

Table S2: For each country, the ten biggest cities in term of population, with the Shannon entropy of the cities' orientations' distribution. The distributions were computed from the street network within 1000 meters of the city geographical center.

Country	City	Population	Entropy
Albania	Tirana	374801	3.3546
Albania	Durres	122034	3.4006
Albania	Elbasan	109093	3.4768
Albania	Vlore	89546	3.3054
Albania	Shkoder	88245	3.5182
Albania	Kamez	66841	2.1037
Albania	Korce	58259	3.4273
Albania	Fier	56297	3.2984
Albania	Berat	46866	3.5322
Albania	Lushnje	41469	3.3749
Argentina	Buenos Aires	2890151	3.362
Argentina	Cordoba	1317298	2.512
Argentina	Rosario	1193605	2.4631
Argentina	La Plata	643133	2.0086
Argentina	Mar del Plata	593337	2.29
Argentina	San Miguel de Tucuman	548866	1.9364
Argentina	Salta	520683	2.5266
Argentina	Santa Fe de la Vera Cruz	391164	2.6401
Argentina	Vicente Lopez	360078	2.1252
Argentina	Corrientes	346334	2.2493
Australia	Sydney	5131326	3.4514
Australia	Melbourne	4850740	2.8113
Australia	Brisbane	2408223	3.3015
Australia	Perth	2050138	3.0183
Australia	Adelaide	1313927	2.2874
Australia	Gold Coast	591473	3.0161
Australia	Canberra	367752	3.3699
Australia	Newcastle	308308	3.3825
Australia	Wollongong	292190	2.9386
Australia	Logan City	282673	3.0762
Austria	Vienna	1840573	3.478
Austria	Graz	273838	3.5172
Austria	Linz	198181	3.4209
Austria	Salzburg	148420	3.5467
Austria	Innsbruck	126851	3.5364
Austria	Klagenfurt am Woerthersee	90610	3.344
Austria	Villach	58882	3.5054
Austria	Wels	57943	3.3453
Austria	Sankt Poelten	49001	3.2933
Austria	Dornbirn	43013	3.5349
Belgium	Antwerp	520504	3.3714
Belgium	Gand	259083	3.5577
Belgium	Charleroi	201256	3.4839
Belgium	Liege	197885	3.5298
Belgium	Brussels	176545	3.4987
Belgium	Brugge	116709	3.0161
Belgium	Namur	106284	3.3699
Belgium	Leuven	92892	3.3825
Belgium	Mons	91277	2.9386
Belgium	Aalst	77534	3.0762
Canada	Toronto	2731571	2.4356
Canada	Vancouver	1837969	2.9404
Canada	Montreal	1704694	3.3722
Canada	Calgary	1239220	3.224
Canada	Ottawa	934243	3.0791
Canada	Edmonton	932546	2.7931
Canada	Mississauga	668549	3.1894
Canada	North York	636000	3.4946
Canada	Winnipeg	632063	3.324
Canada	Quebec	528595	2.8919
Croatia	Zagreb	698946	3.1258
Croatia	Split	176314	3.5165
Croatia	Rijeka	141172	3.4682
Croatia	Osijek	88140	3.3204
Croatia	Zadar	71258	3.3559
Croatia	Slavonski Brod	60742	3.2132
Croatia	Pula	59078	3.4468
Croatia	Sesvete	52411	3.4225
Croatia	Karlovac	48123	3.4722
Croatia	Varazdin	41803	3.4075
Czech Republic	Prague	1391508	3.5465
Czech Republic	Brno	454337	3.5137
Czech Republic	Ostrava	314590	3.3645
Czech Republic	Pilsen	177936	3.4624
Czech Republic	Olomouc	102134	3.5526
Czech Republic	Liberec	97770	3.5513
Czech Republic	Ceske Budejovice	96053	3.4325
Czech Republic	Hradec Kralove	95195	3.532
Czech Republic	Usti nad Labem	94105	3.5359
Czech Republic	Pardubice	88741	3.3929
Denmark	Copenhagen	777218	3.357
Denmark	Aarhus	273077	3.4187
Denmark	Odense	176683	3.5186
Denmark	Aalborg	113417	3.3837
Denmark	Frederiksberg	105037	3.1706
Denmark	Esbjerg	72205	3.0724
Denmark	Randers	55780	3.5347
Denmark	Kolding	55363	3.5401
Denmark	Vejle	51177	3.4982
Denmark	Horsens	50074	3.466
Finland	Helsinki	1176976	3.2941
Finland	Tampere	317316	3.1892
Finland	Espoo	272193	3.5541
Finland	Turku	254671	3.0954
Finland	Vantaa	216973	3.5426
Finland	Oulu	128618	2.8981
Finland	Lahti	98826	3.342
Finland	Kuopio	89104	3.2965
Finland	Jyvaeskylae	85026	3.2022
Finland	Pori	76772	2.993
France	Paris	2206488	3.2257
France	Marseille	861635	3.4166
France	Lyon	513275	3.4257
France	Toulouse	471941	3.5247
France	Nice	338620	3.4793
France	Nantes	277269	3.4552
France	Strasbourg	274845	3.5506
France	Bordeaux	249712	3.3281
France	Montpellier	248252	3.5196
France	Lille	228328	3.5176
Germany	Berlin	3292366	3.3941
Germany	Hamburg	1706696	3.5359
Germany	Munich	1348335	3.4454
Germany	Cologne	1005775	3.4143
Germany	Frankfurt	667925	3.5337
Germany	Essen	593085	3.4857
Germany	Stuttgart	589793	3.4566
Germany	Dortmund	588462	3.3599
Germany	Duesseldorf	573057	3.3951
Germany	Bremen	546501	3.4126
Greece	Athens	3090508	3.2102
Greece	Thessaloniki	788952	3.3539
Greece	Patras	213984	3.3955
Greece	Heraklion	173993	3.5369
Greece	Piraeus	163688	3.2015
Greece	Larissa	162591	3.4687
Greece	Peristeri	139981	3.2822
Greece	Kallithea	100641	2.8862
Greece	Acharnes	99346	3.2714
Greece	Kalamaria	91617	3.3517
Hungary	Budapest	1736685	3.4969
Hungary	Debrecen	211340	3.4778
Hungary	Szeged	168048	3.3476
Hungary	Miskolc	167754	3.3344
Hungary	Pecs	156049	3.2815
Hungary	Győr	128265	3.284
Hungary	Nyiregyhaza	116298	3.3351
Hungary	Kecskemet	109847	3.4268
Hungary	Szekesfehervar	101600	3.3523
Hungary	Szombathely	79534	3.3346
India	Mumbai	12442373	3.4163
India	Delhi	11034555	3.0664
India	Bengaluru	8443675	3.5444
India	Hyderabad	6809970	3.4049
India	Ahmedabad	5570585	3.3743
India	Chennai	4646732	3.3427
India	Calcutta	4496694	3.1185
India	Surat	4467797	3.2842
India	Pune	3124458	3.3735
India	Jaipur	3046163	2.6155
Indonesia	Jakarta	8540121	3.34
Indonesia	Surabaya	2765487	3.3452
Indonesia	Bandung	2394873	3.2091
Indonesia	Bekasi	2334871	3.4804
Indonesia	Medan	2097610	3.3436
Indonesia	Tangerang	1798601	3.3669
Indonesia	Depok	1738570	2.8871
Indonesia	Semarang	1555984	3.3707
Indonesia	Palembang	1455284	3.4239
Indonesia	Makassar	1338663	3.1732
Iran	Tehran	8693706	2.8789
Iran	Mashhad	3001184	3.2538
Iran	Isfahan	1961260	3.5249
Iran	Karaj	1592492	3.4997
Iran	Shiraz	1565572	3.2092
Iran	Tabriz	1558693	3.3245
Iran	Qom	1201158	3.2608
Iran	Ahvaz	1184788	3.0699
Iran	Kermanshah	946651	3.3555
Iran	Urmia	736224	3.5135
Ireland	Dublin	1173179	3.5309
Ireland	Cork	208669	3.4616
Ireland	Limerick	94192	3.4939
Ireland	Galway	79934	3.5461
Ireland	Waterford	53504	3.5343
Ireland	Drogheda	40956	3.4411
Ireland	Swords	36924	3.5243
Ireland	Dundalk	33428	3.4089
Ireland	Bray	32600	3.4308
Ireland	Navan	30173	3.5588
Italy	Rome	2617175	3.5635
Italy	Milan	1242123	3.5356
Italy	Naples	962003	3.4168
Italy	Turin	872367	2.6495
Italy	Palermo	657651	3.4205
Italy	Genoa	580223	3.5029
Italy	Bologna	366133	3.2943
Italy	Florence	349296	3.4903
Italy	Catania	290927	3.3557
Italy	Bari	277387	3.0293
Malaysia	Kuala Lumpur	1588750	3.5488
Malaysia	George Town	708127	3.4591
Malaysia	Ipoh	657892	3.3154
Malaysia	Shah Alam	641306	2.8587
Malaysia	Petalang Jaya	613977	3.5111
Malaysia	Iskandar Puteri	529074	3.4709
Malaysia	Seremban	515490	3.5189
Malaysia	Johor Bahru	497067	3.4797
Malaysia	Melaka	484885	3.534
Malaysia	Kota Kinabalu	452058	3.1928
Netherlands	Amsterdam	855896	3.4668
Netherlands	Rotterdam	638751	3.5074
Netherlands	The Hague	531935	3.1493
Netherlands	Utrecht	347526	3.5293
Netherlands	Eindhoven	229184	3.5336
Netherlands	Tilburg	199613	2.9831
Netherlands	Groningen	181194	3.3967
Netherlands	Almere Stad	176432	2.9416
Netherlands	Breda	167673	3.4425
Netherlands	Nijmegen	158732	3.4565
New Zealand	Auckland	1628900	3.4603
New Zealand	Wellington	418500	3.2524
New Zealand	Christchurch	404500	2.7958
New Zealand	Manukau City	362000	3.3176
New Zealand	Hamilton	241200	3.3055
New Zealand	Waitakere	208100	2.9181
New Zealand	North Shore	207865	3.5276
New Zealand	Tauranga	141600	3.2107
New Zealand	Dunedin	114347	3.2006
New Zealand	Lower Hutt	101194	3.4354
Norway	Oslo	634463	3.4923
Norway	Bergen	278121	3.4499
Norway	Trondheim	190464	3.4758
Norway	Stavanger	130754	3.467
Norway	Fredrikstad	72760	3.3602
Norway	Drammen	64597	3.3649
Norway	Kristiansand	63814	3.3784
Norway	Sandnes	63032	3.5082
Norway	Tromso	52436	3.3702
Norway	Sarpsborg	52159	3.2642
Poland	Warszawa	1753977	3.4147
Poland	Krakow	765320	3.3804
Poland	Lodz	696503	2.8218
Poland	Wroclaw	637683	3.3512
Poland	Poznan	540372	3.3863
Poland	Gdansk	461865	3.5348
Poland	Szczecin	407811	3.3365
Poland	Bydgoszcz	366452	3.3497
Poland	Lublin	360044	3.4224
Poland	Katowice	317316	3.2129
Romania	Bucharest	1883425	3.5237
Romania	Cluj-Napoca	324576	3.4292
Romania	Timisoara	319279	3.5223
Romania	Constanta	303399	3.4261
Romania	Galati	294087	3.429
Romania	Iasi	290422	3.4986
Romania	Brasov	276088	3.4517
Romania	Craiova	269506	3.4718
Romania	Ploiesti	228851	3.5423
Romania	Braila	213569	3.3207
Russia	Moscow	12380664	3.5681
Russia	Saint Petersburg	5281579	3.3697
Russia	Novosibirsk	1602915	2.9706
Russia	Yekaterinburg	1455514	2.7437
Russia	Nizhny Novgorod	1261666	3.5155
Russia	Kazan	1231878	3.2368
Russia	Chelyabinsk	1198858	3.0055
Russia	Omsk	1178391	3.3659
Russia	Samara	1169719	2.6558
Russia	Rostov-on-Don	1125299	2.3556
Russia	Riyadh	6506700	3.2226
Saudi Arabia	Jeddah	3976400	3.4013
Saudi Arabia	Mecca	1919900	3.2144
Saudi Arabia	Medina	1271800	3.1298
Saudi Arabia	Hofuf	1136900	3.0342
Saudi Arabia	Taif	1109800	2.6632
Saudi Arabia	Dammam	975800	3.1812
Saudi Arabia	Buraidah	658600	3.3848
Saudi Arabia	Khobar	626200	3.3369
Saudi Arabia	Tabuk	609000	3.3431
Slovakia	Bratislava	425923	3.3033
Slovakia	Pesov	239141	3.3159
Slovakia	Kosice	89618	3.1563
Slovakia	Nitra	86329	3.4919
Slovakia	Zilina	81041	3.4978
Slovakia	Banska Bystrica	78635	3.4755
Slovakia	Trnava	69785	3.2294
Slovakia	Martin	60817	2.9909
Slovakia	Trencin	58278	3.3322
Slovakia	Poprad	57431	3.4538
South Africa	Cape Town	3433441	2.6744
South Africa	Durban	3120269	3.1351
South Africa	Johannesburg	2026482	2.4959
South Africa	Soweto	1695047	3.4325
South Africa	Pretoria	1619438	2.6098
South Africa	Port Elizabeth	967677	3.3588
South Africa	Pietermaritzburg	750845	2.1505
South Africa	Benoni	605344	2.2213
South Africa	East London	511655	3.362
South Africa	East London	478676	3.1947
Spain	Madrid	5263000	3.5391
Spain	Barcelona	4251000	3.3969
Spain	Valencia	1499000	3.5081
Spain	Sevilla	1262000	3.5601
Spain	Zaragoza	639000	3.3089
Spain	Malaga	568305	3.51
Spain	Murcia	436870	3.3424
Spain	Palma	401270	3.5531
Spain	Las Palmas de Gran Canaria	381847	3.4432
Spain	Bilbao	354860	3.