different areas	4	1
letter a	2	1	place on map	3	1
de caffe	2	1	arrow inside compass	3	1
circular shape	2	1	map of italy	3	1
compass inclination	2	1	orange compass dial	3	1
south east	2	1	name of place	3	1

Tamil			Spanish		
Stem	Collocation	Frequency	Stem	Collocation	Frequency
drawing of a man	4	1	golfo di coron	3	2
mora written on map	4	1	old map	2	2
compass pointing south	3	2	drawing of a man	4	1
keyring on compass	3	1	compass pointing south	3	1
old map	2	2	region called morea	3	1
			conquest of america	3	1
			arrow inside compass	3	1
			gold metal ring	3	1
			shadow of compass	3	1
			territory	2	1
			ryan air	2	1
			no destination	2	1
			hitch hike	2	1
			renascence man	2	1
			geographic division	2	1

Other language			German		
Stem	Collocation	Frequency	Stem	Collocation	Frequency
south south west	3	2	compass pointing between south and south west	7	2
arrow pointing between south and south west	7	1	golfo di coron	3	2
will to escape	3	1	red arrow tip	3	1
map of morea	3	1	map of spain	3	1
capital letter a	3	1	capital letter a	3	1
megalopolis	2	1	south south west	3	1
cursive writing	2	1	earlier times	2	1
compass handle	2	1	italian map	2	1
compass shape	2	1	greek island	2	1
different region	2	1			
compass ring	2	1			
south west	2	1			
red arrow	2	1			

English		
Stem	Collocation	Frequency
old map	2	14
south south west	3	10
golfo di coron	3	8
place name	2	8
south west	2	7
compass pointing between south and south west	7	6
compass pointing south	3	6
compass point	2	6
red arrow	2	6
compass keyring	2	5
coast line	2	5
map of morea	3	4
north west	2	4
lord of the rings	4	3
morea written on map	4	3

## Co-occurrence

Arabic		
Stem1	Stem2	Count
capital letter a	compass	5
capital letter a	map	4
columbus	compass	2
compass	contour	2
compass	letter a	2
compass	napoli	2
letter a	morea	2
map	napoli	2
morea	mountain	2
morea	napoli	2

English		
Stem1	Stem2	Count
compass	map	295
arrow	compass	90
arrow	map	89
compass	morea	70
map	morea	68
compass	country	29
country	map	29
map	number	29
compass	number	28
compass	ring	27
map	ring	27
arrow	number	24
compass	shadow	24
map	travel	24
compass	travel	22

Other language		
Stem1	Stem2	Count
compass	italian	6
italian	map	4
compass	map of morea	3
compass	continent	2
continent	map	2
paper	south south west	2

Patois/ Creole		
Stem1	Stem2	Count
map	metal	13
compass	metal	12
map	shade	5
compass	shade	4
metal	writing	2

Welsh		
Stem1	Stem2	Count
map	sea	31
compass	sea	30
compass	letter	18
letter	map	18
arrow	country	14
explore	map	11
letter	number	10
arrow	circle	9
arrow	sea	9
compass	name	8
compass	star	8
map	name	8
arrow	shadow	7
compass	island	7
island	map	7

## Co-occurrence PMI

S1 = Stem1 frequency, S2 = S2 frequency, C = co-occurrence frequency											
Welsh						English					
Stem1	Stem2	S1	S2	C	PMI	Stem1	Stem2	S1	S2	C	PMI
place name	sea	1	12	18	2.7263	arrow inside compass	shadow of compass	2	1	6	3.6414
number	star	12	2	31	2.6613	old map	shadow of compass	14	1	10	3.0182
brown	word	1	6	437	2.3741	compass	middle earth	219	2	29	2.9927
country	metal	7	2	89	2.3071	north	time	17	2	19	2.9116
explore	greece	2	2	298	2.2491	capital letter a	compass pointing south	3	6	10	2.9090
explore	history	2	2	298	2.2491	a	old map	6	14	29	2.7024
circle	sea	1	12	698	2.2491	navigation	world	6	2	4	2.6872
direction	discovery	15	1	735	2.2192	compass pointing south	golfo di coron	6	8	12	2.5622
greece	travel	2	6	517	2.1700	compass	degree	219	2	90	2.4771
colour	shadow	3	2	207	2.0731	arrow inside compass	compass keyring	2	5	2	2.4653
Arabic											
Stem1	Stem2	S1	S2	C	PMI						
letter a	morea	1	7	2	1.5241						
morea	mountain	7	1	2	1.5241						
columbus	compass	1	21	4	1.3480						
morea	napoli	7	2	2	1.2230						
capital letter a	compass	2	21	5	1.1439						
compass	letter a	21	1	2	1.0469						
capital letter a	map	2	20	2	0.7671						
map	napoli	20	2	2	0.7671						
compass	contour	21	2	2	0.7459						
compass	napoli	21	2	2	0.7459						