Appendix A

Let $G=(V,E)$ be a graph, with a set of vertices V, and a set of edges E. The adjacency matrix A of

the graph G is the matrix whose (i,j)-th entry is equal to the number of edges in E linking vertex i

to vertex j in V. In the Twitter graph presented in this paper, the edges are undirected, thus A is a

symmetric matrix $(A_{ij} = A_{ji})$. It follows that the k-th power of A has (i,j)-th entry equal to the

number of paths of length k linking vertex i and vertex j. And the number of paths of length two

from a reference vertex s (the seed) and visiting a vertex i can be computed as:

$$NV_s(i) = A_{si}^2 + A_{si} \sum_j A_{ij}$$

This number of paths is interpreted as the number of visits of a stationary random walker,

traveling two steps from the seed s. (In the above formula, the first term corresponds to the

number of times the random walk ends at i, the second term equals the number of times the

random walk passes through i and goes further to a neighbour j of i.)

To denoise the network, we select those vertices around a seed s which are visited by the random

walk more than the average number of visits of the random walk per vertex (the mean $\overline{NV}_s$ of

$NVs(i)$ in the above formula). We then normalise the resulting number of such visits in units of

standard deviations (of visits) σs:

$$nv_s(i) = \max \left(\frac{NV_s(i) - \overline{NV}_s}{\sigma_s}, 0 \right)$$

In other words, the vertices of the seed network associated with seed s are those vertices i for

which $nvs(i)$ is non-negative.

In this paper, the network of a field of interest is build from the seed networks of several seeds.

The *intensity score IS(i)* of a vertex *i* in a field of interest, is the sum of the normalised number of visits of random walks from each of the seeds:
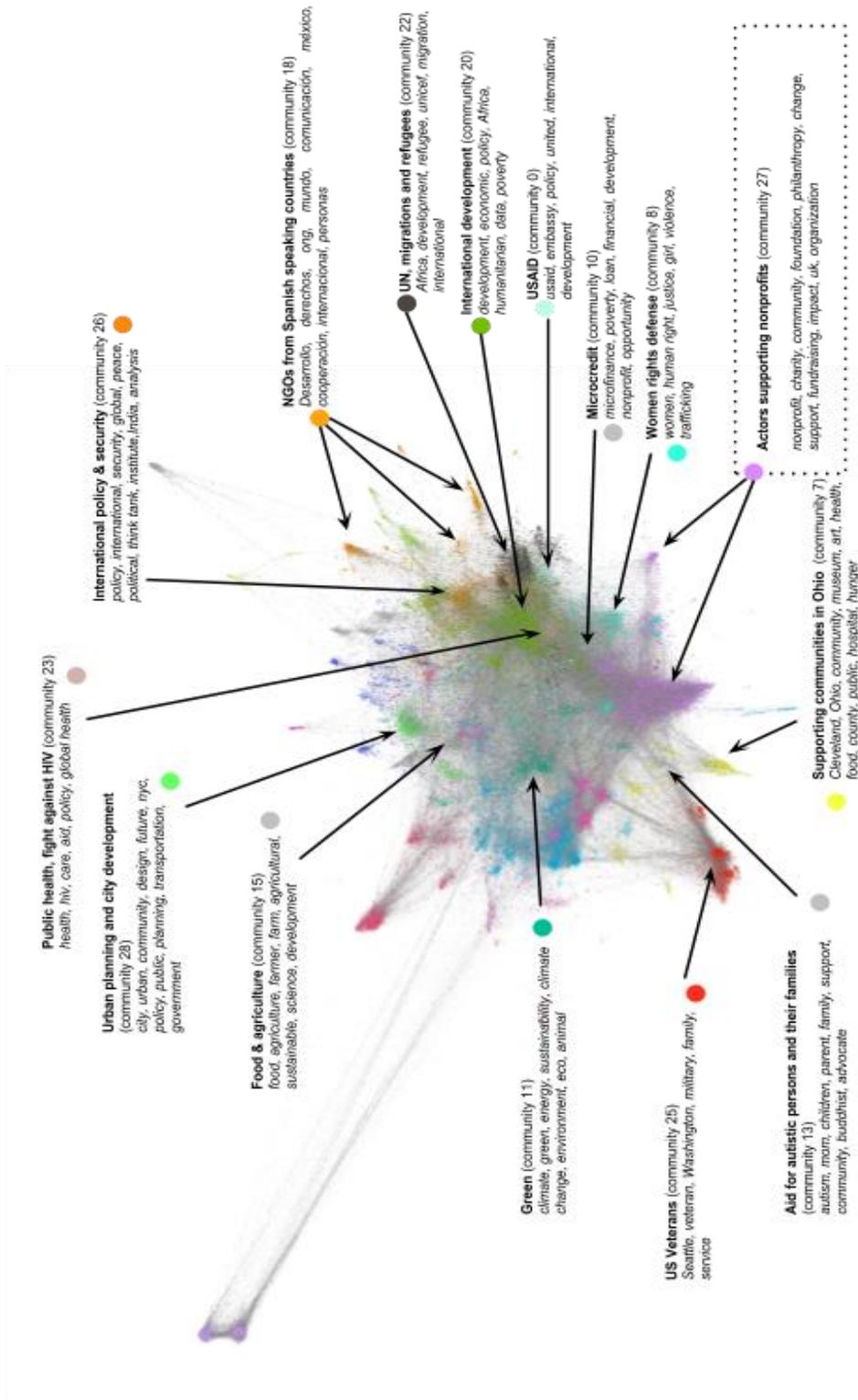
$$IS(i) = \sum_s nv_s(i)$$

Appendix B - sensitivity analysis.

	rockefellerfdn	MandE_NEWS	gatesfoundation	GiveWell	Keystone_Acc	CWTips
3ieNews	13458 (44%) - 109 (48%)	9251 (30.25%) - 91 (40%)	15995 (52%) - 101 (44%)	11754 (38%) - 114 (50%)	9787 (32%) - 113 (50%)	11655 (38%) - 110 (48%)
rockefellerfdn		13282 (43%) - 107 (47%)	17576 (57%) - 105 (46%)	13452 (44%) - 115 (51%)	12276 (40%) - 113 (50%)	13593 (44%) - 111 (49%)
MandE_NEWS			15438 (50%) - 92 (41%)	11042 (36%) - 112 (49%)	8514 (28%) - 101 (44%)	10570 (35%) - 97 (43%)
gatesfoundation				14961 (49%) - 102 (45%)	14298 (47%) - 93 (41%)	14876 (49%) - 86 (38%)
GiveWell					9475 (31%) - 106 (47%)	10428 (34%) - 102 (45%)
Keystone_Acc						8672 (28%) - 84 (37%)

How to read this table. When @rockefellerfdn and @gatesfoundation are the only two seeds used to cover the field of "social impact", it results in a network made of 17,576 actors, which is 57% of the actors in the network that is obtained when the 7 seeds are used. It also discovers 105 of the 225 accounts (46%) of the Powell, et al. (2017) study.

Appendix C. Figure 5 in oversized version.

International policy & security (community 26)
policy, international, security, global, peace, political, think tank, institute, India, analysis

NGOs from Spanish speaking countries (community 18)
Desarrollo, derechos, ong, mundo, comunicación, méxico, cooperación, internacional, personas

UN, migrations and refugees (community 22)
Africa, development, refugee, unicef, migration, international

International development (community 20)
development, economic, policy, Africa, humanitarian, data, poverty

USAID (community 0)
usaid, embassy, policy, united, international, development

Microcredit (community 10)
microfinance, poverty, loan, financial, development, nonprofit, opportunity

Women rights defense (community 8)
women, human right, justice, girl, violence, trafficking

Actors supporting nonprofits (community 27)
nonprofit, charity, community, foundation, philanthropy, change, support, fundraising, impact, uk, organization

Public health, fight against HIV (community 23)
health, hiv, care, aid, policy, global health

Urban planning and city development (community 28)
city, urban, community, design, future, nyc, policy, public, planning, transportation, government

Food & agriculture (community 15)
food, agriculture, farmer, farm, agricultural, sustainable, science, development

Supporting communities in Ohio (community 7)
Cleveland, Ohio, community, museum, art, health, food, county, public, hospital, hunger

Green (community 11)
climate, green, energy, sustainability, climate change, environment, eco, animal

US Veterans (community 25)
Seattle, veteran, Washington, military, family, service

Aid for autistic persons and their families (community 13)
autism, mom, children, parent, family, support, community, buddhist, advocate

Appendix D: List of the 28 sub-regions identified in the network for the field of "social impact", which comprised more than 10 members (sub-regions "5", "6", "12", "17" were left out as they did not meet this threshold). For each sub-region, the 10 most frequent terms used in the profiles of the members of each sub-region are listed. In the rare case when a sub-region comprises several linguistic sub-regions (most often, English and a second one), the two languages are detected as such and the most frequent terms of each are treated separately.

sub-region 0 members: 590 % of total: 1,93	Language: en usaid x 55, embassy x 52, policy x 41, united x 33, international x 31, office x 25, privacy policy x 24, democracy x 24, america x 22, affair x 22, development x 21	
sub-region 1 members: 521 % of total: 1,70	Language: en national x 55, resistance x 42, unofficial x 41, reporter x 33, editor x 32, political x 28, team x 27, politics x 27, host x 27, fact x 25, post x 22	
sub-region 2 members: 737 % of total: 2,41	Language: pt oficial x 47, contato x 34, tv x 26, apresentadora x 25, atriz x 23, jornalista x 23, vida x 23, br x 21, instagram x 19, brasil x 17, facebook x 16	Language: en tv x 8, producer x 7, instagram x 7, actress x 6, da x 5, gmail com x 5, gmail x 5, music x 4, atriz x 4, actor x 4, director x 4
sub-region 3 members: 1481 % of total: 4,84	Language: en science x 458, space x 250, nasa x 110, stem x 101, education x 92, open x 90, astronomy x 75, editor x 72, writer x 69, engineering x 63, scientist x 63	

sub-region 4 members: 566 % of total: 1,85	Language: en ministry x 52, republic x 48, president x 30, minister x 26, government x 16, prime minister x 16, office x 13, english x 12, mfa x 9, latest x 7, international x 7	Language: es economista x 38, chile x 35, república x 34, colombia x 25, economía x 25, diputado x 23, presidente x 23, ministerio x 19, desarrollo x 17, director x 15, nacional x 15
sub-region 7 members: 1412 % of total: 4,62	Language: en cleveland x 178, ohio x 160, sub-region x 128, museum x 111, art x 109, health x 100, food x 86, county x 81, public x 80, hospital x 76, hunger x 74	
sub-region 8 members: 1421 % of total: 4,65	Language: en women x 202, human x 141, human right x 110, sub-region x 95, justice x 79, girl x 79, national x 70, organization x 68, global x 63, violence x 55, trafficking x 51	
sub-region 9 members: 828 % of total: 2,71	Language: en education x 227, teacher x 145, school x 128, learning x 115, educator x 90, student x 69, teaching x 48, policy x 46, learner x 43, public x 43, national x 41	
sub-region 10 members: 190 % of total: 0,62	Language: en microfinance x 51, financial x 35, poverty x 25, sub-region x 16, organization x 16, loan x 15, global x 15, financial inclusion x 14, development x 14, nonprofit x 14, opportunity x 13	
sub-region 11 members: 1468 % of total: 4,80	Language: en climate x 221, green x 181, energy x 132, sustainability x 128, sustainable x 105, climate change x 101, environment x 95, global x 90, environmental x 90, eco x 71, animal x 70	

sub-region 12 members: 1006 % of total: 3,29	Language: en food x 137, health x 106, fashion x 45, chef x 40, healthy x 39, writer x 39, recipe x 34, live x 33, fitness x 31, online x 30, lover x 28	
sub-region 13 members: 261 % of total: 0,85	Language: en autism x 115, mom x 31, with autism x 28, children x 25, parent x 22, family x 19, support x 18, sub-region x 16, buddhist x 16, autistic x 16, advocate x 16	
sub-region 14 members: 948 % of total: 3,10	Language: en financial x 88, industry x 82, global x 77, leading x 75, finance x 64, service x 64, company x 52, bank x 51, investment x 47, management x 46, maritime x 45	
sub-region 15 members: 503 % of total: 1,65	Language: en food x 156, agriculture x 103, farmer x 75, farm x 62, agricultural x 51, ag x 48, global x 46, sustainable x 37, science x 35, development x 33, sub-region x 32	
sub-region 16 members: 3222 % of total: 10,54	Language: en speaker x 139, ceo x 115, director x 108, design x 101, writer x 100, sub-region x 97, consultant x 95, editor x 86, book x 82, web x 81, coach x 79	
sub-region 18 members: 749 % of total: 2,45	Language: en car x 17, toronto x 12, event x 9, team x 8, canada x 8, owner x 8, entertainment x 7, music x 7, service x 7, online x 7, local x 7	Language: es desarrollo x 37, derecho x 35, ong x 31, mundo x 26, i x 25, comunicación x 25, méxico x 22, cooperación x 21, internacional x 20, personas x 20, los derecho x 19

sub-region 19 members: 181 % of total: 0,59	Language: en irish x 44, view x 35, journalist x 30, ireland x 29, rte x 24, editor x 23, rté x 23, presenter x 20, radio x 17, correspondent x 17, dublin x 15	
sub-region 20 members: 3448 % of total: 11,28	Language: en development x 514, global x 334, economic x 309, international x 268, policy x 236, africa x 206, humanitarian x 200, data x 194, director x 182, view x 170, poverty x 169	
sub-region 21 members: 476 % of total: 1,56	Language: en sociology x 75, philosophy x 58, professor x 52, anthropology x 52, university x 49, book x 41, journal x 35, anthropologist x 33, sociologist x 33, science x 31, study x 29	
sub-region 22 members: 1559 % of total: 5,10	Language: en africa x 174, development x 117, refugee x 116, water x 111, human x 85, unicef x 79, office x 78, global x 77, view x 74, migration x 73, international x 72	
sub-region 23 members: 1454 % of total: 4,76	Language: en health x 611, global x 208, hiv x 167, care x 139, aid x 135, policy x 134, global health x 115, sub-region x 98, healthcare x 96, service x 91, public health x 89	
sub-region 24 members: 130 % of total: 0,43	Language: en girl x 6, demi lovato x 5, justin x 5, fun x 5, ♥ x 5, music x 4, hey x 4, jonas x 4, miley x 3, profit x 3, non profit x 3	
sub-region 25 members: 1068	Language: en seattle x 260, veteran x 109, washington x 94, military x 79, family x 63, service x 60, sub-region x 51, reporter x 43, sport x 42, washington state x 41, event x 39	

% of total: 3,49		
sub-region 26 members: 1514 % of total: 4,95	Language: en policy x 174, international x 147, security x 140, global x 115, peace x 101, political x 99, tank x 96, think tank x 94, institute x 88, india x 84, analysis x 82	
sub-region 27 members: 3589 % of total: 11,74	Language: en nonprofit x 502, charity x 379, sub-region x 374, foundation x 258, philanthropy x 234, change x 218, support x 206, fundraising x 199, impact x 195, uk x 193, organization x 172	
sub-region 28 members: 1023 % of total: 3,35	Language: en city x 259, urban x 145, sub-region x 83, design x 81, future x 75, nyc x 73, policy x 69, public x 63, planning x 57, transportation x 50, government x 50	
sub-region 29 members: 212 % of total: 0,69	Language: en breaking x 15, analysis x 12, latest x 11, team x 10, global x 9, story x 9, source x 8, politics x 8, ceo x 7, editor x 6, source for x 6	

Appendix E

Spread of the 127 actors from Powell, et al. (2017) across the sub-regions identified in the network.

sub-region 4: 0,80%	sub-region 11: 4,00%	sub-region 23: 5,60% sub-
sub-region 7: 1,60%	sub-region 12: 0,80%	region 26: 6,40%
sub-region 8: 1,60%	sub-region 16: 0,80%	sub-region 27: 44,00%
sub-region 9: 2,40%	sub-region 20: 25,60%	sub-region 28: 1,60%
sub-region 10: 3,20%	sub-region 22: 1,60%	

Appendix F

Users from Powell et al. **inside** sub-region "27" (twitter handle followed by the first 80 characters of the Twitter profile description).

@newprofit: Break through with New Profit. https://t.co/mRBW5FClRb[...]

@NatlCouncilNPs: The National Council of Nonprofits is a trusted resource and advocate for Americ[...]

@Give2Asia: Give2Asia builds connections between donors and local charitable groups in Asia [...]

@PointsofLight: Points of Light inspires, equips and mobilizes people to take action that change[...]

@FordFoundation: Around the world, we make grants that support the visionary people and organizat[...]

@GreatNonprofits: Stories That Make a Difference[...]

@phijo: Your online source for nonprofit news, resources, jobs, and events. PJ is a prog[...]

@fdncenter: Foundation Center is the leading source of information about philanthropy worldw[...]

@DRKFoundation: We invest in early stage, high impact social entrepreneurs who are changing the [...]

@Alliancemag: The leading global source of independent and informed discussion of philanthropy[...]

@macfound: John D. & Catherine T. MacArthur Foundation supports creative people and effecti[...]

@NCVO: National Council for Voluntary Organisations - largest membership body for Engli[...]

@MooreFound: We foster path-breaking scientific discovery, environmental conservation, patien[...]

@ThirdSector: The UK's leading publication for everyone who needs to know what's going on in t[...]

@ImpactSP2: The Center for High Impact Philanthropy provides smart, actionable guidance to d[...]

@aapip: We are a member-supported national advocacy organization committed to building d[...]

@TheComNetwork: The Communications Network Foundations & nonprofits that communicate well are [...]

@PackardFdn: We work with partners around the world to improve the lives of children, familie[...]

@BlendedValue: Impact Investing and Entrepreneurship Thought Leader; Founding Director, REDF an[...]

@gpforg: Global Philanthropy Forum (GPF) aims to build a sub-region of donors & social inv[...]

@peakgrantmaking: Member driven network leading innovation in grantmaking and effective practices [...]

@vppartners: Venture Philanthropy Partners leads change to build a better future for vulnerab[...]

@pewtrusts: Driven by knowledge to solve today's challenging problems, improve public policy[...]

@CEPData: The Center for Effective Philanthropy focuses on the development of comparative [...]

@kresgefdn: We're working to expand opportunities through grantmaking and social investing. [...]

@MntrInstitute: Mining the leading edge, challenging assumptions, and redefining expectations, w[...]

@BridgespanGroup: A global nonprofit organization collaborating with mission-driven leaders, organ[...]

@HeronFdn: Investing in enterprise as if people matter, challenging the rules of philanthr[...]

@IrvineFdn: Expanding opportunity for the people of California.[...]

@npquarterly: Journalism for the nonprofit sector. Tweets on nonprofit trends, news, democrati[...]

@atlantic: The Atlantic Philanthropies is a limited life foundation dedicated to bringing a[...]

@MyForefront: Illinois' statewide association of nonprofits, foundations + advisors. Forefront[...]

@hiltonfound: We provide funds to #nonprofit organizations working to improve the lives of dis[...]

@philaction: Philanthropy Action: A Journal for Donors[...]

@PhilanthropyNY: We ARE the professional association of grantmakers in the NYC region. Please not[...]

@RGK_Center: Located in @TheLBJSchool, we turn students and practitioners into changemakers w[...]

@Tidessub-region: Accelerating the pace of social change. Amplifying our sub-region's efforts to ac[...]

@siliconvalleycf: Silicon Valley sub-region Foundation makes all forms of philanthropy more powerfu[...]

@Deborah909: Nonprofit technology strategist. I live to bring resources and needs together.[...]

@SOCAPmarkets: SOCAP connects global innovators who are dedicated to increasing the flow of cap[...]

@arabellaadvisor: We help individual, family, institutional & corporate philanthropists & investor[...]

@RockBrosFund: The Rockefeller Brothers Fund advances social change that contributes to a more [...]

@GivingUSA: The Giving USA Foundation publishes data and trends about charitable giving thro[...]

@gkccf: Greater Kansas City sub-region Foundation | Greater Horizons: Simplify your givin[...]

@knightfdn: Knight Foundation supports transformational ideas that promote quality journalis[...]

@Socalgrantmaker: Southern California Grantmakers (SCG) is the leadership hub where 300 of our reg[...]

@svtgroup: Impact measurement, management & valuation mavens. When the world sees your soci[...]

@MeyerFoundation: Meyer supports organizations working to meet local sub-region needs throughout th[...]

@kaboom: We're the national nonprofit dedicated to bringing balanced and active play into[...]

@Surdna_Fndn: The Surdna Foundation seeks to foster just and sustainable sub-regions in the Un[...]

@nff_news: We make millions of dollars in loans to nonprofits and push for fundamental impr[...]

@CWphilanthropy: A philanthropy firm that knows management, and a management firm that knows phil[...]

@colsfoundation: We are the trusted philanthropic advisor to more than 2,500 individuals, familie[...]

@CharityNav: Empowering Donors to Make Informed Giving Decisions[...]

@bostonfdn: Greater Boston's sub-region foundation: a partner in philanthropy, a major funder[...]

Users from Powell, et al. (2017) **outside** of sub-region "27" (twitter handle followed by the first 80 characters of the Twitter profile description).

@UNICEF: UNICEF promotes the rights and wellbeing of every child in 190 countries and ter[...]

@LuminaFound: Lumina is a private foundation committed to increasing the # of Americans w/high[...]

@anticorruption: We fight #corruption around the world with a movement spanning 100+ countries. F[...]

@commonwealthfnd: Affordable, quality health care. For everyone.[...]

@UNStats: Official Twitter account of the Statistics Division of the United Nations Depart[...]

@Keystone_Acc: Keystone helps #socialchange organisations improve their #impact and #performanc[...]

@gmfus: GMF strengthens transatlantic cooperation on regional & global challenges and op[...]

@UNAIDS: UNAIDS leads and inspires the world to achieve zero new #HIV infections, #zerodi[...]

@PathfinderInt: We champion sexual and reproductive health and rights worldwide.[...]

@MDRC_News: MDRC, a nonprofit, nonpartisan organization, develops and evaluates innovative e[...]

@NewAmerica: Think tank and civic enterprise renewing America in the digital age[...]

@McKinsey: Since 1926, the trusted advisor to the world's leading businesses, governments &[...]

@AEI: Cherish freedom? The power of enterprise? Opportunity for all? It's these core b[...]

@RANDCorporation: RAND helps improve policy and decisionmaking through research and analysis. RAND[...]

@UNESCO: Building peace where it starts - in the minds of men & women. Follow our Directo[...]

@CGDev: The Center for Global Development: Independent research + practical ideas for gl[...]

@FairTradeCert: Your Purchase Matters. Quality products, improving lives, and protecting the en[...]

@gatesfoundation: We work to help all people lead healthy, productive lives, focused on health, po[...]

@Refugees: The official account of #UNHCR. Follow us as we provide vital aid and protection[...]

@DalbergTweet: Official feed of Dalberg Global Development Advisors, a strategic advisory firm [...]

@PSIimpact: PSI is a global non-profit organization dedicated to improving the health of peo[...]

@MathPolResearch: Research for the public good, guided by the highest standards of quality, rigor [...]

@CanadaDev: Global Affairs Canada's account dedicated to international development. FR: @Dev[...]

@MicroCredSummit: From 1997-2016, the Microcredit Summit Campaign regularly convened leaders in #m[...]

@amprog: Dedicated to improving the lives of Americans through ideas and action. Tweets b[...]

@the_IDB: At the Inter-American Development Bank we work to improve lives in Latin America[...]

@FINCA: FINCA's mission is to alleviate poverty through lasting solutions that help peop[...]

@UNHABITAT: UN-Habitat, is the United Nations agency for human settlements. Improving the qu[...]

@GrameenFdn: Innovating for the world's poor. #microfinance #financialinclusion #socent #mhea[...]

@CeresNews: Sustainability nonprofit organization working with the most influential investor[...]

@MandE_NEWS: A news service focusing on developments in monitoring and evaluation methods rel[...]

@Deloitte: Sharing the latest news, research, events and more from Deloitte Touche Tohmatsu[...]

@WorldBank: The official World Bank Twitter feed. The World Bank's mission is to fight pover[...]

@BrookingsInst: Independent research and analysis on the most important policy issues in the wor[...]

@echoinggreen: 1987–2017: Celebrating the Power of 30 Years Supporting Social Innovation[...]

@CWTips: [...]

@AdvocatesTweets: Rights. Respect. Responsibility. Following an account does not indicate philoso[...]

@USAID: USAID works to end extreme global poverty and enable resilient, democratic socie[...]

@policylink: PolicyLink is a national research and action institute advancing economic and so[...]

@charitywater: We're bringing clean and safe drinking water to people in need around the world.[...]

@ClintonFdn: The Bill, Hillary & Chelsea Clinton Foundation transforms lives and sub-regions [...]

@aeaweb: Evaluation Esoterica from the American Evaluation Association[...]

@cochranecollab: Cochrane: Trusted evidence. Informed decisions. Better health.[...]

@Ashoka: Ashoka is an international citizen-sector organization that is leading the way t[...]

@NextBillion: Exploring the connection between development and enterprise through analysis, ne[...]

@KauffmanFDN: Fostering economic independence by advancing education & entrepreneurship. RTs ≠[...]

@MSHHealthImpact: Management Sciences for Health helps leaders, health managers & sub-regions buil[...]

@RnfrstAlliance: International nonprofit organization working to conserve biodiversity and ensure[...]

@unfoundation: Connecting people, ideas and resources with the United Nations. #2030Now[...]

@Accion: We're a global nonprofit dedicated to building a world where everyone has access[...]

@CarnegieEndow: The Carnegie Endowment for International Peace is the oldest international affai[...]

@_AfricanUnion: For an integrated, prosperous and peaceful Africa. Official page of the AU.[...]

@Asia_Foundation: Nonprofit international development organization committed to improving lives ac[...]

@mix_market: MIX is the premier source for financial inclusion data and analytics.[...]

@PATHtweets: PATH is an international nonprofit organization that transforms global health th[...]

@SusanGKomen: A force united by a promise to end breast cancer, funding groundbreaking researc[...]

@350: Join a global movement that's inspiring the world to rise to the challenge of th[...]

@GlobalFundWomen: Global Fund for Women is a champion for gender equality, standing up for women a[...]

@CIVICUSalliance: CIVICUS is a global network of civil society organisations and activists working[...]

@UNDP: UNDP helps empower lives & build resilient nations. Follow @ASteiner @PNUD @PNUD[...]

@MSF: Médecins Sans Frontières/MSF is an international, independent, medical humanitar[...]

@EndOvershoot: Global Footprint Network is a research organization changing how the world manag[...]

@dfat: Official account of Australia's Department of Foreign Affairs & Trade. Follow @s[...]

@UN_Women: UN Women is the #UN entity for #genderequality & women's empowerment. Executive [...]

@SkollFoundation: Driving large-scale change by investing in, connecting, & celebrating social ent[...]

@ADB_HQ: Guided by a vision of an Asia-Pacific region free from poverty, Asian Developmen[...]

@GRI_Secretariat: GRI is an international independent organization that has pioneered #sustyreport[...]

@AAMers: #AAM2017 #AAMSMJ #museuminclusion American Alliance of Museums. Champion Museums[...]

@Accenture: Follow us for updates on Accenture research, blogs, podcasts and more. Tweets by[...]

@OneWorldTrust: The One World Trust is a UK-based charity that conducts research, develops reco[...]

Appendix G

Size and relative share of sub-groups detected in sub-region 27.

sub-group 0: 538(14,99%)   sub-group 3: 224(6,24%)   sub-group 6: 5(0,14%)

sub-group 1: 757(21,09%)   sub-group 4: 474(13,21%)   sub-group 7: 52(1,45%)

sub-group 2: 365(10,17%)   sub-group 5: 243(6,77%)   sub-group 8: 931(25,94%)

For each sub-group with more than 10 members, the 10 most frequent terms used in the profiles

of the members of each sub-region.

sub-group 0 members: 538 % of total: 14,99	Language: en foundation x 150, sub-region x 119, philanthropy x 117, nonprofit x 88, change x 35, sub-region foundation x 33, organization x 31, support x 31, network x 28, donor x 26, sector x 26
sub-group 1 members: 757 % of total: 21,09	Language: en charity x 251, uk x 142, support x 84, sub-region x 59, children x 57, sector x 53, live x 50, family x 47, leading x 44, national x 41, change x 38
sub-group 2 members: 365 % of total: 10,17	Language: en sub-region x 53, service x 49, cancer x 37, organization x 36, live x 30, nonprofit x 28, national x 27, foundation x 24, support x 24, poverty x 20, volunteer x 20
sub-group 3 members: 224 % of total: 6,24	Language: en justice x 59, prison x 39, charity x 30, policy x 28, crime x 27, offender x 23, criminal justice x 22, uk x 22, support x 22, sub-region x 20, family x 19

sub-group 4 members: 474 % of total: 13,21	Language: en impact x 90, change x 47, global x 42, sub-region x 39, investing x 38, investment x 35, socent x 34, impinv x 34, capital x 27, ceo x 26, entrepreneurship x 25
sub-group 5 members: 243 % of total: 6,77	Language: en nonprofit x 49, sub-region x 20, philanthropy x 16, online x 14, charity x 13, organization x 12, profit x 12, foundation x 11, support x 11, change x 11, non profit x 10
sub-group 7 members: 52 % of total: 1,45	Language: en impact x 8, global x 8, sub-region x 5, engage x 4, csr x 4, nonprofit x 4, company x 4, giving tuesday x 4, corporate x 4, brand x 4, tuesday x 4
sub-group 8 members: 931 % of total: 25,94	Language: en nonprofit x 298, fundraising x 151, philanthropy x 81, consultant x 79, profit x 72, non profit x 63, organization x 62, change x 61, speaker x 60, sub-region x 59, helping x 51

Appendix H

A comparison of the operationalization of three mechanisms characterization actions by

organizations engaged in the proto-institutionalization of a field:

	Powell et al. (2017)	Network based on co-memberships in Twitter lists
Proselytizing	"If its outdegree is twice its indegree"	- if the number of accounts they follow *in their sub-region* is twice the number of their followers *within their sub-region*.
Convening	"If an organization's indegree is larger than a threshold [...] we set this threshold to 99 [out of a maximum of 368]	- if the number of followers *in their sub-region* is above a threshold (e.g., a third of the sub-region members)
Strengthening	"those organizations whose bidegree is larger than 50% of their indegree"	- those organizations which follow, and are followed by, a number of Twitter accounts in their sub-region which is larger than 50% of the number of their followers within their sub-region.
Conforming		- if an organization tends to

		follow a large number of Twitter accounts from *its own sub-region*, relative to Twitter accounts it follows which are *outside* its sub-region.
Interfacing		- organizations following, and being followed by, Twitter accounts situated *outside* their sub-region, while being followed by a large number of members from their sub-region

Appendix I

1. Repository for the Java code used to create local networks from seeds:

https://github.com/seinecle/issuefields

A repository is also available in Python, with slight differences (does not include capping limits

for number of lists and users, see main text):

https://github.com/MohamedBnbm/seed_expansion

2. Repository for the Java code used to identify the most common terms per sub-region:

https://github.com/seinecle/TextMiningOnCommunities