Participation Space Studies:
a socio-technical exploration of activist and community groups' use of online and offline spaces to support their work

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Volume 2: Appendices

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Appendix 1. Technological determinism and sociotechnical models

Table 1: Technological determinism and sociotechnical models

Model	Focus	Period of influence	Prominent authors/ texts	Associated approaches	Tenets	Methodologies / frameworks
Technological determinism	Science and technology, including ICTs	Throughout, though disparaged by academics since 1980's	e.g. Elull, 1964 (dystopian view); Toffler, 1980 (cited by Kling, 1994)	Technological imperative, media determinism, media effects	Technology has direct effects on society and culture; its trajectory of development is singular and inevitable.	Rhetoric and marketing
Media effects (via Lievrouw, 2014)	Media	20th century till 1980's, though some continuation	e.g. Lasswell, 1948; Weaver and Shannon, 1949 (both cited by Lievrouw, 2014: 33)	Communication theory (Weaver and Shannon, 1949) Computer Mediated Communication (CMC)	Linear models: e.g. who says what in which channel to whom with what effects (Lasswell, 1948); tend to conflate channel and content.	Communication theory frameworks
Medium theory (via Lievrouw, 2014)	Media as communications technologies	Mostly 60's, but some continuation	Toronto School: e.g. Innis, 1951 (cited by Lievrouw, 2014, p38); McLuhan, 1962	Theorists' backgrounds: history, cultural criticism, political economics	The influences of media technologies: macro-level (Innis); human perception and cognition (McLuhan); the Global Village.	McLuhan's hot/ cold media (1968)
Constructivist approaches (all)	Science, technology, media	From 1980s.	See breakdown below	Sociology of science, sociology of technology, interpretivist, relativist-constructivist, SCOT, ANT, SST, STS, Critical/Cultural Media Studies	Technology (and media) are socially constituted, cultural artefacts; open trajectories of development; technology as text.	Sociology of technology, SCOT, ANT

Model	Focus	Period of influence	Prominent authors/ texts	Associated approaches	Tenets	Methodologies / frameworks
Constructivist approaches from Sociology of Scientific Knowledge (SSK): Interpretivist/ relativist-constructivist	Science, technology, media (including ICTs)	From 1980s	e.g. Grint and Woolgar, 1992; Woolgar and Grint, 1991	Constructivist approaches; Sociology of Scientific Knowledge (SSK)	Technology (and media) are entirely socially constituted, cultural artefacts, with no essence beyond this; open trajectories of development: artefacts open to interpretation throughout lifecycle; technology as text.	Sociology of technology; interpretivist and reductionist frameworks
Constructivist approaches: Social Construction of Technology (SCOT)	Technology, especially during development.	From 1980s	Bijker, 2006; Bijker, Hughes and Pinch, 1987; Kline and Pinch, 1999	Constructivist approaches, SST, STS, ANT, social informatics	Technology as socially constructed; open trajectories of development, until closure or stabilisation of artefact.	SCOT framework
Constructivist approaches: Critical/Cultural Media Studies (via Lievrouw, 2014)	Media (including ICTs)	From 1980s; ongoing	Birmingham school: Hall, 1980, 1999; (Raymond) Williams, 1974. (cited by Lievrouw, 2014: 36)	Constructivist approaches, SST	Reveal and challenge influence of power on media production; interpretation of media (as texts); phenomenological.	e.g. encoding/ decoding binary to characterise relations between producers and consumers
Social Shaping of Technology (SST)	Technology, including systems, organisations, ICT; also media	From 1980s; ongoing	e.g. Graham and Dutton, 2014; MacKenzie and Wajcman, 1999 (and writers in their SST anthology); Williams and Edge, 1996; Baym, 2010	Some constructivist approaches, e.g. SCOT but not Grint/ Woolgar; domestication; ANT; social informatics; materiality and affordances; mediation/ mediatisation	Social and technical entwined and influencing each other, throughout (branching) development trajectories and artefacts' lifecycles.	SST frameworks; studies analysing processes of technological change (Williams and Edge, 1996)

Model	Focus	Period of influence	Prominent authors/ texts	Associated approaches	Tenets	Methodologies / frameworks
Structuration (informs SST approaches)	Society, but can be applied to technology	From 1984	Giddens, 1984. It influences all social shaping approaches: e.g. Orlikowski and Iacono, 2001	Influences mediation, SST, social informatics (Sanfillippo and Fichman, 2014); Parallel to ANT (Law, 1992; Latour, 2005)	Human agency and social structure continuously reconstitute each other. Technology is both a product and an action.	
SST approaches: technological momentum	Large technical (technical and social) systems	From 1980s	Hughes, 1983, (1985/1999 in M&W's anthology)	SST, SCOT, social informatics, information infrastructures, systems model	Cycle of mutual shaping in complex, networked relationships, over *time*.	Histories of technologies/ systems
SST approaches: Domestication	ICTs	From 1990s	e.g. Graham and Dutton, 2014; Haddon, 2006; Livingstone, 2005; Silverstone, 2002, 2005, 2006. See also Baym, 2010; Hijazi-Omari and Ribak, 2008	SST approaches	Adoption and consumption of ICTS within the home, including meanings; mutual shaping; taming; moral responsibility.	Mostly qualitative and ethnographic methods. Framework: appropriation, objectification, incorporation, and conversion
ANT (can be seen as an SST approach)	Technology and systems (including ICTs), organisations, events.	From 1980s; ongoing	Callon; Latour, 2005; Law, 1992.	constructivist approaches, SST, STS, social informatics	Technologies (etc.) as dynamic networks (processes) of heterogeneous elements; technologies and people treated equally; open trajectories of development, until temporary stabilisation / black-boxing.	ANT

Model	Focus	Period of influence	Prominent authors/ texts	Associated approaches	Tenets	Methodologies / frameworks
Social Informatics (can be seen as an SST approach)	ICTs, including systems/ networks.	From 1970s; ongoing	Re social shaping vs constructivism: Kling 1991, 1992. See body of literature review for more authors and more detail (re US and UK SI)	SST, STS, SCOT, ANT. Coming from computing and IS background, rather than sociological backgrounds.	Technology as socially-embedded web/network of heterogeneous elements; open trajectories of development; users as social actors.	Computerization movements; Web models; Technological Action Frames; STIN.
Situated action (can be seen as an SST approach)	ICTs, including systems/ networks.	From 1980's	e.g. Suchman, 2007 (brings the concept into studying ICTs)	SST, social informatics, affordances and materialist approaches.	Agency is co-produced though the "intra-actions" of various social and technical actors; boundaries are enacted (Leader, 2012)	Ethnography, ethnomethodology, user studies
Affordances (can be seen as an SST approach)	Primarily ICTs and media, though originally about naturally occurring objects.	From 1990's for ICTs	Hutchby, 2001. Original idea from Gibson, 1979.	SST and constructivist approaches; materialist approaches; mediation	Artefacts possess qualities which influence use (e.g. enable, constrain or inhibit)	e.g. Four affordances of networked media: Persistence, replicability, scalability, searchability (boyd, 2010)
Materialist approaches	Primarily ICTs and media.	From 2000 and growing in influence.	e.g. Gillespie, Boczkowski and Foot, 2014; Leonardi and Barley, 2008;	SST; affordances, mediation. Also media archaeology (Parikka, 2012)	Artefacts possess *material* qualities which influence use.	

Model	Focus	Period of influence	Prominent authors/ texts	Associated approaches	Tenets	Methodologies / frameworks
Software studies	Software e.g. algorithms, API.	From 2001	e.g. Bucher, 2012; Kitchin and Dodge, 2011; Manovich, 2001 (cited by Bucher, 2012); Fuller, 2008;	Medium theory	Understanding software –its derivations and cultural effects.	Software as text or as subject of study
Mediation and mediatisation (can be seen as an SST approach)	Media, including ICTs	From about 2002	Lievrouw, 2014; Livingstone, 2005, 2009; Silverstone, 2002.	SST, domestication, affordances, materiality, structuration	To capture the ways in which communications media transform social processes while being socially shaped themselves.	Lievrouw, 2014: Dynamic reconfiguration, remediation and reformation among artefacts, practices and social arrangements
Media logics	Media and society.	From 1979, more since 2000	Altheide and Snow, 1979 (cited by van Dijck and Poell, 2013)	Becomes part of mediation theory; polymedia; hybrid media	The customs and affordances that shape media use. These also penetrate other areas of life: social, political, commercial.	e.g. Mass media logic; Social Media Logic (van Dijck and Poell, 2013)
Polymedia (a mediation approach)	Media, including ICTs	From 2012	Madianou and Miller, 2012.	Anthropology, SST, domestication, affordances, mediation, media logic, structuralism	Media as integrated structure. People's choice of media beyond access, costs, literacy. Can be judged on that choice.	Ethnography
Hybrid media (a mediation approach)	Media, including ICTs	From 2013	Chadwick, 2013	SST, affordances, mediation, assemblages, media logic.	Combinations of media (systems) create new forms.	Hybrid media systems.

Appendix 1. Ethics forms: self-assessment form for CS2 HCAT

The self-assessment forms for the three case studies are similar. The HCAT form is provided as an example.

Project Title :	**Participation Case Studies: Case study 2 –Hill Community Action Trust (HCAT)**					
Very brief Description:	looking at online and offline participation processes in real life by conducting case studies of people and groups, who are trying to change something					
Type	UG	PG	Research Degree	EU / contract research	Research council	KTP / Commercial

People Involved

Name	Role
Various	People involved in HCDT
Various	People involved in related groups and organisations
Various	The wider public who attend events or interact with the trust online
Various	Elected representatives who interact with the Trust.

Issue		If 'yes" give brief details.
Children under 16 involved	Y/N	N
Interaction with patient groups, disabilities or older potentially vulnerable people	Y/N	Y A wide variety of people are involved with the Trust.
Potential impact on physical health and safety of participants, researchers and the general public	Y/N	N
Potential impact on the mental health and safety of participants, researchers and the general public	Y/N	N
Data protection, intellectual property and permissions required	Y /N	N
Socially or culturally 'controversial' investigations (e.g. pornography, extremist politics)	Y /N	N
Privacy issues (e.g. use of social media, ethnographic studies) • See the assumed consent form	Y/N	Y use of social media ethnographic studies, including observation of public and semi-public events. An assumed consent form is completed for this case study.

If any of the questions have been answered "Yes" then continue.

Briefly describe the ethical problem:
Issue: Interaction with people who have disabilities or older potentially vulnerable people A wide variety of people are involved with the Trust, including older people and potentially other vulnerable people.
Issue: Privacy - Use of social media Various social media are used by the group. They are a source of data and a focus of interest in the

study.
Issue: Privacy - Ethnographic studies The case study methodology is ethnographic and includes observation of public, semi-public and private events. For example, the Trust is involved in many events that are public or that are organised by different organisations within the community. It would be intrusive to get informed consent for all meetings and events observed.
If this can be satisfactorily resolved by the gatekeeper and researcher, describe the resolution:
Issue: Interaction with people who have disabilities or older potentially vulnerable people High levels of respect and cultural awareness will be maintained. Any interaction with potentially vulnerable adults will take place with support from appropriate peoples associated with the trust, including their physical presence.
Issue: Privacy - Use of social media The privacy level of social media will be respected. The source (e.g. writer) of social media contributions will be assumed to be the owner and their permission sought before quoting their contributions in any shared reports or publications. See the assumed consent form for this case study.
Issue: Privacy - Ethnographic studies At the beginning of the study the board of trustees gave consent for the trust to be involved in the study. Permission to observe activities and meetings is on a case by case basis. When attending events, I introduce myself and the research, assuring that their privacy will be respected, but also that they can ask for more privacy at any time or over particular issues. The trust and its participants are re-named in data and reports.

Appendix 2. Ethics forms: informed consent (all cases)

Informed Consent Form: Participation Case Studies

Edinburgh Napier University requires that all persons who participate in research studies give their written consent to do so. Please read the following and sign it if you agree with what it says.

1. I freely and voluntarily consent to be a participant in the research project on the topic of *Participation and eParticipation* to be conducted by *Ella Taylor-Smith*, who is a postgraduate student in the Edinburgh Napier School of Computing.
2. The broad goal of this research study is to explore *Participation -how people and groups influence decisions and get involved in the actions that affect their lives*. Specifically, I have been asked *to take part in a case study*, which should take no longer than *4 months* (*not full time)* to complete. Within the case study, I will be *observed* and *interviewed*. I may also be invited to take an active part in activities like *paper-based mapping, listing activities, collecting images* etc. I understand that these activities are optional.
3. I have been told that *my responses will be anonymised*. My name will not be linked with the research materials, and I will not be identified in any report subsequently produced by the researcher. *Any groups I am associated with will also be anonymised*.
4. I also understand that if at any time during the case study I feel unable or unwilling to continue, *I am free to leave*. That is, *my participation in this study is completely voluntary*, and I may withdraw from it at any time without negative consequences.
5. In addition, should I not wish to answer any particular question or questions, I am free to decline.
6. I have been given the opportunity to ask questions regarding the case study procedures and my questions have been answered to my satisfaction.
7. I have read and understand the above and consent to participate in this study. My signature is not a waiver of any legal rights. Furthermore, I understand that I will be able to keep a copy of the informed consent form for my records.

_____ _____

Participant's Signature Date

I have explained and defined in detail the research procedure in which the respondent has consented to participate. Furthermore, I will retain one copy of the informed consent form for my records.

_____ _____

Researcher's Signature Date

Appendix 3. Ethics forms: assumed consent form for CS1 Ward Anti-Cuts

The assumed consent forms for the three case studies are similar. The Ward Anti-Cuts form is provided as an example.

To be completed by the Gatekeeper and the researcher

Project Title :	**Participation Case Studies: Case study 1 –Ward Anti-Cuts**					
Very brief Description:	looking at online and offline participation processes in real life by conducting case studies of people and groups, who are trying to change something					
Type	UG	PG	Research Degree	EU / contract research	Research council	KTP / Commercial

People Involved

Name	Role
Various	People involved in Ward Anti-Cuts group
Various	People involved in related anti-cuts groups and organisations
Various	The wider public who attend public meetings or interact with the group online
Various	Elected representatives who interact with the group.

Edinburgh Napier University requires that all persons who participate in research studies give their written consent to do so. However this is not always possible or practical. For example, studies which involve observation, the use of photography, or video recording may be invalidated if those people involved are told about it in advance. However, everyone has a right to privacy as described in article 8 of the European Convention on Human Rights. In situations like this we must take all reasonable steps to determine whether the research may proceed guided by the four principles described in Ethical Conduct and Governance in the Faculty of Engineering, Computing and Creative Industries.

This discussion must be taken between the Gatekeeper and the researcher and a written record must be made and retained.

Here are some questions which can shape and direct this discussion.

Potential harm

1. Do the subjects of the research have a reasonable expectation of privacy? For example,
   - Are they in a private (e.g. at home) rather than a public place (e.g. Princes Street)?
   - Are children involved?

Organisational meetings are nominally public, but take place in enclosed rooms (e.g. in a community centre) which carry some expectations of privacy. The identities of participants (i.e. meeting attendees and those mentioned who are not public figures) are anonymised. A respectful common sense approach is implemented to use of meeting content – for example, not using personal remarks or attributing direct quotes.

2. Have reasonable steps been taken to **anonymise** the identities of the people being studied?
   - Can their appearances be obscured / disguised / pixelated?
   - What are the potential consequences of their identity being exposed?

Yes. Identities have been anonymised, during data collection, from the outset.

3. With respect to the use of social media and other forms of e-communication (email, texts, tweets, online recommendations)
    - To whom was the original tweet, posting, email (etc) intended? Was it clearly personal (e.g. a declaration of love) or was it more general (e.g. a restaurant or film review)
    - be mindful of potential liable

The privacy level of social media will be respected. The source (e.g. writer) of social media contributions will be assumed to be the owner and their permission sought before quoting their contributions in any shared reports or publications. Screenshots of public websites will be anonymised and/or permission obtained (depending on the context of publication)

Potential benefits

Describe the potential benefits of this research: *To increase meaningful and effective use of online tools to support participation.*

After careful consideration

Having considered these questions, the gatekeeper and researcher agree that it is reasonable to conclude that no harm is done to the participants and that the data cannot be collected in any other manner (i.e. one involving informed consent).

The research is approved and should proceed. Yes

(signed) Gatekeeper: Colin Smith (signed) Researcher: Ella Taylor-Smith

Appendix 4. More information about Participation Case Studies

Who am I and what am I doing?

I'm a PhD student in Edinburgh Napier University's School of Computing. I'm interested in eParticipation – *using the Internet and mobile phones to influence the decisions and get involved in the actions that affect our lives*.

The Internet can make participation easier, but doing things online changes them, often in unpredictable ways. Also, participation over the Internet is mostly integrated with offline participation – meetings, events, flyers, phone calls etc. I want to look at *online and offline* participation processes in real life by conducting *case studies of people and groups, who are trying to change something*.

In these case studies, I want to explore what people are doing (on and offline) to inform people about their cause, get people involved and try to influence people in power, as well as the social and organisational tasks that keep this going.

I'm hoping that this research will provide useful information about participation. Ultimately, I want to help to make participation easier for more people, as well as more attractive and effective.

There's more information about this project here:
http://www.iidi.napier.ac.uk/c/phds/matricno/99085666

I've been doing research in this area since 2001: http://www.iidi.napier.ac.uk/e.taylor-smith

What do I want to do with you/your group?

I want to find out what you're doing, how you're doing it and how you feel about it.

I'm flexible about what we'll actually do, as this will vary to suit each person and each group, but it's likely to involve interviews and observation, including public and semi-public information on the Internet (e.g. website, Facebook groups and pages). It will be up to you what you get involved in and you'll be able to change your mind along the way. I understand that you're busy and don't want to add to your workload.

What will happen to your data?

- The main output of the project is a thesis (a long essay), but I will also write papers and blog posts.
- I will not use your name, your group's name or its location in published material, including blog posts.
- The group may be recognisable to people who know it, because of the unique purpose of the group.
- Interview data will be anonymised and stored securely.
- Social media data will be anonymised before being shared in any reports, presentations or publications, including photographs.
- I do not want to create a picture of the group that you don't agree with, but I do want to include the perspectives of different people inside the group, who may not see everything the same way.
- You will be able to comment on any outputs and your opinion will be taken into consideration.

Appendix 5. Short guide to HCAT research

Ella Taylor-Smith, Edinburgh Napier University:
http://www.iidi.napier.ac.uk/e.taylor-smith
http://www.iidi.napier.ac.uk/c/phds/matricno/99085666

Researching the [Community Action Trust]

Who am I?

I'm Ella Taylor-Smith, a PhD student in Edinburgh Napier University's School of Computing.

I'm interested in eParticipation – *using the Internet and mobile phones to influence the decisions and get involved in the actions that affect our lives*.

What am I doing in [Hill]?

[Hill Action Trust] kindly agreed to be a case study. So, I am exploring how the Trust organises and communicates, on the Internet, on paper and face to face.

In person:

- I am observing at events like this (the Gala) and meetings like the Trust's AGM in April.
- I would also like to interview people who are involved or interested in the Trust.

On the internet I observe:

- the [Hill] Community Group on Facebook
- the website [Hill.org URL]
- and blog [Hill WordPress Blog URL]
- and Twitter account [Hill Twitter URL]
- reports about the Trust

If you are willing to be interviewed, please email me e.taylor-smith@napier.ac.uk or put a completed contact slip in the questionnaire box.

Privacy

- I will not use your name, your group's name or its location in anything that is shared: reports, presentations or published material, including blog posts.
- The group may be recognisable to people who know it, because of the unique purpose of the group.
- Research data is kept private and stored securely.

More information

If you have any questions or worries about this, please feel free to ask me or email me: e.taylor-smith@napier.ac.uk

or put a completed contact slip in the questionnaire box [at the Gala] and I'll get back to you.

Appendix 6. What do case study participants do and how long does it take?

This list is based on what people in previous groups have done. It's all negotiable.

1. Give permission, on behalf of the group, for the group to be involved in the research[1], including
    - Ok for the researcher to come along to meetings or events (where appropriate)
    - Ok to join any online groups and read posts
    - Ok to be added to any email lists (where appropriate)

    Time: 1 hour? (How long this takes depends on how you communicate with the group about the research and whether you get their permission as individuals or as a group).
2. Interviews
    - Be interviewed. These are audio-recorded and take 30 minutes to an hour (We agree the end time at the start)
    - Suggest some people in the group for the researcher to interview and put them in touch.

    Time: 1.5 hours
3. Admin
    - Add researcher to online groups and email lists (where appropriate):

    Time: 10 minutes
    - Let researcher know about upcoming meetings and events:

    Time: 10 minutes

Total time

As you can see from the above, the time involved really depends on the context.
My estimate is 3 hours.

[1] I'll provide copies of the project's privacy policy, so people will know what can happen to their data. Here is a summary:

Privacy

- I will not use your name, your group's name or its location in anything that is shared: reports, presentations or published material, including blog posts.
- The group may be recognizable to people who know it, because of the unique purpose of the group.
- Research data is kept private and stored securely.

Appendix 7. Data gathering methods for CS1: Ward Anti-Cuts

Gathering data: publicly available data

- A union website timeline of the privatisation campaign that led to the establishment of Ward Anti-Cuts.

Review materials created by the groups

- Paper posters and flyers from Ward AC and associated groups, such as unions.

Observation: offline

- Ward Anti-Cuts' twice-monthly meetings;
- Public meetings organised by Ward AC: January 2013; October 2014;
- Two lobbies: The Scottish Parliament; City Council;
- City-wide anti-bedroom tax demonstration/march;
- City Council Petitions Committee meeting;
- Two Sister Group 1 meetings.

Observation: online

- Ward AC Facebook Page, when established;
- Facebook pages of Sister Groups 1 and 2;
- Ward AC Twitter account; Twitter accounts of some participants.
- Alliance Blog;
- Bedroom tax petition on City Council's website: signatures monitored daily.

Survey

The group were consulted about the survey, which led to the word "you" being emphasised in the final question. Distributed at the public meeting, organised by Ward Anti-Cuts, in January 2013. The researcher introduced it at the beginning of the meeting. The responses were shared with Ward AC at one of their regular meetings.

- How did you hear about the meeting?
- How would you like to stay in touch with the campaign?
- What would <u>you</u> like to do about the issues raised in the meeting?

Selecting Interviewees

As well as asking for volunteers at Ward AC, certain group members were asked individually: people who were particularly active or who took specific roles, such as Mr Green, who attended to share information with Sister Group 1, and Ward's chair, Jean. Sister Group 1's Dave was responsible for the Alliance Blog and was contacted specifically. Councillor Bruce only attended one Ward AC meeting in the case study period, but was contacted due to his historical involvement. The researcher met all the Ward AC interviewees at meetings and events.

Appendix 8. Data gathering methods for CS2: HCAT

Gathering data: publicly available data

- HCAT had been founded to manage a compensation payment, over an illegal waste site. The story of the village's battle with the neighbouring council, over this issue, was reported on the BBC news website and in a book (Dunion, 2003).
- HCAT are also listed on websites which register similar Trusts, charities and public organisations.
- The appeal against the rejection of planning permission for the Westhill Moor wind-farm was documented on the Scottish Government's Directorate of Planning and Environmental Appeals (DPEA) website: https://www.dpea.scotland.gov.uk/

Review materials created by the groups

- Paper posters and flyers, promoting events (some as paper; some downloaded from websites and social media);
- Reports from HCAT's 2011 Community Consultation (implemented by external organisation);
- Reports from HCAT's 2012 wind-farm survey (implemented by external organisation);
- Documents for HCAT's 2012 AGM (i.e. reports covering 2011)

Observation: offline

- Christmas Fair, organised by HCAT and the Gala Committee;
- Hill Community Council meeting, with presentations by Network Rail and the local council, about plans for the new level–crossing barrier;
- HCAT AGM 2013;
- Shadowing HCAT's Action Manager and "hanging out" in HCAT office;
- Hill Gala, wearing an "Ask me about my research" tabard, and conducting a survey (see below).

Observation: online

- Hill.org (Hill village website, managed by HCAT);
- Hill WordPress blog (managed by HCAT);
- Hill village Twitter (managed by HCAT);
- I love Hill Facebook Page (managed by HCAT);
- The Scottish Government's Directorate for Planning and Environmental Appeals website re the Westhill Moor wind-fam application.
- Hill Facebook Group.

Survey

Paper surveys were taken to Hill Gala, using a clipboard. Approaching people queuing for burgers was a particularly effective strategy. Respondents were from Hill and the surrounding villages. The survey included the HCAT logo at the top and Edinburgh Napier's logo at the bottom, accompanied by the legend: "*This information is being gathered as part*

of a research project at Edinburgh Napier University". There were three questions, closely aligned to those of the Ward AC survey:

- How did you hear about [Hill Community Action] Trust?
- How do you like to hear about Trust news and events?
- How would you like to be involved with the Trust?

The 29 responses were shared with Monty.

Selecting Interviewees

Attending events was one source of interviewees; one interviewee responded to a request on the Facebook Group, Lily. People with specific roles were identified: involved in the Gala Committee, Allotment Association, Community Council and the Trust directors. These people were contacted directly (e.g. via email or Facebook) or with help from Monty or other interviewees. Armstrong was identified as someone who had questioned Monty about HCAT activities on the Facebook Group. In addition to the interview, the researcher met about half the HCAT interviewees at other events.

Appendix 9. Data gathering methods for CS3: City Primary School

Gathering data: publicly available data

- Local news articles published online: Evening Paper, Local TV, Hyperlocal Paper.
- Local blogs: Local Environmental Org.
- Social media: Heritage Org's Facebook Page, Mr MSP's Twitter account and Facebook Page, individual's comments on Hyperlocal Paper and public Facebook Pages.
- The City Planning Portal, including comments on the planning application.

Review materials created by the groups

Interviewees supplied flyers that they had used in the campaign, as pdfs and word docs.

Observation: offline

- Two Neighbouring Community Council meetings where the planning application and CPS campaign were discussed;
- The city council Planning Committee meeting where the developers' planning application was considered;
- The pub opposite the school, where the campaigners celebrated the Planning Committee's decision;
- Site inspection led by the Scottish Government's Directorate for Planning and Environmental Appeals (DPEA).

Observation: online

See Publicly available data.

Interviews

For the City Primary School study, the researcher met some campaigners at the Planning Committee and in the pub to celebrate the initial Planning Committee victory. Rachel invited people via their email list. The researcher contacted everyone who had spoken against the planning application at the Planning Committee meeting, apart from Mr MSP. Also the chair of Local Community Council was interviewed, whereas their Planning Convener had presented to the Committee. Two Hyperlocal Paper contacts were interviewed, one of whom, Ivan, was also an involved parent.

Appendix 10. Tabard worn to Hill Gala (CS 2: HCAT)

Edinburgh Napier UNIVERSITY

Institute for Informatics & Digital Innovation

Shaping our digital future

Please ask me about my research on [Hill Community Action] Trust

On the original tabard, Hill Village Logo was here.

Appendix 11. Interview protocol

Recruiting interviewees	
	Who to interview? • Consider group boundaries and roles • Web admins (of related projects if necessary) • Keep notes about recruitment process
Before the interview	
Interviewee	Arrange meeting time and place. Make sure interviewee understands: • I'm interested in *their* experience and viewpoints (no right/wrong answers) • If it's one of a series • Likely length • It will be recorded • Privacy level (invite them to ask more about data if they like)
Location	Convenient for interviewee Quiet Reasonably private Ideally free
Recording equipment	Establish recording equipment (HP laptop) Charge batteries Test (record, playback, archive, playback)
Informed consent	Ensure enough forms are printed Take to interview Take information sheet too
Interview	
Interviewee	Check interviewee understands the nature of the interview Get informed consent form signed Ask interviewee to choose the name that will refer to them (project name) Arrange other interviews, with them, if necessary
Recording equipment	Test Show interviewee how to control
Interview guide	Topics, questions, prompts
Demographic data	Collect any demographic data you need, that didn't come up in the interview
After the interview	
Record context	About the interviewee About the location Length Date and time
Catalogue	Interviewee's project name Context details Main/salient points
Informed consent	Scan and file
Archive recording	Convert files if necessary Additional privacy (store more safely than normal, portable data)
Transcribe	As soon as possible after interview. Listen to whole interview first.

Appendix 12. Interview guides

The table is based on Lofland and Lofland's (1994) method for designing an interview guide, as summarised in Fielding and Thomas (2001: 132).

Table 2: Interview guide for CS1 Ward Anti-Cuts

Topics	Questions	Prompts
1. Their involvement (beginning)	How did you hear about the group? Why did you get involved?	Involvement with previous actions Involvement with connected organisations Contacts in group Personal history
2. Activities between meetings	What happens between group meetings?	Anti-cuts activities/ related activities What do you do? (online, offline) What do other people do? Organisation Finding information
3. Participation spaces, if not covered	Where do you talk with other people about this issue? Where do you get information? How do you pass it on? How do you try to influence people in power (what do you do, where do you do it?)	Websites, social media, email, forums Offline places where issues are discussed, activities are organised etc.
4. Internet use	Do you use the Internet? What for/how much? Where do you have access?	Home/work/, social networking, smart phone. Positive negative feelings about internet, estimation of technical competence, time spent
5. Getting more people involved	How many people come to meetings? Would you like to see more people involved?	Picturing a bigger/more powerful group Or a smaller/ less active one What do you think inspires involvement? What would inspire other people to be involved? How could other people usefully get involved? What actions are useful? Where, when?
6. Convincing politicians, especially councillors	Who has the power to change the situation? How can they be convinced?	Individuals? Or as a group? (By party, or as a council?) Contacting them Supplying them with information Convincing them (people or information?) Getting accurate feedback from them
7. Demographic information	Bio can shed light on participation attitudes and history	do you consider yourself Scottish? Occupation/ previous occupation/ education, approx. age,

8. Further interviews	Further interviews with this interviewee Other people to interview	Times, places, topics to cover Useful people to chat with

Table 3: Interview guide for CS2 HCAT

Topics	Questions	Prompts
1. Their involvement (beginning)	How did you hear about the Trust? Why/how did you get involved?	Involvement in specific projects Involvement with connected organisations Contacts in group Personal history
2. Activities	What activities are you involved with through/related to the Trust?	Environmental/local activities/ related activities What do you do? (online, offline) What do other people do? Organisation Finding information
3. Participation spaces, if not covered	How do you find out what the Trust is doing? Where do you talk with other people about trust issues/events? Where do you get information? How do you pass it on? How do you try to influence people in power (what do you do, where do you do it?)	Websites, social media, email, forums Offline places where issues are discussed, activities are organised etc Influencing local issues (and wider experience of activism/citizenship)
4. Internet use	Do you use the Internet? What for/how much? Where do you have access?	Home/work/, social networking, smart phone. Positive negative feelings about internet, estimation of technical competence, time spent
5. Getting more people involved 6. People setting Trust directions	Could you estimate how many people come to trust meetings? (public meetings, consultation meetings, AGMs) Would you like to see more people involved? Who?/ How? In activities/ in setting policies?	Picturing a bigger/more powerful group? Or a smaller/ less active one What do you think inspires involvement? What would inspire other people to be involved? How could other people usefully get involved? What actions are useful? Where, when?
7. Convincing politicians, especially councillors	Who has the power to influence life in [Hill]? How can they be convinced?	Individuals? Or as a group? (By party, or as a council? Other organisations: public/private) Contacting them Supplying them with information Convincing them (people or information?) Getting accurate feedback from

		them
8. Demographic information	Bio can shed light on participation attitudes and history	do you consider yourself Scottish? Occupation/ previous occupation/ education, approx age,
9. Further interviews	Further interviews with this interviewee/ people to interview	Times, places, topics to cover Useful people to chat with

Table 4: Interview guide for CS3 City Primary School

Topics	Questions	Prompts
1. Their involvement (beginning)	How did you hear about the proposed development and the campaign? Why/how did you get involved?	Involvement in specific projects Involvement with connected organisations. Contacts in group Personal history
2. Activities	What activities were/are you involved in related to the campaign?	School/local activities/ related activities What do you do? (online, offline) What do other people do? Organisation. Finding information
3. Participation spaces, if not covered	How did/do you find out what is happening with the campaign/development? Where do you talk with other people about it? Where do you get information? How do you pass it on? How do you try to influence people in power (what do you do, where do you do it?)	Websites, social media, email, forums Offline places where issues are discussed, activities are organised etc Influencing local issues (and wider experience of activism/citizenship)
4. Email list	How did the group use the email list? How did you get on with it? How was it organised? How many were on the email list? How often did you send/get emails?	Closed
5. Facebook group	How did the group use the FB group? How did you get on with it? How was it organised? How many were in the group? Frequency/volume of posts	Closed
6. Internet use	Do you use the Internet? What for/how much? Where do you have access?	Home/work/, social networking, smart phone. Positive negative feelings about internet, estimation of technical competence, time spent
7. Getting more people involved	Would you like to see more people involved?	Picturing a bigger/more powerful group?

	Who?/ How?	What do you think inspires involvement? What would inspire other people to be involved? How could other people usefully get involved? What actions are useful? Where, when?
8. Convincing politicians, especially councillors	Who has the power to influence this issue? How can they be convinced?	Individuals? Or as a group? (By party, or as a council? Other organisations: public/private) Contacting them Supplying them with information Convincing them (people or information?) Getting accurate feedback from them

Appendix 13. NVivo Nodes

Node	Nested Nodes	Nested Nodes
Participation spaces offline	Word of mouth Demonstrations and direct action Face to face spaces Meetings and workshops Pubs surgeries (reps)	
	Ward offline spaces	Independent resource centre Community Centre library
	Hill offline spaces	Arts workshop church and church hall in village outside the village other meeting spaces New Resource centre shop and post office Trust office Village hall
	CPS offline spaces	City Council buildings Disputed building -3 North Street Hyper-Local Paper print edition Library (North Street) Other city schools Pub opposite the school The school
Participation spaces online	blogs and websites DPEA website Facebook pages and in general Fundraising sites online surveys and polls other social media Twitter in general YouTube and Vimeo	
	Ward online spaces	Alliance website Sister Group 1 Facebook page Petition on council's website social media general Ward Facebook Page Ward Twitter
	Hill online spaces	Arts Shelter FB page Facebook group Facebook page (I love Hill) hill.org social media topics Trust email list Twitter (Hill Village) WordPress blog
	CPS Online spaces	City planning portal

		Heritage org website and Facebook page Hyper Local paper Local environmental org blog PC Facebook page
Participation communication methods (on or offline)	advocacy Banner CCTV video & webcast communication gaps or breakdown consultations and surveys Contact list and contact details Email events calendars FOI requests Grapevine Letters and formal emails maps Minutes and formal reporting networks Newsletters and magazines Paper flyers, leaflets, posters, stickers Petitions and ePetitions Photos Planning coms Telephone Texting Traditional media Voting and elections	
Democracy	Diversity	
Events and campaigns	Ward events	Demo March 2013 IDS Protest March 2013 Other public meetings Parliament Lobby March 2013 Public meeting January 2013 Bedroom Tax petition to Council Ward public meetings 2011-12 Workshops (A-C etc)
	Hill events and campaigns	Christmas festival events Community development consultation H Community development plan Food & Xmas craft fair 2013 Fundraising I love Hill Sponsored Walk Golf tournament Concert HCAT origin and fund Moving out of the office Pharmacy Recruiting staff summer 2013

		Renewables Wind farm development and inquiry Wind farm consultation School Spring Fair speeding in the village sustainability incl transport & food Trust AGMs Volunteer Awards
	CPS events and campaigns	Decision to split campaign Developers appeal Planning Committee 4 Dec Planning Committee 6 Nov Exhibitions at the library Modular classrooms campaign Objections to planning Stuart's presentation flyer Parents meeting in June PC meeting in May Presentation to NTB Site visit Visit to modular classrooms
Groups	Ward groups	Alliance and Trades Council Advice groups, CAB etc Anarchist groups bedroom tax groups Disability rights groups Anti-poverty group Tenants associations Sister Group 1 Sister Group 2 Glasgow Law Centre Housing associations Anti-War groups
	Hill groups	Army RAF MOD Community Association Community Council (Hill) Cycling groups kids -playgroup toddler group brownies rainbows etc Objectors to the wind farm Parent councils Schools (local primary and nearby high school) Trust Directors and board meetings Trust members Trust staff
	Hill Group space/event combos	Allotments/ Allotments Association Gala/ Gala Committee Network Rail crossing events

		Park upgrade / Park Group Arts Shelter Woods paths Phone box
	CPS groups	Councillors on planning committee Developers Heritage org Hyper Local paper Neighbouring Community Council Local environmental org Local residents Local Community Council Objection working group Parent Council, PSA and Parent Forum Parents Planning Aid Scotland School staff
	Church groups and orgs Community Councils Police Unions Volunteers EU Gov and funding Political parties WM government and parliament	
	Elected reps	Mr MSP
	Local Council body and staff	Buildings and estates Education, children and families Planning dept and groups
	Scottish Government, quangos, utilities	DPEA Forestry Commission Scotland General Registers of Scotland Scottish Water
	Transport	First Scotland buses Scotrail
Internet access, computers and use	Googling and searching Local files and programs e.g. XL, word Online banking Smart phones Tablets, notebooks, laptops	

Appendix 14. Participation spaces long-list

Table 5: Participation spaces long-list

1. Ward Anti-Cuts	2. Hill Community Action Trust	3. City Primary School
Ward emails	Trust email list	Parent Council email list
Ward Facebook Page	Hill Facebook group	Parent Council Facebook group
Sister group 1's Facebook Page	I love Hill Facebook page	Heritage.org Facebook page
Ward Twitter	Twitter (Hill Village)	Hyper-Local paper website; Facebook page; Twitter
	Hill.org	Local environmental org blog
Alliance blog	Hill blog	City planning portal
Petition (Council's website or paper/public signing)	Fundraising websites	City Primary School and playground
Community Centre Room	Trust Office	North Street building
Independent local resource centre	Village Hall	City Chambers
City Arts Workshop Room	Resource centre	Pub opposite the school
Lobby outside Parliament	People's homes	

Appendix 15. Workshop protocol

(Information in italics is specific to each group)

1. Set-up –diagrams are on the table from the start

- Diagrams are on the tables, blue-tacked down *(Ward AC: Community Centre Room and Facebook Page; HCAT: Hill Facebook Group and Hill blog; CPS: Facebook Group and Email List*)
- Acetate is on top.
- Printed docs on table: Individual diagrams, spare ethics forms, glossary for that workshop.
- Other materials: Pens for acetate, remover pads, plain paper pads, biscuits.

2. Intro

- (If it's not obvious, check whether introductions are necessary)
- Thank you for coming to the workshop.
    - Please feel free to chip in or ask questions at any time.
- Thank you for your help with the case study so far, welcoming me into your group and giving me your time.
- What we're going to do (overview). We're going to look at these diagrams and you're going to annotate them by drawing on sheets of acetate laid on top.
    - Think back to
        - *Ward AC: early 2013 from the public meeting with AB and BS to the first Anti-Bedroom tax petition going to the Council, meeting with AB in the new year, started working on the bedroom tax issue and set up the petition and the Facebook page*.
        - *HCAT: Spring/Summer 2013 when this place was being built, the Primary children did the Big Walk, Clearing paths in the wood, HCAT were advertising jobs and the wind-farm proposal was with the DPEA*.
        - *CPS*: *summer and autumn 2013, when you were campaigning against the planning application (up to the Planning Committee meeting)*.
        - I'm hoping you'll draw corrections/add more info by scribbling on the acetate.
    - (The HCAT workshop was the first workshop and the plan was to annotate one acetate looking back at the case study period and then one looking at the time since then, into the present, for each interactor diagram. However, it was not possible to split the conversation into "then" and "now", so this idea was not pursued: only one acetate was used per diagram, for all workshops.)

3. Privacy and ethics

- I'm going to audio record the session, so that I can capture your thoughts.
- The recording will be kept private, though some sentences may be transcribed and used anonymously, as in the interviews. Only the examiners and I will have access to the recording.

- Anonymity (e.g. using your “research names”).
    - Note –your group has been an anonymised and is called: *Each group’s research name*
    - Also, your names and the names of other groups and places in the study –see glossary *E.g. Hill Village*
- Your input will feed into my thesis.
- It will give another perspective on your communications and my diagrams
- It will also show whether you found the diagrams understandable and useful.
- I think this is covered by the ethics forms you signed before.

4. Start recording on 2 devices

- Laptop and IPad –**put near participants**.

5. What I’m hoping we’ll get out of this workshop

- You: a deeper understanding of how your group communicates, including what works well and the challenges you face.
- Me: feedback on my picture of your communications; information about how things have changed.

6. Where do the diagrams come from and what do they show?

- Each diagram is an attempt to show the communication methods associated with a certain “space” – I’m calling these “Participation Spaces” in my research. So, each space is an **abstraction** of your use of the space –the communications methods associated with it and the people and groups involved.
- These two diagrams show
    - *Ward AC: Community Centre Room and Facebook Page; HCAT: Hill Facebook Group and Hill blog; CPS: Facebook Group and Email List*
- The diagrams describe the time I spent with you
    - *(Similar description to intro)*
- I’ve been trying to understand each space within the context of the group –for example looking at how it is used by/connects with people inside the group, other groups, other spaces etc; and looking at practical things such as access and costs.
- I’ve done this with 7 spaces (*List participation spaces for each group*). But we’re just going to look at 2 today.
    - There’s more analysis and diagrams. This is the tip of the iceberg.

7. Considering the first diagrams

- Recap what I would like you to do:
    - Draw on the acetate to improve this picture of how things were then (in *2012/2013*)–e.g. add comments or new info, change arrows, cross stuff out, emphasise other stuff.
    - Add comments about how things have changed since then and/or how things are now.
    - It’s probably best to work on one diagram at a time.

    - Please work together and talk out loud about what you're doing.
- Any questions?

1. Diagram 1

- Brief explanation of schema: blue line loosely bounds space; the icon in the middle identifies this space; it is at the centre, because it is the focus of this model: it is not at the centre of all young communications. Orange arrows describe information flow. (*Depending on the case study, add: dotted arrows show influence; pink arrows show funding*).
- Hand out pens.
- Looking at diagram 1…
    - Think yourself back to (*e.g. the campaign)*
    - Can you recognise/understand the diagrams as pictures of your communications at that time?
    - What would you like to change? (e.g. Move, add, cross-out)
    - **Leave some silence before prompting.**
        - Other prompts:
        - Can you see yourself?
        - Notice the flatness of the diagram and identify/emphasise important aspects.
        - Maybe someone would feel more confident sketching something on a wee diagram first and then getting agreement with the group
    - Hopefully people are drawing on the acetate and talking about it.
    - I ask questions to make sure I understand what's happening.
    - Now I want to find out about what you're doing now. How things have changed. (Prompt from observations if necessary).
- When it's finished, **take photos** before moving anything.

2. Diagram 2

As for diagram 1.

3. Take home messages (de-brief chat)

- What has struck you in this workshop? What has been the most interesting or useful thing for you?
- What are you going to take home for the group?
- Do you have any more questions?
- Thanks for your time.

Appendix 16. Workshop implementations

The workshops are listed in chronological order.

Pilot workshop

A pilot workshop was held to identify any problems with the diagrams or protocol. This was held at Edinburgh Napier University, with one colleague and two PhD students from the School of Computing. As the participants did not know the case study groups' work, this workshop validated practicalities of the method, such as communicating the task and understanding the diagram's schema.

HCAT Workshop: November 2014, the New Resource Centre

Potential participants were invited by contacting all interviewees via email or Facebook, depending on the contact details, according to the method used to arrange the interview. Five people attended: Monty (HCAT's Action Manager), Bill (HCAT's founder and Chair), Fred (who leads the woods path project), Robert (HCAT's vice-chair) and Armstrong (Community Council member, who is sceptical about wind-farms). The workshop was held early evening and lasted about 90 minutes.

The workshop focused on interactor diagrams of the Hill WordPress Blog and Hill Community Facebook Group.

The diagrams were a good focus for discussion. Due to Monty's role, people left him to annotate the diagrams. At first there was a small misunderstanding about the diagrams, in which the group thought that the Hill blog icon was at the centre to represent its centrality in their communications, rather than because it was the subject of the diagram (and STIN model). Thus they tried to move the icon for the new resource centre to the middle instead. This misunderstanding was quickly cleared up, but may have inhibited annotation. In the following workshops, the position of the central icon was clarified at the beginning: emphasising that the diagram was about how the other elements related to this participation space.

The initial workshop plan had included two sets of annotation per diagram: one concerning the case study period (then) and the other concerning changes since the case study period (now). It quickly became clear, in this first workshop, that enforcing this temporal

separation of the discussion would not be possible, without being very disruptive. So, the discussions ranged freely through time and only one set of annotations were made per diagram, concerning both then and now.

CPS Workshop 1

Potential participants were invited by contacting all interviewees via email. Two people attended: Stuart (who is on the Parent Council and created the campaigners' objection presentation and report) and Ivan (a parent, whose email exchange with council staff was published on Hyperlocal Paper's website). The workshop took place in a local church meeting room. The workshop was held in the early evening and lasted just over an hour.

The workshop focused on interactor diagrams of the Reply-all Email List and the Parent Council Facebook Group.

This workshop, and all those following, were more successful than the HCAT workshop in terms of annotating the diagrams. Stuart quickly picked up the schema and was confident in adding information. Ivan followed suit. Ivan had not used the Facebook Group and Stuart had used it very little, so most of the annotation was on the Email List diagram.

CPS Workshop 2

This was held at Rachel's house and attended by Dmitri (who is on the Parent Council and was very active at the beginning of the campaign) and Rachel (who led the campaign against the planning application). The workshop was held in the evening and lasted just over an hour.

The workshop focused on interactor diagrams of the Reply-all Email List and the Parent Council Facebook Group.

Dmitri and Rachel were active users of the Facebook group in the case study period, unlike Stuart and Ivan. Both were confident and enthusiastic in annotating the diagrams. In both CPS workshops it worked well to have the diagrams side by side and facing the same way. This encouraged comparisons and iterative annotation.

Ward Anti-Cuts Workshop

Potential participants were invited by attending a Ward AC meeting and contacting all interviewees via email or in person. Five people attended, including interviewees: Caroline (who keeps the minutes notebook), Victor (who manages the Twitter account and is a Facebook Page admin) and Florence. Jean (the group's chair) sent apologies. Two people attended who were currently involved in Ward AC communications, but had not been involved during the case study period: Liz (who now looks after the Email List) and Bob. The workshop was held in the Community Centre and lasted about 90 minutes.

The workshop focused on diagrams of the Community Centre Meeting Room and Ward AC's Facebook Page. The Community Centre represented by the diagram is the same place as where the workshop was held.

Because of where people were sitting, there was more focus on the Community Centre Meeting Room diagram than the Facebook Page. Liz was keen to annotate: though she was not there in the case study period, she had worked with the group before and after. The group quickly picked up the schema and most annotated or suggested annotations. The small A4 diagrams were helpful for those who were less mobile, especially to consider the Facebook Page diagram, which was further away from them.

Appendix 17. Motivations, exclusions and problematic interactions

Motivations/used for	De-motivations	Exclusions	Non-interactions
Advertise meetings	Confusion with Facebook group	Approved supporters only	Commenting disabled
Asynchronous	Dislike posting	Can't get there (time/location)	Confusing processes
Attend a meeting	Dislike posts (gossipy, offensive)	Council/gov staff restricted posting	Confusion with Hill.org
Avoid time-tabling clashes	Don't understand how it works/ how to use it	Dislike Twitter	Council leaks to paper
Be like other groups	Facebook model	Limited geographical reach	Danger
Be visible and accessible	Feel it's ineffective beyond network	Low literacy confidence	Developer annoyed with Community Council
Build/maintain network	Few posts	May not be interested in articles	Don't know it exists
Buy and sell; lost and found	High volume	Mostly advertisements	Drawings hard to read on computers
Can be used from anywhere with Internet access	irregular opening hours	Need Internet access	Hard to find via Google
Co-create outputs	Lack of control over data	Need Internet access and skills	Indecipherable email address provided
Comment	Lack of time	Need to read English	Is it a community account or a Trust account?
Complain, vent, instigate change	Limited geographical reach	No email account	Lack of info
Delivered to homes	Locked in school hours	Privacy	Lack of push technology
Facebook auto-tweet	Long dormant period	temporary eviction	Lack of space for public
Follow policy	Other parent does school run	Trying to exclude studio residents	May dislike content
Fundraising	People outside Hill	Visually impaired	Miss posts - algorithms
Get feedback, input and opinion	People think it's out of date		Miss posts - busy feeds
Get input	Persistence of posts		Monty not involved in development
Get news/info	Physical difficulty		Need to read English
Get volunteers	Prefer email list		Neglected sections
Help people	Prefer f2f		No link with Alliance blog
Ideology	Presume Monty will do all the work		No link with minutes notebook
Increase sustainability of village	Privacy		No links to minutes
Influence local council	Reputation of posters (silly)		No push technology
Keep it looking up to date	Social media links to blog		No warning about publishing full address
Learn social media to support children	Technology break down		Noise
Make planning decisions	Time (holiday period)		Not webcast
Number of people on list	Time clash (another event)		Password problems
Offline access	Time clash (children, work)		Poor advance info
Organisation	Ugly		Privacy issues
Organise events	Volume discourages posting		Reply all threads/ ccs
Part of job			Technology break down
Participate			Text length issues
Pick something up			Very few comments
Post links to useful info			Wrong contact details provided

Post photos of events Privacy Promote actions and events Promote/support petition Promoted via flyers Provide contact point Publish docs Push technology Record actions rent-free lease extension Represent other people Share info from other groups Share knowledge/skills Share news/info Share photos Show support Social, community Solidarity storage and distribution To assess North St building To flyer and collect email addresses To get to school To play outside To speak to Monty To take photos work (access technology to support work)			**Positive interactions** Council leaks to paper Full minutes provided on council website later Posters in windows Privacy Responses published Supervision

Appendix 18. Resources

Resource outlay (CS groups)	
Funds to fundraising activities	(continued)
Heating	Rent (£Xpm)
Hosting (£Xpa)	Resources to get there (bus, car, bike)
Hosting (+ IP and maintenance?)	Selling stuff for village funds
Info for articles	Storage and bandwidth
Monty's salary	Technology and Internet access
Payment for adverts and inserts	Time (attention and content)
Previously design and support costs	Time (attention)
Promotion of magazine (via FB page))	Time (travel and specific actions
Resource outputs (CS groups)	
Art work and play equipment	(continued)
Building community	Potential influence (petitions, model resolutions,
Business listings	emails to reps)
Community Groups listings	Promotion Community Groups (esp. Community
Contact point	Council)
Decisions about planning	Promotion of events
Encourage actions	Promotion of local businesses
Encourage volunteering	Promotion of petition
Events	Provide info to support actions
Facilities to object online	Publish local opinion (especially useful to
Funds from fundraising	Community Councils)
get information	Share information
Good offline communication method	social
Information products (flyers)	Space for community groups' files
Input into plans	Space for community groups to meet
Learn about planning	Space for local council to hold events
Market place (for buying and selling)	Space to meet parents and flyer them
Photos and measurements of North Street	Support
building	Support for other groups and events
Account taking dependencies	
Continuing campaigns, actions	(continued)
Council social media guidelines	Reputation of alliance and the anti-cuts groups
Fear of strangers	Reputation of associated groups
Impact on neighbourhood	Reputation of campaigners
Impact on school	Reputation of Community Council
Importance of keeping site up to date	Reputation of Council
Importance regular meetings for offline activists	Reputation of developers
Links with other organisations	Reputation of group
Make it clear that group are independent of, e.g.,	Reputation of groups mentioned on flyers
unions	Reputation of individual posters (esp. elected
Meetings announced via email, Facebook and	reps)
blog	Reputation of local council and councillor
Personal reputations	Reputation of objectors (people and orgs)
Profits to charity	Reputation of paper
Relationship with funders	Reputation of Parent Council
Reputation and values of Trust	Reputation of School
Reputation attached to meetings (regular,	Reputation of village

friendly)	Safety and happiness of children
3rd party outlay	
Advertisers support paper	(continued)
Content from other orgs	Local councillor acts to get rent-free period
Content shared by other people/ pages	Lottery fund Monty's role
Council contributes content via letters	Open Source input to Wordpress
Council donate premises rent-free	Other groups help to distribute
Council funds upkeep	Other groups provide trestle table
Council pay for space	Other organisations use portal in their work (e.g.
Council pay for staff	community councils, Hyper-Local Paper, Heritage
Council pays councillors	Org
Council pays for maintenance	Paper pays for printing
Council pays for staff to monitor children	Paper pays for web-hosting
Council provides technology (afaik)	People from other orgs contribute time
Council staff run meeting	voluntarily) (Community Councils, Hyper-Local
Council staff upload content	Paper)
Dave M's Technology and Internet access	Rent previously paid by Lottery?
Developers contribute content via responses	Scottish Gov/ Council pay for development,
Developers contribute plans and docs	maintenance and hosting
Developers upload docs	Some email accounts provided by other
Directory Magazine run magazine	organisations (e.g. work)
Expertise	Some present as part of paid work (Developers,
Facebook provide technology, hosting and	Heritage Org)
moderation	Supported by advertisers (local businesses)
Funds from Lottery income?	Time (Dave M's)
Google; Hotmail (provide email accounts)	Twitter provide technology, hosting and
Hosting costs (£2-3pm paid by Dave M)	moderation
Idox create and support portal	Unions print flyers
Input from Lottery (e.g. for "marketing")	Volunteers provide time and expertise
Indirect outlay	
Council potentially receives funds through sale of	(continued)
buildings and as sweeteners.	Parents fund portal through taxes
Council receives funds through renting out other	Pay for building via taxes (via Council)
rooms	Pay for space via taxes
Data to Facebook	Pay for staff via taxes
Free email accounts funded by advertising	People send content via email lists
Parents fund council through taxes	Potential attention to advertising
Parents fund planning department through taxes	Union members may indirectly pay for printing

Appendix 19. Characteristics of the groups as community/ activist orgs

Most of the participants are volunteers.

1. Goals and motivations

- Shared goals to improve things:
    - For their families and communities;
    - For other people, the wider environment;
- Helping people;
- Putting something back.

2. Time

- Limited amount of available time and energy;
- May be unavailable at specific times (e.g. office hours, evening hours);
- Working for/with the group may be a rewarding use of time.

3. Resources

- May not have finance for expenses;
- Issues with/access to regular physical locations;
- Individuals need to supply and maintain their own technology (including infrastructure and training):
    - Favour “free” resources, especially online spaces;
- Driven by personal and shared ideologies (though there may be some discrepancies and conflicts).

4. Learning and skills

- Need to self-educate about issues, processes, involving people, communications strategies, new technology;
- However, group members also bring useful skills and expertise from other contexts;
- And learning is rewarding.

5. Leadership, community and control

- Light/consensual leadership structures:
    - Hard to enforce people to take on boring or difficult tasks;
    - However, increases ownership, so people do take on most tasks and take them seriously.
- Importance of group as community, working for a wider community
- Groups not firmly bounded.
- Unlikely to have explicit communications strategy (or have allocated communications roles).

6. Uneven playing field

- Often up against organisations with many paid and expert staff.
- External orgs may set the agenda/timetable.
- Victories generally temporary.

7. Comparisons

- Paid employment;
- Government organisation;
- Formal versus social environments.

Appendix 20. Change and trajectories for groups

1. Ward Anti-Cuts

- Are missing Liz, a key communications person, in this period.
- Campaigning trajectory –increase in all activities as bedroom tax becomes the focus.
- Use Council's petitions system for the first time.
- Start Facebook Page and increase Twitter use.
- Impact of mobile phone use increases throughout case study period: used to check stuff in meetings, photos posted on Facebook Page.

2. HCAT

- Case study covers a lull in HCAT's engagement activities –e.g. not consulting.
- It also covers part of the rise of the Facebook Group, combined with worries about its dominance and the neglect of the Hill blog and Hill.org.
- Individuals are increasing their social media use –e.g. starting to use Twitter and Facebook.
- More people are using mobile phones.

3. CPS

- Campaign comes out of blue.
- Parent Council communications systems come out of hibernation and become stretched, almost to breaking, but hold.
- Rachel seems to increase the focus on the Facebook Group when she joins the campaign.
- Some idea that email list will be improved, but no one takes this on.
- Mobile phones and digital cameras are very important in the campaign.

Appendix 21. What are spaces used for?

What is the space used for/ advantages of this space	Case studies and participation spaces	
How did this space/ these spaces help the group organise?		**Help to involve people?**
Organisation, including organise events	Ward AC: Community Centre Meeting HCAT: Office CPS: Email list, Facebook Group	Events Groups and email lists
Meetings	Ward AC: Community Centre Meeting HCAT: Trust office CPS: School	Come to meetings
Record actions	CPS: Email list, Facebook Group	Keep up with business
Confidential organisation	CPS: Email list, Facebook Group	
Potentially avoid time-tabling clashes	Ward AC: Alliance Blog	
Asynchronous communication	HCAT: Directory Magazine CPS: Email and Facebook Group	
Share knowledge/skills	Ward AC: Community Centre Meeting , Flyers CPS: Email list, Facebook Group	Ways to join in/ act
Get volunteers	HCAT: Facebook Group, Hill.org, Hill Twitter	Ways to join in/ act
Co-create outputs	Ward AC: Community Centre Meeting, email CPS: email and Facebook group	
Photos Post photos of events	Ward AC: Facebook Page HCAT: Facebook Group	?
Share photos to support campaign	CPS: Email list, Facebook Group	
Social, community	Ward AC: Community Centre Meeting, Email list HCAT: Facebook Group, Facebook Page CPS: Facebook Group	Groups and email lists
Build/maintain network	Ward AC: Email list and flyers HCAT: Hill Twitter, Hill Facebook Group	Groups and email lists
Show support	Ward AC: Facebook Page, Flyers, Twitter, Alliance Blog HCAT: Facebook Page CPS: Facebook Group, City Chambers Room	Ways to join in/ act
Getting and sharing news and info Get news/info	Ward AC: Facebook Page, Email list, Flyers, Twitter HCAT: Blog, Facebook Group, Facebook Page, Hill.org, Office, Hill Twitter, Directory Magazine CPS: Email list, Facebook Group, Planning Portal, City Chambers	

	Room, Hyper-Local Paper	
Share news/info	Ward AC: Community Centre Meeting, Email list, Facebook Page, Twitter, Alliance Blog HCAT: Blog, Facebook Group, Facebook Page, Hill.org, Hill Twitter, Directory Magazine CPS: Email list, Facebook Group, Playground, City Chambers Room, Hyper-Local Paper	Use info
Post links to useful info	HCAT: Hill Twitter, Facebook Group CPS: Email list, Facebook Group	Use info
Share info *from* other groups	Ward AC: Facebook Page, Twitter HCAT: Hill Twitter	Use info
Access info offline	Ward AC: Community Centre Meeting, Flyers HCAT: Directory Magazine (+posters) CPS: Hyper-Local Paper (+ flyers)	Use info
Get feedback, input and opinion	Ward AC: Flyers (distributing) HCAT: Facebook Group, Hill.org, Hill Twitter CPS: Email list, Facebook Group, Planning Portal, Hyper-Local Paper	Ways to join in/ act
Comment	HCAT: Hill.org CPS: Facebook Group, Planning Portal, Hyper-Local Paper	Ways to join in/ act
Complain, vent, instigate change	HCAT: Facebook Group, office	Ways to join in/ act
How did this space/ these spaces help the group influence events?		
Influence local council	Ward AC: (spaces promoting petition) Facebook Page, Twitter, Email List, Community Centre Meeting, Alliance Blog, Flyers HCAT: Hill Twitter CPS: Email list, Facebook Group, Planning Portal, City Chambers Room	
Promote actions and events	Ward AC: Facebook Page, Email list, Flyers, Twitter, Alliance Blog HCAT: Blog, Facebook Group, Hill.org, Hill Twitter, Directory Magazine CPS: Email list, Facebook Group, Playground	
Make planning decisions	CPS: City Chambers Room, Planning Portal	
Follow policy	CPS: City Chambers Room	
Represent other people	CPS: City Chambers Room	
Getting people into the space		
Provide contact point	Ward AC: Facebook Page, Email list, Flyers, Twitter, Community Centre Meeting HCAT: Trust office CPS: Email list, Facebook Group	Contact point
Be visible and accessible	Ward AC: Facebook Page HCAT: Trust office CPS: Playground	Visible and accessible
Advertise meetings	Ward AC: Facebook Page, email list and flyers HCAT: Directory Magazine	
Publish docs	HCAT: Hill.org CPS: Planning Portal, Hyper-Local Paper	

Alerts and push technology: Link to/promote another space	Ward AC: Facebook alerts; Twitter HCAT: Facebook alerts, Twitter, emails from blog	
Push technology (emails and email alerts)	Ward AC: Community Centre Meeting, Email list HCAT: Blog CPS: Email list	
Linking to another space: Push technology (Appears in newsfeed)	HCAT: Facebook Group, Facebook Page CPS: Facebook Group	
Push technology (links from Facebook)	HCAT: Blog CPS: Hyper-Local Paper	
Push technology (links from Twitter)	Ward AC: Facebook Page CPS: Hyper-Local Paper	
Promoted via flyers	Ward AC: Facebook Page, Twitter CPS: Email list, Facebook Group	
Implementing projects		
Fundraising	HCAT: Blog, Facebook Group, Facebook Page, Directory Magazine	
Promote place and local businesses	HCAT: Blog, Facebook Page, Hill.org, Hill Twitter, Directory Magazine	
Buy and sell; lost and found	HCAT: Facebook Group	
Misc.		
Ideology/help people	Ward AC: Community Centre Meeting, Alliance Blog	
Learn social media to support children	HCAT: Facebook Group, Facebook Page, Hill Twitter	
Pick something up	HCAT: Office	

Appendix 22. Spaces for organisation; spaces for influence

The groups' activities: organising and solidarity, sharing information, encouraging involvement, and trying to influence events.

1. How did this space/ these spaces help the group organise?

Contexts/task

- Small group organisation (e.g. group meetings, HCAT directors)/larger group organisation (e.g. AGM);
- Showing support, getting support;
- Organising events;
- Creating outputs;
- Including experts.

Features of space/tech/assemblage

- Non-public spaces and control over who sees contents.
- Resources: distributed costs (away from groups to individuals, away from individual communication acts to infrastructure costs) (except flyers).
- Support social functions: FB profiles and short interactions (likes, smileys, short comments); Ward email list sent from Jean's address.
- Support for sharing photos. Discussions centre on photos.
- Facebook events.
- Design/custom may encourage people to keep content up to date .

Especially human features

- Volume of people and content, e.g. discussion moves to where people are (esp. HCAT).
- Creating the right content, based on content from another space (e.g. objection templates).
- People as info links/gates (Jean, Victor, Dave, Monty, Rachel);
    - Also as gaps/broken links where they don't use certain media.

Problems of space/tech/assemblage

- Exclusions;
- Ad hoc email lists –tech and usability problems;
- Content volume can be a problem (and signal to noise ratio);
- Design may feature out of date content (also a lack of control over design);
- Privacy poorly implemented on Twitter.

Especially human problems

- Not knowing where to look for up to date info, because no dominant online space;
- Antipathy towards social media, esp. Facebook;
- Social media guidelines exclude council employees;
- Recording meetings and sharing records (and volunteers) (not a problem for CPS);

    - Planning meeting papers provided are chaotic, though sorted by paid staff, not volunteers;
- Out of date content excludes people/ stops them using the space.

2. How did this space/ these spaces help the group involve more people?

Contexts/task

Discussion moves to where people are (esp. HCAT).

Features of space/tech/assemblage

- Point of contact
- Using networks
    - Connecting personal networks to the group
    - Links between spaces
    - School networks to involve (flyers in bag drop (HCAT), CPS flyers in playground, school fairs etc.)
    - Texting (HCAT gala, CPS)
- Flyers, posters and 3rd-party media for reaching beyond group
    - Including people not online
    - And links to online spaces to maintain participation
- Trajectories of participation
    - Importance of events
    - Potential connections through life events, e.g. passing driving test (Hill FB page)
- Fred's email list for woods (helpful, but not transparent)

Especially human features

- People sharing content with others by word of mouth (e.g. people not in FB group)
- Spaces maintained by 3rd parties –don't require groups to actively update them (HLP, Alliance blog, Planning Portal, Directory Magazine and Hill FB Group)

Problems

- More spaces used =more time needed to keep them up to date/maximise their reach.
- Hard to have social media strategy with small group of busy volunteers.
- Flyers need finance.
- Hill FB page's name –problems for searching.

3. How did this space/ these spaces help the group influence events?

Contexts/task

- Influence on power:
    - Influencing people in power (contact with elected reps; petitions, planning objections);
    - Information outputs, e.g. flyers; objection templates; shared infrastructure info.

- HCAT projects and actions;
- Monitoring;
- Involving community councillors (email).

Features of space/tech/assemblage

- Council-hosted mechanisms, including petition and planning objection system;
    - Showing support (numbers).
- Spaces hosting/distributing information about how to act;
    - to support lobbying councillors (including contact details, surgery times);
    - draft text (Ward AC flyers, CPS Email, FB group, text).
- Support councillors & MSPs to become involved:
    - Facebook groups, email lists, meetings big and small;
    - Statements and emails published on Hill blog and Hyperlocal paper (anon if necessary e.g. leaks);
    - (also council staff);
    - Using council's terminology (not Annexe, CPS).
- Photos:
    - Monty using Twitter to direct stuff to local council coms people;
    - Photos at centre of CPS campaign;
    - Reports from field/events made easier/more immediate by social media and camera phones.

Problems of space/tech/assemblage

- High level of literacy needed for planning objections.
- CPS –no flyer specifically for planning objection (school holidays?).
- Some teething problems with council's petition system.

Especially human problems

Planning portal and city chambers room –imbalance of access/ input between developers and campaigners; council staff/ campaigners (need the right employment to attend).

Appendix 23. Ward Anti-Cuts Communication Forums

Table 6: Ward Anti-Cuts' communication forums

Forum	Occurrence	Space/locations	People
Ward Anti-Cuts' meetings	Twice-monthly	Local Community Centre Room.	6 to 16 attendees: people from related groups, people interested in current work, invited experts.
Ward Anti-Cuts' Email List	Twice-monthly	Internet, email programs.	250-300
Ward Anti-Cuts' Facebook Page	From March 2013: 21 posts in 8 weeks =2.6. p/w	Internet, Facebook (linked to Twitter)	76 likers.
Ward Anti-Cuts' Twitter account	Nov/Dec: 0 posts Jan/Feb: 2 p/m March: 59 (+ 14 RTs) April: 36 (+ 5 RTs)	Internet, Twitter.	c.13 followers (Ward AC people; external organisations).
Sister Group 1's Facebook page	Dec 12 to April 13 inclusive: 131 posts in 22 weeks = 5.9 p/w	Internet, Facebook.	130 likers. 3 posts from Ward AC members (not including Mr Green).
Sister Group 2's Facebook page	Jan 2013: 1 post	Internet, Facebook.	
Alliance Blog	Dec 12 to April 13: 43 =2 p/w	Internet.	Alliance includes the 3 anti-cuts groups, local union organisations.
Ward AC public meeting Jan 2013	about every 6 months	Arts Complex meeting room (location varies).	c.50 attendees. Q&A: Leader of Council, leader of disability rights group.
Demonstrations, lobbies, pickets	Ad hoc–e.g. 4 in March	Town centre, Parliament, City Chambers, workplaces.	e.g. c.20 Scottish Parliament lobby; c.1600 at City-wide anti-Bedroom Tax demo.
Flyering	Weekends.	Local high streets, outside supermarkets, outside bingo.	Group members, public.
Email (off-list)	As necessary	Internet, print-outs to meetings.	Between members; people contacting group.
Sister Group 1 meetings	About twice a month	Independent Resource Centre .	c.6 people at meetings , meet for flyering and actions.
Related groups' meetings	N/A	Various venues.	Members attend meetings and events, and report back.

Appendix 24. Ward Anti-Cuts: interviewee profiles

Bruce: Local councillor for neighbouring Ward. Bruce came to a meeting to advise the group on using City Council's petitions' process. Prior to becoming a councillor, Bruce was involved in the campaign against privatisation and in establishing Sister Group 1.

Caroline: Long-term activist, actively involved in many groups, often as main contact or leader. University lecturer. Grown-up children. Caroline takes notes at Ward AC meetings in the Minutes Notebook.

Dave: Involved with: Sister Group 1; the Independent Resource Centre where Sister Group 1 meet; trade union, and anti-poverty groups. Dave created and maintains the Alliance Blog. Dave doesn't attend Ward AC meetings, but takes content for the blog from their email list. Relatively young: late 20s or early 30s.

Florence: Founder member and Jean's neighbour, but not an activist before getting involved. Florence is kind and friendly: she welcomes new people to the group and does the welcome and introduction at public meetings. Probably in her 50s, Florence looks after children, professionally.

Harry: Local Councillor for Ward AC's ward. Harry attends Ward AC meetings when he is at the Community Centre for Community Council meetings.

Jean: Founder member and long-term activist; chairs Ward AC, though reluctant to call herself a leader. A self-employed graphic designer, working from home. Her work is aligned to the group's networks. Grown-up children.

Karl: Founder member and long-term activist; works for City Council; involved in unions and socialism; children at school.

Liz: Not interviewed, but active in the workshop. Liz worked with the group before and after the case study period, but was away that winter. Liz manages the group's communications, including the Email List that Jean managed through the case study period.

Mr Green: Founder member of Sister Group 1 and also active member of Ward AC, as well as various local anti-poverty and disability rights organisations. Retired: previously worked for a campaigning charity. MS increases his online activism.

Nelson: Council worker forced into early retirement; angry about increasing mismanagement of his service. Has lived in Sister Group 1's area all his life; attends their meetings as well as Ward AC's. Will stand up against racism: hence his research name. Nelson wasn't using the Internet when I interviewed him, because he lacked confidence in his writing skills, though his reading was fine. I assured him that writing wasn't a necessary skill for Internet use and he took to it. Friends helped him look up information about the bedroom tax and he copied this from an iPad and brought it to a meeting. Since the case study, he has established an email address and become involved with 38 Degrees.

Victor: Long-term activist, actively involved in many groups, especially anti-war and socialist groups. Works in a university (on widening access). Manages Ward AC's Twitter account, set up their Facebook Page, with Caroline. Admins a couple of social media accounts for other groups. 40-something.

Appendix 25. Ward Anti-Cuts: STIN studies of participation spaces

STIN Study: Community Centre Meeting Room (Ward AC)

The Community Centre (CC) is owned by City Council. It is a one-storey building with about 10 rooms. The CC hosts groups and events, especially for children and parents. Local groups use rooms for free. The manager allocates rooms. Rooms are furnished with moveable soft chairs and low tables. Wifi seems to be available.

Ward AC meet twice a month, on a weekday evening, in the CC. This study describes the *space-in-use*. It is an abstraction across several CC rooms and a dozen meetings. Meetings last up to 90 minutes, till the CC closes at 8pm. Arrivals arrange chairs round central tables. Flyers and print-outs are put on tables.

H1 System interactors and H2 Core interactor groups

Figure 2, on p63, shows meeting layouts. Figure 3, on p64, shows system interactors.

Meetings are attended by about 10 people: activists (more or less frequent attendees), people attending for specific reasons, and new people. Attendees are local people, concerned about cuts, privatisation, and the bedroom tax. Some members are directly affected and provide personal testimony. Many have a professional interest: working for the Council, for housing associations, unions, charities, advice services. A legal expert attended the petition-writing meeting. Jean chairs. Florence sits next to Jean and welcomes new people. Caroline takes minutes in the paper *Minutes Notebook*, and occasionally reads information back. The researcher takes notes.

Some people attend to *represent* other groups, especially sister anti-cuts groups and union organisations, whose agendas are aligned with Ward AC's. They bring news and questions; they take outputs, such as model resolutions and flyers. Their groups help with publicity, actions and events. Other groups are present through Ward AC members active in multiple groups, including anti-war groups, unions, and socialists.

Local Councillor, Harry, attends when at the CC for other meetings. Councillor Bruce, from the neighbouring ward, attends one meeting to advise on the Council's petitions process. At CC meetings, the group organise interactions with the Council: public meetings; petitioning

or lobbying the Council; contacting Councillors via email, phones, and surgeries. Interactions with the public, through flyers and public meetings, are also organised at CC meetings.

H3 Incentives

Figure 4, on p65, shows motivations, exclusions and problematic interactions. A timeline of meetings is provided in Figure 5, on p66.

People attend for social and ideological reasons: to help people, share expertise, act against privatisation and austerity policies and help to mitigate their effects. Some attend to get help or out of curiosity. Attendance is highest while the group is organising specific actions. People attend because they enjoy spending time with the group. People value meeting in person. Nelson described why he attended the meetings, as well as his local group's meeting: "I stuck with the people from [Ward AC], because I know, like, [Jean], [Florence], [Karl]. I got to know them and I *admire* them and *respect* them, you know and they're good people".

The group benefits from more people becoming involved: more people can share tasks, especially if they bring specific skills; City Council are influenced by the number and diversity of campaigners (e.g. outside unions).The group helps to oversee the Council's work and publicises policy and implementation issues.

In the workshop, Victor described how the group's regular meetings help them to develop their understanding of issues: "I think that one of the things that we've done in the quieter times is actually carried on meeting and talking quite a lot. And sometimes there may seem like meetings where we just talked together, but actually, I think that we also developed and shared common understandings of things".

H4 Excluded actors and undesired interactions

Exclusions are not obvious, because meetings are the primary observation opportunities within this case study, and the source of interviewees. People can be excluded by time clashes with related events: one meeting coincided with a public meeting organised by Sister Group 2. People were accidentally excluded when there was a problem with the email list reminder. One older person stopped attending during dark winter evenings. One person

with MS was sometimes prevented by his condition. Bad weather reduced attendance.

Ideology is a strong motivation to attend. However, a balance needs to be maintained between expressing emotions, sharing ideology, and completing business. This could cause tension; mostly dealt with using humour.

New attendees could be unaware of the group's wider agenda and extensive experience and suggest actions the group are uncomfortable with, such as non-payment campaigns for social housing residents.

H6 Resource flows

Figure 6 on p67 describes resource flows.

Use of the room is free. The group do not have a bank account. The Council pay for the CC's upkeep and staff. The Council's primary revenue streams are council tax and income tax. The foyer contains adverts and flyers, including Ward AC flyers.

The main resources contributed by the group are time and expertise. These support regular meetings and campaign outputs. The meetings are at the centre of the group's activities: regular attendance is equivalent to membership. Meetings define the group from outside: they are known for holding organised and welcoming meetings. Most online content about the group is about the meetings.

At the beginning of the case study, Ward AC meetings alternated between the CC and the local library. The library was near busier bus stops, but the group were unable to advertise their (political) meetings. They decided it would be simpler to hold all meetings in the CC. The Minutes Notebook started to be used at the beginning of the case study. Caroline takes notes, keeps the notebook, and sometimes reads back previous minutes.

Workshop participants described how, since the case study period, the group have become involved in the Community Centre's management. As part of this, they need to pay *subs* (£1 per person, per meeting).

H7 System architectural choice points

Email addresses and contact details are collected on paper at the beginning of each

meeting. Email addresses are added to the email list, which notifies people about meetings. The Alliance Blog lists Ward AC meetings, using information from the email list. Members bring emails to meetings as printouts, or on mobile devices. Email is used to continue business between meetings: Jean may ask someone to find information or design wording and send it via email. The discussions which led to the establishment of a Facebook Page, took place in these meetings. Meetings are advertised on the Page.

H8 Viable configurations and trade-offs

Paper flyers and printed petitions are a constant presence. The group create content for flyers, petitions and model resolutions during meetings: these transfer information between groups and spaces. Paper items encapsulate a trail of technology and relationships between groups: e.g. flyers printed by the unions. The email list carries information to people who did not attend.

People bring paper notebooks. Increasingly, people access information via digital devices (tablets, phones, iPod) during meetings. This enables business to move forward more effectively than retrieving information between meetings. Most of the digital technologies which influence the meetings are used before or after the meeting. Devices become more common in the meetings as more people attend. When fewer people are present, using a device stands out, compared to listening or talking.

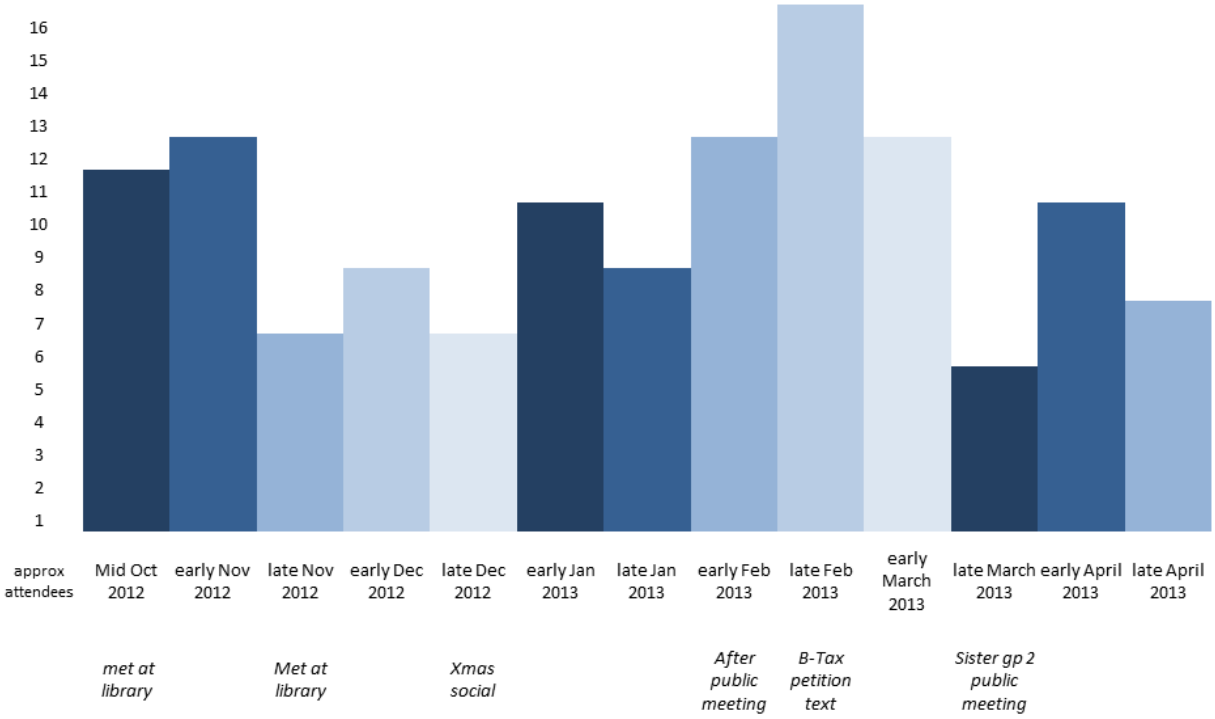
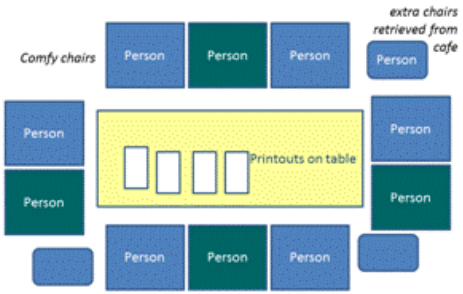
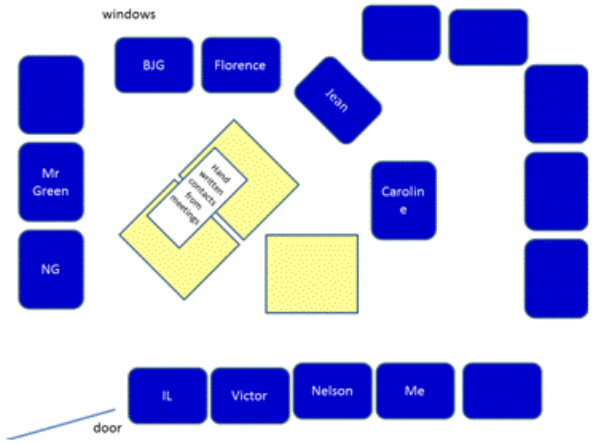


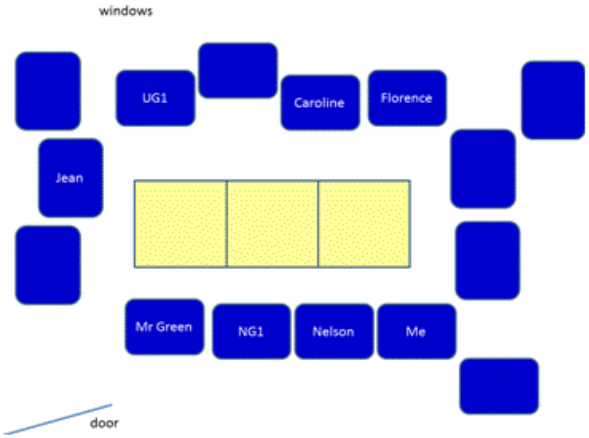
Figure 1: Community Centre Meetings – Attendees



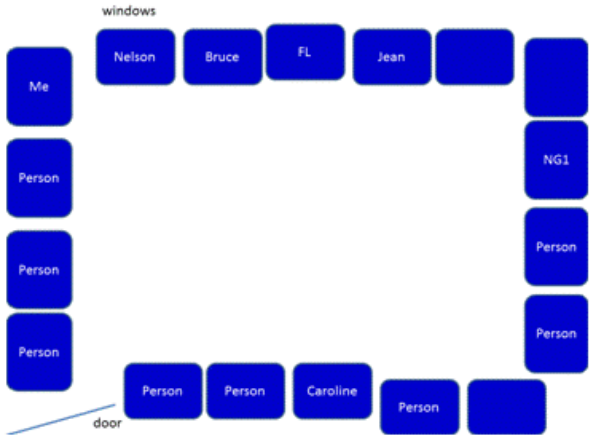
Early November 2012.
11+ people



Early January 2013.
10+ people



Late January 2013.
8 people



Mid-February 2013.
16+ people

Figure 2: Four Community Centre Meeting Layouts

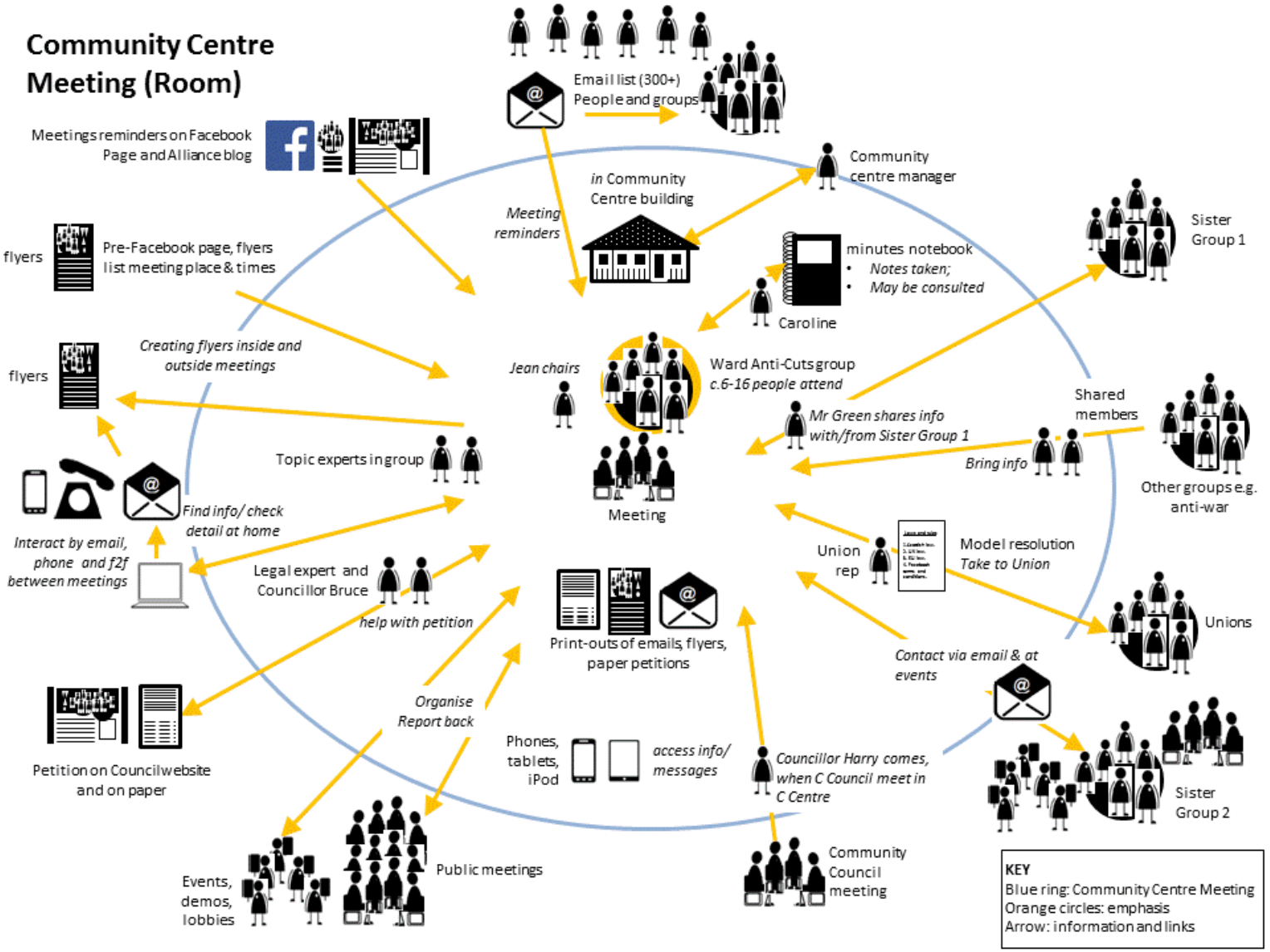


Figure 3: Community Centre Meetings – Overview of Interactors

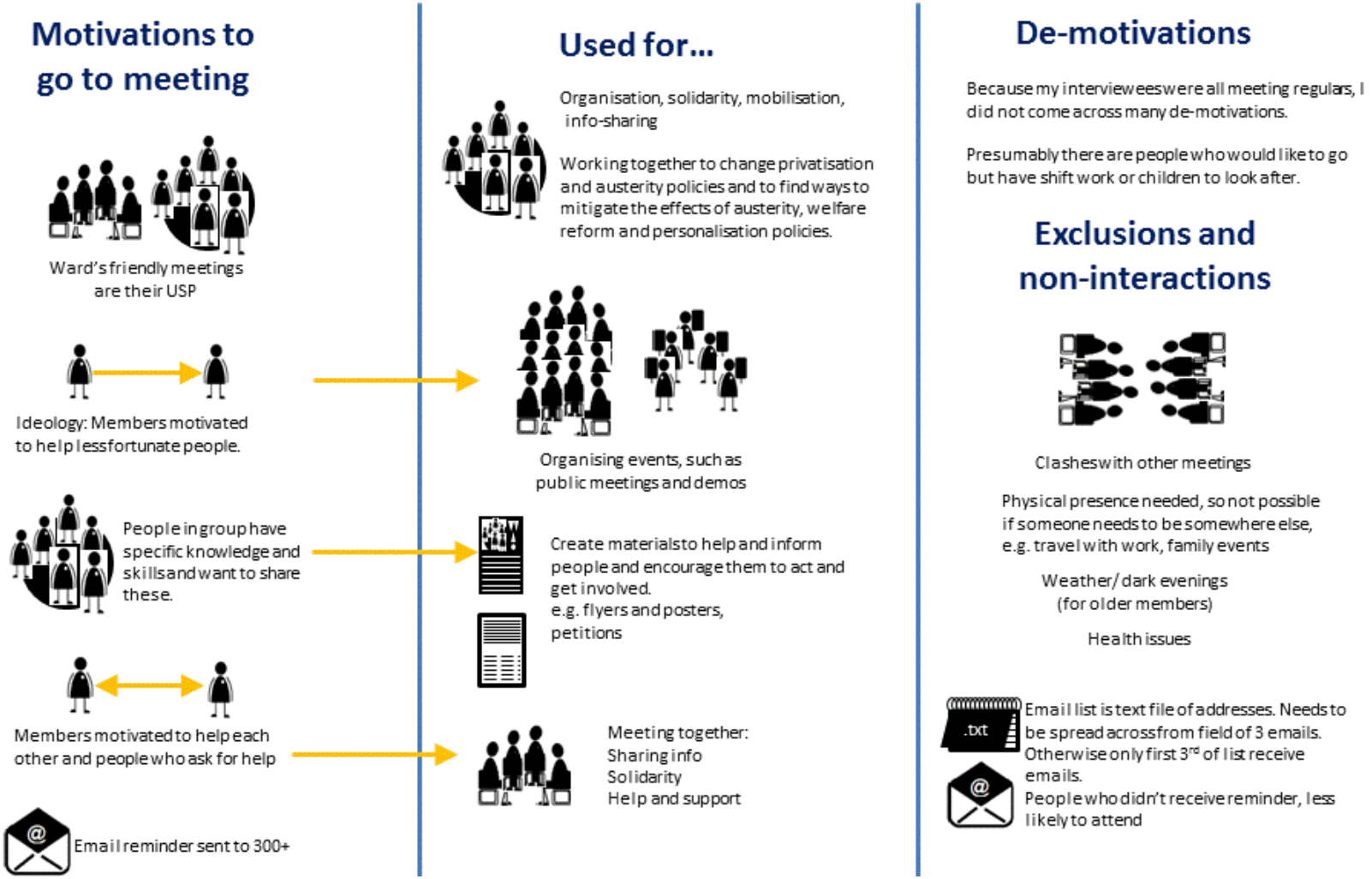


Figure 4: Community Centre Meeting – Motivations, Exclusions and Problematic Interactions

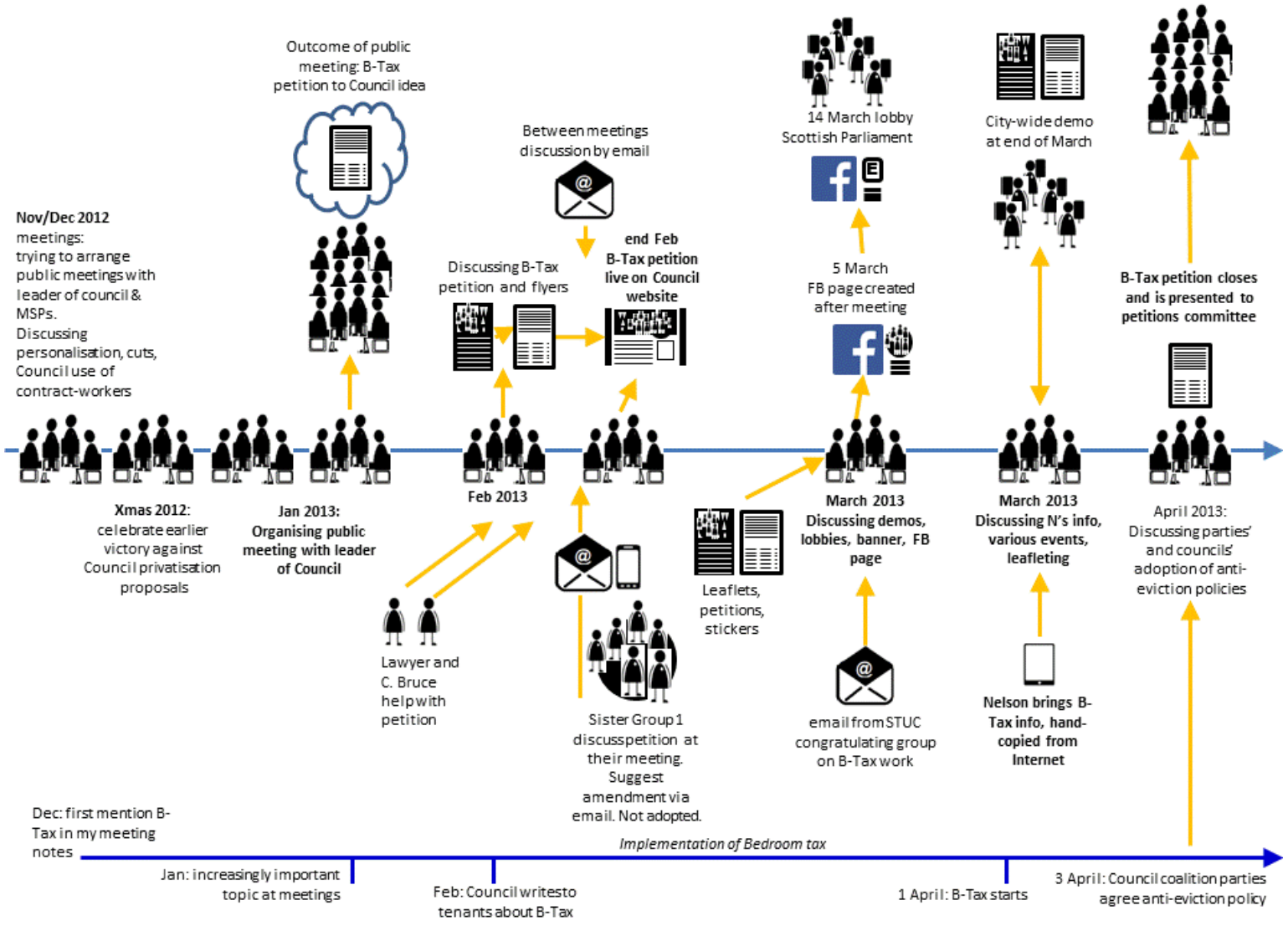


Figure 5: Community Centre Meetings as Timeline

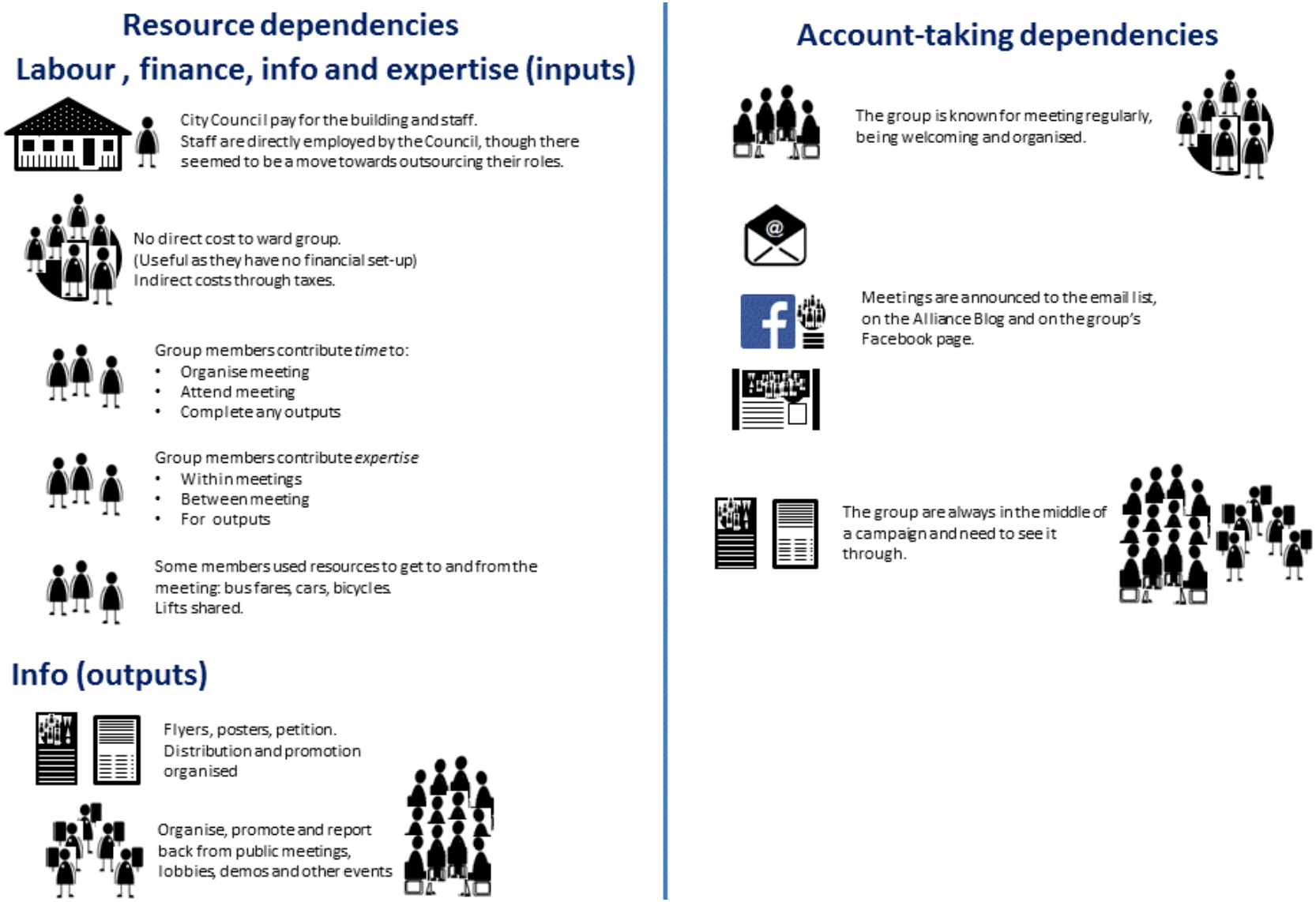


Figure 6: Community Centre Meetings – Resource Flows

STIN Study: Ward Anti-Cuts' Facebook Page (Ward AC)

Facebook pages are public profiles associated with an organisation, person, or theme. They are distinct from Facebook groups or personal pages. Pages are primarily networked through *likes*. People become followers or fans by *liking* a page. Unlike the relationship between friends' personal pages, this is not symmetrical: posts from likers' personal pages are not visible to owners of the Facebook page.

Each Facebook page is a collection of webpages: timeline (posts in reverse chronological order); information about the group; photographs; and events. Page administrators post media: pictures, video, links, text. People may *like* posts, *comment* on posts, *share* posts on their personal Facebook page or on that of a group. Administrators may remove comments. Facebook users can message page admins. Facebook pages are public: visitors do not need to be members of Facebook, or to *like* the page, to visit it and read posts.

This study describes Ward Anti-Cuts Facebook Page as a *space-in-use*. Ward AC set up their Facebook Page in March 2013. In April, 66 people liked the Page.

H1 System interactors and H2 Core interactor groups

Figure 7, on p73, shows system interactors.

Three Ward AC admins are visible through posts, photos, comments and shares: Jean, Mr Green, and Victor. Caroline is an admin, though no interactions are visible.

People from outside the group are visible through comments, likes and shares, though few people comment. Comments tend to be positive or humorous and aligned to the group's agenda. One to 12 people like each post. People and groups share posts from Ward AC's Facebook Page on their own timelines, potentially reaching beyond Ward AC's network. Other groups have a presence through shared posts and pictures of their events, especially anti-cuts groups, anti-bedroom tax groups, disability rights groups, unions, and anti-war groups. Prominent members are active in these groups, including managing their social media accounts. Mr Green is a Sister Group 1 Page admin. Their posts, shared on Ward AC's Page, increase links to Sister Group 1's actions and networks. Mr Green performs a similar role offline.

A Glasgow legal advice organisation asked Ward AC to host a Facebook e*vent page* to promote a lobby of the Scottish Parliament. This event page was widely shared: it lists 1,012 people as *invited*. (109 said yes, 24 said "maybe").

Content often comes from other Facebook pages or websites, via links with summary text (e.g. to news articles, ministerial statements, petition texts); images include photographs and posters.

Facebook create and maintain the software that supports the page. They host and moderate the page. (Moderation may be outsourced). Non-human interactors include devices to access and update the Page and Facebook algorithms, including *EdgeRank* which controls who sees which posts (Bucher, 2012; Gillespie, 2012; Marichal, 2012; van Dijck and Poell, 2013). Laws and guidelines are interactors: City Council's social media guidelines forbid employees from posting political content.

H3 Incentives

Figure 8, on p74, shows the timeline. Figure 9, on p75, shows motivations, exclusions and problematic interactions.

The page was set up to create an online contact point that could be listed on flyers, and to promote the bedroom tax petition. It was precipitated by a request from Glasgow Law Org to create an *event page* to promote a lobby.

A City-wide anti-bedroom tax demonstration was organised, seemingly via a Facebook event page, by a group unknown to Ward AC (probably associated with Occupy). The event page said: over 8000 Facebook members had been invited, 1500 said they were going and 558 said *maybe*. Organisers estimate that 1600 attended. Ward AC were impressed by the interest in this event, shown on Facebook: an influence to create their page.

Ward AC's Facebook Page was used to promote petitions, especially bedroom tax petitions, and to report on their progress and related news. It was used to promote events. The page name was added to leaflets. Combined leaflet distribution and petition-signing events were promoted via the page.

H4 Excluded actors and undesired interactions

People who do not use the Internet are excluded, including core Ward AC members Florence and Nelson. Nelson did not use the Internet because he lacked confidence in his writing[2]. He did not attend the Scottish Parliament lobby: although he knew it was on, he did not know the details. Florence does not use the Internet because she prefers personal contact (face-to-face or telephone). An older member did not have Internet access.

Sister Group 1's Dave, prefers not to use Facebook because he dislikes its use of personal data and commercial model. Others dislike aspects of Facebook, but accept a trade-off against its usefulness. Council and government employees may not post political content online. Several Ward AC members are Council employees. They use Facebook, but there are no visible interactions on the public page.

There is no established mechanism for information to pass from the Minutes Notebook to the Facebook Page. Caroline uses social media for information, but rarely posts content. She is active in many groups and unwilling to take on further responsibilities. Other members who use social media are more interested in reading than writing posts: "I –partly I do use it to keep in contact with people, but, um, I don't post on it that much" (Victor); "I don't use Facebook as a kind of *personal* sort of thing, but I do find it quite interesting to scroll through, cos I mean like, you know, today, I picked up on a couple of articles I wouldn't have read if somebody hadn't posted them. So, I do use it a *lot* for getting information." (Jean)

The gap between the number who say they will attend an event on a Facebook event page and the number who attend may lead to cynicism about online activism: "you can have the *illusion* of lots of activity, well the reality then turns out to be really disappointing. Doesn't have to happen like that, but I think, you know, there is a danger in that. And I think, for people that use social media to campaign, that's probably an issue […] maybe it's the *way* you use it and actually perhaps *need* to be more conscious of the fact that rather than simply sharing information, you actually share…information that enables people

[2] Later he went online with a friend and looked up information about the bedroom tax, copied this out by hand and brought it to a group meeting.

to understand how they could go *beyond* that point and get connected." (Victor). The group had a Facebook event page, from a previous event, which would turn up if one searched Facebook for their name.

H6 Resource flows

Figure 10, on p76, shows resource flows.

Facebook provides services free to users and funds these through advertising. This model is useful to Ward AC, as the group has no bank account.

Labour to create Facebook content is a limiting resource. Members who use the Internet are busy people (jobs, families, various campaigns). Those with more time (e.g. retired) are offline. People are reluctant to take on work, if it's not effective, compared to tried and trusted methods: "among people that are *politically* active, people do tend to be conservative with a small c about the things that they have done in the past which are effective at getting, involving other people. […] there's a tendency to think "Well, if you do something else, you know, start using forms of social media or something, then that's just more work and it's not necessarily going to be anything more effective."" (Victor). Ward AC wondered if their Page would spread information beyond their current network. Their cynicism was confirmed by the Scottish Parliament lobby: its event page listed 1000 people invited, 109 going and 24 maybe; 30 or 40 people attended: "maybe it's even *liking* a Facebook page is even *less* of a commitment, than going and signing a petition" (Jean).

While setting up the Page had been discussed before the public meeting, the request from Glasgow Law Org to host an event page precipitated its eventual creation. The competing suggestion was to use Sister Group 1's Facebook Page. However, people were searching Facebook for Ward AC. No alternative online resources were suggested.

The researcher's survey, conducted at the public meeting may have been influential. Out of 14 respondents, four included Facebook in their answer to "How did you hear about the meeting?" and two in answer to "How would you like to stay in touch with the campaign?" Results were shared with the group.

H7 System architectural choice points

The Page is an ever-shifting configuration of people and technologies. People carrying phones with cameras take and upload pictures at events. The Page will appear differently according to the device used to access it and the person's Facebook settings. Those using a laptop or desktop have more choice about which posts they see. Those using an app on a phone or tablet are restricted to Facebook choosing "top posts".

H8 Viable configurations and trade-offs

The Page has a strong relationship with paper flyers: the flyers promote the Facebook Page; the Page promotes flyering meet-ups.

The group create and maintain the Page to get people involved: to come to events, sign petitions, and access information. The Page enables people to show support for the group and shows the group's solidarity with other groups and people affected by cuts.

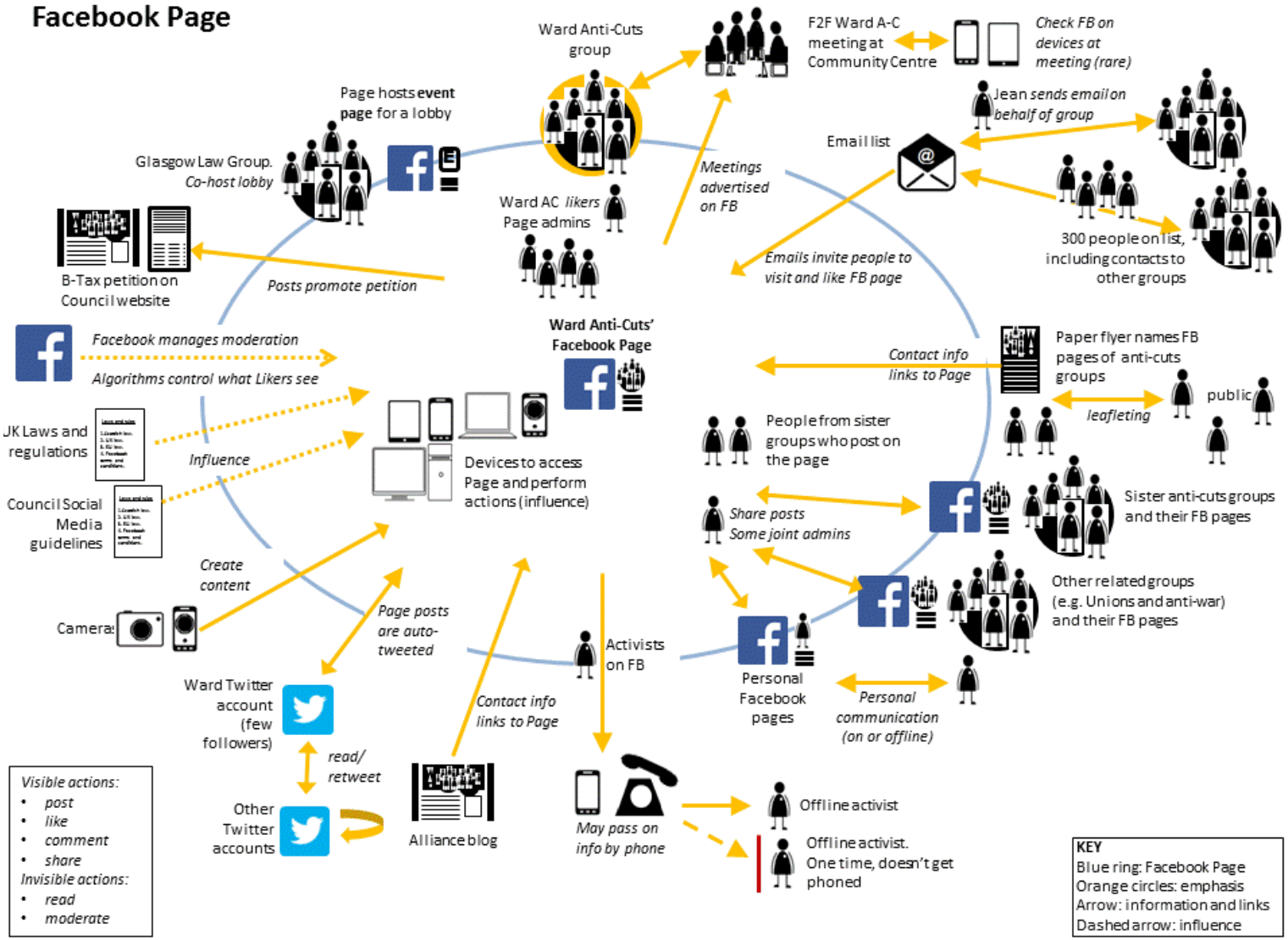


Figure 7: Ward Anti-Cuts' Facebook Page – Overview of Interactors

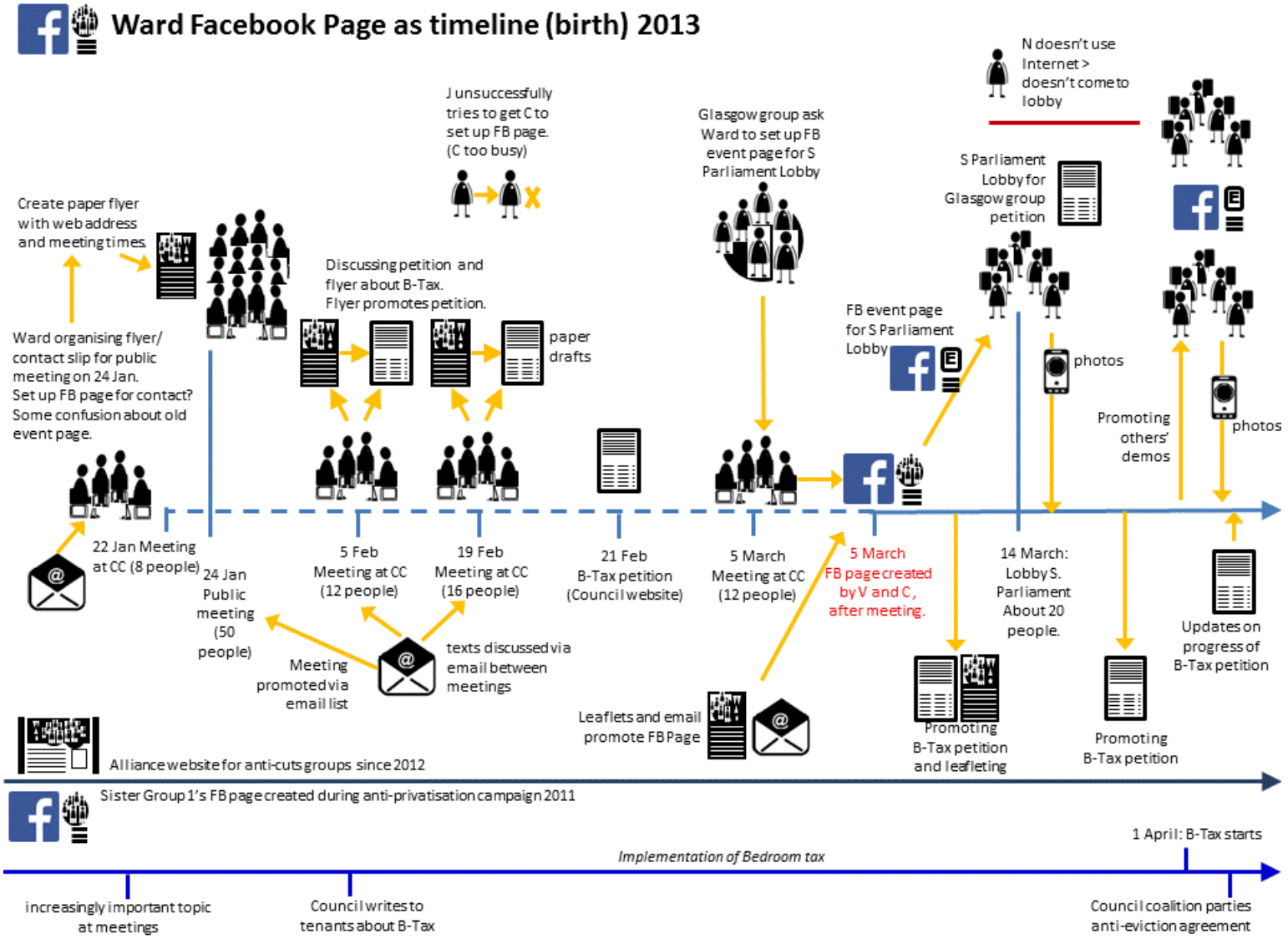


Figure 8: Ward Anti-Cuts' Facebook Page Timeline

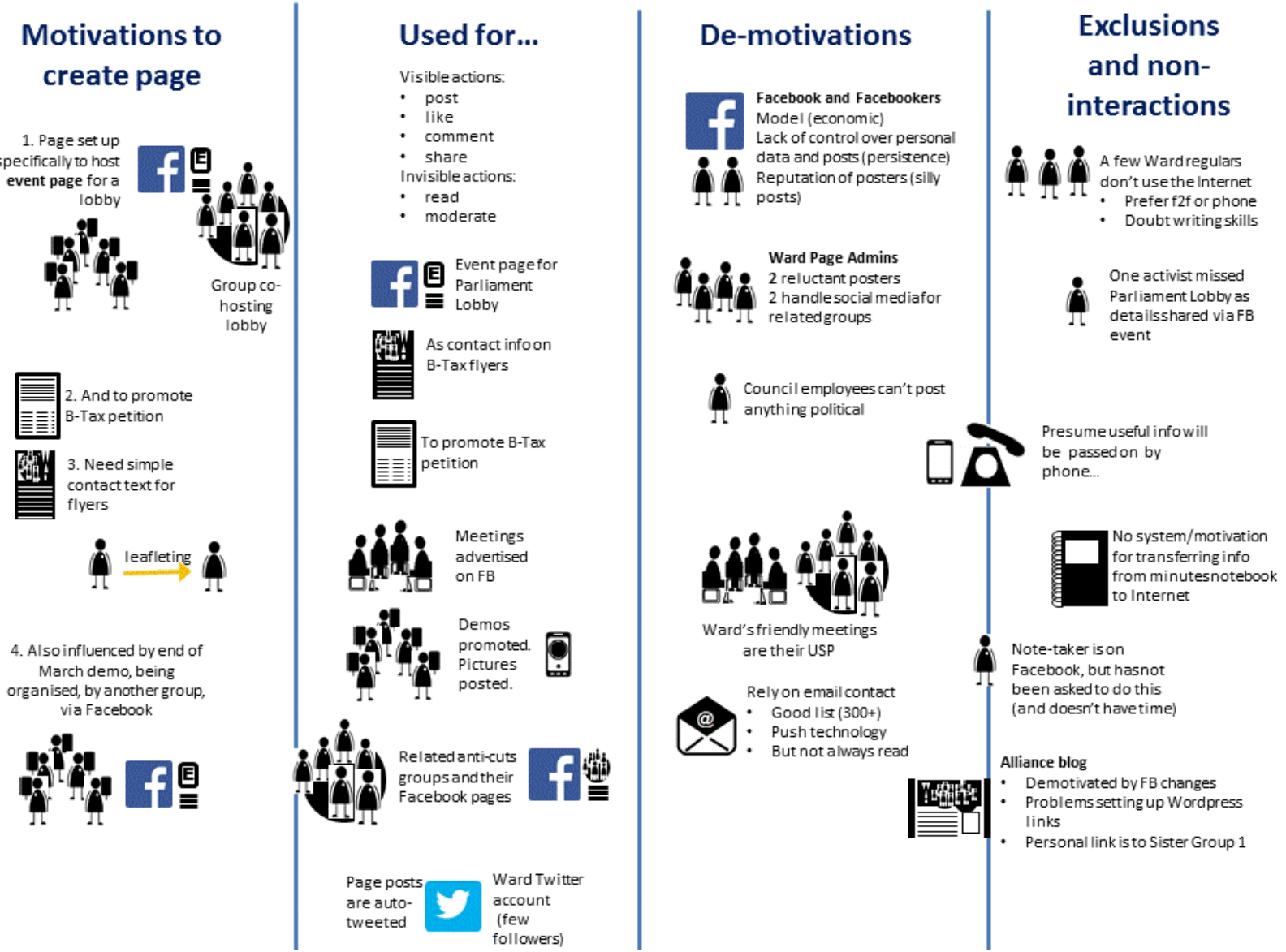


Figure 9: Ward Anti-Cuts' Facebook Page – Motivations, Exclusions and Problematic Interactions

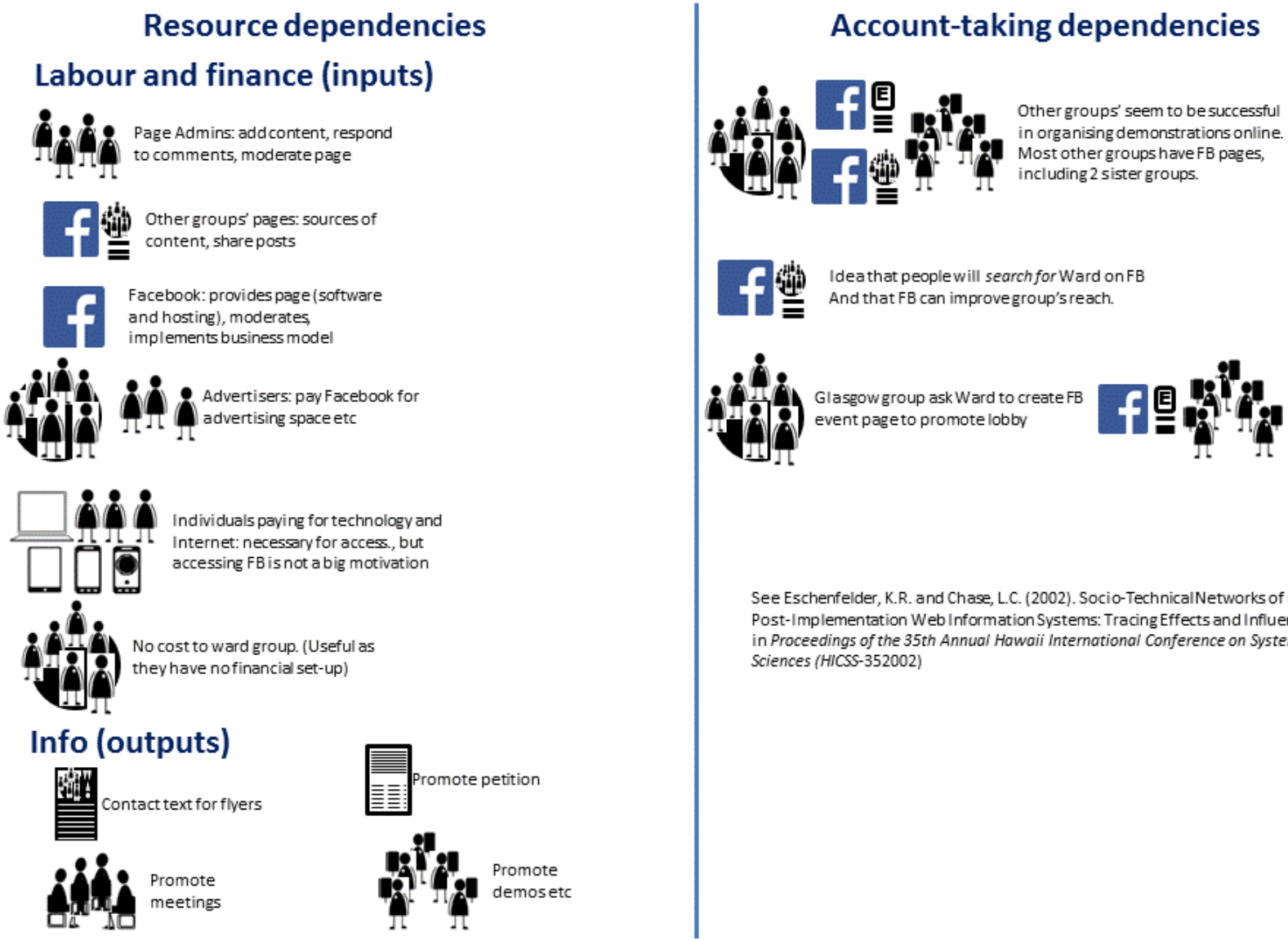


Figure 10: Ward Anti-Cuts' Facebook Page – Resource Flows

STIN Study: Email (Ward AC)

Figure 11 (p81) and Table 7 (p83) summarise email interactions.

The group have a one-to-many email list, including c.300 people. This is a text file of email addresses, rather than a hosted distribution list. To send email to the list, the owner (Jean) sends a message to herself, Bcc'ing email addresses from the text file, by copy and paste. The addresses are spread across three emails: the Bcc field has an upper limit to prevent spam. Replies come back to the sender, rather than the whole list.

H1 System interactors and H2 Core interactor groups

Email is central to the group's communications. Email addresses are collected at every meeting. Jean sends emails to the list once a fortnight. A typical email includes a reminder of the coming meeting; perhaps including: agenda information, information about events, link to the Facebook Page, relevant petitions and Alliance Blog. The emails are organisational, rather than affective. They are not used to create solidarity or share ideas. They are deliberately plain to avoid confusion: "You've got to be very careful with words and I tend to keep even work emails to the very minimum" (Jean). However, Jean also receives more emotional emails, including thanks for support, friendly messages, and news from old friends.

People email the group via Jean, as the perceived leader, and because people reply to her list emails. Messages are brought to meetings, summarised or printed. Jean may ask Florence to read out a printed email.

Although Jean is reluctant to take charge of communications, the email list requires Jean to *gatekeep*: deciding what to include in emails to the list and what to pass on to the group. (Jean does not have direct access to the Minutes Notebook.) Other members, especially Caroline, Victor and Karl, receive emails about events through their involvement with other groups, and bring them as printouts or on devices.

The group also use email to support work between meetings. Individuals take on the task of emailing people outside the group: e.g. someone emails an elected representative to ask for information or to invite them to answer questions at a public meeting.

Dave, from Sister Group 1, takes information from the email list and uses it to create posts and events on the Alliance Blog. Once the Facebook Page was live, list emails included it, e.g. "*WE ARE NOW ON FACE BOOK please like us at [Ward Anti-Cuts].*" (Email to the list).

H3 Incentives

Figure 12, on p82 shows motivations, exclusions and problematic interactions.

Email enables Ward Anti-Cuts to stay in touch with people who are interested in their work at minimal cost. People want to stay in touch with the group and their activities. The list emails support involvement, especially through meeting reminders: "the group is just a core of people who could *respond*; who build up a network. And I think it's –what's been important is to maintain that network, you know, through *emails*. Umm, with individuals who come along from time to time" (Karl). People and groups invite Ward AC to events, or ask for their help. In the workshop, Victor noted that different communication methods are important at different points in the group's life: e.g. as they build up contacts, their email list becomes more useful; whereas flyers helped to establish initial contacts.

H4 Excluded actors and undesired interactions

People who don't use the Internet are excluded. Some email addresses supplied at events are indecipherable.

Once Jean asked someone else to send the list email and it only reached a subsection of the email addresses. Jean surmised that the other person had been unaware of the Bcc field's upper limit and copied all the addresses into the Bcc of one email, not noticing that it was truncated. The meeting after this was sparsely attended. This system break-down revealed how the email list was managed and the importance of the reminder to encourage people to attend the meeting.

Not everyone who receives the email actually opens or reads it, due to time constraints and sometimes technical issues. Some interactions are slowed by email: e.g. trying to set a date with an elected representative.

H6 Resource flows

Jean sends the email and maintains the text file of email addresses. Her email account is provided by her Internet Services Provider: the costs of maintaining the account are subsumed within the costs of the Internet connection, e.g. broadband, devices. There is no indication that the email system has additional costs to individuals or the group.

H7 System architectural choice points

Using a text file, rather than a distribution list, reflects the genesis of the group. No one has actively decided to change this situation: “I mean it started off about 8 people, so I just sent it out from my own email address. And then it kind of grew and grew and I’ve often thought “should we get a [Ward] email address?” But given it’s nothing off my back to *send* it from my email address, [then] I think people quite *like* that personal contact, that they’ve got someone to email back” (Jean). However, it seems to work well most of the time. Not using an interactive list prevents discussion taking place on list. Jean suggested that email was not good for political discussions: “I think things can get very misunderstood in email. You know, so I don’t, I don’t think I would do that as a kind of online kind of discussion kind of thing, because I think when you’re discussing things you need to be able to go back and forward […] I think involvement of people in*rooms* and *spaces* doing that is much, much more important that trying to do it online. Because I, I do think it can very misunderstood what you’re saying or people can pick up a kind of a tone that’s not there?” (Jean). Also, email discussions would exclude offline members and could be dominated by related groups with their own agendas.

H8 Viable configurations and trade-offs

Emails include links to online presences, including Facebook and petitions, and may include attachments, such as flyers, paper petitions and draft motions (as pdfs or Word documents). No link has been established with the Minutes Notebook. Caroline has the paper notebook; Jean writes the emails. When Victor suggested that an email summary of one meeting would be provided, Caroline did not accept this extension to her role, but was open to someone else doing it.

Ward AC operate in two modes: face-to-face together, and technologically-mediated

situations apart, e.g. at home via email. Using email to continue work between meetings brings time for consideration and also the opportunity to consult information elsewhere. Email print-outs bridge the gap between individual and group spaces. As smart phones became more prevalent during the case study period, people were more likely to access emails on mobiles during meetings.

Since the end of the case study period, another group member, Liz, has taken on the role of sending emails to the list for the group, using a group Gmail address. In the workshop, it became apparent that Liz had been working with Ward AC before and after the case study period, but was away that winter. During the case study, this regular role was *temporarily* taken by Jean. Since returning, Liz had taken over the email list and now sent it from a group Gmail address.

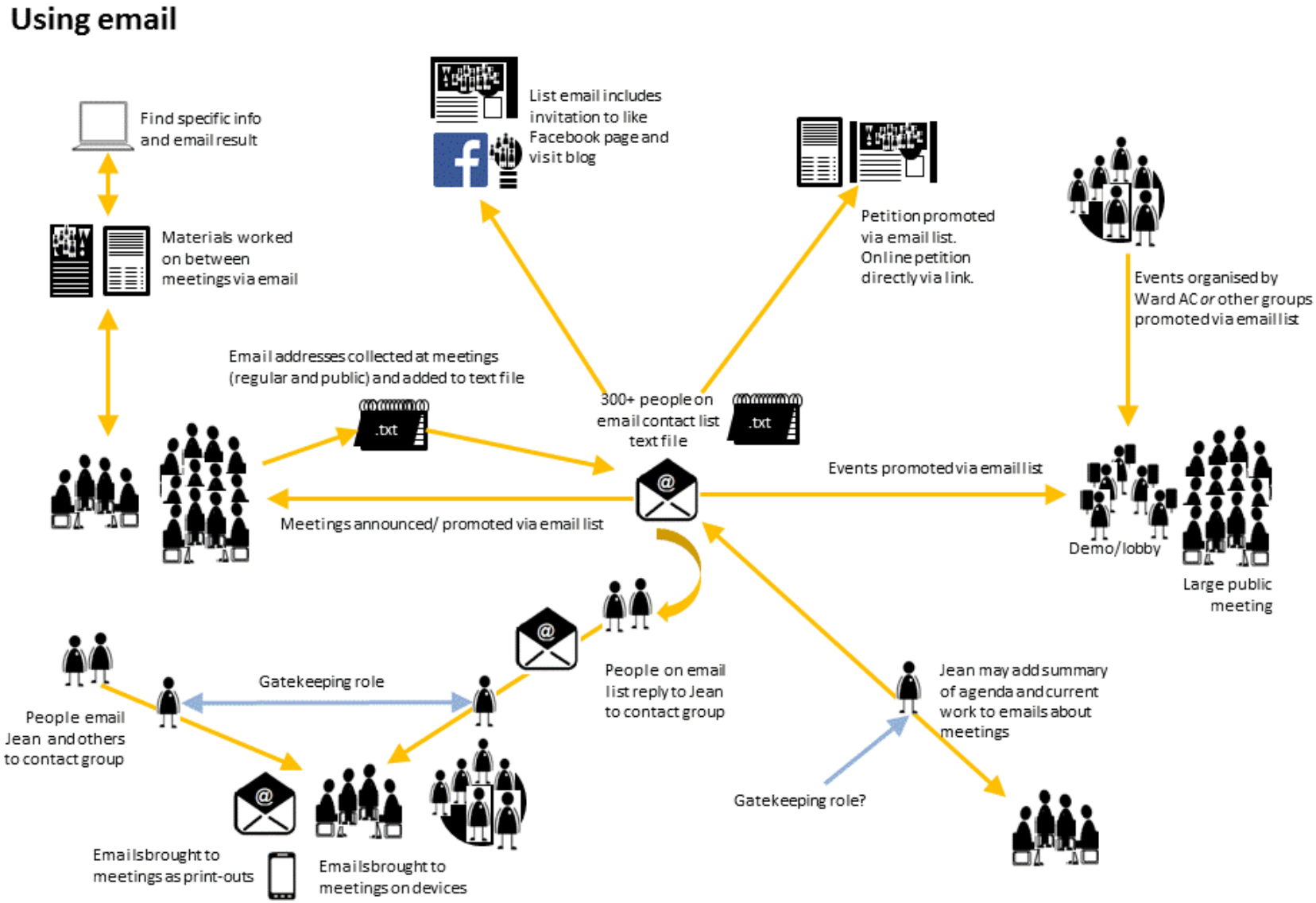
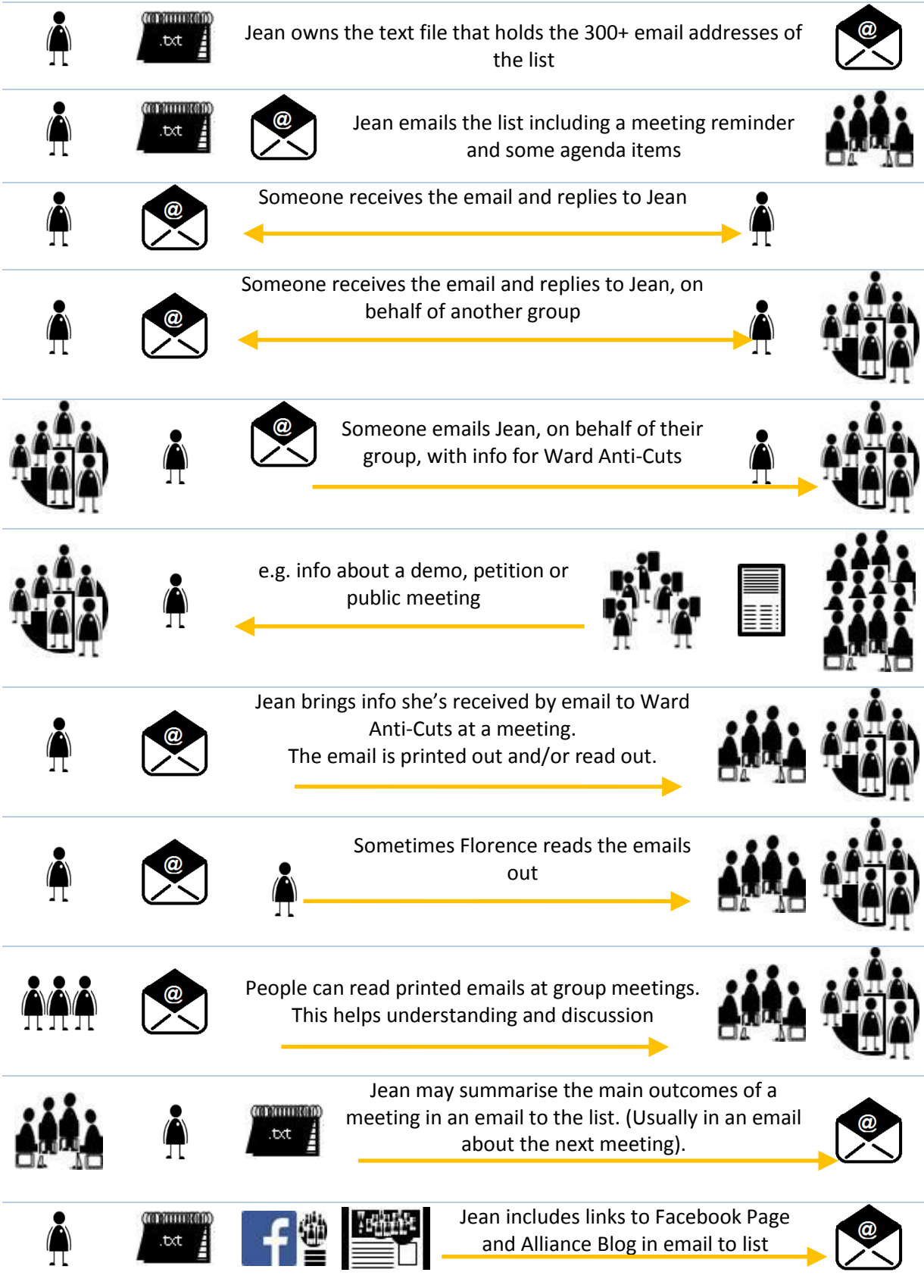
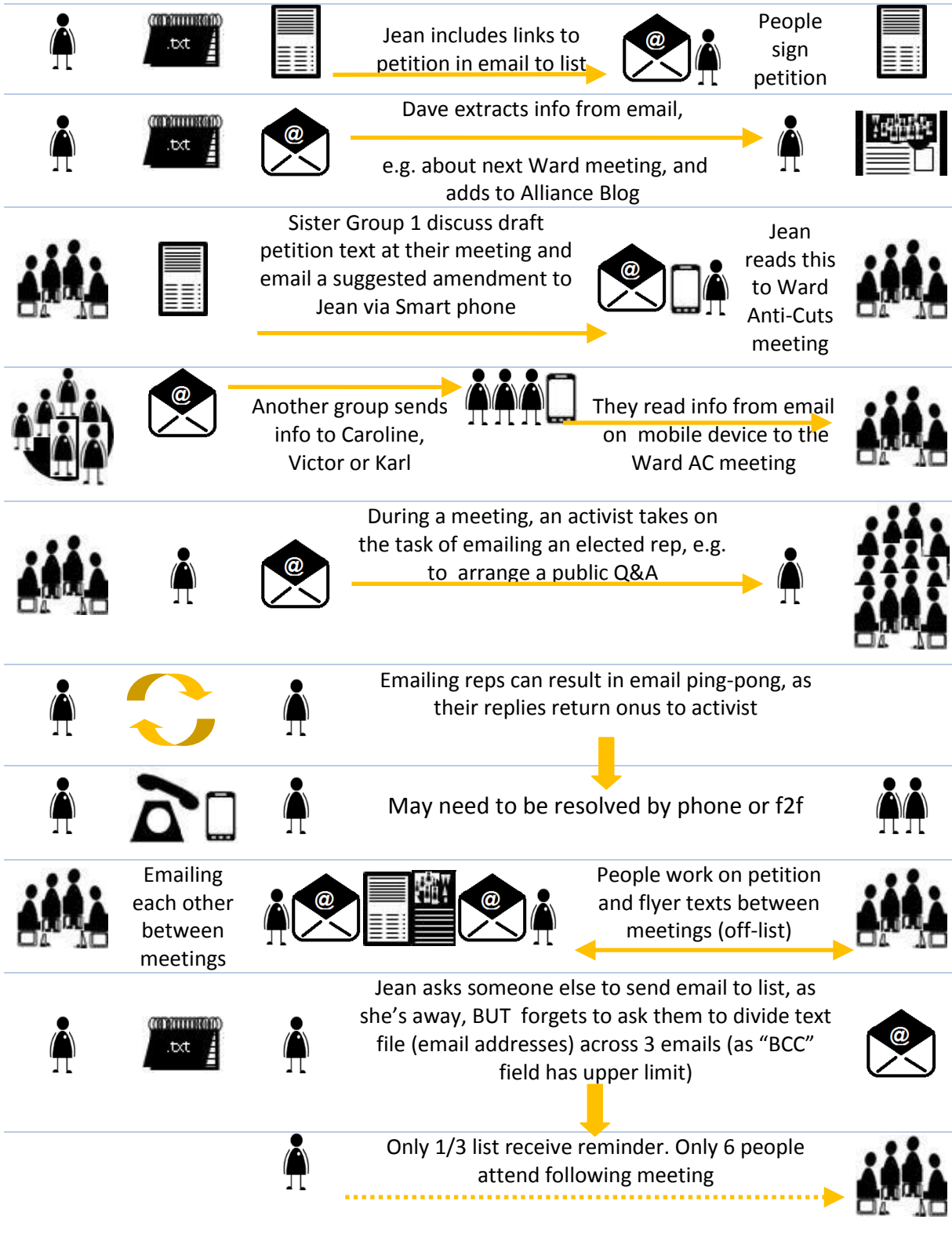


Figure 11: Ward Anti-Cuts' Use of Email – Overview

Figure 12: Ward Anti-Cuts' Email List – Motivations, Exclusions and Problematic Interactions

Table 7: Ward Anti-Cuts' Email Actions- People and Roles




Jean includes links to petition in email to list
People sign petition
Dave extracts info from email,
e.g. about next Ward meeting, and adds to Alliance Blog
Sister Group 1 discuss draft petition text at their meeting and email a suggested amendment to Jean via Smart phone
Jean reads this to Ward Anti-Cuts meeting
Another group sends info to Caroline, Victor or Karl
They read info from email on mobile device to the Ward AC meeting
During a meeting, an activist takes on the task of emailing an elected rep, e.g. to arrange a public Q&A
Emailing reps can result in email ping-pong, as their replies return onus to activist
May need to be resolved by phone or f2f
Emailing each other between meetings
People work on petition and flyer texts between meetings (off-list)
Jean asks someone else to send email to list, as she's away, BUT forgets to ask them to divide text file (email addresses) across 3 emails (as "BCC" field has upper limit)
Only 1/3 list receive reminder. Only 6 people attend following meeting

STIN Study: Paper Flyers (Ward AC)

Ward AC use the terms "leaflet" and "flyer" interchangeably to describe short paper communications that people may hold and read (as opposed to posters[3]). Flyers support synchronous and asynchronous communication: when a member gives someone a flyer, face-to-face, they may talk about the content; a flyer may be read later; or picked up without talking to anyone.

H1 System interactors and H2 Core interactor groups

Ward AC use flyers to provide information to the public. The group created a flyer about the bedroom tax, in advance of its implementation. This consists of coloured text and is folded into four pages (Table 8 on p85).

Table 8: Contents of Anti-bedroom tax flyer

1.	2.	3.	4.
The bedroom tax is wrong. Show opposition. Say no to evictions.	Outlines effects of benefits change, emphasising unfairness. List of unfair circumstances, where change will still be imposed. Number of people likely to be affected. Other likely outcomes of the bedroom tax, including a rise in total benefits costs as tenants moved to smaller, but more costly, private accommodation.	Likely outcomes continued. Better ways to reduce housing benefits bill. Multi-home owning millionaire politicians responsible for the policy. List of numbers and website URLs for advice services which could help people likely to be affected.	Ways to act: Sign the petition to the Council (URL and QR code). Sign a petition to The Scottish Parliament. Write to elected representative via *Writetothem.org* Distribute leaflets. Get involved with a local group. A list of contacts to support involvement, including the Alliance Blog, Ward AC Twitter[4] and Sister Group 1's Facebook page.

Figure 13, on p89, shows interactions.

Flyers are created by the group at meetings and finalised between meetings: e.g. Mr Green emailed Jean a list of organisations that could help people, including phone numbers and URLs; Jean, a professional designer, chose a subset for the flyer. Members with social

[3] Ward AC also use posters. For promoting the public meeting, the posters were the same as the flyers, but A4, rather than A6.
[4] Ward AC's Facebook Page was not created until after the flyer was printed

housing expertise emailed draft texts to Jean. Jean emailed a final draft to “those who were at last meeting and who use email”, sharing responsibility.

The flyer lists Sister Group 1’s Facebook Page, but not Sister Group 2’s, reflecting the stronger relationship with Group 1. The flyer lists advice services: the group were also investigating likely impacts of benefits reform on local advice services. The bedroom tax flyer is credited to local residents’ anti-cuts groups (disclaiming any party affiliation) and union branches, who printed it.

Distribution is organised at meetings: meet in a busy public place at the weekend and flyer passers-by. Members also take flyers to other groups and events. Flyering is an important outreach activity: it prompts discussions about issues, and gains feedback, including personal narratives. Florence talks about flyering to promote a public meeting, before the case study period: “Because, you speak to people and they start to tell you their own situation. And, actually, for me, certainly, that’s what brings it home to me, why you have gone and stood on that street corner or why you have organised a meeting. Because you do engage with certain people and you think “Oh gosh, that’s awful” or “How do you do that? How do you manage?” or…And then that person will come along to the meeting and you see them walking in and you think “Gosh. You did care enough” or “You were concerned enough that you thought “No, I will go and find out what’s happening”.” Caroline describes one of their flyering locations, outside the Bingo hall, as “a good place to have a chat”.

The distribution resembles social media: most content is seen by people within the group’s social network; this network may be extended by people sharing content through their own networks. Flyers distributed in town or through letter-boxes are likely to reach people unconnected to the group, carrying information further.

In earlier campaigns, members had leafleted door-to-door. Members flyered their neighbours for Ward AC’s first public meeting, in 2011, resulting in over 100 attendees.

Figure 14, on p90, provides a timeline of the bedroom tax flyer. The key is on p91.

H3 Incentives and H4 Excluded actors and undesired interactions

Figure 16, on p91, shows Motivations, Exclusions and Problematic Interactions.

Ward AC create flyers to share information, to help people, to encourage and support people to get involved. Flyers are a conversation-starter and a way to collect information: "If you do stand in the street and leaflet, people do stop and talk to you, […] most people usually know somebody who's suffered because of some sort of cut somewhere" (Caroline). "I'd like to think [we] would make a difference […] because, when you're doing stalls and leafleting people do come up and talk to you. They say "Oh this is happened" or "I've heard this"" (Dave).

The flyer promoted the bedroom tax petition, providing background information to motivate signatures, as well as the URL. Figure 14, on p90, shows the development and distribution of the flyer. Activities are colour-coded according to where they took place (p 91). Towards the end of the timeline, the Green party, followed by the Council's governing coalition parties, agreed a policy resembling the petition's request. The flyer was updated after the petition's success: removing links to the petition; recording the outcome; updating information; linking to the new Facebook Page.

Flyers are available offline, but people need to be able to read text.

H6 Resource flows

Members contribute time and skills to the flyers' creation and distribution. Professional skills are contributed free. Flyers are printed by union branches: representatives volunteer printing at meetings. However, it's important Ward AC are seen as independent: "*You know the trade union branch can't tell our group what to do. But we're supportive of one another, you know. And it, the trade union, say, will pay for printing leaflets or something like that*." (Karl). Nelson identified printing costs as a restriction to the group's use of flyers; no one else identified this constraint. Ward AC team up and share other groups' trestle tables for leafleting and signing petitions.

H7 System architectural choice points and H8 Viable configurations and trade-offs

The flyer text was not repeated in the group's own public Internet spaces. The flyer was shared with the email list, but not uploaded or copied onto their Facebook Page. Dave created a post on the Alliance Blog using the flyer text.

Members recognised the importance of flyering and suggested they could usefully do more. Flyers play an essential role in linking groups and spaces.

In the workshop, participants discussed the groups declining use of flyers over time. Victor suggested that, having established a network of people, and contacts, such as the email list, the need for flyers was reduced. Caroline suggested it was due to tackling more nuanced issues.

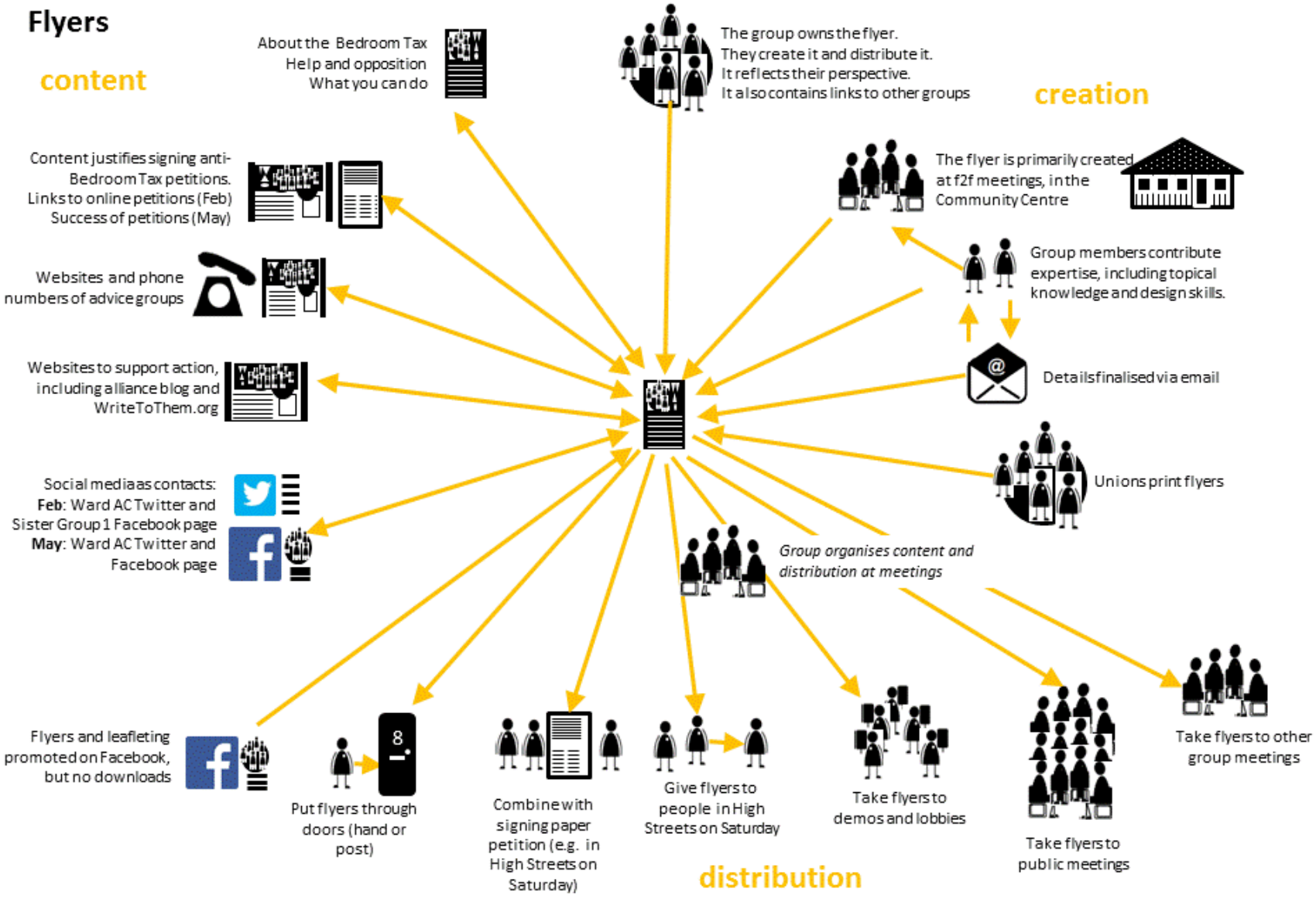


Figure 13: Ward Anti-Cuts' Leaflets and flyers – overview

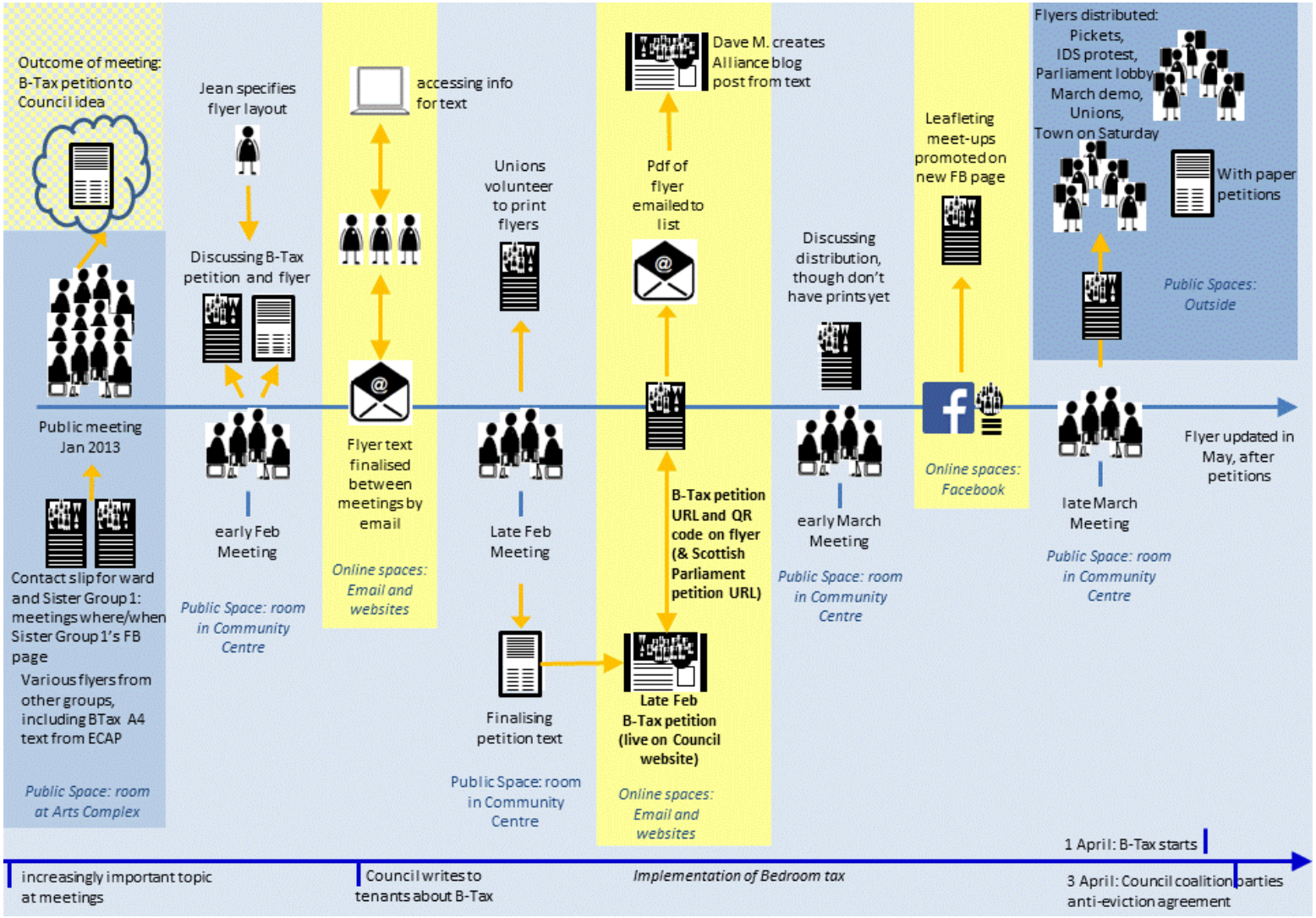


Figure 14: Ward Anti-Cuts' Anti-bedroom tax flyer timeline

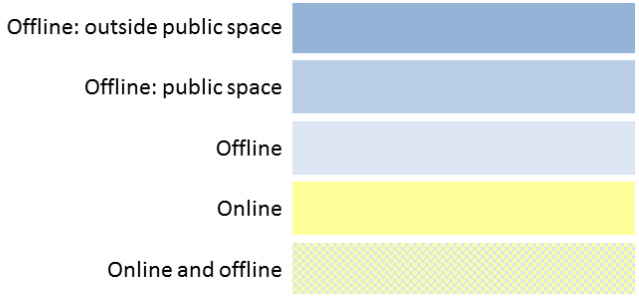


Figure 15: Key to timelines

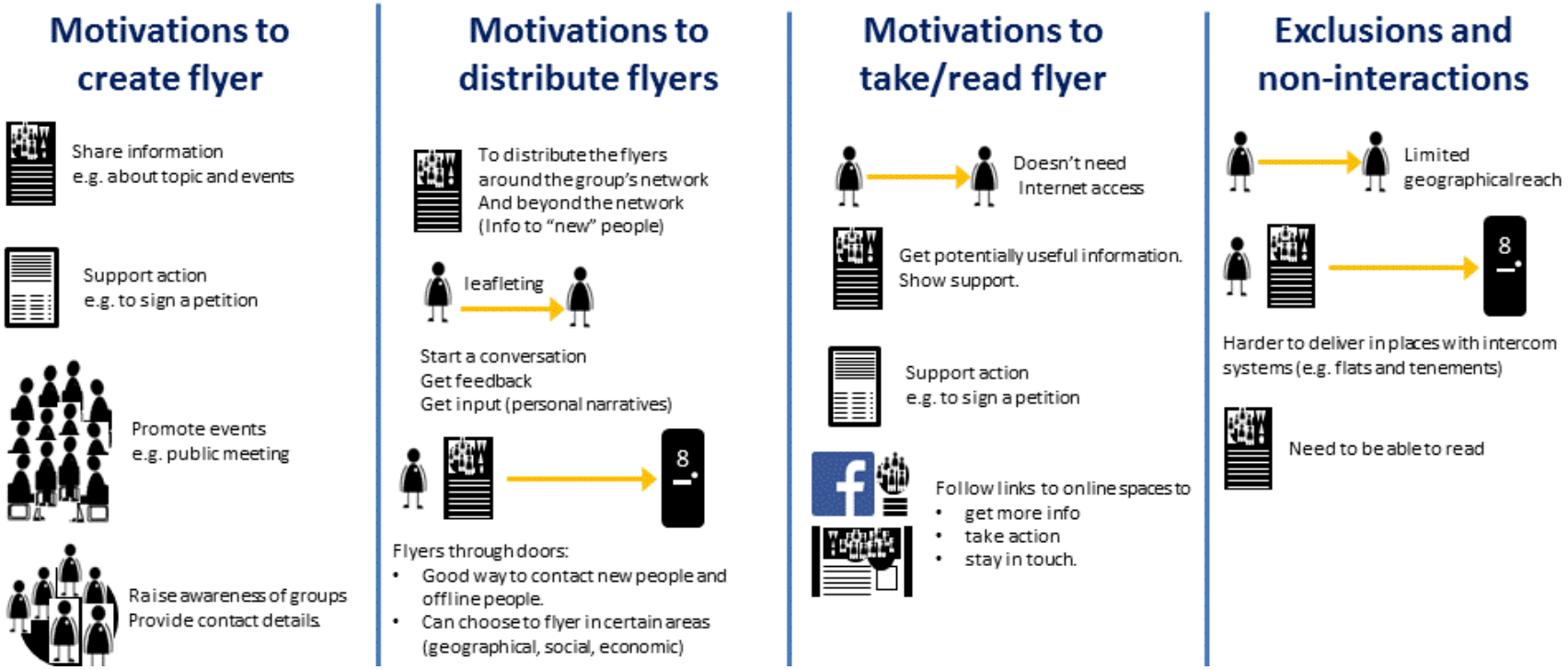


Figure 16: Ward Anti-Cuts' Flyers – Motivations, Exclusions and Problematic Interactions

STIN Study: Ward Anti-Cuts' Twitter Account (Ward AC)

Twitter[5] is a social network based on a micro-blogging tool. Users post short messages, up to 140 characters, which may include photographs. This short form is ideal for use via mobile phones. Users see tweets of accounts they follow, in reverse chronological order. Following is a uni-directional relationship. Users can forward (retweet) each other's tweets. Tweets may include hashtags: search terms highlighted by the hash character- #. These may be used to support conversations and/or coverage of topics and events.

Each account includes a profile page: 140 character description and the account's tweets and photos. This page is usually public and can be viewed by people not logged in to Twitter.

Twitter is not an important communications method for Ward Anti-Cuts, though use increased in March and April 2013, reflecting a busy and focused campaigning period.

H1 System interactors and H2 Core interactor groups

Figure 17 on p95 shows system interactors.

The Twitter account was started in August 2012, in advance of a public meeting hosted by Ward AC. Victor set it up, having gained a reputation for being tech-savvy. The account has few followers: 13 on 5th April 2013, including Caroline, Jean, a union organisation, a disability rights organisation, and the researcher. The account was following 10 people, including Caroline, union organisations, disability rights and human rights organisations, and the researcher.

Victor manages the account. He also manages a Twitter account for an anti-war group, creating a personal connection between the accounts. The Ward AC account retweets other organisations' tweets: their agendas overlap Ward AC's agenda. (Retweets of Ward AC tweets were not collected as data for this study.)

Caroline and Jean use Twitter to discover, rather than publish, information. Caroline uses Twitter to follow international events. She retweets, but rarely creates tweets. Jean tweets or retweets every month or so, including retweeting Ward Anti-Cuts' tweets.

[5] https://twitter.com/

Most of the tweets come from Facebook posts: Twitter's policy to release their application programming interfaces (APIs) enables third-party developers to write applications that link other social media to Twitter (Bucher, 2012). Posts appear, truncated, as tweets, linked to the full posts.

Twitter maintains the platform (e.g. code, API, databases, servers, staff/organisation, marketing, legal and financial support). Twitter manages the social network as a community: legal and technical issues, help, advice, improvements and sometimes moderation.

H3 Incentives and H4 Excluded actors and undesired interactions

Figure 18, on p96, shows motivations, exclusions and problematic interactions.

The Twitter account is used to promote the petition and events. The account name was included in the first bedroom tax flyer. Tweets support related groups and campaigns: tweeting about events, demonstrations and strikes. When Ward AC created their Facebook page, they set it to tweet posts and their tweets rose from about one per month to 59 in March and 36 April. This is more than the number of Facebook posts: retweets rose as well. The increase reflects a busy campaigning period. See Table 9: Ward Anti-Cuts: Tweets and Retweets, p93.

Table 9: Ward Anti-Cuts: Tweets and Retweets

Month	Tweets	Retweets (Ward AC account retweeting others' tweets)
November and December 2012	0	0
January 2013	2	0
February 2013	2	0
March 2013	59	14
April 2013	36	5

Victor appreciates Twitter as a campaigning tool, but has been unable to devote attention to it: "I actually think it's probably, probably a very effective tool, actually, and so, initially I set it up, but […] I think it still needs probably 2 or 3 more people to be involved in it in a consistent way" (Victor). Victor did not seem to encourage other people to get involved or help with promotion; probably because of group scepticism about Twitter, and especially considering that no members are active tweeters.

People who don't use the Internet are excluded. City Council's social media guidelines

prohibit employees posting political content. This includes several group members. One is involved in implementing the guidelines. Other people, like Dave, dislike Twitter, annoyed by friends' use.

Searching Twitter does not reveal any negative tweets to Ward Anti-Cuts. (No interaction is revealed except retweets). No problems are mentioned in meetings or interviews.

H6 Resource flows

To access the account, individuals need their own Internet/device set-up. Use of Twitter is free to end users. Twitter users benefit from the free social network service. Groups, companies and organisations benefit from a free online structure to support information exchange. Organisations can gather inputs, using Twitter as a feedback channel. Potential disadvantages include being the target of negative comments. Third-party actors benefit, as articles on websites are linked to from Twitter.

Twitter manages the platform: staff (code, management, promotion, legal etc.) and hosting (servers, power, Internet access). Twitter acquires companies to integrate into the platform. Twitter's revenue stream includes income from advertising and from flotation on the stock market; users can pay to have tweets *promoted*; Twitter sells access to data. Twitter's full revenue model is unclear.

H7 System architectural choice points and H8 Viable configurations and trade-offs

Tweets link directly to the bedroom tax petition online. The petition on the Council website included facilities to share the petition via social media (Digg, StumbleUpon, Facebook, Reddit and LinkedIn) but not Twitter. (See screenshot in main text). In a meeting, someone asked how to tweet a link to the petition. He did not know how to copy and paste, so a *Tweet this* link would have been necessary to tweet the petition's URL.

Twitter enables location-based news and feedback, including live updates, via mobiles, from protests and meetings. This is not evident in the Ward AC Twitter account. Victor's relevant experience led to him managing the account, but this is connected to responsibilities which prevent him live-tweeting, and promoting the account. The account needs involvement of someone who attends meeting and events, but has more time.

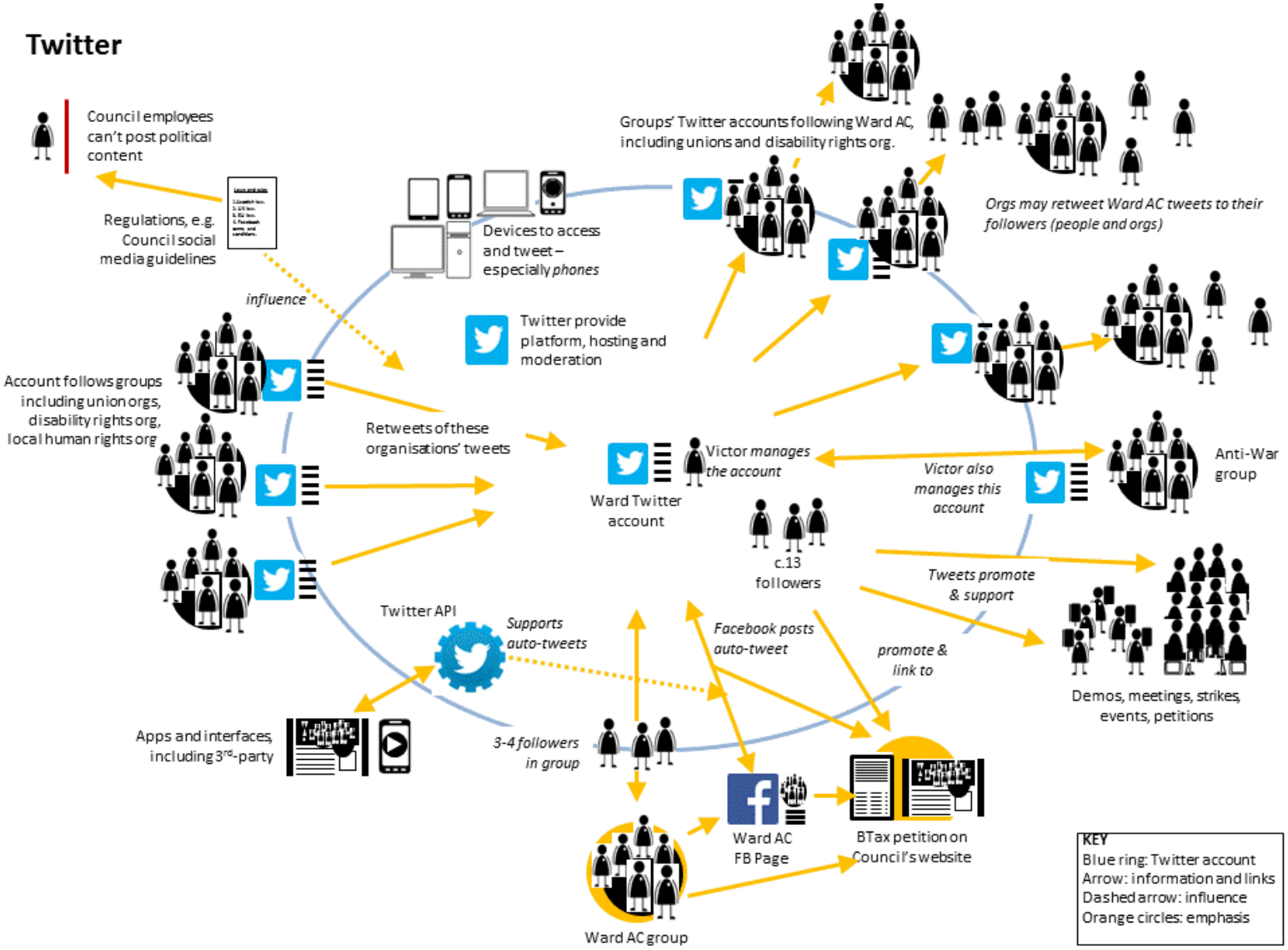


Figure 17: Ward Anti-Cuts' Twitter – Overview of Interactors

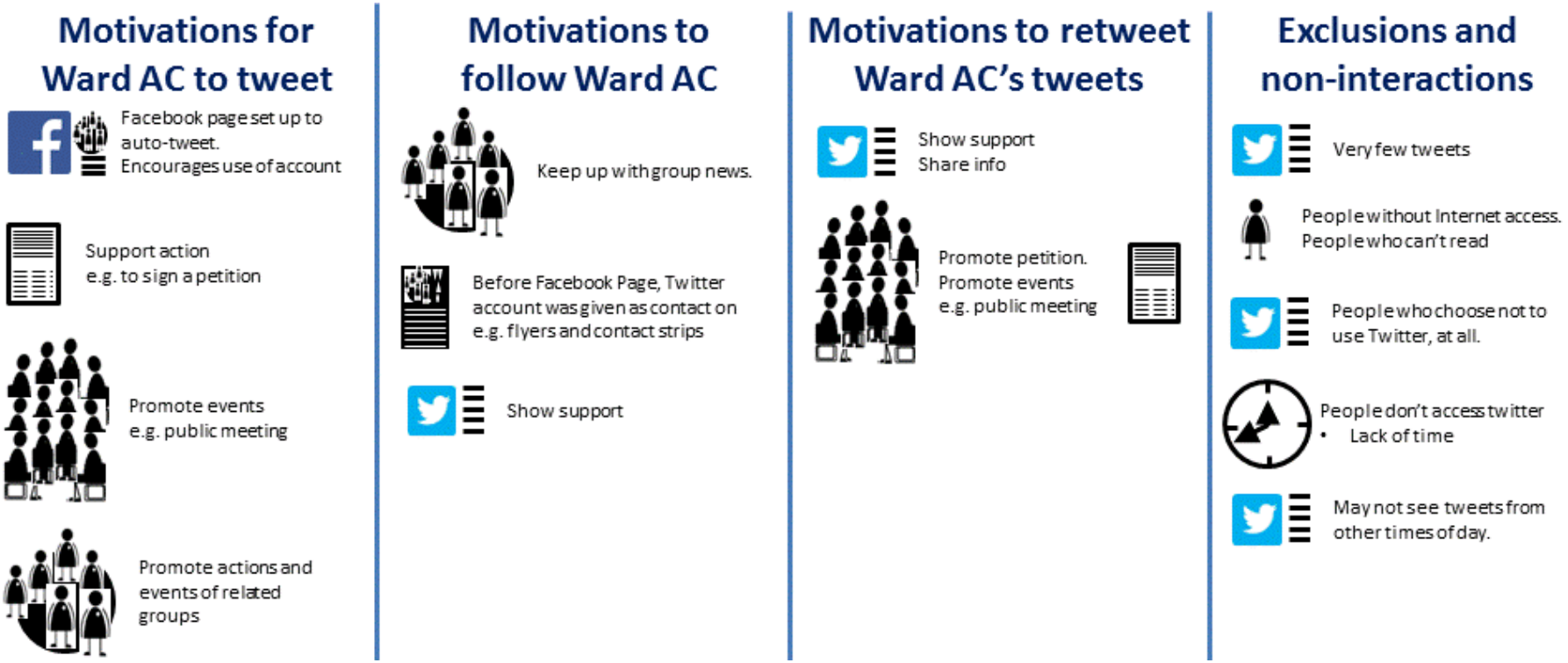


Figure 18: Ward Anti-Cuts' Twitter – Motivations, Exclusions and Problematic Interactions

STIN Study: Alliance Blog (Ward AC)

The Alliance was a network which brought together local groups opposing austerity and privatisation, including union organisations, and anti-cuts groups. It was set up in 2011, after the UK coalition government began introducing austerity policies. However, Alliance members wanted to create local actions and campaigns, rather than just sharing information. Alliance meetings petered out, but the blog continued.

The Alliance Blog uses the WordPress content management system, enabling the blog to be maintained without content-creators writing html. WordPress also simplifies administration and moderation. WordPress blogs use a standardised interface: a masthead picture across the top; horizontal navigation to static pages, below. Below the navigation is the main post, with other content to one side (events calendar, links to previous posts, blog roll). News posts are the main content, displayed in reverse chronological order. Visitors may be able to comment on posts, though this is not enabled on the Alliance Blog. Static pages tend to contain information about the blog and/or owner. The *blog* roll contains links to other blogs. The appearance of the blog may be changed, at any time, by applying a new styling (via Cascading Style Sheets, CSS). This retrospectively applies to all pages.

The first Alliance Blog post is from March 2012. The Blog's masthead is a picture of the City, identifying it as local. There is one static page for each of three local anti-cuts groups and one for the Alliance, each listed on the horizontal navigation. Blog posts cover topics and events related to austerity, privatisation, welfare reform, personalisation, and anti-poverty. The blog roll lists anti-cuts groups, disability rights organisations, unions, local groups and campaigns. An events calendar lists meetings, demonstrations, and dates associated with relevant petitions. The right hand bar includes links to pages which undermine the cases for austerity and public sector cuts. The Blog's style remained constant throughout the case study.

H1 System interactors and H2 Core interactor groups

Figure 19, on p101, shows Alliance Blog posts on a timeline. Figure 20, on p102, shows system interactors.

Dave creates the blog, repurposing content from emails, newsletters and websites. Other

people interact via Dave: “No, no one sends me anything. I just take stuff […] What I would’ve liked is if we had a pool of people that when something happened they would then write something about it, which is kind of what’s happened with a lot of [groups] that I’ve been involved with. But that’s not really, that’s not really taken off” (Dave). Jean provides information through Ward Anti-Cuts’ email list. With no comment system, it’s not evident who visits the Blog. Interviewees were aware of it, but none used it regularly. Caroline felt it was not always up to date. Ward Anti-Cuts include the Blog’s URL on contact slips, flyers and emails.

Three anti-cuts groups have pages on the Blog, with their names prominent in the navigation. Each group’s page contains information about meetings, contact, and their Facebook Page. Posts about groups are tagged with their name. Meetings are added to the events calendar.

Dave is a key-holder for the Independent Resource Centre where Sister Group 1 meets. Groups meeting there, and their events, appear on the Blog. Dave gets information from groups via: email lists; flyers and posters in the resource centre; people attending multiple groups and events.

H3 Incentives and H4 Excluded actors and undesired interactions

Figure 21, on p103, shows motivations, exclusions and problematic interactions.

Anti-cuts group founders, Jean and Mr Green[6], appreciate the Blog: setting up pages and using its URL on communications. Beyond this, there is little information in the data about who visits the blog and why.

The Blog is a resource for information about events, to avoid scheduling conflicts. However, there are gaps in communications between the anti-cuts groups. Sister Group 2 held a public meeting, which was not listed on the Blog and clashed with a regular Ward Anti-Cuts’ meeting. There is no push technology: no sign up for email alerts about new posts; no auto-links to social media. Occasionally, links to posts are posted on Sister Group 1’s Facebook page.

[6] Mr Green helped to found Sister Group 1, with Councillor Bruce.

The Blog contains political and economic information about austerity policies, the case against privatisation and public sector cuts. This is not prominent in mainstream media and is useful to support the groups' actions. However, most Ward Anti-Cuts members have a good understanding of this context, including professional expertise and access to relevant texts.

H6 Resource flows

The Blog is available to anyone with Internet access: public and accessible, high on descriptions of activities; low on polemic. The primary resource is Dave's time, taking this away from other groups: "because I spent a lot of time on the anti-cuts stuff, […] I've come out of the [unrelated] group completely, which I feel kind of guilty about". Dave also pays a hosting company £2-3 a month to host the blog and does not reclaim this. None of the posts are concerned with raising money.

The blog advertises and records events, potentially benefiting groups. The Blog is the first search result for Ward Anti-Cuts' (real) name. The Blog provides pages about anti-cuts groups, but not other Alliance groups like unions, which have established websites.

H7 System architectural choice points

Sister Group 1 began to resurrect the Alliance, as a de-centralised organisation, facilitating information-sharing between groups, e.g. to avoid scheduling clashes. According to the Blog, Alliance meetings resumed after the case study. Its reestablishment indicates that online communications between the groups were not adequate.

Dave did not set up a Facebook Page for the Alliance, because he needed a personal Facebook account to do this. An Alliance Facebook Page exists, though the most recent post by page admins is from 2011. Others, including Mr Green, are still posting on the page. Jean posted a few years ago. Dave tried to link the Blog to Sister Group 1's Facebook, but had problems configuring the WordPress plugin.

H8 Viable configurations and trade-offs

The advantage of Dave's responsibility for the Blog is that the posts are well-written and the Blog is mostly up to date. The disadvantages are Dave becoming a "bottle-neck" for content

and technical improvements, plus his work with other groups is reduced. There is a communication gap between Dave and Sister Group 2; perhaps the latter share news via Facebook and face-to-face, rather than email.

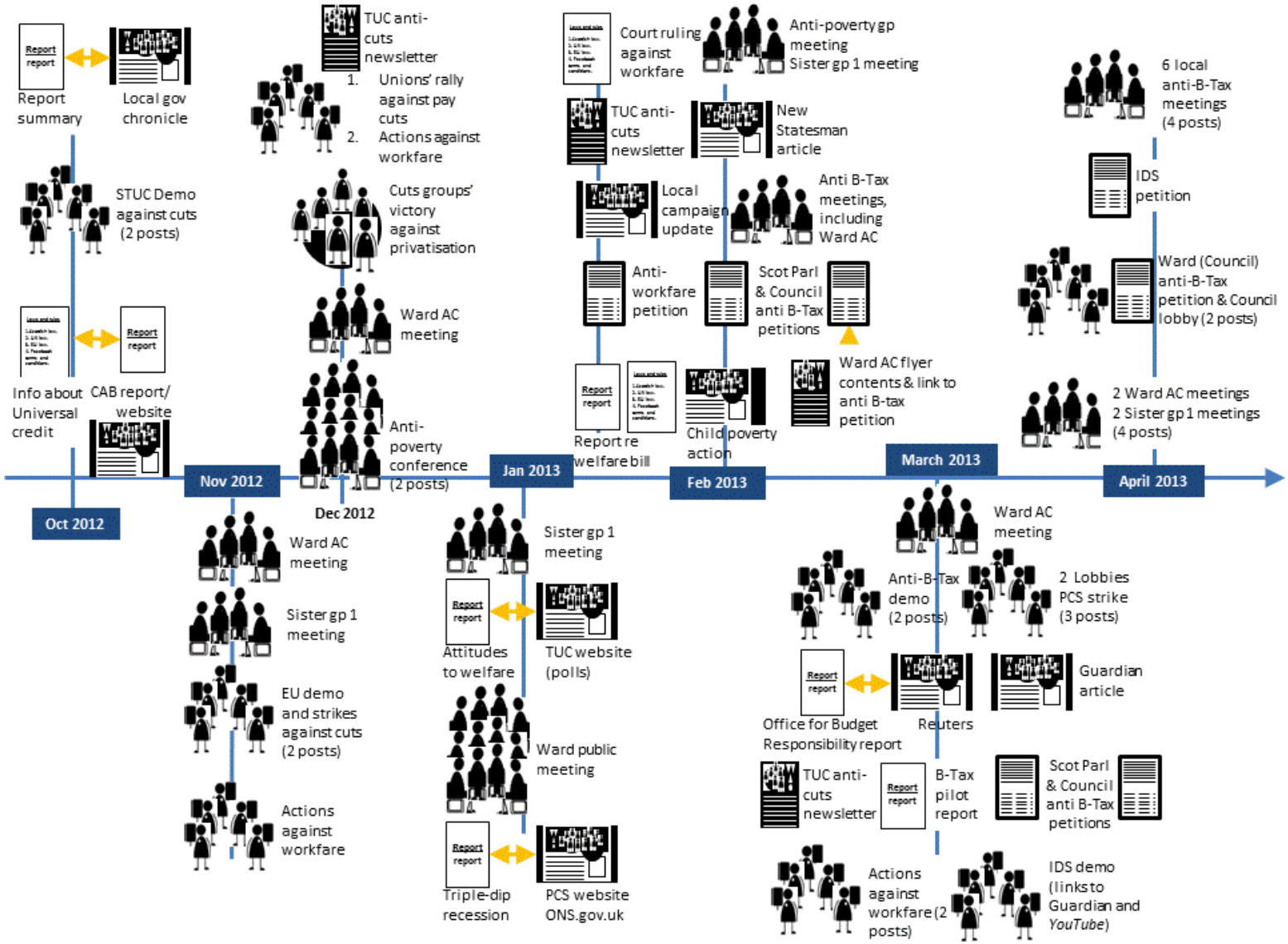


Figure 19: Alliance Blog Posts as Timeline

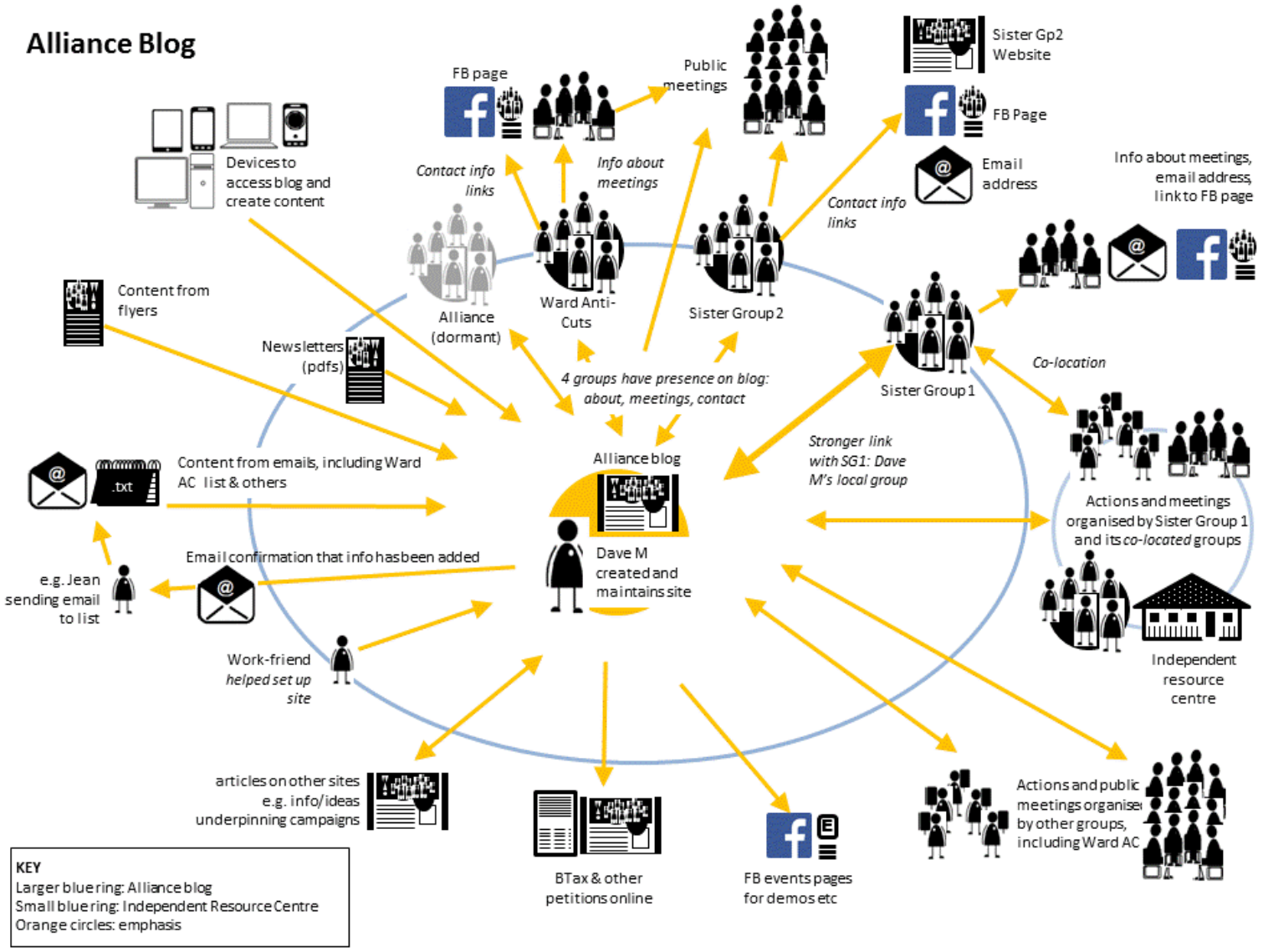


Figure 20: Alliance Blog – Overview of Interactors

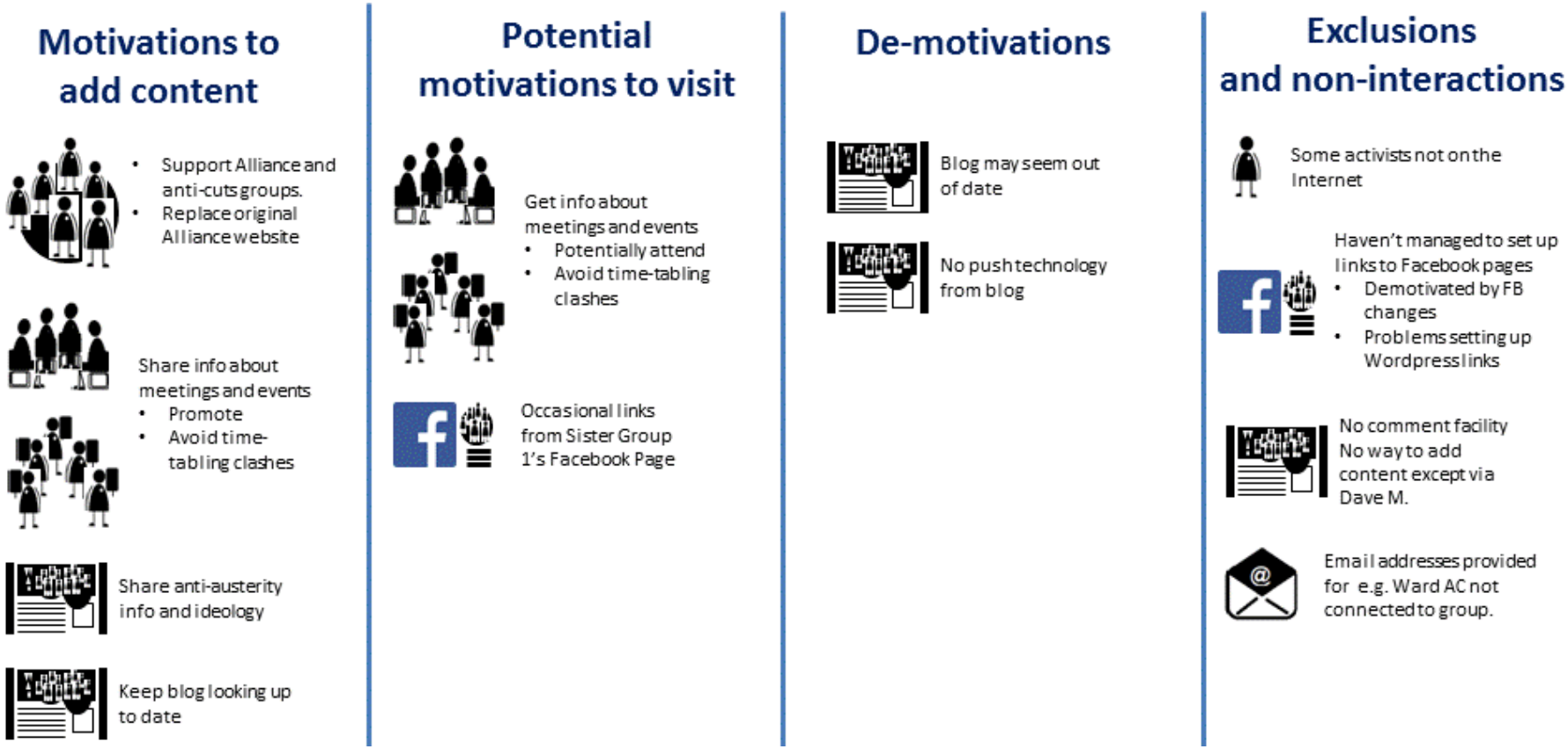


Figure 21: Alliance Blog – Motivations, Exclusions and Problematic Interactions

Appendix 26. HCAT Communication Forums

Table 10: HCAT Communication Forums

Forum	Occurrence	Space/locations	People
Networks of people			
The village	Daily, depending whether people live inside or outside the village.	The village and its surrounds. Also online via the Trust sites, plus sites and social media associated with village groups and businesses.	People who live or work in/near the village. Elected representatives and local council. Utilities and public transport organisations.
Hill Community Action Trust (HCAT)	Holds AGM once a year. Online presence most weeks.	Offline (primarily Hill) Online (Internet, Facebook, Twitter).	1 member of staff (Monty); several directors. Membership is open to people who live in or near Hill.
Trust directors	Meet formally about every other month; plus contact as necessary: f2f, by phone and email.	Meet in each other's homes and sometimes in the Trust office.	About 6 directors. Including Bill (HCAT's chair), Robin, Chris (Treasurer), Robert, Louise.
Community Council	Meet every month (except July).	In the village hall.	Robin is the CC's chair. Bill and his wife sit on the council. Armstrong is on the council. Monty attends, sometimes takes minutes. Meetings open to the public (e.g. railway crossing meeting) and may involve representatives from external organisations, including Network Rail and the local council.
Groups associated with the Trust: e.g. Allotment Association, Gala Committee	Some groups have regular meetings throughout the year; others meet in the run-up to events.	Meet in each other's homes and sometimes in the Trust office. Also meet casually on location: at the allotments, in the park etc.	People from Hill. Barbara chairs the Allotment Association. Philippa, Rowling and Chloe are active members of the Gala Committee.
Networks associated with children, school, children's groups and events	Parent council and forum have regular meetings. Parents meet each other on the school run and at events. Plus playgroup.	At the school, on the way to/from school. Playgroup meets in village hall. Also a Parent Council Facebook Group.	People with young children. People who lived in the village when they had young children (as the networks persist). Including people who sit/sat on the Parents' Council, like Monty.
Wind-farm networks (for	DPEA hold inquiry throughout case	Westhill Moor wind-farm would have	People representing Hill Community Council and HCAT: primarily Robin and

Forum	Occurrence	Space/locations	People
and against)	study period.	been 5 miles from Hill. The inquiry sat in a local village and is archived on the DPEA website.	Robert, but also Bill. Objectors who live near the proposed wind-farm. The energy company. The local council. Various people and organisations with an interest/expertise. Community Councils from neighbouring villages (a joint inquiry was held about 2 applications).
Online spaces			
Hill Facebook group	Average 116 posts per month	Internet, Facebook.	c. 400 people are members, mostly from Hill or the surrounding area.
"I love Hill" Facebook page	Average 26 posts per month[7], but varies widely.	Internet, Facebook.	Up to 149 people liking the page. People with a strong connection to Hill.
Twitter (Hill Village)	Average 7 tweets and 7 retweets per month, but varies widely.	Internet, Twitter.	Up to 268 people follow the page. More reached through retweets. The account follows up to 456 other accounts.
Hill.org	Average 1 news post per month till June 2013, then nothing till end of case study period.	Internet, public website.	People are referenced on the website via community groups, business directory, news and photos. Some people have made comments.
Hill blog	Average 1 blog post per month.[8]	Internet, public website.	People are referenced in the blog posts. No comments are visible from the case study period. People receive alerts by email.
Trust email list	Aligned to HCAT news.	Internet, email accounts.	Trust members.
Fundraising websites	One website in use throughout case study period.	Internet, public website.	People in Hill, especially children and their families, their friends and relatives.
Offline spaces			
Trust office	Till September 2013.	In the centre of Hill.	Monty working there. People drop in. Some groups meet there. Owned by local council.
Resource Centre	Being planned and built in case study period. HCAT move in September 2013.	Near the centre of Hill.	During the case study period, people who are involved in the project drop by: especially Monty and the Trust directors. Plus the builders.
Village spaces	Up to daily	School and routes to school, park, PO,	People who use these spaces –e.g. day to day or for specific events.

[7] From June 2013 to September 2013 inclusive. During the case study period, the page was not actively used until late May.
[8] From June 2013 to September 2013 inclusive.

Forum	Occurrence	Space/locations	People
		shop, village hall, church and church hall, arts workshop, stables	Rowling runs the arts workshop.

Appendix 27. HCAT: Interviewee profiles

All interviewees live in Hill Village. During the case study period, all interviewees are Hill Facebook Group members, except Bill, Robert and Robin.

Armstrong: Community Councillor. Works in IT in local city. Sometimes critical of HCAT's work, especially around wind-farms. He felt their consultation process was inadequate. Online, he speaks up for people who live near the proposed wind-farm, and opposed it. Keen cyclist; children at school.

Barbara: Chair of Allotment Association. Works in public sector communications in local city.

Bill: Chair of HCAT. Bill took on the neighbouring council over an illegal waste-tip on the edge of Hill, leading to the environmental payment that HCAT were established to manage. He was previously a Hill community councillor. He works in renewables and has grown-up children.

Chloe: Trust member and active in the Gala Committee. Young, with young children. Works part-time in healthcare. Involved in local church and voluntary work.

Chris: An accountant and HCAT director and treasurer. Took on these roles about a year before the case study. Also involved in local cycling groups. Has teenage children. His wife is on the Gala Committee. Chris was starting to use social media (Facebook and Twitter) so that he could understand them and support his children's use.

Fred: Instigated and manages the woods path project, a keen off-road cyclist. School-age children. Works for a construction supplier and persuaded them to donate materials to the paths project. Trust member. Very supportive of the Trust, but also critical of their wind-farm consultation.

Lily: Trust member with young child. From North East England, with proud history of left-wing politics. Just graduating as mature student.

Louise: New HCAT director. Previously ran successful campaign against tunnel under railway. Previously worked in IT; now retired. Grown-up children.

Monty: Monty is HCAT's Action Manager. During the case study period, he is the Trust's only paid member of staff. In the latter half of the study, he works part-time for the Trust and takes on communications for another community business in a neighbouring village. He also successfully reapplies for his HCAT post. Prior to working for the Trust he was active in the community via the primary school board and he set up the Hill Facebook Group. He previously worked in public sector communications. Monty lives in the village with his wife and young children. His wife is active in other local groups, including the Gala Committee. Monty is down to earth, with a good sense of humour. He chose his research name after Montgomery Clift, though he does not resemble him.

Philippa: Trust member and active in the Gala Committee. Young children and teenage children. Dislikes social media.

Robert: HCAT's vice chair. Also an intersection between his profession and work with the Trust. Took on these roles, like Chris, about a year before the case study. Has teenage children. Robert was starting to use Twitter in the case study period, aligned to his professional responsibilities. After the case study period, he joined Facebook and the Hill Facebook Group.

Robin: Chair of Community Council, HCAT director and one of its founders. Retired and keen to retire from the Community Council, but needed new people to get involved first. Does not use social media.

Rowling: Long-term involvement in HCAT. Runs Hill Arts Workshop and helps out in that role: for example hosting village events. On the Gala Committee. Previously a journalist. She has teenage children. Hill Facebook Group member. The Arts Workshop has its own Facebook page.

Appendix 28. HCAT STIN studies of participation spaces

STIN Study: Hill WordPress Blog (HCAT)

The Hill Blog uses the WordPress platform. This is described in the Ward Anti-Cuts' STIN study "Alliance Blog" on pX.

Metadata describes the Hill Blog as about life and work in Hill village. A static *about* page gives the Blog's purpose as supporting the 2011 HCAT Community Consultation and sustainable energy funding bid. Local people are invited to join HCAT by leaving contact details; no further information is provided about HCAT. The Blog includes an email alert facility for new posts. Until summer 2013, the Blog used rural-style CSS theme "Spring Loaded". The theme then changed to "Trvl": no graphics, black background, white text, blue and yellow headings.

This study is based on posts from November 2012 to September 2013. Posts reflect the timetable of community events and project milestones. A third of posts are mirrored on the Hill.org website. See Table 11: Hill WordPress Blog Posts on p113.

H1 System interactors

Figure 22, on p114, shows system interactors.

Monty owns and manages the Hill Blog, writing all the posts, except a Community Council update, which is written (though not uploaded) by the CC's chair, Robin. People are mentioned within posts: Volunteer Award winners; people involved in fundraising. People are quoted: Bill (HCAT's chair) and Fred (organising the woods' path project).

During the case study period, only one comment is recorded. There were more comments in the previous year, around the wind-farm consultation.

Chloe, Philippa and Rowling receive email alerts from the blog about new content: "I think there was a [Hill] blog, maybe, which I would get as email, but I haven't had one of those for ages." (Chloe interview). Rowling used the Blog to find out about the new railway crossing. Several interviewees were aware of the Blog, though it was difficult to separate their experiences of it from the Hill.org website. Louise and Fred check both. People doubted

whether the Blog or Hill.org was most current. At the workshop, Monty said that Blog posts generally got 70 to 80 views.

H2 Core interactor groups

HCAT is the primary interactor group. The Blog is within Monty's work for HCAT: publishing news and promoting their agenda. The Community Council is another core interactor group: the Blog publishes updates on their work. Robin's update post is part of a campaign to encourage people to stand for the CC, causing an election, and increasing village democracy. Members of the CC founded HCAT; some are directors; HCAT reports to the CC; Monty provides their external communications.

Other community groups are evident in posts: the Gala Committee, the Allotment Association, a local exercise class, the primary school. Local businesses are mentioned in posts about fundraising, volunteering, and about Hill as a tourist destination. A post advertises a coffee morning with a local councillor and Hill's MP. External groups, like Network Rail and the Forestry Commission, appear through their involvement in village events. Network Rail implemented a controversial new level-crossing; the Forestry Commission worked on the woods' path project. Funding information features the Scottish Government, Lottery Fund, and the EU.

H3 Incentives

Figure 23, on p115, shows motivations, exclusions and problematic interactions.

Monty started the Blog as an additional way to get information to the community: "I just started to put out things […]Trying to make things as open and as accessible and trying to provide information as [easily as] possible, as some people read that. So we do, we try and do everything: Facebook, Twitter, blogs, pictures, whatever." (Monty). This reflects Monty's strategy: people receive information from a variety of places and that's the way to distribute it. The posts indicate Monty's incentives: share news, encourage involvement, and raise funds. The first post, from January 2011, is about HCAT's second Community Consultation. These consultations establish HCAT's priorities. An April 2013 post echoes Monty's ambition to attract tourism.

People visit the Blog to find out what's going on, e.g. about the new railway crossing. This complex issue was difficult to follow from the Blog's partial updates: "It was difficult to know what was going on. You *had* to go and find out. I *had* to keep picking up the phone to people and ask what was happening. […]it was on a blog, it was on, you know, it was on various sites, and it was –I think there was an article in [Directory Magazine] about it. But it was quite difficult to *understand* […] what was *actually* happening." (Rowling). No posts record the Community Council meeting where people from Network Rail and the local council were questioned by people from Hill (though Monty took minutes).

People visit the Blog following email alerts and links to new posts. As post titles become email alert titles, Monty chooses them to encourage people to open the email: e.g. "Shhh, Festive Gossip". Google Analytics statistics indicate most interest in who won Volunteer Awards, and more interest in posts about the local army base, than the food-waste pilot. The Blog is in the top few Google results for Hill, below Hill.org[9].

H4 Excluded actors and undesired interactions

People who do not use the Internet cannot access the Blog. Some interviewees were unaware of the blog: Trust director (and vice chair) Robert became aware of the Blog through the HCAT research information sheet (Appendix 5, p19); director Chris then heard about it through Robert. In 2012, Blog posts about the wind-farm consultation received comments from people who lived outside Hill, but near the proposed wind-farm.

People suggested they had not accessed the Blog recently because it was not current or they had not received an alert. This reflected gaps in posting. When Fred suggested the Blog had been less "active" recently, it was nearly two months since the last post. When Chloe suggested she had not received a Blog email for ages, it was three months since the last post. The alert system is effective in publicising new posts to those who have signed up.

During the case study period, only one comment was published. In 2012, posts covered HCAT's involvement in a wind-farm proposal, especially their local consultation. These posts attracted several comments, many negative about the consultation process and the

[9] This may depend on the searcher's profile and location.

proposed wind-farm. Monty responded to some comments. Critical comments from before and after the case study period were not removed.

Text on the *about* page invites local visitors to contact HCAT via a comment form, below the text. It is not clear that these contact comments will be published: someone's membership request is published there, including his full address.

H6 Resource flows

WordPress is Open Source: free to download and free to use. HCAT use a hosting and maintenance service provided by WordPress.com: about £18 pa, including the domain name and software maintenance. Monty posts within his role, which is funded by a National Lottery grant. Costs for people accessing the Blog are subsumed into their Internet access costs.

Many Blog posts concern fundraising: ideas, activities, donations, how to contribute, links to fundraising websites, amounts raised, where funds go, thanks. The resource centre build is financed through grants from the Scottish Government and EU, plus fundraising, and this is noted in blog posts. HCAT's aims include encouraging community-led development and helping local people to develop new skills. These are reflected in posts promoting volunteering. Sustainable technology is an HCAT priority, reflected in posts about the proposed wind-farm and the resource centre, a zero-carbon building.

H7 System architectural choice points and H8 Viable configurations and trade-offs

The Hill.org website was under construction when Monty created the Blog. Now, there are overlaps in content and function between the Blog, the website, the Facebook Group, and the Facebook Page. Each time Monty posts information, he needs to decide where to post it, where to mirror it and where to link to it. Monty's strategy of using multiple information spaces is appreciated, but sometimes confusing: "the Trust are very good at communicating what's going on, in terms of Facebook, the blog, and the community –[Hill].org, but *only* if you know that they're there. You know, and sometimes it can get a bit lost, you know, with what's going on" (Fred). Online discussions now take place in the Facebook Group, rather than on the Blog or Hill.org. The Blog is linked to from Hill.org; it auto-posts to Hill Twitter

and the closed Facebook Group, but not the public Facebook Page.

Few photographs are used, though more throughout the case study period. This increase indicates that it became easier to upload/include photos. This may be due to changes in WordPress functionality or Monty's device-use, or the posts' topics. In the workshop, Monty describes how his Internet use changed as he moved from using a Blackberry to a smart phone during this period.

Table 11: Hill WordPress Blog Posts

	Date	Post content	Comments [10]	On Hill.org?
1	November 2012	Donation received.	0	Yes
2	November	Update: woods paths, Resource Centre tender, neighbourhood watch, football team, volunteer awards, wind-farm enquiry, food fair, fundraising.	0	Woods info
3	November	Volunteer awards: winners.	0	Yes
4	December	Update: Christmas events, fundraising, Volunteer awards.	0	No
5	December	Fundraising.	0	Yes
6	January 2013	2012 Blog statistics.	0	No
7	March	Network Rail response re new level-crossing barrier.	0	No
8	April	Hill as tourist destination.	0	No
9	April	Coffee morning with elected representatives, golf day.	0	No
10	May	Resource Centre update	0	Yes
11	May	Update from chair of Community Council: elections, Network Rail, fly-tipping, wind-farm enquiry.	0	Yes
12	May	Sponsored walk.	0	No
13	May	Sponsored walk.	0	No
14	June	Resource Centre update.	0	No
15	June	Successful Lottery Fund application.	1 [11]	Yes
16	June	HCAT recruiting.	0	No
17	September	Volunteer awards.	0	No

[10] It is also possible to "rate" posts, using a star system. However, none of these posts received any ratings.
[11] Congratulations.

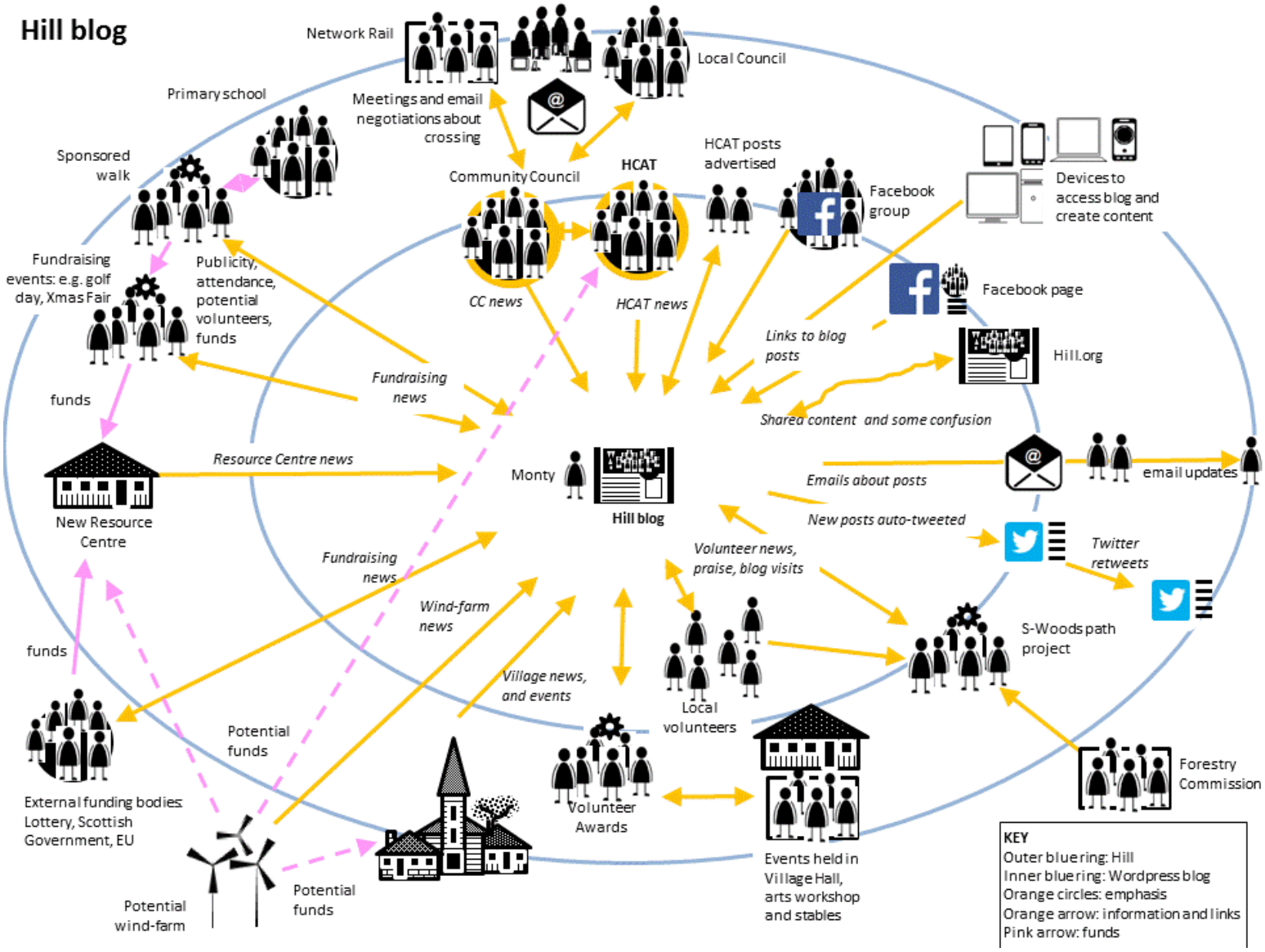


Figure 22: Hill Blog – Overview of Interactors

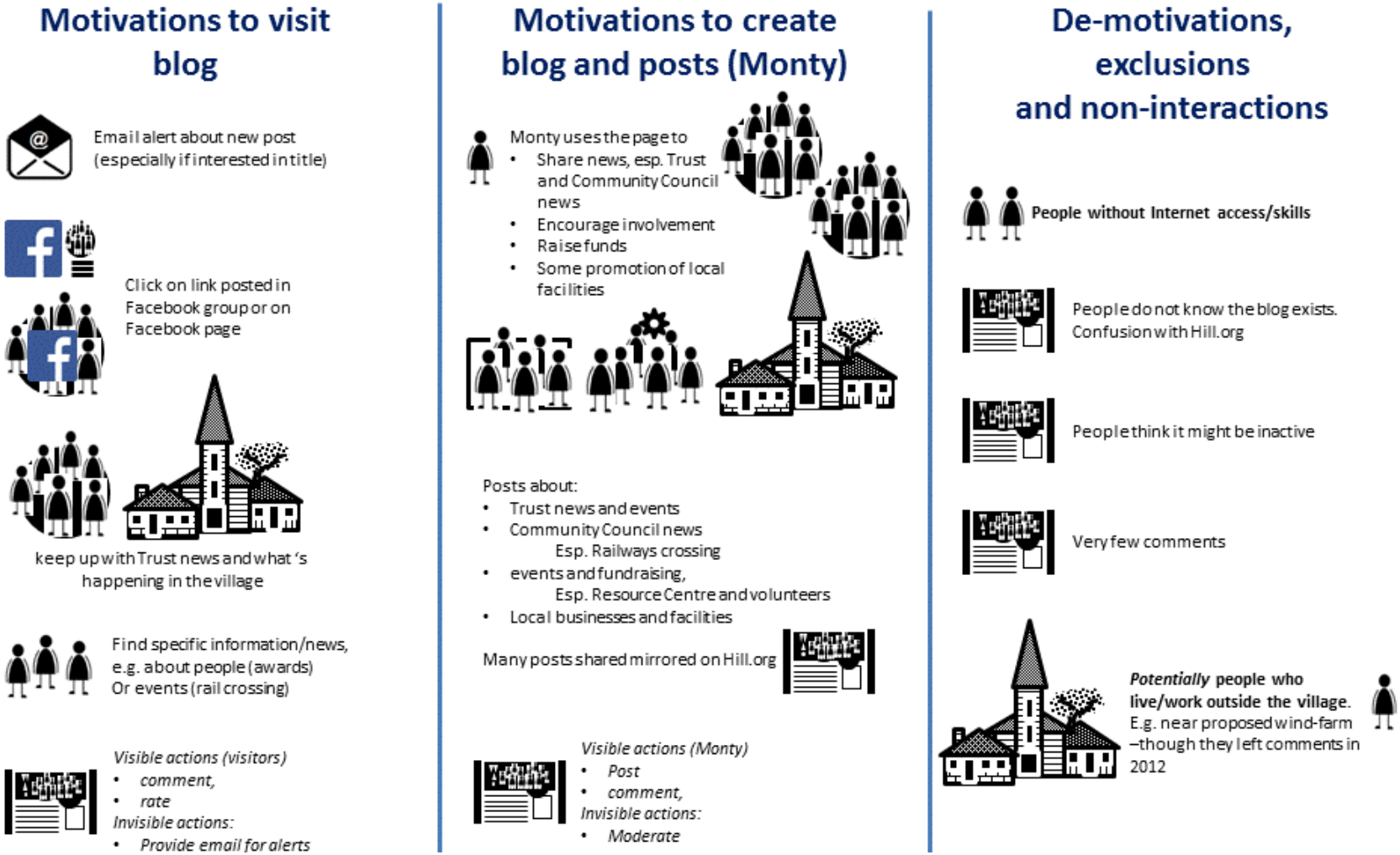


Figure 23: Hill Blog – Motivations, Exclusions and Problematic Interactions

STIN Study: Hill Facebook Group (HCAT)

Facebook groups are opt-in networks for Facebook members to share information. Group administrators set privacy levels and can moderate content by removing posts. The interfaces resemble Facebook newsfeeds (timelines): posts are displayed in reverse order of activity. Members can post, comment, *like* posts, *like* comments. Members access group posts within their own newsfeed or by visiting the group. Members' identities are presented consistently by Facebook: name and picture, linked to personal page. Like all Facebook spaces, different posts appear according to previous interactions and the device used.

Hill Facebook Group is the community's group, set up by Monty *before* he started to work for HCAT. Posts concern: events and fundraising; buying, selling, giving away; recommendations, contact details; local fitness classes; schools and events for children; litter, vandalism, (dog) mess, theft; lost and found, especially pets; transport, village infrastructure; local information, history, wildlife; welcoming new people; weather. Most posts attract 3 to 5 comments; one thread included more than 200. See Table 12: Hill Facebook Group posts in case study period (p122). The Group is *closed*: requests to join need approval; content is not visible beyond the Group.

Figure 24, on p123, shows system interactors.

H1 System interactors and H2 Core interactor groups

Over 400 people are members of the Facebook Group: potentially 20% of Hill's population; members may live elsewhere, but have other connections. Not all are active.

Monty is the founder, an administrator and regular poster. People ask Monty for HCAT information, comment supporting Monty's inputs, and thank him for his work. People *like* his posts and comments. A few Trust directors are members, but rarely post. Other HCAT associates active in the Group: Fred, organising the woods' path project; Barbara, chair of the Allotment Association; people organising the Spring Fair and the Gala.

People living in Hill are the core interactor group. HCAT groups within this include: Trust members, centred on Monty; directors; associated groups, e.g. Allotment Association, Gala Committee, Community Council, arts workshop. Monty posts information from the

Community Council and local council. Other core-interactor groups include two local fitness groups, and groups associated with children's activities. Indirect interactors include transport and infrastructure organisations: Network Rail, First Travel, and Scottish Water. Information from these organisations is posted by group members: e.g. scanning and uploading flyers distributed by Network Rail.

Content is created by members: posts and comments. Most posts centre on photos or links. Comments are individual responses to posts or to other comments. Group admins, including Monty and Armstrong, approve members and remove inappropriate content. Facebook create, maintain and host the platform, and manage the communities. Their moderation is not visible in this Group.

Information reaches beyond the Group, online and offline: Rowling reposts information on the arts workshop's Facebook page; members talk to other people: e.g. Robert gets information via his wife.

Monty posts links to Hill Blog posts, and to fundraising websites. He encourages Group members to like the "I love Hill" Facebook *Page*. Hill.org includes a link to the Group. Offline HCAT spaces intersect with the Facebook Group, especially the office and resource centre. Some photos of the resource centre build are re-posted from Director Chris' Twitter account. Offline *Hill* spaces intersect with the Facebook Group through people posting about events. Events like the Gala, held in the park, are promoted and recorded in the Group. The Group discuss problems with dog mess and litter, especially in the play-park.

H3 Incentives

Figure 25, on p124, shows motivations, exclusions and problematic interactions

People use the Facebook Group to keep up with village news and events, to get specific information, to socialise, to buy and sell, to promote events, for lost and found, to complain and sometimes try to get things changed. See Table 12: Hill Facebook Group posts in case study period, on p122. "I mean, like today, [Monty] had put up a, up a post about the progress at the Resource Centre. So, you know, you know that if you look […] you'll find out things like that. […] like the activity days that they were doing for the [woods], you know.

Facebook –to be honest, Facebook is probably the most sort of *immediate* type of communication that goes on. And obviously all the stuff about the railway crossing was discussed in *quite a lot of detail* […]. You get people selling things, you get people doing charity stuff, you get people doing, um, things that are *nothing* to do with the [Action] Trust and then things that are to do with the [Action] Trust. […] certainly from an online point of view, the Facebook Page is definitely a major resource" (Barbara). It is Hill's primary online network, useful to many people and groups for sharing information. HCAT, specifically Monty, use the group to keep people informed, promote events, raise money and get feedback: "It's just about being open and transparent and working with people and saying "These are the things that we're doing and we can help, even in a small way." […] if I was doing something on say Facebook, for example, and suddenly someone said "That's a really rubbish idea", and then suddenly 70 people liked it, well you'll go "Well actually, maybe there's something in that."" (Monty). Trust director Louise recognised the group's potential to surface issues: "I think it is a good way for me of seeing how a Facebook community in the community feel about things" (Louise). The combination of information provision and socialising is an important component of community-building in this growing and changing village.

In terms of supporting offline action, the Gala Committee gained one volunteer via the Group; a woods' path day, advertised via an event page, was well attended. The fitness groups' discussions encourage attendance, regular and new. The Post Office manager posts about changes to services. A local councillor publicises his work for HCAT via the Group.

People keep up with the Group as a bi-product of their Facebook use, because posts appear in their newsfeed. "But on the Facebook site, I really see that every day. Because [laughing] I'm a Facebooker!" (Louise). Armstrong had set his browser to automatically open Facebook (although he had serious doubts about it), so he experienced the Group as a *push technology*.

H4 Excluded actors and undesired interactions

People who do not use the Internet, or choose not to join Facebook, are excluded. Most of Hill *do not* access the Group: "Definitely just has to be a jump in mind-set of: "There are lots

of people that don't read Facebook"" (Rowling). People outside Hill are unlikely to join, including people who live near the proposed wind-farm, which is hardly mentioned. Robert chose not use Facebook and felt that Trust communications lacked a centre: "how do I find out what's going on? I don't really do –I don't think there's any *one* place to go to find out. And I think they're not very good at communicating it…generally as a Trust. Or *we're* not very good at communicating it" (Robert). Rowling worried about a village information gap; Rowling and Chloe worried that people outside the Group missed the woods' path day. People could be influenced by ease of posting and overestimate reach: "You just go: type it on Facebook, send/post whatever. And you think "Oh, the whole world's going to know about it"" (Rowling).

People primarily choose not use Facebook because of privacy concerns, including a dislike of Facebook's modus operandi (e.g. Lily's husband); these people see their Internet use as specific information searches, e.g. Robert: "Internet: I use to find out, to find out something that I need to know. […] So it's quite sort of direct; going to known places to find out information." There are more posts and comments from women, and more female interviewees were prepared to use Facebook, though not without reservations. Some Facebook members are not members of the Group, potentially put off by the volume of posts or their tone: Rowling mentions "horrible gossipy rubbish", perhaps referring to criticisms of children, outsiders and newcomers. As the Group is busy, it would take significant time and attention to see all posts.

The Group is *closed*: content is not visible to non-members. This may encourage more openness, e.g. to including location information or discussing negative Hill experiences. A few disagreements become heated. A thread about dog mess included unpopular comments about outsiders; members used humour to diffuse the situation. Soon after, a new resident introduced themselves and members welcomed their new neighbour, specifically negating others' comments about outsiders. The space is moderated: an advert for adult toys was removed. Monty said that his comments killed threads, as the "voice of authority". However, people asked Monty questions and he fielded criticisms. Other people joined in, supporting Monty and HCAT. The Group is unsuitable for some discussions: Lily

felt that comments about children and bullying should have been made privately. There are potential issues with photos of children: very few are posted in the group. Louise recognised the dangers of upsetting people online, especially as a Trust director. Monty recognised that he could choose *not* to post, e.g. about HCAT projects in development and the wind-farm inquiry.

Philippa worried about Internet use impacting on social skills: “I actually worry about our generation, as to, you know, people are losing the skills to communicate properly, because everything’s done on, by a screen.”

H6 Resource flows

Facebook provides the group facilities free. Members primarily provide their own Internet access and devices. Monty’s posts are mostly within his paid HCAT work, although his involvement also stems from his family life. Other members, including admins, contribute their time and attention voluntarily. There are costs for Facebook associated with supporting groups, including staff and infrastructure costs. Facebook lists advertising as its primary income. Facebook employs people specifically to deal with government data requests, but does not charge for these.

Fundraising is an important function of the Group, especially for HCAT. Their “I love Hill” fund benefits various causes directly, including the school and young people. The Group is used to promote fundraising events, and to sell goods on behalf of the fund. Monty sells unwanted HCAT office furniture via the Group. Members also fundraise for other causes (e.g. Macmillan Cancer Support), promoting sponsored walks, bike rides and coffee mornings.

People and organisations benefit from the information-sharing opportunity, e.g. promoting events. Businesses benefit from recommendations. The local council, local transport and utility companies benefit from people distributing information about their activities. When the village’s train station was closed and traffic was diverted from the main road, group members shared information about buses and route diversions.

Facebook *event pages* promote offline events: e.g. fundraising events, HCAT AGM. When

Monty creates an event page, he invites everyone in the Facebook Group and posts links to the event page in the Group. Monty also posts links to longer, more informative articles elsewhere, e.g. the Blog. The Facebook Group serves as an online resource for village spaces without websites or Facebook pages, such as the park and village hall.

H7 System architectural choice points

Monty had seen Facebook groups work well in his previous communications role: "starting a Facebook group, get people using it and talking about something they knew about, which was their own community, was a good way of communicating". When Monty set up the Group, he was on the school's Parent Staff Association. Networks associated with children are at the heart of Hill's communications ecology, bringing both ways and needs for information-sharing. The narrative of HCAT moving out of their office was carefully documented on the Group, including sad photos of Monty's family, as he took the HCAT sign down. One of these photos is reproduced in the main body of the thesis. (See also "STIN Study: HCAT Office" on p140).

When Monty thought Facebook was changing its provisions for community groups, he set up the public "I love Hill" Facebook Page. These changes did not happen; the Facebook Group kept growing, while the Page languished. See "STIN Study: "I love Hill" Facebook Page" on p125. Some confusion about the two spaces remained.

H8 Viable configurations and trade-offs

During the case study period, Facebook indicated where content had been posted from a mobile phone, using a little phone symbol. This was about a third of Group content. About a third of posts also included a photo: e.g. items for sale, dogs, traffic jams, screenshots. Posting from mobile phones can provide photos and information that are sensitive to time and location, such as traffic issues. The immediate context can influence the tone of the post: e.g. frustrated drivers caught in queues by new level-crossing barriers. On mobile devices, Facebook members have less choice of which content they are shown. In interviews, people described accessing Facebook via desktop and laptop computers (Chloe, Philippa, Lily) and tablets (Barbara).

Group posts reflect the values of both Hill and HCAT. The most important value is *community*: people love Hill and want it to be a welcoming space. HCAT's work benefits from people, businesses and non-profit groups sharing the same broad aspirations for Hill and working together. Discussions also reflect divisions, e.g. between people whose parents lived in the village and those who have moved there. This is presented as an urban/rural split, though class is clearly relevant. Sallies across this divide are declared unacceptable, or deflected with humour.

At the workshop, participants discussed how the Facebook Group is lightly moderated by many people. Monty compared Group with their neighbouring village's group, which he had been moderating. The Hill group is less argumentative, with milder language. Since the case study period, the Facebook Group has been joined by school students and sections of Hill that were not involved before. Robert joined the Facebook Group, and particularly appreciated the alerts. Armstrong worried about Facebook's control of their data and clashes between EU and US data laws.

Table 12: Hill Facebook Group posts in case study period

Month (2013)	Number of posts	Prominent events that month
April	106	HCAT fundraising (buying and selling, preparation for: golf day, concert, walk); HCAT AGM; HCAT being moved out of office; new level-crossing barrier, dog mess problems in the play-park.
May	188	HCAT fundraising (buying and selling, golf day, concert, walk); HCAT move out and back into office; preparation for woods' path-clearing; school spring fair; new level-crossing barrier and road closures.
June	159	Gala; HCAT fundraising (from walk); Resource Centre being built; Woods' path-clearing; HCAT recruitment; water problems; new level-crossing barrier and road closures; end of term.
July	59	HCAT recruitment; Resource Centre build; ; new level-crossing barrier and road closures. Monty is working part-time HCAT this month.
August	86	Resource Centre build; Community Council election drive; road closures; back to school; power cut; dog mess problems in the play-park.
September	100	Monty re-employed, plus new HCAT staff; new fitness class; Resource Centre build
Total	**698**	

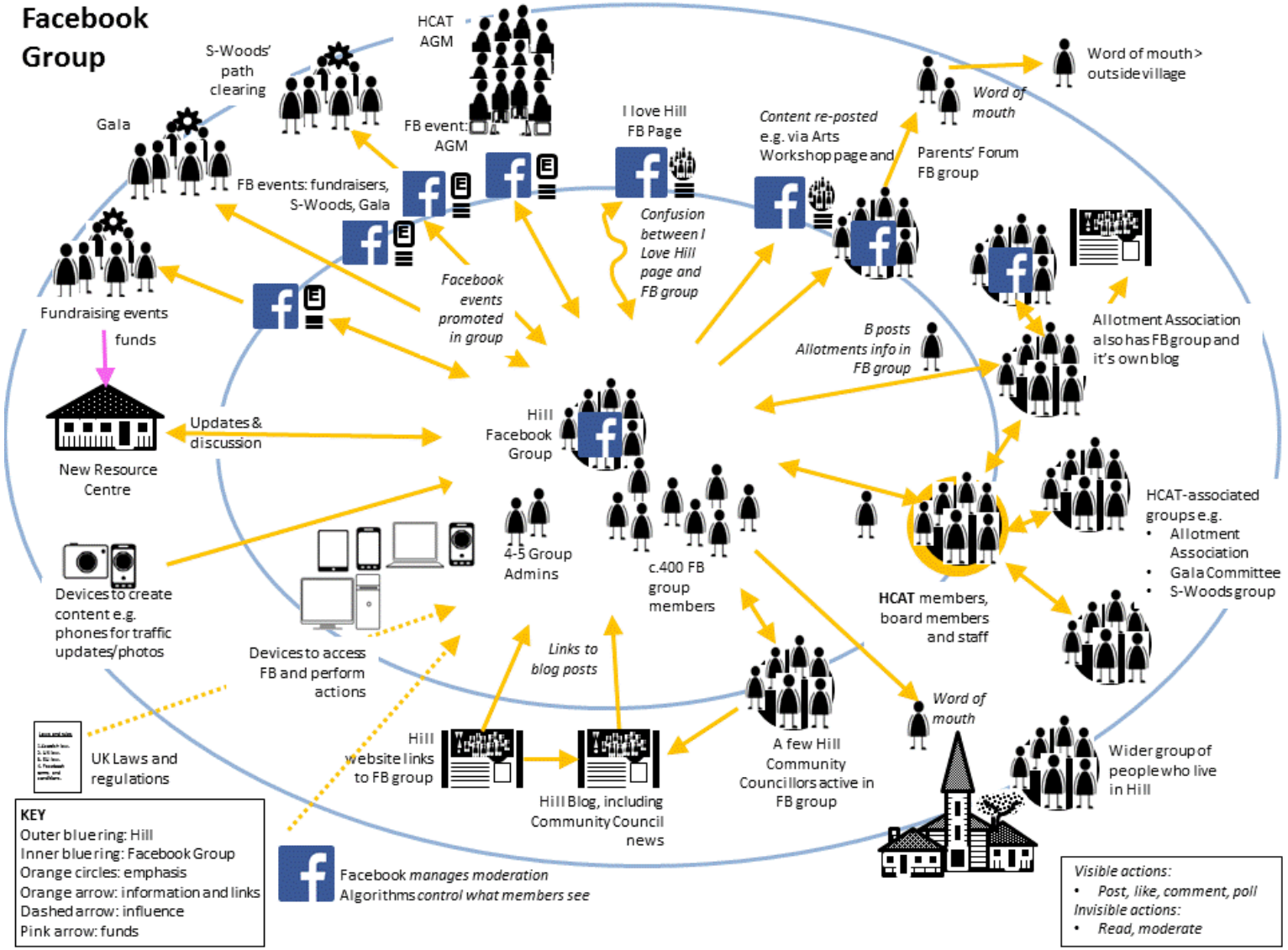


Figure 24: Hill Facebook Group – Overview of Interactors

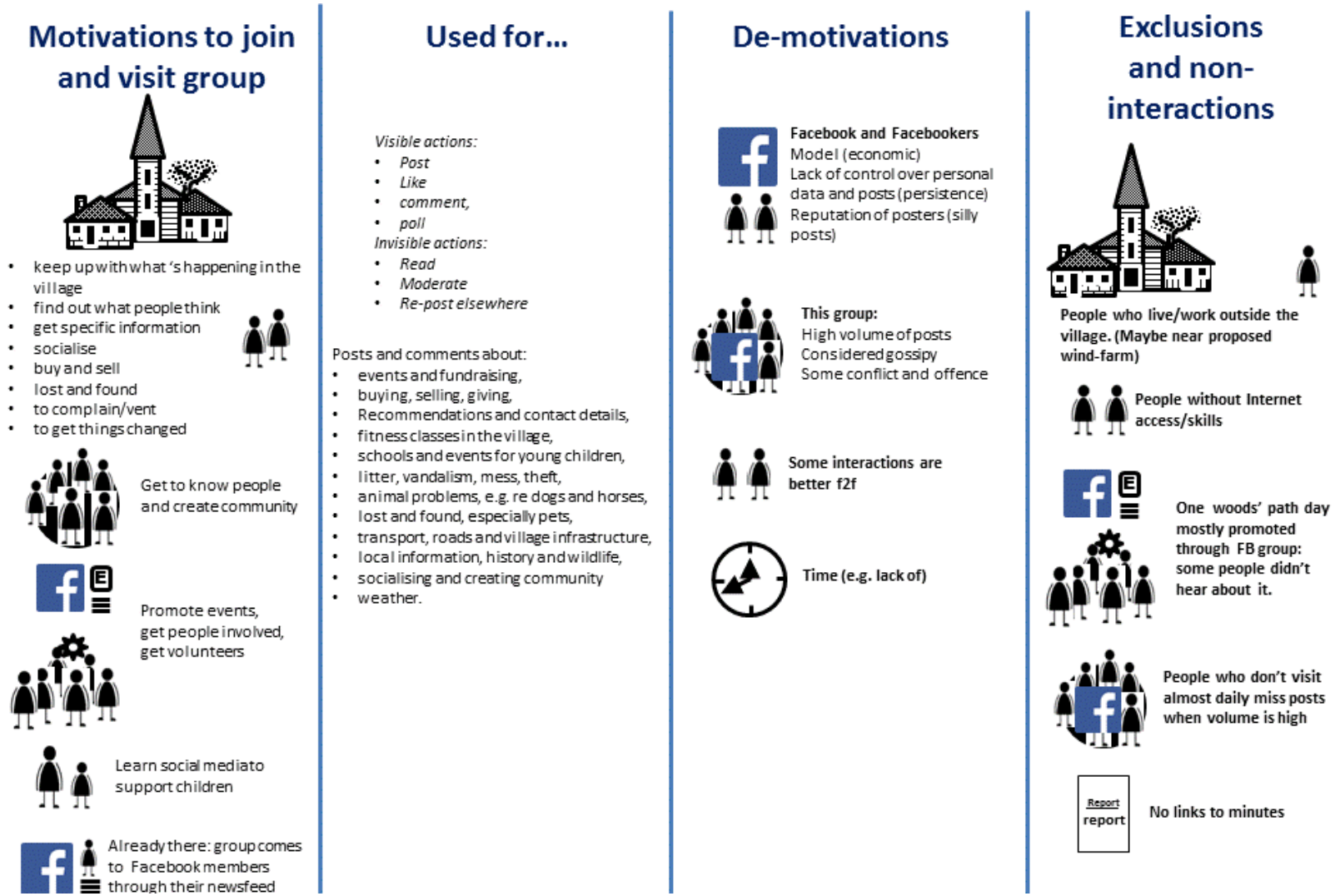


Figure 25: Hill Facebook Group – Motivations, Exclusions and Problematic Interactions

STIN Study: "I love Hill" Facebook Page (HCAT)

The "I love Hill" Facebook Page is a public page to promote Hill and share information of interest to the Hill community (Monty 8). The Page was created in 2011, but dormant from 2012 to May 2013. See previous chapter, p68, for a description of Facebook pages in general.

H1 System interactors

Figure 26, on p129, shows system interactors.

In May 2013, 51 people liked the page; in August 2013, 149 people liked it. The page is public: open to anyone with Internet access. Facebook members who *like* the page may see posts within their newsfeed. Others need to visit. 1-6 people *like* each post; some posts are shared. Facebook maintain and host the platform.

Monty manages the page and posts the content. He also shares posts from other people's pages, including a local sign painter, and an artist who worked on a park project. The core interactor group is HCAT, through Monty and through posts about their work. Three comments are posted in the case study period, including two from director Chris (positive encouragements). Although Chris is a member of the Facebook *Group*, he does not comment there. Local people feature in photos, including children at the sponsored walk and people at the Gala. Photos of people who have just passed their driving test are shared from the driving school's page. In terms of information reaching people second or third hand, few posts are shared beyond the Page.

H2 Core interactor groups

Local enterprises are core interactor groups, through shared posts: local arts and crafts businesses, tourism and leisure businesses, driving school, army base, local council and church. Groups involved in events promoted on the page are interactor groups: e.g. the Gala Committee, school children, the playgroup. Posts are shared from a local cycling group: an important information network: "it's often said that cycling is the new golf, from a *social* interaction point of view. We had 20 riders out on Saturday, on a 60 mile round run round to [a local town] and what-have-you. There's a lot of chat. It's constant chat. It's a social

thing as much as anything...a lot of people meet at [neighbouring village] –our local club from the village. And I often use that as an opportunity to, when I'm riding along, telling people about what's going on [in HCAT]".

Monty encourages Facebook Group members to visit and like the Page, via posts and invitations. The two Facebook spaces share content around events in the village. Monty posts links to Blog posts and fundraising websites. The Page's *about* text links to Hill.org. Monty is mostly working in the HCAT Office when posting content. The date HCAT returned to the office is the date Monty started to reuse the Facebook Page, though that day's posts concern the sponsored walk. The resource centre intersects with the page through posts about being funded and built. Other village spaces intersect with the page, through posts and photos about events: the park, village hall, arts workshop, stables, and phone-box.

H3 Incentives and H4 Excluded actors and undesired interactions

Figure 27, on p130, shows motivations, exclusions and problematic interactions.

Monty uses the space to promote Hill and to build relationships with local enterprises: "this struck me as a really *good* opportunity to have, you know, put businesses on there that were in our surrounding area, any really *good* news stories […]. So it gives this, this positive angle on [Hill] and that people could share that on their pages and like it and do all those things" (Monty). HCAT help to promote local businesses; these are more visible here than in any other HCAT space. People need to access and share content to make this effective.

People need Internet access to visit the Page. People who choose not to use Facebook are unlikely to visit the Page. See "STIN Study: Hill Facebook Group" (from p116) for more about people excluding themselves from social media. People need a connection to Hill to know about the Page. It does not appear in the first ten pages of a Google search. People use the Page to keep their connection with Hill alive, when they move away.

A photo was shared from the sign-painter's Facebook page of a painting on a lorry: a woman, in a highly objectified style. This soon disappeared from the Hill Page. There is no other evidence of inappropriate content.

Confusion is experienced by Facebook Group members who also follow the Facebook Page: when posts appear in their newsfeeds because the source is not obvious. This is compounded by posts from other Hill Facebook groups, such as the Parents' Forum: "Well, there's a bit of confusion going around the whole thing. […] the *[Hill]* community Facebook page[12] is what the majority of people use, and that is what I use. And I get a bit confused over the fact that there's the "I love [Hill]" one, as well. […] I think [Monty] posts to both of them, because I get the feeds from them all. I'm not entirely ever certain what one I'm on, to be honest. […] And then, because then there's a Parents' Forum as well […] and they all end up getting inter-mingled and you get feeds from them all" (Rowling).

H6 Resource flows

Monty's updates are part of his paid role at HCAT. Visitors need devices and Internet access. Facebook provides the Page facilities free. There are costs for Facebook associated with supporting Facebook pages, including staff and infrastructure costs.

Activities which raise funds for HCAT and other organisations are promoted on the Page. The Page promotes HCAT values by publicising community and fundraising events. Enterprises whose posts are shared may benefit from additional publicity. Shared posts about local businesses demonstrate cohesion and economic activity: "in some places there are real conflicts between business, community groups and the trusts, and what they're all trying to do" (Monty). Posts promoting local arts and crafts demonstrate a strong and accessible creative culture.

H7 System architectural choice points

In 2011, Monty thought Facebook was changing the status of community groups and set up the Facebook Page. Facebook did not make these changes and the Page languished for 15 months. Monty decided to use this *public* Page to promote Hill and build relationships. He revived the Page and started sharing posts from other local pages. Monty promoted the Page to the Facebook Group. However, descriptive text on the Page contained information about *replacing* the Group, which caused ill-feeling. Monty changed the text and clarified the situation. See Table 13: Facebook Group exchange about the "I love Hill" Facebook Page

[12] Presumably meaning the Facebook Group in this context.

on p128.

H8 Viable configurations and trade-offs

Most posts centre on photographs or videos. Posts including photos are given a higher priority by Facebook algorithms: more likely to appear in newsfeeds, and to show on the page as “highlights” after a time lapse. Digital cameras enable people to photograph or video events like passing their driving test or riding a horse. These are shared from organisations’ pages onto this Page. One business posts screenshots of its reviews from other websites. A photo of children celebrating the sponsored walk was the Page’s banner photo for some months.

Table 13: Facebook Group exchange about the “I love Hill” Facebook Page

Poster	Post	Likes/shares
Monty	“Hill -if you think it's a great place to live or work, if you have a business here or would like to encourage someone to visit then please 'like' this post and 'share' our page to your Facebook friends. Thank You!”	6 likes 1 share
Armstrong	“Interesting decision to take away a group that had started to be used for local matters and reformat it to a particular agenda. Anyone want to join me in a group called "We like [Hill] just like it is" with the promise that it will never be closed?”	5 likes
Monty (reply to Armstrong)	“Hi -this site won't be closing. The [“I love Hill”] site was set up a while back when Facebook gave the impression that such pages would replace the group we already had. However the [“I love Hill”] format is fairly standard now for sharing information with others. So we have the best of both worlds! Sorry for any confusion.”	

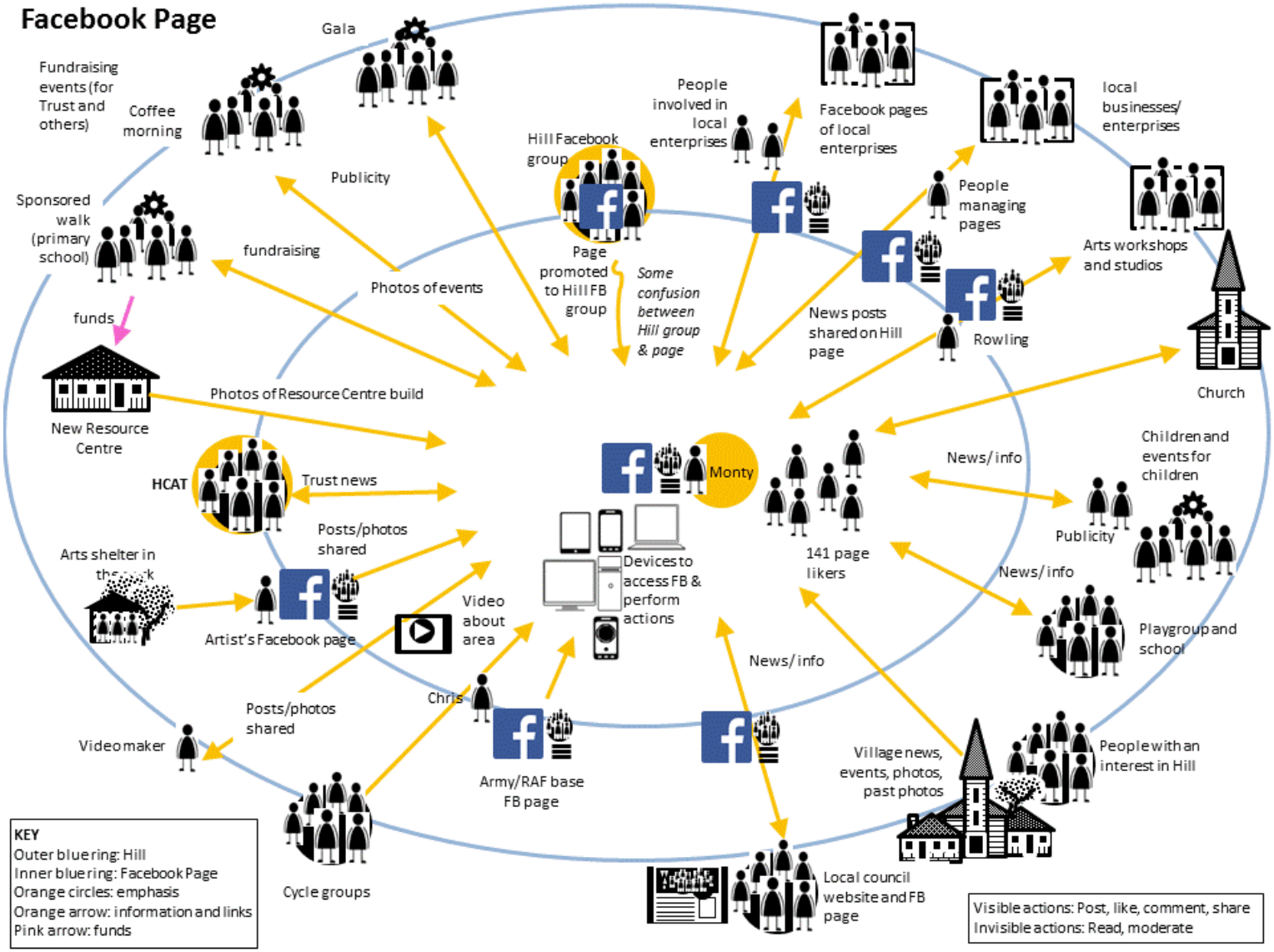


Figure 26: Hill Facebook Page – Overview of Interactors

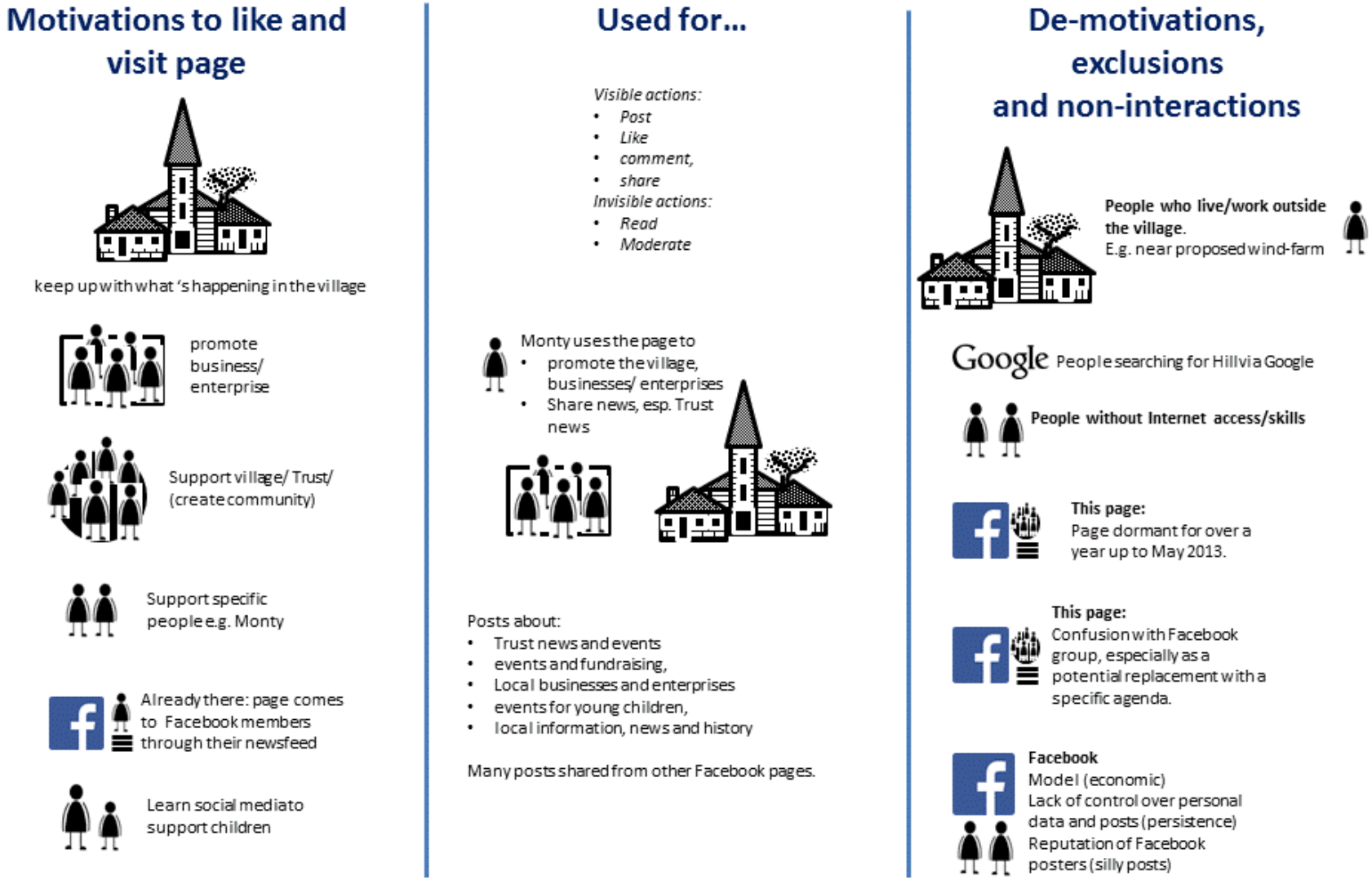


Figure 27: Hill Facebook Page – Motivations, Exclusions and Problematic Interactions

STIN Study: Hill.org website (HCAT)

Hill.org is a website based on a Content Management System (CMS). The CMS enables people to publish, edit and modify content, without knowing html or interacting directly with code or databases. Hill.org uses a bespoke CMS created by a digital design company. The website includes the sections: Home, About, News, What's On, Community Groups, Business Directory, Gallery, Eco-Pledge, and Contact. An overview of content is provided in Table 15 (p136). The website is stylish and easy to use, but prominent sections are out of date, and some interactions no longer function. Figure 28, on p131, shows the layout and content of the home page.

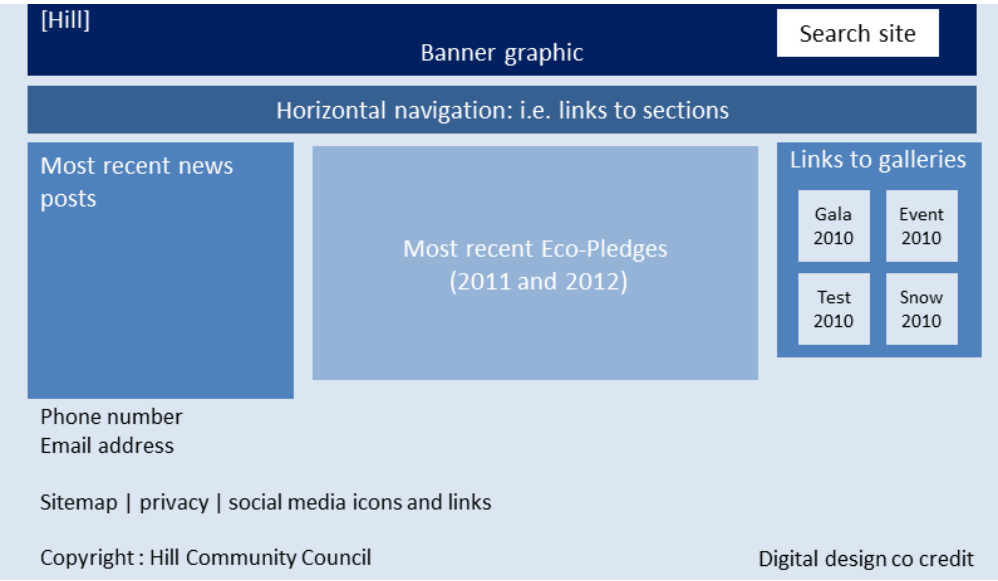


Figure 28: Hill.org – Home Page Content Map

Hill.org identifies itself with Hill, rather than HCAT: “to find out about the Trust now, there is obviously the, there is a website, but that’s not a dedicated Trust website, that’s more about the community as a whole. And the reason I think that’s a *good* thing is, I think you need to understand the community as a whole, before you understand the Trust and what it’s trying to do” (Monty). Information about HCAT is available in the Community Groups section and the website content reflects HCAT priorities.

H1 System interactors and H2 Core interactor groups

Figure 29, on p138, shows system interactors.

HCAT developed the website, with an external design agency; Hill Community Council holds

the copyright. The website was being populated, before launch, when Monty joined the Trust. In the case study period, Monty is the only visible content-creator, apart from Robin, who provided text for a news post; Monty added a job advert and seven news posts (Table 14, p133). People ask Monty to add content or help with login problems.

Armstrong and Rowling can edit content, as a Community Council member and local business, respectively. However Rowling rarely updated content and Armstrong had lost access. The Allotment Association was constituted after the launch of the website and its chair, Barbara, did not ever have a login. She would "ask [Monty] to put something up on the [Action] Trust website" (Barbara). Website sections include Community Groups and Business Directory (Table 15, p136). These list 26 community groups and 35 businesses. Rowling noted the importance of HCAT's promotion to local businesses.

Most interviewees had visited Hill.org. Trust director, Louise, checked Hill.org and the Blog: "And I look at these quite frequently". People can comment on news or in the forum, though no one commented in the case study period. People had previously commented on Fred's woods' path plans.

H3 Incentives

Figure 30, on p139, shows motivations, exclusions and problematic interactions.

Monty accesses Hill.org to add news and update content. HCAT use Hill.org to provide news and information about HCAT and Hill, including local businesses and groups. HCAT's core strategy document, the Community Action Plan, is published on Hill.org. Armstrong visited to add Community Council minutes. Robin's Community Council news post, mirrored on the Blog, is part of a campaign to encourage people to get involved. Interviewees use Hill.org to find out about activities associated with Hill and HCAT. Louise looked for minutes of directors' meetings. Lily looked for local news and to find out about getting an allotment.

Previously, Fred had shared plans for cycle paths in the woods in a news post. People commented on the post, providing useful feedback and enabling Fred to amend the plans: "they put things on and a lot of the time nobody comments *at all* on what you're doing […]. Which is where the cycle path –when it came on, there was 17 responses, sort of. So

you could see how you'd kind of hit a nerve, and you could gauge how. Which -it was good and I was able to speak to people, happily" (Fred). People supply email addresses to post comments. These are not published, but are available to admins, like Monty. Monty contacted people who commented on Fred's woods plans. After this introduction, Fred was able to speak to people directly and cooperate with them. The path project is discussed in the main body of the thesis.

Table 14: Hill.org News Posts November 2012-September 2013

	Date	Post content	On blog?
1	November 2012 1	Donation received	Yes
2	November 2012 2	Woods path project –with link to info pdf	Yes, in an update with other projects
3	November 2012 3	Hill volunteer awards: list of winners (people and organisations)	Yes + photo link
4	December 2012 2	New round of fundraising	Yes
5	May 2013 1	Resource Centre: external funding in place, build starts	Yes
6	May 2013 2	Update from the chair of the Community Council (elections, new level-crossing barrier, fly-tipping, wind-farm enquiry)	Yes
7	June 2013 2	HCAT successful in Lottery Fund application	Yes

H4 Excluded actors and undesired interactions

Most interviewees visit rarely, because they think Hill.org is out of date. The old eco-pledges, at the centre of the home page, give this impression. Interviewees contrast Hill.org with the Facebook Group, which they visit regularly: "I think people forget it's there, because we all use Facebook" (Rowling). During the case study period, Armstrong experienced login problems and could not add content. He contacted Monty, who had the same problem. This may explain the lack of news posts between December 2012 and May 2013.

People who do not use the Internet cannot access Hill.org. People without a connection to Hill are unlikely to know about the website. The website shows on the first page of Google search results for Hill's real name[13]. In terms of people with an interest in the wind-farm

[13] This may depend on the searcher's profile and location.

inquiry, it's notable that the website address is *not* included in communications from HCAT or the Community Council to the Directorate for Planning and Environmental Appeals (DPEA).

In 2011, early HCAT projects ended, their staff moved on, and Monty's post was created with a focus on engagement. This happened between Hill.org's development and launch. Content specific to early projects, such as the eco-pledges, was not updated after this[14]. Monty started the *Blog* at this time. In the case study period, Monty creates more Blog posts than Hill.org news posts (17:7, see Table 11 on p113 and Table 14 on p133, respectively).

H6 Resource flows

HCAT paid for the website, including initial training. Their accounts list £2,055 for website development in 2011 and £4,847 in 2010. No costs are listed under website development in 2012, although these may have been subsumed under other headings. After development, HCAT were paying £600pa for "IP", which seemed to cover hosting and minimal support.

The bespoke CMS leads to "lock-in". HCAT's running costs are covered by external project grants. Hill.org reflects the projects funding HCAT when it was designed. HCAT would need to employ the same design agency to update the website. If the website was built on an Open source CMS[15], it would be possible to employ a different developer each time changes were needed. The content creation and website population has mostly been done by paid staff. The CMS seems to require training for some sections. It's not clear whether Monty received training. Problems with content in the *Galleries* and *What's On* sections indicate that these are not straightforward; whereas, the news section works like a blog. There are few recent photos, in contrast to online spaces which support uploads from mobile phones.

In terms of resource benefits, Hill.org supports fundraising activities: news posts record fundraising challenges, plans, and donations. However, the sponsored walk and 2013 Gala are not mentioned. A section to buy, sell and swap goods features in an early news post, but

[14] Hill.org text claims that the Eco-pledges will be displayed anonymously, but uses names and home postcodes to show the pledges on a map of Hill.
[15] Popular Open Source CMS include Drupal and Joomla

the Facebook Group is used for this purpose.

H7 System architectural choice points

Functions have been superseded by other online spaces: the Blog for news; the Facebook Group for discussion, buying and selling, sharing photos and information about Hill and its businesses. Events are promoted via Facebook events pages. During the case study period, the bottom of each Hill.org page had social media links to the Facebook Group, the Twitter account and the Blog, plus HCAT's Gmail address.

Community Groups' pages contain specific space for minutes, but few have been uploaded. Interviewees mentioned circumstances in which they were interested in the outcomes of meetings they could not attend: e.g. Chloe wanted to know about the HCAT AGM. Timely information from AGMs is difficult to access, as the minutes are not ratified until a year later. Providing pages for meeting papers may discourage people from posting informal summaries of meetings. HCAT has no system for publishing information about directors' meetings: agendas, inputs and outcomes are shared between directors by email.

H8 Viable configurations and trade-offs

The current configuration is not really viable. Hill.org is passive compared to the Blog and Facebook, which use alerts to get attention (e.g. email or phone alerts). Opportunities to add content are not promoted, unlike the social media sites. People can comment on news or in the one open forum, but there are no visible comments in the forum or on recent news posts. This may deter people: they cannot see comments, so there are few clues about what will happen to theirs. The bespoke CMS is inflexible: it was out of date by the time the website was launched.

The workshop that Hill.org was out of date when it was launched and it lacks ownership: "we've been looking at the web page, [Hill.org]- the web pages –and realised that it's not really fit for purpose. It's difficult to update. Nobody's got ownership of it. It's owned off-shore, if you like. The software, the interaction is owned by a 3rd party company, who charge us a lot of money for it. And it's not really fit for purpose" (Bill). At the workshop, Monty also described his realisation that HCAT lacks its own, specific, online information

space: “although we do quite a lot of communication, we didn’t have that *one* place where we could get that information, where our addresses, all our telephone numbers, who’s on our board” (Monty).

Table 15: Hill.org sections

Section	Contents	Up to date?
Home page	Left panel: titles of the 2 most recent news posts, linking to posts in News section. Central panel: two most recent Eco-pledges (from 2012 and 2011), linking to Eco-pledges section. Right panel: photos, linking to latest 4 Photo Galleries. Three galleries presented here are from 2010; one is a test gallery.	News posts: varies. Other content: no.
About	Pages about the village (e.g. history) and about HCAT (e.g. jobs and volunteering opportunities). It contains a page about the current Community Action Plan, with a link to download the file as a pdf.	Jobs added in 2013, but not removed
News	News articles in blog format. Comments: No comments on posts added in the case study period, though there are comments on older posts. Forums: 3 forums from 2011. 2 are closed, with no comments visible. One, a forum about the village in general, has an active comment form, but no visible comments. Table 14, on p133, shows the news posts added between November 2012 and October 2013.	Yes, apart from 5 month gap between posts.
What's On	Not populated by the case study period.	No
Community Groups	26 groups listed. Each group has a basic information page. The Community Council, HCAT and the Parent Council have pages with links to minutes, though most seem to be missing[16]. HCAT have a pages about their current projects. The Parent Council have a page about current projects and a page which links to reports. However 6/7 of these report links are to the Local Council website and are no longer live.	No. Minutes, links and projects are out of date.
Business Directory	35 businesses, with some of the following: a description and logo, website address, phone number and email address.	Not according to posts in Facebook Group.
Gallery	7 sets of photos from 2010 to 2011, though link to 2011 Gala photos is broken.	No
Eco-Pledge	The pledge form includes suggested pledges and asks for contact details, including postcode. Pledges are shown, on a map of Hill, using this postcode and including the pledger’s name, through the website claims “pledges will be displayed anonymously”.	No. Latest 2 pledges from 2011 and 2012.
Contact	Contact form and suggestion to look at the [Hill] Facebook page, which	Ok.

[16] For example, between the first news posts, in March 2011 and the end of the case study period, in September 2013, (31 months), the Community Council *met 28 times* (every month except July). However, the Community Council minutes page shows only 7 sets of minutes from this period, plus 3 from 2010 and 1 from 2009.

	links to the Facebook *Group.*	

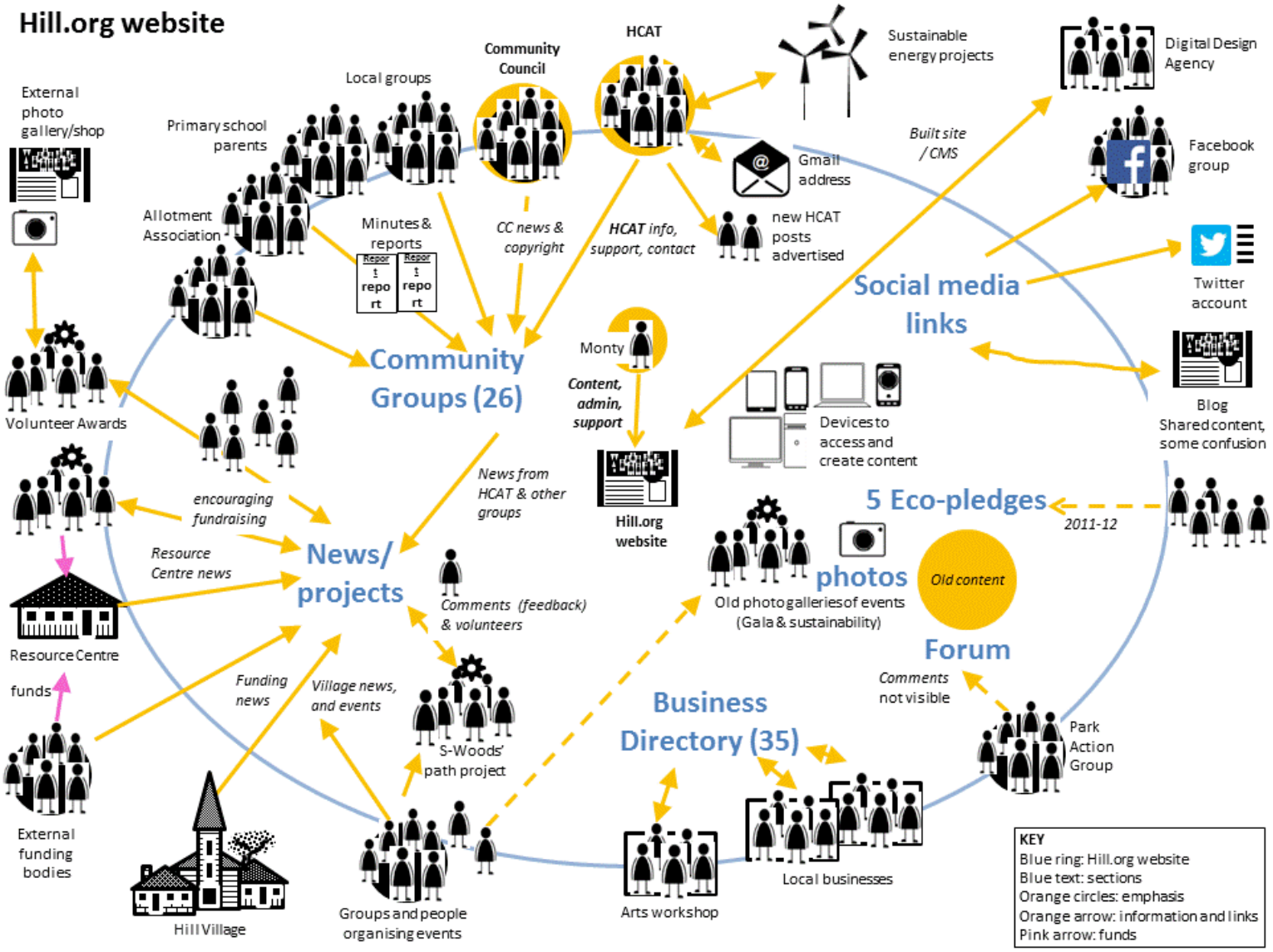


Figure 29: Hill.org – Overview of Interactors

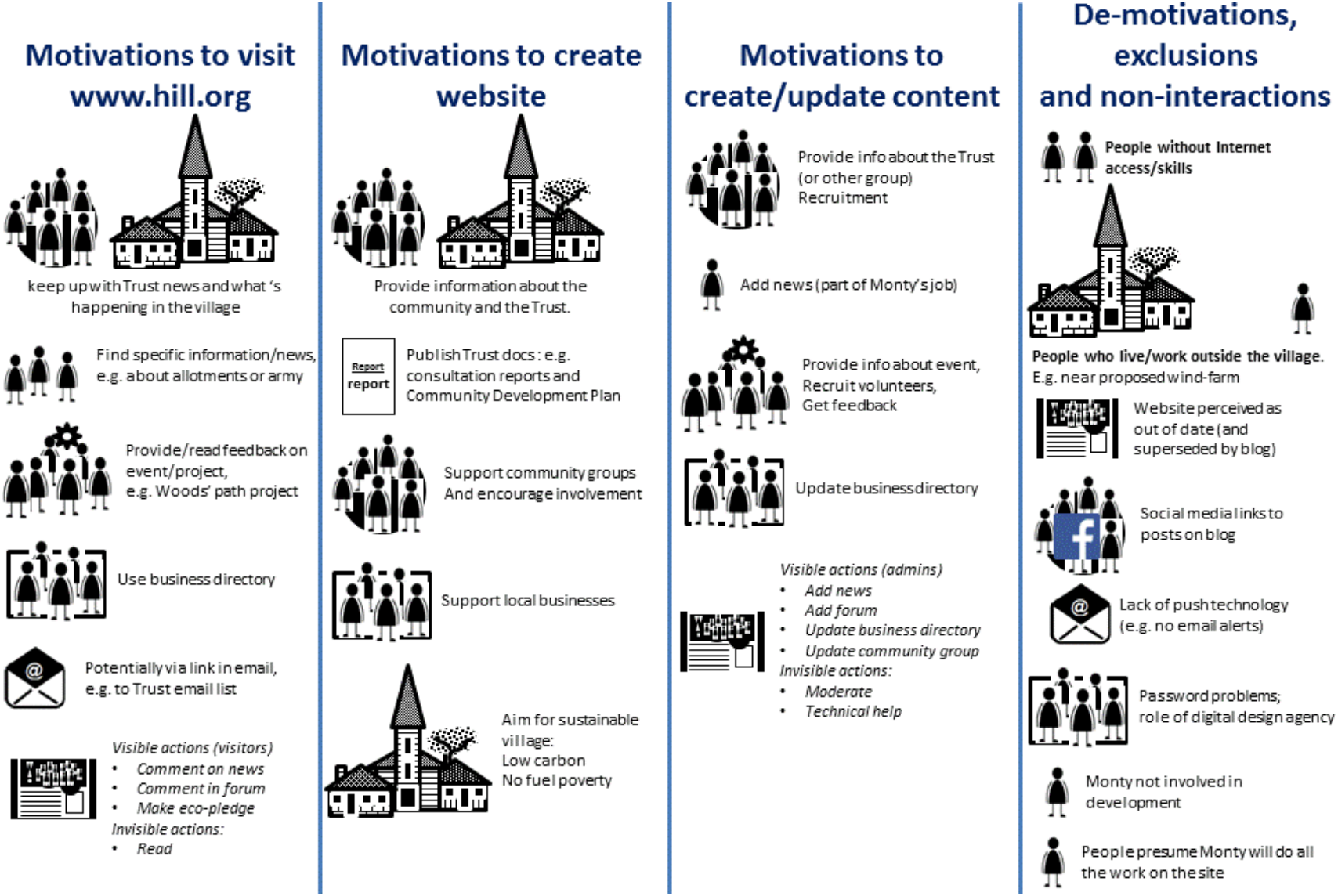


Figure 30: Hill.org – Motivations, Exclusions and Problematic Interactions

STIN Study: HCAT Office (HCAT)

This participation space is a one-storey terrace cottage in the centre of Hill, by the Post Office, pub, and shop. It is owned by the local council. There are two rooms, plus a kitchenette and toilets. The first room, informal and welcoming, with wifi, hosts meetings. The rear room is for HCAT work. Windows onto Hill's main street contain posters to be read from outside. HCAT job adverts are displayed in the window. There is a large sign (HCAT's logo) on the outside.

The office is open a couple of days a week, when Monty is there. During the case study period, HCAT's lease ended and they moved out. However, a local councillor arranged for them to move back in and use the office rent-free, until they moved into the resource centre. HCAT is registered to the home address of Bill, the chair, rather than the office.

H1 System interactors and H2 Core interactor groups

Figure 31, on p144, shows system interactors.

Monty is the main interactor. When Monty is working part-time, the office is open two days a week. People from Hill, including Trust members like Lily and Philippa, drop in. HCAT directors drop in, including HCAT's chair, Bill, and treasurer, Chris. This is an important way for Monty and the directors to communicate: "I meet [Monty] quite often at the Trust office, which no doubt will be the [Resource Centre] when that's built. Again, because it suits my personal circumstances. I often walk down to the village to get a bit of exercise and take the paper and just pop in" (Chris). People phone the office.

HCAT is the core interactor group. Most groups which interact with HCAT interact with this space. Some groups meet there, including the Allotment Association, Park Action Group, and occasionally HCAT directors. (Community group leaders, have keys). The Post Office looks after various materials when the office is closed, e.g. selling food waste bags and looking after items sold during the move out. The local council sometimes use the office, because they have no local base: "Irony 1 - just been asked by a department in [the local] Council if we can have a meeting in the [action] trust office late May! The answer will be no then" (Facebook Group post by Monty).

People read posters and adverts in the windows, because the office is in in the centre of Hill. Groups are also represented by posters, flyers and reports: people experience the office as an information resource. People are aware of HCAT because of the sign. “And obviously, being such a small place, you know, you pass the [Action] Trust office quite a bit. And obviously there’ll be posters, there could be a poster up or bump into [Monty] and he’ll you’ll find out some information.” (Barbara). In answer to “How did you hear about [Hill] Community [Action] Trust?” in the survey conducted at the Gala, someone wrote "Through the window".

H3 Incentives

Figure 32, on p145, shows motivations, exclusions and problematic interactions.

People drop into the office to chat to Monty, ask questions or make suggestions, personally or on behalf of groups: “I’ve never been frightened of going in and asking and going in and saying “Why don’t we do something about this?” (Philippa). The directors drop in to chat about progress, because they know they’re likely to see Monty, each other, and resource centre contractors. During the first half of the case study period, HCAT ran a food waste pilot and people came by for related equipment. Lily dropped in for a school uniform exchange. People come in the evenings to attend community group meetings. Some visits are necessitated by Hill’s lack of public toilet facilities.

H4 Excluded actors and undesired interactions

It can be difficult to know when the office is open, especially when Monty is working part time. Some people cannot reach the office at those times. People living on the outskirts of Hill travel by car and pass it less frequently.

The primary exclusion was HCAT being asked to leave by the local council. HCAT have rented the office from the local council (for £400 per month, paid from grants) since late 2010. When their lease expired, HCAT were waiting for funding news and planning to move into the resource centre in six months. One of Hill’s local councillors returned from holiday to find HCAT moving out: “Just back from my hols. This is outrageous. I will speak with [the man at the council] later this morning re extending lease” (Councillor). He got the Council to

pass an emergency motion, securing the office rent-free until HCAT moved into the resource centre. This reflects the council's occasional use of the office, overlap between HCAT's activities and the council's remit, and the difficulty of finding a new tenant. Towards the end of the case study period, HCAT helped to find a new tenant, a much-needed pharmacy.

H6 Resource flows

Monty used the move out to raise money, by selling office contents. HCAT fundraising was also organised from the office: grant applications were written and discussed; the Lottery Fund visited HCAT there. The Facebook Group is used to document the move out and lease extension and support the sale of contents for HCAT fundraising. This process is not mentioned on the more public spaces, apart from a leaving Tweet with a sad photo (Link to photo).

HCAT pay the power bills, which can be high as the building is poorly insulated. The office contains a couple of computers and a printer. The 2012 accounts list computers and equipment at a net value of £1,160, after depreciation, and telephone costs at £959. Some technologies, such as wifi and the printer, can be used by community groups. (New laptops are provided for community use in the new resource centre). The office supports HCAT to implement the Community Action Plan. It supports community groups and initiatives and is an information hub, both for visitors and people walking past.

H7 System architectural choice points and H8 Viable configurations and trade-offs

Posters and flyers promote events in other spaces, including the village hall, the park and the arts workshop. Events in other spaces may be organised here. The office supports the building of the resource centre, from arranging funding and reviewing tenders, to providing facilities for the builders. Towards the end of the case study period, HCAT directors begin to drop into the resource centre, rather than the office.

HCAT have now moved out of the office and into the resource centre, about 100m along the road. A purpose-built space supports them to organise and host events, as well as providing somewhere to go for a coffee, in a village with no café. The resource centre has large

windows, containing posters, though these are further from the street and the building is further from Hill's centre than the office

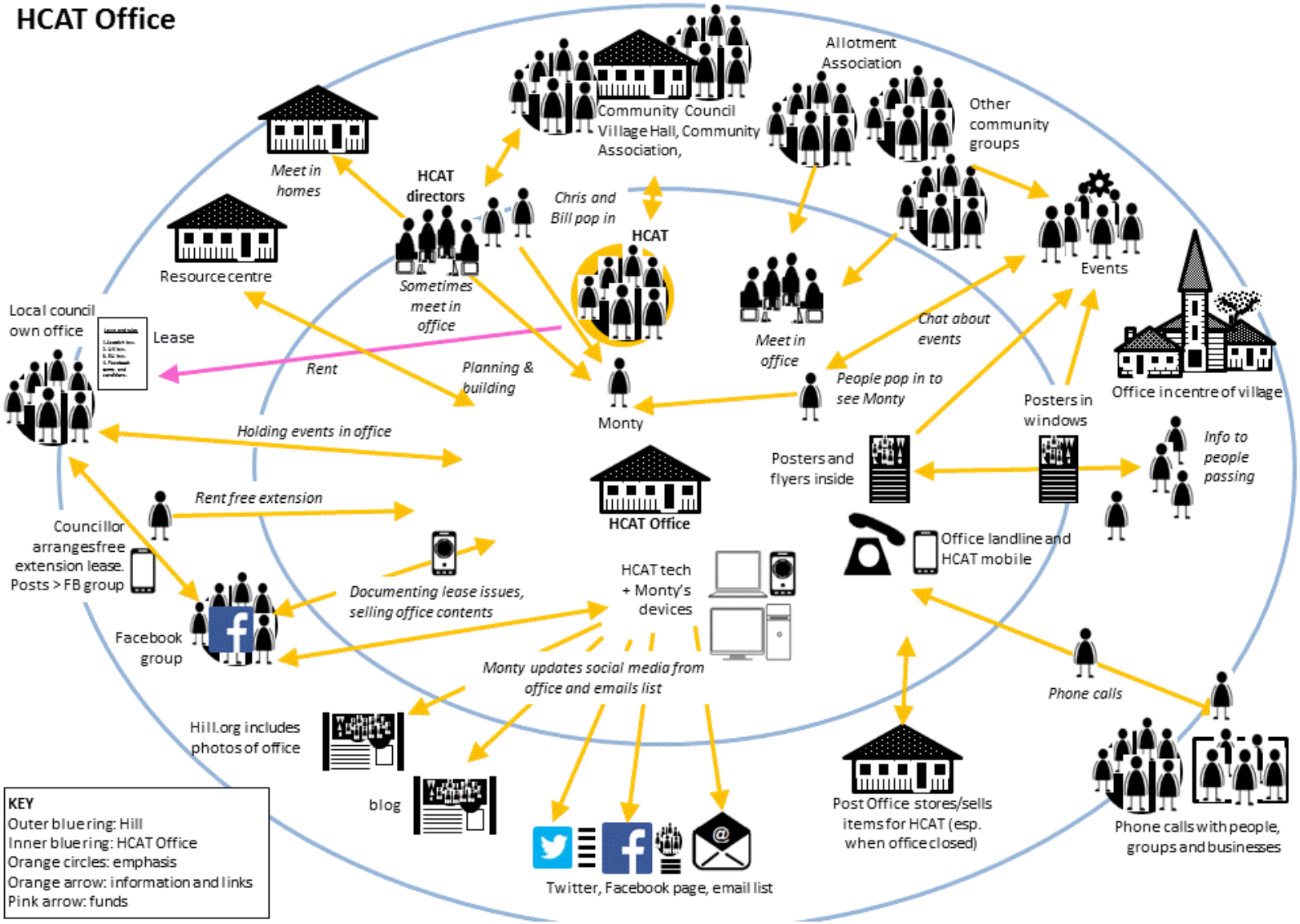


Figure 31: HCAT Office – Overview of Interactors

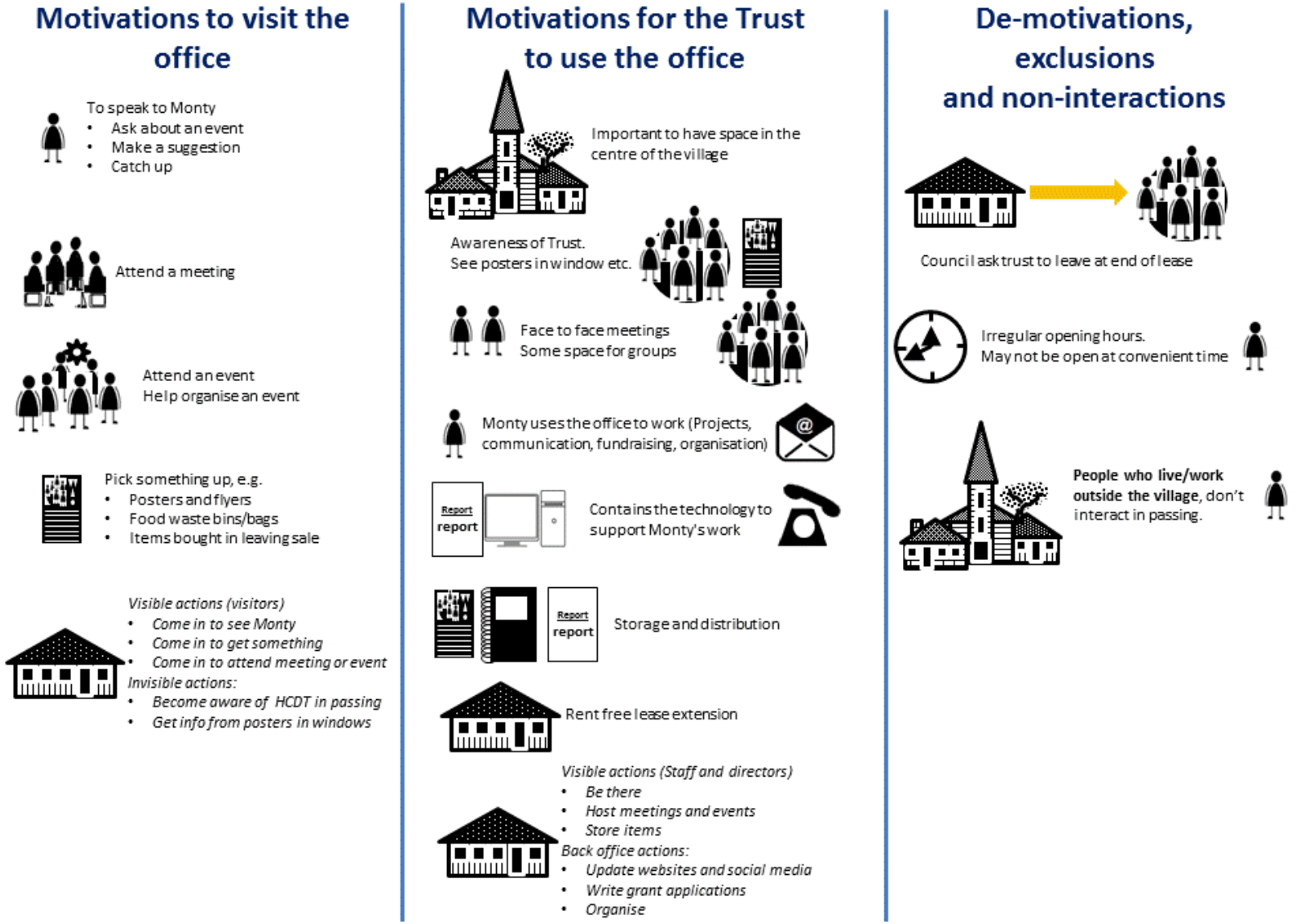


Figure 32: HCAT Office – Motivations, Exclusions and Problematic Interactions

STIN Study: Hill Twitter (HCAT)

See *STIN Study: Ward Anti-Cuts' Twitter Account (Ward AC)*, p92, for a description of Twitter accounts.

The Hill Twitter account was started in January 2011, when Monty started to work for HCAT. It is named after the village. The profile describes the account as about life in a [local county] village and includes Hill.org's URL. The header and wallpaper use the village logo that is the basis of HCAT's logo. The ID image, which accompanies each tweet, changes: "I Love Hill" logo, sponsored walk logo, sponsored walk photo. The tweets reflect what is happening in Hill: events, travel information, updates from local businesses and initiatives, information from elected representatives and the local council. Tweets reflecting HCAT news include tweets about HCAT events, links to job adverts, photos of the resource centre being built. The account it is not very busy or actively promoted. Up to 268 accounts follow Hill, in the case study period. See Table 16: Hill Twitter Account Tweets, p148.

H1 System interactors and H2 Core interactor groups

Figure 33, on p151, shows system interactors.

Monty created the account and writes the tweets. Although not identified in the profile, HCAT is the core interactor group; Monty tweets within his job. The Hill account presents itself as a community resource. It supports village life through sharing useful information, especially about matters which have a local impact, such as updates about travel. It also promotes the village – local enterprises, charities, people, and events. The Hill account tweets on behalf of groups without an account, e.g. Hill Community Council, the Gala Committee and playgroup. The account tweets about organisations which have potential impact on HCAT and Hill, like renewable energy companies.

Messages are retweeted from other local organisations: the council, transport and utilities companies, newspapers, quangos, charities, businesses, cycling group, arts workshop and the Lottery. People are visible through tweets and retweets: local people (e.g. Armstrong), people who used to live in Hill, visitors, local MP and MSPs, and local journalists; local children feature in photos of the sponsored walk, and of the HCAT office sign being taken down. Posts from the arts workshop's Facebook Page are auto-tweeted and these are

retweeted by the Hill account.

Hill tweets are retweeted by a few people and organisations, some with thousands of followers. Monty retweets Hill tweets from his personal account. Armstrong, Barbara, Chris and Robert follow the Hill account. Monty thought that most followers were outside Hill, but interested in HCAT, e.g. people from other community trusts. He valued tweets linking to useful information, and surmised this was true of followers. Although, relatively few Hill people follow the Hill account, its tweets influence public organisations like the local council: "the Twitter stuff is about informing, to other people, who've joined your Twitter, about the work that you're doing. It's not necessary –there isn't enough people in the community, on Twitter, to make any influence here whatsoever, but it does influence, potentially, other people. And so can be used as a lobbying tool. […] If I wanted [local council] to be aware of something, I would put @[local council]. […] and you can tell that it goes to their communications department. They all go [comedy voice]: "Oh! Oh! This is on Twitter! What we going to do?"" (Monty).

Twitter create and maintain the Twitter platform and social network as a business and community. Various apps and interfaces are available from 3rd Party companies, enabled by Twitter's public API.

H3 Incentives

Figure 34, on p152, shows motivations, exclusions and problematic interactions.

Monty uses Twitter to share information with local people. The Twitter account publicises the progress of the resource centre. After the case study period, the resource centre is the focus of most tweets from the account. Mobile updates, via Twitter, are particularly useful for travel information, which is sensitive to time and location: e.g. when the installation of new railway crossing barriers closed the station and main road, disrupting travel by rail, bus or car. The account retweets updates, including Armstrong's photo of a traffic queue at the new barrier. The new railway crossing is a focus of many of the tweets. Twitter brings information, from the organisations involved, into one place, accessible by those immediately affected, e.g. people waiting for a replacement shuttle bus on their commute

to work.

Table 16: Hill Twitter Account Tweets

Month	Tweets	Retweets [17]	Following	Followers	ID photo
December 2012	8	3	Didn't record	Didn't record	"I love Hill" logo
January 2013	1	2	Didn't record	Didn't record	"I love Hill" logo
February 2013	3	2	Didn't record	Didn't record	"I love Hill" logo
March 2013	4	13	403	229	"I love Hill" logo
April 2013	7	3	Didn't record	Didn't record	Sponsored walk logo
May 2013	9	8	409	237	Sponsored walk logo
June 2013	26	14	421	256	Sponsored walk photo
July 2013	4	2	449	259	Sponsored walk photo
August 2013	4	15	453	265	Sponsored walk photo
September 2013	7	11	456	268	Sponsored walk photo

Monty hoped that directors would help to provide a picture of HCAT's work via Twitter. Directors Robert and Chris were learning how to use Twitter. Robert was inspired by Chris' tweets about the resource centre build. He wanted to share professional information, rather than opinions: "I don't do online *chat* or anything like that. I do *emails* because I know where they're going to. And, who they're going to and I can control that, I suppose. But anything wider than that, I wouldn't feel quite comfortable doing. Unless it was maybe Twitter, you know, if it's a professional-related thing, then you're not advising someone, but you're telling someone about what's happening or something relevant for the industry that I operate in" (Robert). Among interviewees, Twitter seemed to attract people who characterised their Internet use as looking for specific information. They were wary of what they saw as *social* online spaces, like Facebook. This outlook was more common in male than female interviewees. Monty is an exception: he clearly experiences both specific information searches and online social spaces as useful ways to gather and share information.

H4 Excluded actors and undesired interactions

Chris used Twitter to share information with his cycling group, and to learn about social media to guide his children. He tweeted photos of the resource centre build to provide

[17] Hill Village account retweeting others' tweets

HCAT's chair, Bill, with updates, while Bill was on holiday. However, Bill does not use Twitter. Chris tries to avoid unwelcome interactions by protecting his account: his tweets are not public, and only seen by followers he has approved. This is unusual on Twitter, where the default is for tweets to be public. Chris wanted privacy for location information and images of his children. However, this was not well implemented by Twitter: Monty was able to copy photos from Chris' tweets and put them on the Facebook Page, which automatically tweeted them. The Facebook Page and Blog are set to automatically tweet posts.

Armstrong expressed confusion about whether the account was a Hill community account, or "directly the voice of the Trust". However, this seems to have stemmed from the context of the interview.

Some interviewees were dissuaded from using Twitter by the volume of information. Armstrong, Lily and Robert found that, once they followed a number of accounts, there were too many tweets to read them all. Louise and Armstrong wanted to understand how Twitter worked. Others, such as Philippa, dismissed Twitter as another social network that they did not have the time for. Barbara did not have much time to use social networks, but, perhaps because of her communications background, her personal account demonstrates that she is a skilled Twitter user and a steady, if not prolific, poster.

Apart from Barbara's breezy confidence, people were beginning to learn Twitter and using it to interact with their existing communication forums: Robert with people in his profession, Chris with his cycling group and family, and Monty with people and organisations with an interest in HCAT. Although Monty had been using Twitter since 2009, he was still developing his understanding: "Twitter, for me, is –I'm starting to re-think how to use Twitter. Even for myself, I'm starting to re-think how to use Twitter." (Monty). Within the case study period, the low number of tweets and lack of promotion of the account may reflect a period when HCAT were focused on implementation, rather than engagement.

People who do not use the Internet cannot access Twitter. People who choose not to use Twitter, are unlikely to access the account, though the tweets are publicly available. People without a connection to the village or HCAT are unlikely to know about the account.

H6 Resource flows

To access Twitter, each person needs to have their own Internet-enabled device and access. Use of the platform is free to end users. Monty maintains the Hill account as part of his paid role. Many Hill tweets are about fundraising events. Third party actors may benefit from the Hill account sharing information about organisations and their events, including groups which are not on Twitter.

Twitter users benefit from the free social network service. Groups, companies and organisations benefit from a free online structure to support their work: sharing information, getting feedback. Potential disadvantages include being the target of negative comments, but this does not seem to have happened via the Hill account.

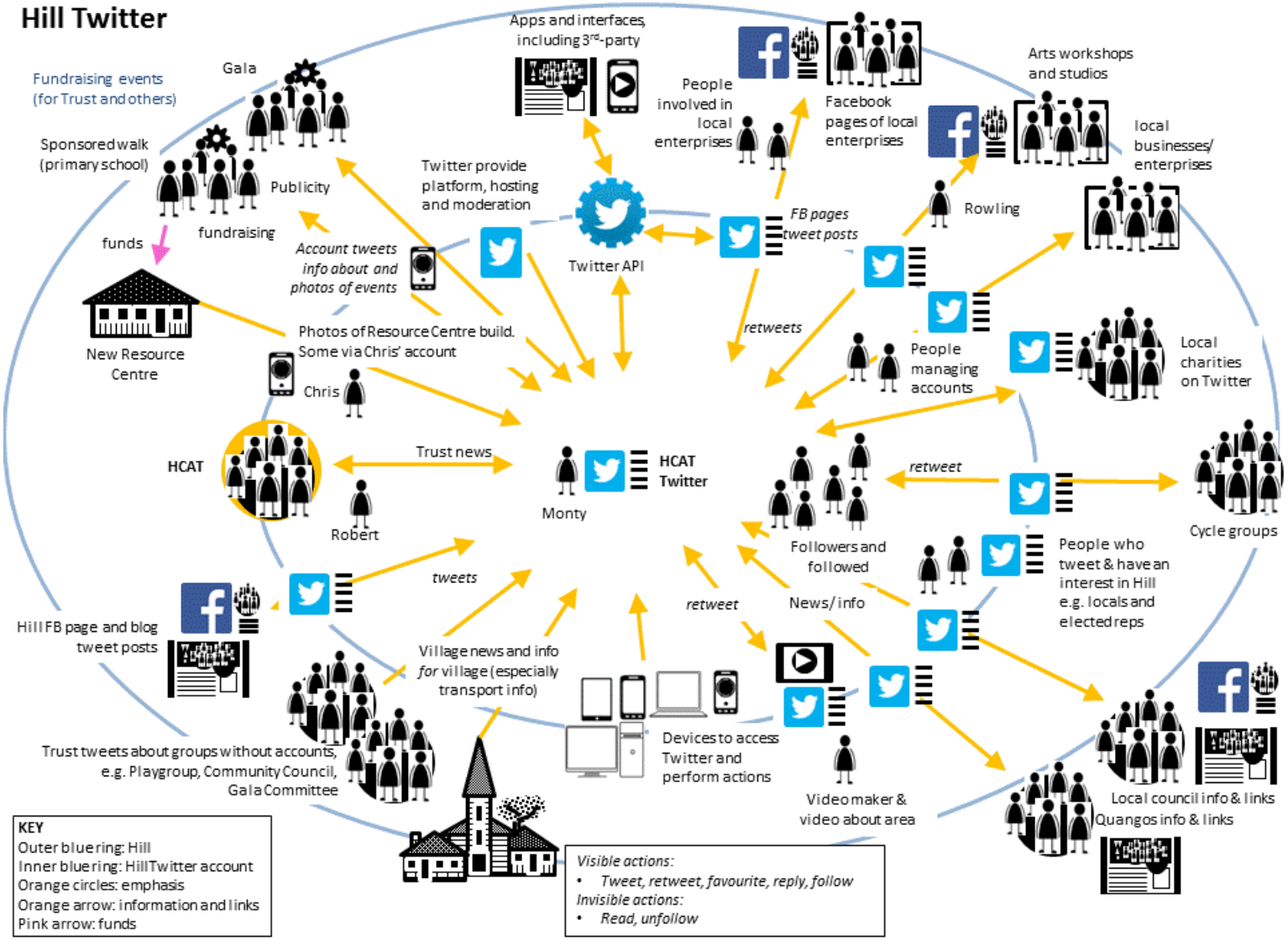


Figure 33: Hill Twitter – Overview of Interactors

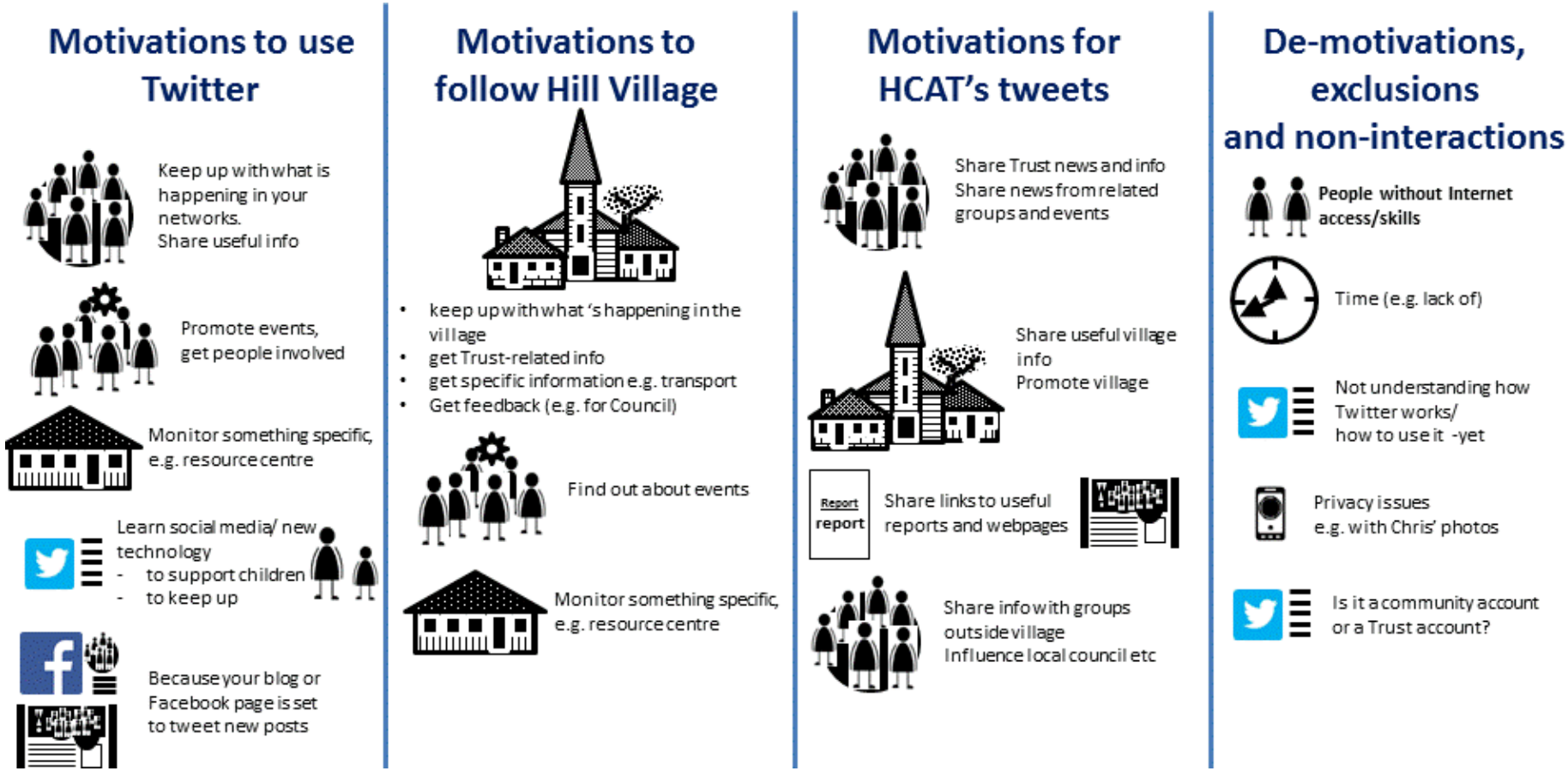


Figure 34: Hill Twitter – Motivations, Exclusions and Problematic Interactions

STIN Study: Directory Magazine (HCAT)

Directory Magazine is a free A5 colour magazine, published monthly in four local editions. It includes listings, adverts, articles and features. Issues are available online, using a publishing format that mimics a magazine. Directory Magazine has a Facebook page. The edition distributed in Hill is shared with several neighbouring villages; 5400 copies are printed. Regular features include event-listings, walks, recipes, information about community council meetings, libraries, Post Offices and surgeries. HCAT events are listed. Articles associated with HCAT cover Christmas activities, fundraising, the resource centre, the Gala, and a community lunch. HCAT advertises job posts and the AGM.

H1 System interactors and H2 Core interactor groups

Figure 35, on p156, shows system interactors.

Directory Magazine is distributed to homes and businesses in Hill and neighbouring villages: recipients are potential readers. In the survey conducted at the Gala, 4/29 respondents referred to the magazine. It is mentioned in Facebook Group conversations about Hill. Directory Magazine is created by a local publishing company. The editor is connected to Bill and Monty on the Linkedin social network[18]. People in Hill write for Directory Magazine: Bill's wife provides a recipe column.

HCAT have a track record of using Directory Magazine to distribute information: Monty read about HCAT in the magazine, before he was employed there. Interviewees read the Magazine (more or less), noting that HCAT place information there: "I think, for people who are not on email or Facebook, it's probably much harder to get information about what's going on in the village. But if there's particular events happening, then there'll be a poster or something put up. And there's sometimes stuff in [Directory Magazine]" (Chloe). HCAT contribute news and articles; their events are listed; they advertise there. Previously, the magazine supported the 2011 consultation.

The time and place of Hill Community Council's meetings are listed in each edition. The CC's news roundup, which was posted on the Blog and Hill.org, was distributed as an insert. The

[18] https://www.linkedin.com/

Gala Committee use Directory Magazine to engage people. The Allotment Association contribute a gardening article, and their open day is listed. Groups evident in the community listings include the fitness groups meeting in the village hall. One edition includes an advert for the playgroup. Local businesses advertise in the magazine.

H3 Incentives

Figure 36, on p157, shows motivations, exclusions and problematic interactions.

Directory Magazine's reach motivates people to use it to share information. People read the magazine because they've previously read useful local news there and because it is delivered to their homes: it's a type of offline *push* technology. Survey responses indicate that some people become aware of HCAT through Directory Magazine.

While some interviewees expressed concern about over-reliance on the Facebook Group to promote events, HCAT regularly shared information through the magazine (though not all events are listed). HCAT's use of Directory Magazine is relatively consistent over time, through changes in staff, and the adoption or neglect of other participation spaces. Each time they communicate through the magazine, they decide whether to provide a press release or listing, or create an advert or insert. Monty places adverts for HCAT's AGM in two consecutive issues. An article about HCAT covers the building of the resource centre and information about the staff posts being advertised. Monty uses Directory Magazine to promote fundraising events and record the building of the resource centre. Personal connections with the magazine's staff may further motivate HCAT to use the magazine.

The magazine provides some services free to community groups. The Gala Committee, Community Council and Playgroup use Directory Magazine to get information to local people and to encourage them to become involved. Businesses advertise their services to get customers, with some success, according to posts shared on Hill's Facebook Page.

H4 Excluded actors and undesired interactions

Directory Magazine is inaccessible for people who are visually impaired or unable to read. For everyone else, it is the most accessible space analysed within this case study. It does not require an Internet connection; it can be read, without leaving the house, at any time.

People may choose not to read it because of the large proportion of adverts or because articles are less interesting to them: no content seems to be created by or for young people.

H6 Resource flows

The Trust provides resources to Directory Magazine: information for articles; funding via adverts and inserts; promotion via the Facebook Group, Facebook Page and Blog. HCAT gain a communication method which is localised to Hill, delivered to people's homes and accessible without an Internet connection. HCAT and associated groups, like the Gala Committee, promote fundraising activities through the magazine. Community groups and events are listed free. The magazine is known and respected in Hill.

Directory Magazine is funded by advertisers, predominantly local businesses. Local businesses benefit from this accessible and localised communication space.

H7 System architectural choice points and H8 Viable configurations and trade-offs

Directory Magazine predominantly exists on paper. Directory Magazine's online publishing mechanism protects content from copying, and compels the reader to "turn" pages and see adverts.

HCAT content which appears in Directory Magazine, is usually also published online: e.g. in Facebook Group posts and events, as a Blog post, a news post on Hill.org, an email to the email list. Monty draws attention to Directory Magazine in posts to the Facebook Group. Some of Directory Magazine's Facebook posts are share on Hill's Facebook page.

HCAT and Directory Magazine share values about supporting the community, including local businesses: a holistic view of local life.

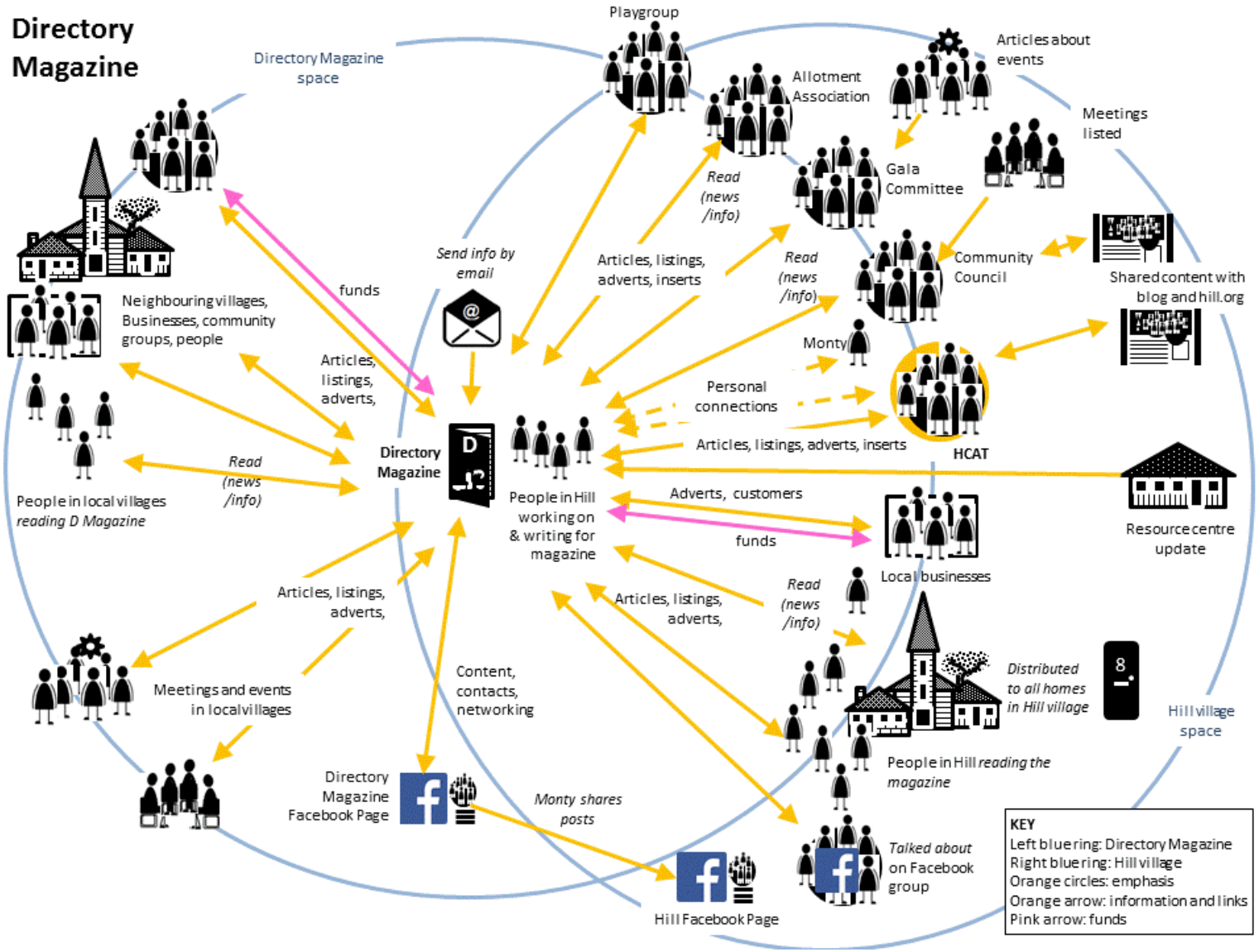


Figure 35: Directory Magazine – Overview of Interactors

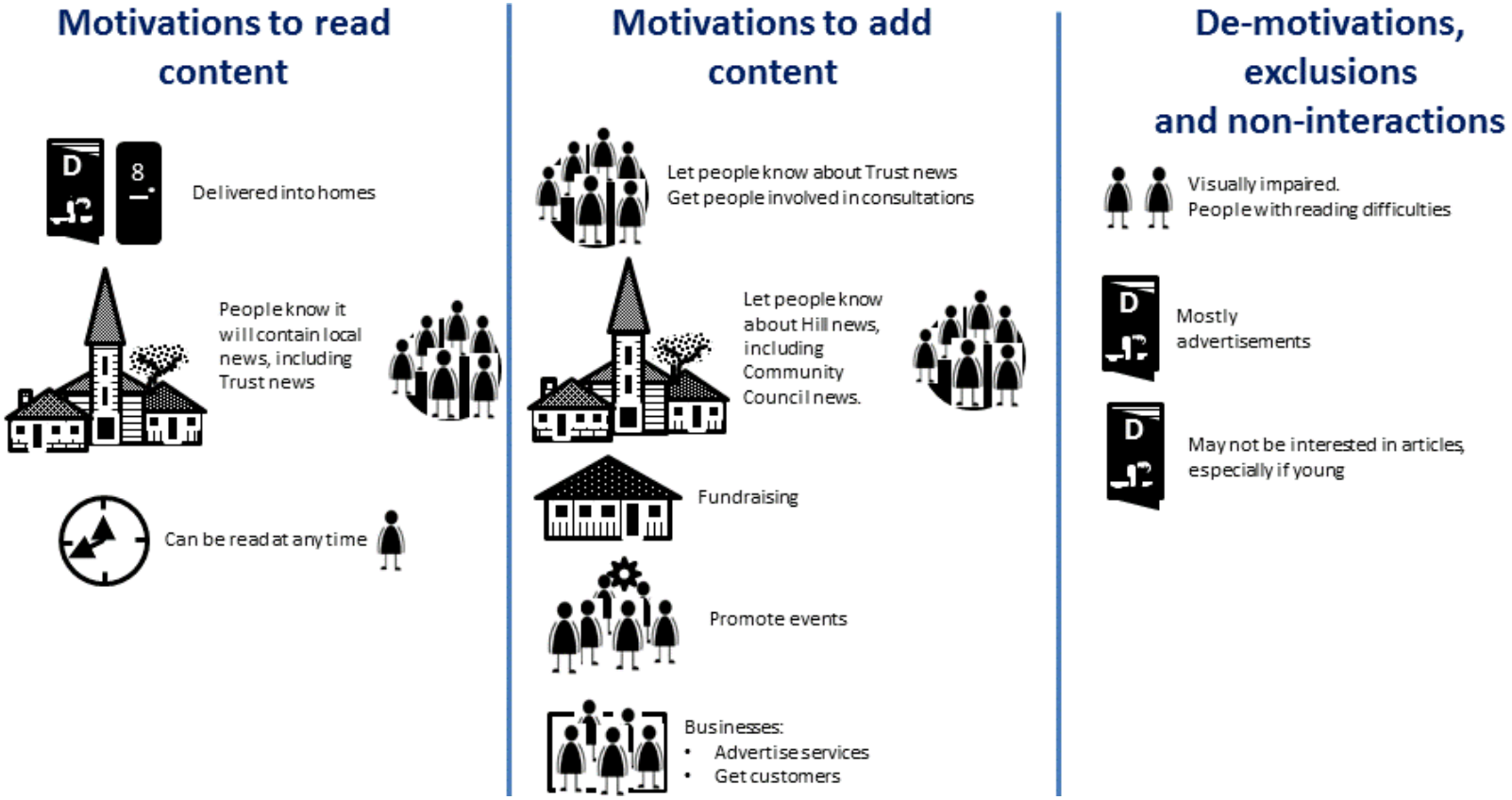


Figure 36: Directory Magazine – Motivations, Exclusions and Problematic Interactions

Appendix 29. HCAT: Wind-farm appeal documents published on DPEA

As this was a joint inquiry, documents were included from two application processes and two groups of organisations applying to create wind-farms in two separate locations, but within the same county.

Documents associated with the original Westhill Moor application:

- The application documents submitted to the local council by the energy companies, companies working on their behalf, HCAT and community councils;
- Documents received by the council, supporting or objecting to the applications, (emails, letters and reports);
- The council's assessment reports (e.g. environmental assessment);
- Any other documents associated with the local council's decisions to refuse the applications.

All the documents associated with the DPEA inquiry are published, both those concerning evidence and those concerning the process:

- Letters and emails about the process, including objections to holding a joint inquiry and objections to holding the inquiry in a village that is difficult to reach by public transport;
- Legal statements;
- Precognitions (summaries of what witnesses to the inquiry will say);
- Minutes and their accompanying emails;
- Expert reports (concerning, for example, potential impacts on local residents, the environment, wildlife, tourism, the economy, aircraft and local airports);
- Evidence collected and submitted by interested parties, including local people, Scottish Rights of Way and Access Society, British Aviation Authority, Historic Scotland, SEPA, Mountaineering Council of Scotland, Marine Scotland, Forestry Commission Scotland, infrastructure organisations and other local councils.

The documents are in *virtual paper* format, so the text is not searchable: letters are scanned to pdf, without using Optical Character Recognition (OCR); emails are printed, personal details are blacked out, then the printed emails are scanned to pdf, without using OCR[19]. Many of these emails included Scottish Government footers about their safety and intended audience, in English and Gaelic.

[19] This method, *virtual paper*, is also used for emails displayed on City Council's Planning Portal, and emails exchanged with the Scottish Government, in Case Study 3. See STIN Study: City Planning Portal (CPS).

Appendix 30. HCAT: Posts about the new resource centre

Table 17: Posts about the new resource centre

Space	Posts about fundraising (approx.)[20]	Posts about building the resource centre (approx.)	Comments
Hill.org website (November 2012 to September 2013[21])	3	1	By Monty
Blog (November 2012 to September 2013)	9	3	By Monty
Facebook page (November 2012 to September 2013)	6	2	By Monty Includes Monty and Chris' photos of the resource centre build.
Facebook group (April to September 2013)	82	20	By Monty and others. Includes Monty and Chris' photos of the resource centre build.
Twitter (April to September 2013)	7	25	By Monty Includes Monty and Chris' photos of the resource centre build.

[20] There is some lee-way in deciding whether a post includes information about the fundraising for the resource centre or not. For example, I have not included posts primarily about the Gala, although some fundraising for the "I love Hill" fund takes place there. Equally, the "I love Hill" fund provides funds for the school and young people's activities, as well as the resource centre.

[21] These dates all include September 2013

Appendix 31. CPS Communication Forums

Table 18: CPS Communication Forums

Forum	Occurrence	Space/locations	People
Networks of people			
Parents, carers, and children	Contact gap in summer holidays	Playground, school, homes, locale, text, email, FB Group	The children, plus their parents and carers.
Parents and carers of school's children	Contact gap in summer holidays	Playground, text, email, FB Group	All parents and carers of pupils, plus some of future or past pupils. AKA the *Parent Forum*.
Parent Council	Meet about 6 times a year.	School, plus email and FB Group.	Voluntary group of parents, with chair (PC Chair).
Parent Staff Association (PSA)	Meet several times a year.	School, plus email and FB Group.	Voluntary group of parents and staff.
Campaigners	From Parent Council's public meeting in June to after appeal.	School and playground, pub, text, email, FB Group.	Parents and others involved in campaigning against the planning application (and ideally against the sale of the building).
Working group for objections to planning application	Continuously online. Offline as necessary.	All spaces, but especially email and FB Group.	Parents involved in campaigning against the planning application, led by Rachel and Stuart.
Working group for overcrowding issues	Data collection did not focus on this group.		Parents and councillors. Led by PC Chair.
Local Community Council	Meet once a month, except July.	Offline. Hard to contact by email.	Up to 12 members, unelected. Joseph is chair.
Neighbouring Community Council	Meet once a month, except July.	Offline and by email. Also have website (blog).	Up to 12 members, unelected. Desmond is the planning contact for this campaign.
City Councillors	Continuous (according to availability).	Offline, including school, surgeries and City Chambers. Email and phone. Some in FB Group.	Councillors relevant to the campaign are: local to school/ parents; on Planning Committee; involved with children and families department.
City Council	Office hours, as available.	Offline, email, websites, phone.	Council staff and councillors.
Online spaces			
Parent Council Facebook Group	Busy throughout campaign, though not all the time.	Internet: Facebook.	Parent Council and PSA, other parents and carers, councillors and Mr MSP. No school staff.
"Reply-All" Email list	Busy throughout campaign.	Internet.	Parents and carers involved in the campaign, some councillors, Mr MSP.

Forum	Occurrence	Space/locations	People
Other email	As necessary.	Internet.	People involved in the planning application, e.g. City Council staff, community councillors, Heritage Org, Hyperlocal paper.
Council Planning Portal	Continuous, though objection period is 21 days; some items only public *after* the planning application decision.	Internet.	City Council. Used by campaigners, community councillors, Heritage Org and Collingwood.
Websites of local papers	7 relevant articles in local evening paper.	Internet, paper.	Readers, including campaigners following links from email and Facebook Group.
Heritage Org's Facebook page	8 relevant[22] posts.	Internet: Facebook.	People interested in city's buildings. Daisy is director. E.g. 1000 people like one of the posts relevant to this. Plus campaigners following links.
Hyper-Local Paper website and social media	10 articles online; 3 in paper news-sheet (also available online as pdf).	Internet (website, Facebook and Twitter).	Collingwood, Ivan, me and others, plus 5000 readers pm online. Plus campaigners following links.
Environmental Org blog	2 posts.	Internet.	Local people interested in environmental issues. Plus campaigners following links.
School website	No relevant information.[23]	Internet.	Staff, Parent Council, PSA, other parents and carers.
Offline spaces			
School	Continuous, part from summer holidays.	Inside the school, including rooms where PC meet.	Children, parents, carers, school staff, elected reps attending meetings.
School Playground	Continuous, though less-frequented during holidays.	Outside and round the school. Bordering disputed building.	Children, parents and carers, school staff. Open to public.
Old High School [3, North Street]	Locked, apart from 2 site visits[24].	Next to school, bordering playground.	Sold by City Council to Developers.
Pub opposite school	Continuous through case study period.	Opposite the school.	Local people, including some parents and carers.
City Chambers	Public access for specific events, e.g. some committees.	Building in City Centre.	Councillors, some council staff; people attending specific events.

[22] Relevant articles include those about the City Council's school strategy towards over-crowding.
[23] The website includes some minutes of Parent Council, and PSA meetings. However, minutes posted do not include those from the Parent Council's big June meeting, to discuss North Street building sale and overcrowding. There is nothing about the proposed development or the campaign on the school website.
[24] Two site visits in the case study period and one as part of the appeal. I attended the appeal site visit and took photos inside and from inside the building.

Forum	Occurrence	Space/locations	People
Hyper-Local Paper news-sheet	Articles in 3 news-sheets.	Local shops, pubs, cafes; delivered to the school.	Local people (1500 paper copies printed), plus HLP team (e.g. Collingwood, Ivan, me).
TV	2 clips found online. More indicated in interviews and workshop.	TV; clips archived on the Internet and referenced on Facebook.	People who catch relevant clips on TV or the Internet. One parent works for BBC news.

Appendix 32. CPS: Interviewee profiles

Bruce: City Councillor (see Case Study 1). Bruce is one of City Primary School's local councillors and supported their campaign. He spoke against the planning application at the Planning Committee meeting. The researcher knows Bruce from attending Neighbouring Community Council meetings, as well as through Case Study 1; he is her local councillor.

Collingwood is the editor of Hyperlocal Paper. Some years previously, his children had attended City Primary School and he had been on the Parent Council. Hyperlocal Paper had a long-standing relationship with the School and its Parent Council. The researcher works with Collingwood on Hyperlocal Paper.

Daisy is chair of Heritage Org, which is local to the City and concerned with its buildings and public spaces. She spoke against the planning application at the Planning Committee meeting, on behalf of Heritage Org. Daisy was previously a teacher. She has grown-up children.

Desmond is on Neighbouring Community Council's planning committee and spoke against the planning application at the Planning Committee meeting. While the Primary School sites within Local Community Council's borders, many children live within Neighbouring Community Council's area. Desmond is retired.

Dmitri was on the Parent Council and particularly involved at the beginning of the campaign, for example, organising their first large meeting. He is friends with Rachel. He holds a public sector communications post.

Georgette had one child at the school and a younger child. She became involved with the campaign, taking photos of other local schools for comparison and creating and distributing flyers to homes near the school. Georgette is a researcher within a university.

Ivan: Ivan's son was in his final year at City Primary School when the campaign began. He was not involved in organising the campaign, but was on their email list and objected to the planning application. An email exchange between Ivan and the head of the Council's Children and Families department was published on Hyperlocal Paper's website. Ivan is on

the board of Hyperlocal Paper and looks after its website. The researcher works with Ivan on Hyperlocal Paper.

Joseph is the chair of Local Community Council, and has been for some time. He works for the Government. He has problems with technology. It took Rachel some time to contact him by email. During the case study period, Local Community Council had a trail of abandoned websites, relying on Hyperlocal paper to report their meetings.

Rachel led the campaign against the planning application to convert the North Street building into studio flats. She was not a member of the Parent Council before the campaign. Rachel has two children at City Primary School and a younger child. She is a healthcare professional. Rachel was the main contact for the research.

Stuart was on the Parent Council. He led the creation of the parents' report to the councillors on the Planning Committee. This report also became the basis of their presentations to the Community Councils and the Planning Committee.

Appendix 33. CPS STIN Studies

STIN Study: Reply-All Email List (CPS)

An email list is a collection of email addresses, enabling emails to be sent from one email address to many. Hosted email lists are managed by third parties: list software manages subscriptions and any associated preferences. Some lists support discussion; others are broadcast, like newsletters. Ad hoc email lists are created by collating email addresses in the "to" and "Cc" fields, and using "reply all" to reply. Unless Bcc is used, email addresses are visible to all recipients. The Reply-All List was an ad hoc list of c.70 email addresses. Any sender could add or remove recipients: these changes would be gradual, as existing threads continued. Interviewees called it the "email list", but clearly understood that it was a collection of email addresses that they managed between them: "it wasn't really an email list in the sense of Google Groups. It was just a large conglomeration of email addresses that things were getting sent out to. And I think there must've been, I don't know, maybe 50 people on it, or something. You could see exactly who everything was going to" (Ivan).

Campaigners also used email with limited circulation, to communicate within small working groups and with people in external organisations.

H1 System interactors and H2 Core interactor groups

Figure 37 on p171 shows system interactors.

Before the campaign, the list consisted of people who attended Parent Council meetings: parents, some staff, and some elected representatives, including the school's MSP, and Councillor Bruce. Emails concerned meetings. At the beginning of the campaign, the Parent Council organised an open meeting, and gathered attendees' email addresses. They also gathered email addresses at events, such as the school fair. Dmitri created a Parent Council Gmail address, which was used on flyers, but most people joined the list by giving their email address to the campaigners: "We haven't had many, via that route, interestingly. It's all been word of mouth, people handing us their email address, or people emailing one of us, or attending a meeting. Or, when it came to the initial meeting, where we went from a dozen email addresses to more like 50, you know, all of these people just gave us their email

addresses and said “Yeah, count me in. I want to hear about everything that happens in this issue” (Dmitri).

The core interactor groups were the Parent Council; parents and carers interested in the campaign; and elected representatives. Some school staff were on the list, which may have muted criticism of City Council: “the email group had, well it has teaching staff on there. Well I think we were a *little* bit conscious of that” (Rachel). This case study follows the working group, led by Rachel, which fought the planning application. Rachel took on the leadership of this group, because she had already been active in the email list and Facebook group.

Small *off-list* email groups were used for specific tasks. Stuart led the creation of its objection report. Rachel and Stuart were careful that strategic communications about their objections were kept within a closed community.

People from external organisations communicated with the parents by email, outside the Reply-All List, including the City Council (elected members and staff), and two community councils. Collingwood, editor of Hyperlocal Paper, describes strategic emails: “specifically to me, and not for wider consumption”. Email interactions with Desmond, from Neighbouring Community Council[25], and Daisy, from Heritage Org, were specific, not burdensome. Daisy describes their communications as “smart”.

Parents who were active in the Facebook Group, posted information from the email list to the Group and vice versa, and distributed information by word of mouth. Elected representatives disseminated information beyond the school community.

H3 Incentives

Figure 38, on p172, shows motivations, exclusions and problematic interactions.

Discussions started by email as soon as people heard about the sale of the building: “There was an immediate, sort of, email reaction” (Stuart). Dmitri created the Parent Council Gmail address, at the beginning of the campaign, to involve parents, rather than the Parent

[25] Two community councils were involved. The school sits within the area of Local Community Council; pupils, parents and carers also live in the area covered by Neighbouring Community Council.

Council acting independently. People gave their email addresses to the campaigners to become involved. The list was used to distribute information which supported active participation: information about how to object, including example objections; councillors' contact details and surgery times; reminders and encouragement: "You might be saying "Look, we've got two weeks to the [Planning Committee]. Please, please, please, if you've got time, these are the people you can contact. […]." And I had put up a draft email people could use. So I'd emailed that round, but I'd also put that on Facebook, to say "You might not want to use, but here's a starter for 10. And this is what you can say, to people on the [Planning Committee]. You can just cut and paste, copy and paste it"" (Rachel). Objecting to the planning application was not straightforward. Some campaigners investigated the process and summarised useful points for the others.

People circulated notes from meetings via the list, following its original role for the Parent Council: "We didn't discuss it. It just happened" (Dmitri). The group working on the overcrowding issue and the group fighting the planning application used the list to update each other. Dmitri regarded it as a record of their activities.

The number of people on the list was an incentive to use it: "I think the power of the email group is you've got, you can reach all 70-odd people –around 70 people" (Georgette). Numbers were important: to submit enough objections to mandate a public hearing and to influence the Planning Committee to vote against the application. Dmitri found the Reply-All Email List easier to use than the Facebook Group. He found email threads easier to follow and search. Councillor Bruce liked the *asynchronous* nature of email (and the Facebook Group): he could interact when it suited him and not worry about bothering people at inconvenient times.

Off-list email enabled the planning application objection group to work efficiently and confidentially. In the run-up to the Planning Committee meeting, Rachel and Stuart created a report to convince the councillors to vote against the application. This was also the basis of their presentation to the Planning Committee. They did not want the Developers to know, and be prepared to counteract, their objections: "we didn't want it to go out to everybody well in advance of the committee meeting, because, obviously, if it ended up in

the hands of the Developers, they could *attack* some of the things said in here" (Stuart). This was especially important in this context, as the parents' main objections (the proximity of the development to the playground and overcrowding at the School) were not considered relevant under planning guidelines[26].

H4 Excluded actors and undesired interactions

People without email accounts or Internet access are excluded. People who are not confident in reading English are unlikely to join the list, and the school is multicultural. Stuart was keen that the planning objection group did not include school staff.

The main impediments were the volume of email, changing collection of email addresses, and unruly threading system: "our email system worked. But it's a *mess*" (Dmitri). The parents interviewed were busy people, with young children and jobs, who suddenly had to find the time and energy to work on this campaign. Objecting to this planning application was challenging: parents needed to develop an understanding of the planning system, a strategic approach, and gather enough active supporters to influence the Planning Committee. The email list was a manifestation of this work, filling people's inboxes. "The bombardment of the emails has just been overwhelming" (Dmitri). Georgette thought that email volume dissuaded people from posting: she did not receive feedback on campaign suggestions: "maybe a lot of the group are not wanting to have 10 emails a day about this. So, as a result, you don't always get feedback emails – you know, the sort of polite "Oh that's a great idea" or "Let's think about it". Because, if you did that, there would be an unmanageable amount of emails. So, sometimes you put things out –that's what I felt about the email group – […] and you wouldn't really get anything back". Georgette felt that few people had the confidence to post in this situation few voices dominated; most voices were not heard.

There was little support for threaded discussions. Stuart experienced a specific problem, as his system, Lotus Notes, separated threads within emails into separate messages. Recipients could see all email addresses. As the list was continually re-created, Dmitri worried that some people, such as planning department staff and elected representatives, may have

[26] See Table 19: Material considerations (planning), p186.

been included in threads that were not relevant to them. This was not experienced as a problem by Councillor Bruce. In workshops, Ivan and Rachel agreed that the email list was unruly because no one really owned it.

Rachel had problems contacting Local Community Council (LCC) by email: she did not receive a response to her first email. Joseph, their chair, was having problems with their email account. Days before the Planning Committee meeting, Rachel succeeded in making contact, by using a different email address, and after chatting to Joseph's wife.

H6 Resource flows

Access to the list requires Internet access and a device. These are individual costs. The campaigners benefited from these distributed costs, as the campaign was not funded. The main resource cost was attention: time, energy, and concentration. This is an important consideration, given the volume of emails and the unstructured system. Stuart was conscious of the technical resources needed, because his work email system had a small storage allowance. He was gathering photos for the objection report and experiencing problems with data limits.

H7 System architectural choice points

In their emails to the list, people posted links to information on the Council Website, especially the Planning Portal, and to articles on local newspapers and blogs. There was some mirroring between the Facebook Group and email list: Rachel posted on both, knowing that not everyone used both spaces: "Whatever was emailed was kind of put up on the Facebook Group, as well" (Rachel). The campaigners distributed flyers, which included their Gmail address. Rachel texted parents, using numbers gathered from birthday parties, offering to put people on the email list.

Digital photographs were an essential part of the campaign. High quality photos need to be sent via email: Facebook reduces their resolution. However, the Facebook Group was useful for gathering feedback on photos, as the volume of comments was not a problem.

H8 Viable configurations and trade-offs

Before the campaign, Dmitri had set up a Google Group for the Parent Council. People did not use the group and Dmitri did not promote it. Moving to this Group, or something similar, may have simplified use in the long run, but would have needed additional attention to get it working. People would have needed to learn the new system. Anyone setting this up would create extra work for the others, and probably lose people from the list. Some people would be reluctant to adopt a new system; some may object to specific email hosts, such as Google Groups. This could cause conflict that would rebound on the new list's initiator. The campaigners, especially Rachel and Dmitri, discussed moving to a better system, but faced with a series of difficult tasks and sudden deadlines, did not attempt it.

The *push-technology* aspect (emails to inboxes) was a trade-off: people could not miss the communication stream, though individual messages were lost and inboxes overwhelmed. Individual campaigners made trade-offs between contacting 70+ people via the email list, or choosing not to voice their opinion: "I think Facebook lends itself more to more people commenting, or kind of having a bit more of a 2-way communication, than email did." (Rachel). Potentially, the email list and Facebook Group supported a *distributed power structure*. While each of the two working groups had a leader (PC Chair and Rachel), no one felt personal responsibility for the email list which supported both groups.

Using the email list was successful for supporting objections and lobbying the Council. It was rather chaotic and may have deterred recipients from making comments, but moving to another system was impractical within the campaign.

At the time of the workshop, the Parent Council were about to start using an email system provided at school level (ParentMail[27]) to communicate with other parents. Stuart and Ivan would prefer the school to use an SMS-based system, but that would cost more. Dmitri and Rachel were having problems with ParentMail: Dmitri had been invited to check his details, only to find that they were someone else's; Rachel was having problems registering the same contact details for each of her children.

[27] http://www.parentmail.co.uk/

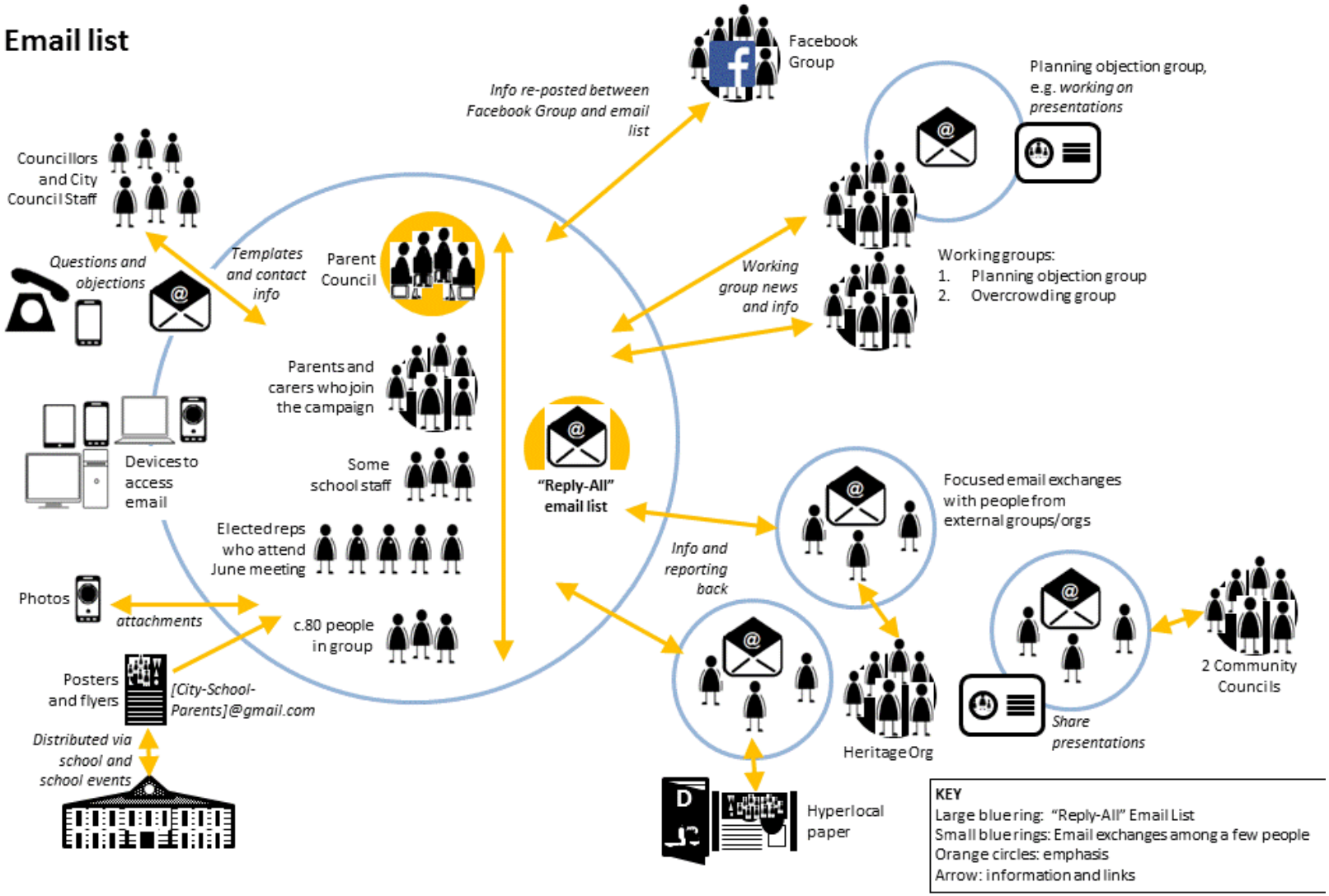


Figure 37: Reply-All Email List – Overview of Interactors

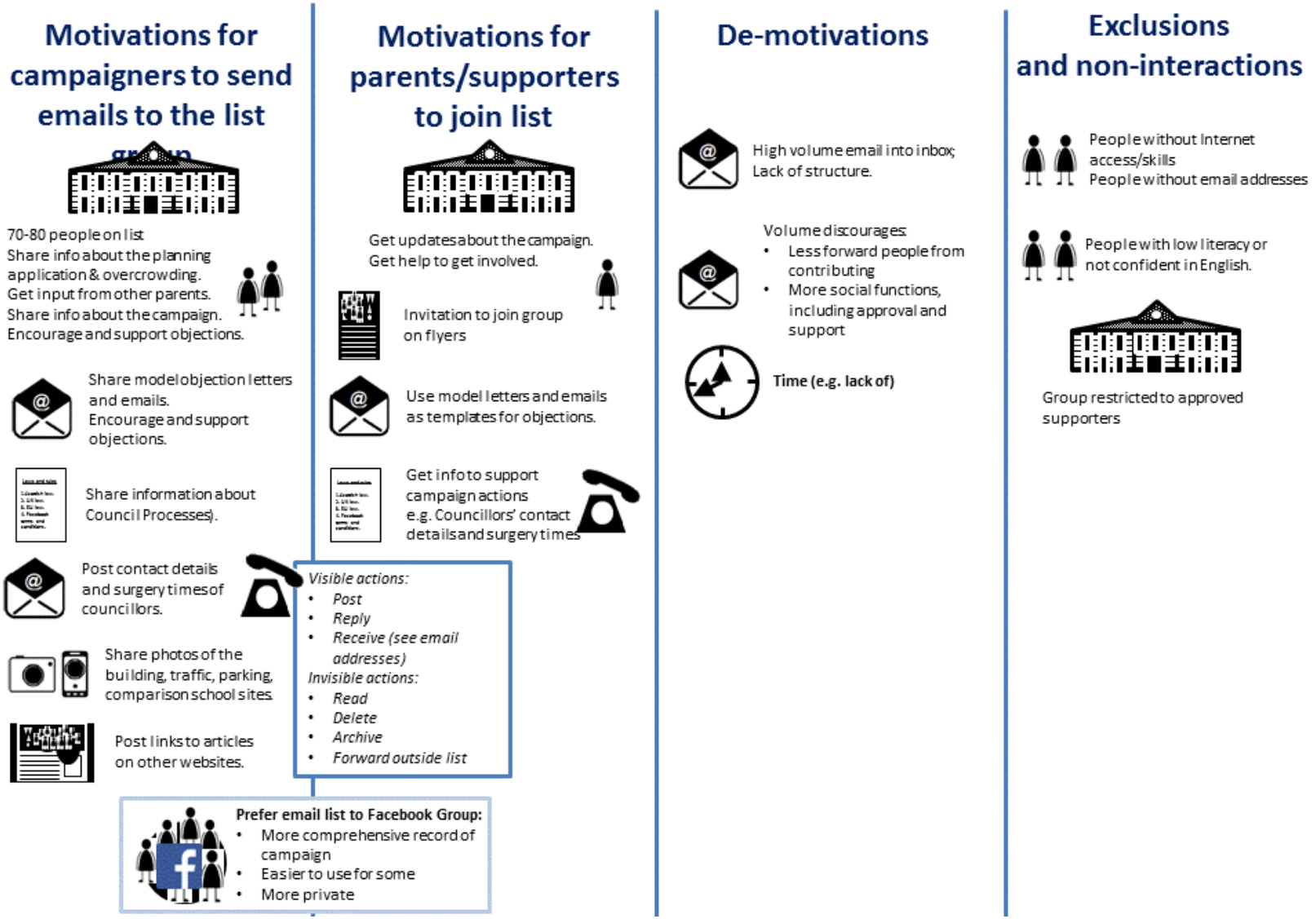


Figure 38: Reply-All Email list – Motivations, Exclusions and Problematic Interactions

STIN Study: Parent Council Facebook Group (CPS)

See previous chapter, p116, for a description of Facebook Groups in general.

City Primary School's Parent Council Facebook Group had been set up, by the Parent Council, to increase involvement: all CPS parents and carers were welcome. Elected representatives, who worked with the Parent Council, joined the group. The group is *closed*: Facebook members request to join; content is not visible to people outside the group, though the list of members is.

H1 System interactors and H2 Core interactor groups

Figure 39, on p178, shows system interactors.

Most group members are parents, grandparents, or carers of children at the school; most joined within the campaign; most are women. At least one person stayed in the Group after her children had left the school. There were three elected representatives in the Group: two councillors (Bruce and G-Councillor) and the local MSP (Mr MSP). Councillor Bruce and Mr MSP are in the same party (Labour) and most active in the campaign. "I know that some people have felt a little bit –not unhappy, but a little bit curious, as to why [these elected representatives] are part of those groups. I don't personally. I think it's been very useful" (Rachel). There were no school staff in the Facebook Group, though they do not seem to have been specifically excluded. The Developers interacted with the Facebook Group, once, by viewing photos on it, on Georgette's phone, during a meeting.

People interacted through posting information to support the campaign, especially Rachel, PC Chair, Georgette and Dmitri. Campaigners were the predominant content-creators: creating objection templates and notes from meetings, putting advice together, taking and uploading photographs. Others interacted through *liking* or commenting on posts: people liked and commented on Georgette's photos of comparable situations, thanking her for taking them. The Facebook Group was more useful than the email list for getting feedback on photos. Facebook records the number of people who have viewed a post, making this invisible action visible to admins and the post's author: "So, even if somebody doesn't take a physical action, you can see that 20 people have viewed [your post]" (Rachel).

Posts included information from the Council and Planning Advice Charity; links to Heritage Org, Local Environmental Org, and Hyperlocal Paper. People re-posted information on their personal pages and in messages. Rachel re-posted a link to a Local Environmental Org blog post and messaged it to Heritage Org and another campaign. Information was re-posted on the email list and shared face-to-face.

Facebook create the platform, maintain the software and host the website(s). They manage the communities they host, moderating as necessary.

H3 Incentives

Figure 40, on p179, shows motivations, exclusions and problematic interactions.

People were encouraged to join the Group via flyers, texts and Hyperlocal Paper articles. The Facebook Group supported the involvement of people beyond the Parent Council, which was limited in terms of representation and these people shared their expertise: "Loads of people asked to join the Facebook Group. And it built into this group of about 80 people. And some have been really, really, active, you know, used their expertise and their strong opinions and their insights to, to do some good. Or just practical" (Dmitri). People posted information about the campaign, including responses from the Council, campaigning ideas and meeting dates, links to articles and overviews of meetings, updates across working groups: " [People] posted a *lot* of information – you know Council [processes], things that I had written to them to post up, and putting out information responses they'd had from [e.g. Leader of the Council] […]; ideas of what they were planning to do, campaign-wise or, and usefully for me, when next meetings were coming up, so that I could diary them" (Councillor Bruce).

Campaigners posted material to support specific actions. At the beginning of the campaign, the focus was on getting objections to the planning application submitted. Rachel posted model objection letters to support admissible objections. People learned about the planning system and shared information about this: "links to the policy documents, links to how the Council [works]–certainly [when] we got a hearing, how that hearing works, how the system works" (Georgette). Later on, campaigners encouraged people to lobby the Planning

Committee, posting Committee members' contact details and example emails. Rachel posted a link to the Developers' plans and their advert for the flats.

Certain aspects of the Group interface specifically supported involvement and interaction:

- The non-public nature of the group;
- Social elements, such as links to people's identities and profile pictures[28];
- Prominent display of photos;
- It is easy to comment briefly on photos or links;
- Being able to see how many people had viewed their post;
- Links to other sites are displayed with previews: photos and extracts.

Facebook is a social space. People visited to keep up with family and friends and saw Group posts while they were there. Either through Facebook custom or because of the absence of school staff, people made flippant and critical comments about the City Council: "Facebook certainly lent itself more to people, I guess more *irreverent* comments. Because it's closed, I suppose. […]I know email is closed, in a sense. But it's interesting that there were a lot more kind of flippant or kind of not-very-nice comments about the local authority put on Facebook […]. Easier to put a pithy one-liner up or something like that, isn't it?" (Rachel).

H4 Excluded actors and undesired interactions

People without Internet access or skills, or with less facility in reading English, are excluded. The Facebook Group is closed: admins limit access to parents, carers and supportive elected representatives. School staff were not excluded from the group, but had not joined: potentially not wanting to intrude on a parent-run space.

Some parents' antipathy to Facebook prevented them from joining the group. Ivan worried about his personal data being exploited, his time being wasted, and dealing with the context-collapse of bringing together people from diverse areas of his life. Reluctant Facebook users, like Stuart and Dmitri, found the site frustrating: it did not support the

[28] "It made it easier for me to communicate and find out, I mean realise, who was who and get in touch with people and offer "Could I come to this meeting?" or "Please would you like to come to this meeting?" That all happened electronically, and you began to get to know people a little bit better, on the human level, which was, I think for me is quite important" (Bruce).

activities they expected it to: “I don’t find Facebook, personally, successful. I look at it and I never get it right. I always click in the wrong place and I feel like I can’t manage things there and I don’t see what I feel like I should see. And [a gently despairing laugh] I think Facebook’s really badly designed. It’s a funny thing. It’s such a strange thing. It’s such a phenomenon, but it seems to be broken to me. And frankly the emails are an easier way of [communicating]. You can see what people are saying and you can see the replies” (Dmitri). Stuart accessed the Group using his wife’s re-activated Facebook account. This had the side-effect of making Stuart invisible in the Group (e.g. to Rachel).

Some parents worried about whether the Group had been set up with the right privacy levels. Some wondered if it was appropriate to have elected representatives in the group, though Rachel found it useful. When the parents were creating their objection report and presentations, even the Facebook Group could seem too public.

H6 Resource flows

Facebook provides the group facilities free to each group. Each member is responsible for their Internet access. Group members freely contribute their time and attention; admin roles are voluntary. The Parent Council and PSA are voluntary organisations. The elected representatives are exceptions, accessing the group within paid roles. There are costs for Facebook associated with the groups, including staff and infrastructure costs. The school gets a free service to support their Parent Council and PSA: the school website is difficult to use and does not support any Web 2.0 interaction. The Facebook Group is also used for fundraising, for the school.

H7 System architectural choice points

The Facebook Group had existed for a few years but was not used much: “the Facebook page was dormant, really dormant” (Dmitri). After the first meeting, in the school dining hall, the campaigners added an invite to join the Group to their flyers. Parents who became involved in the campaign came into spaces previously used by the Parent Council and PSA, including the Facebook Group and email list.

There was some mirroring between the Facebook Group and email list: some people posted information on both; some, like Rachel, cross-posted from one to the other. Flyers provide links between parents in offline spaces and the Facebook Group. Photos provide a vivid link between the Group and the offline spaces at the heart of the campaign. They show how close the potential development is to the school, and other problems with the conversion, such as parking problems. The parents showed the Developers pictures of the rear windows of the Old High School, via Facebook, and the Developers conceded some proximity issues. Mr MSP suggested the parents use one of these proximity photos in their presentation to the Planning Committee: "[Someone] had taken a photograph looking out over the rear playground. So, that was put up on Facebook. And everybody went "Oh my God! That really tells a story." And [Mr MSP] is a member of that group, and he said "You need to use that photograph. You absolutely need to use it, because it just...shows you."" (Rachel).

H8 Viable configurations and trade-offs

The campaigners did not create any public online presence, e.g. a Facebook *Page*. They made a trade-off between a public and private web presence, by using this closed group and the email list to organise the campaign. Online, they relied on public third-party websites, such as Hyperlocal Paper's site, to involve the wider community. A public Facebook Page could potentially have assessed the strength of support in the wider community and supported links to schools dealing with similar problems. However, it is not clear what could have been achieved by a larger campaign. The Council's finance policy precluded redeveloping, rather than selling, the Old High School; City opinion would not influence the DPEA's appeal decision.

The Facebook Group provides opportunities for more parents to become involved in Parent Council activities; the campaign realised this, and rejuvenated the Group. The Group supported the parents' successful campaign to get the initial planning application rejected.

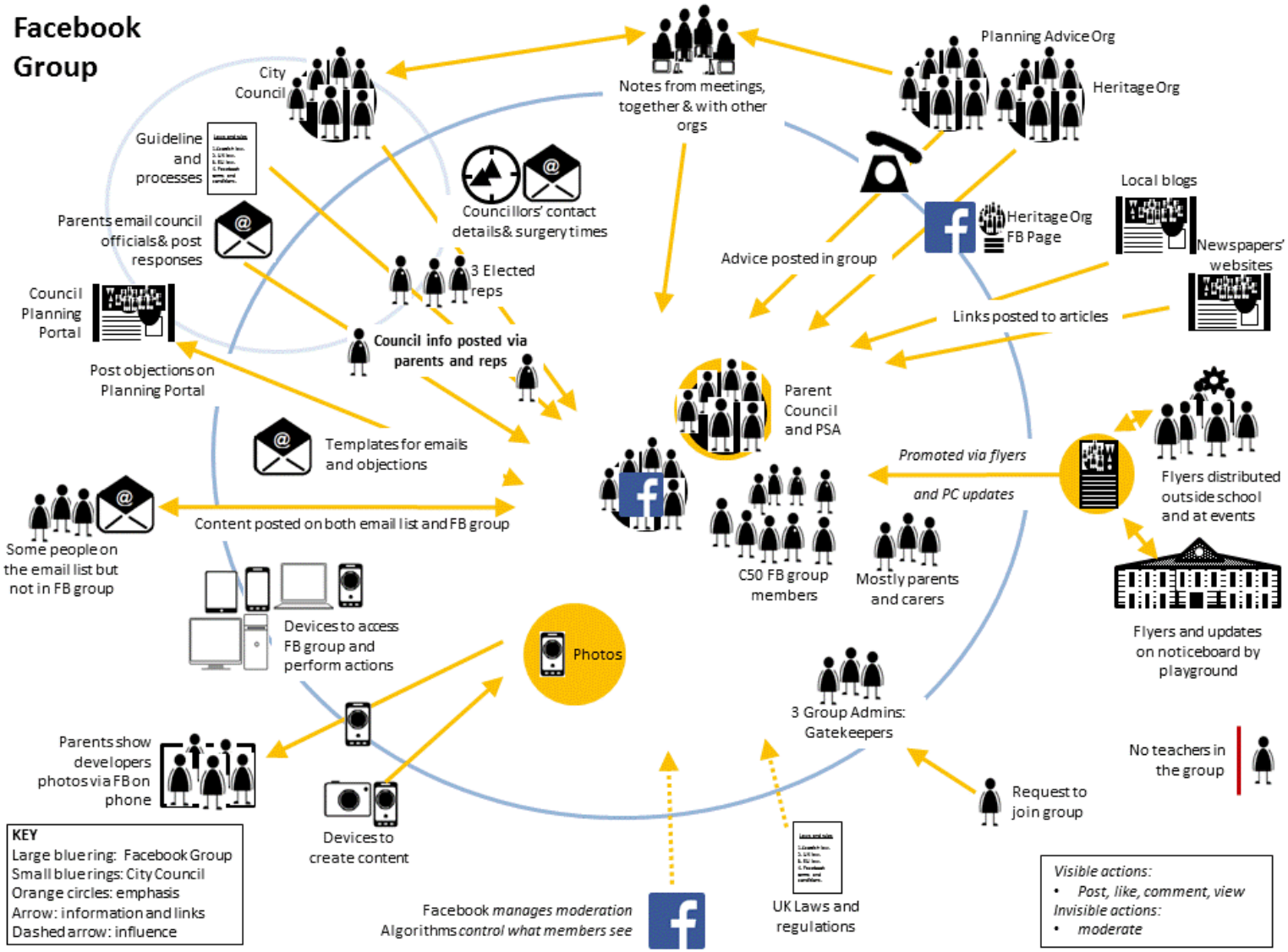


Figure 39: Parent Council Facebook Group – Overview of Interactors

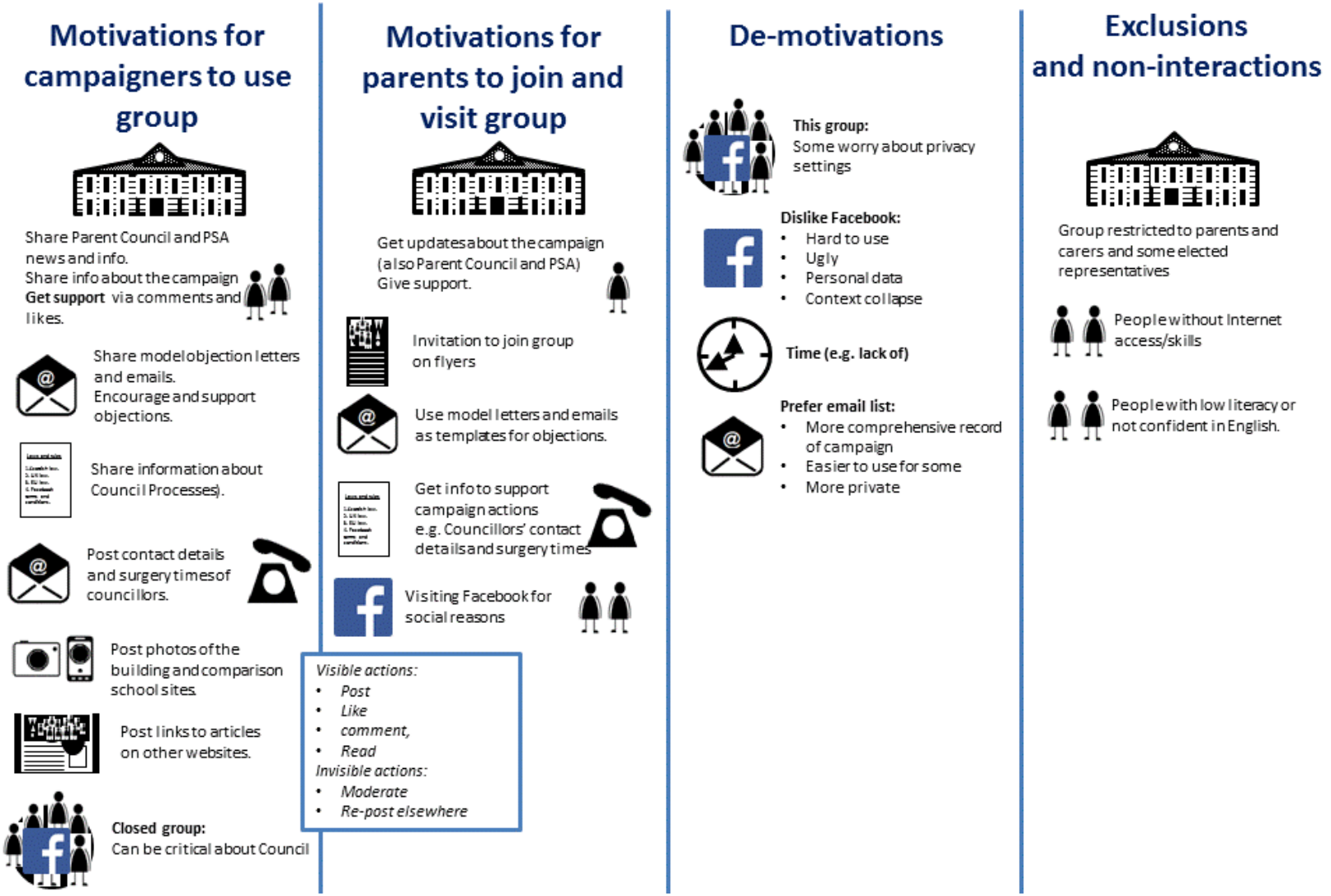


Figure 40: Parent Council Facebook Group – Motivations, Exclusions and Problematic Interactions

STIN Study: The Playground (CPS)

The playground flows round the primary school and the back of the Old High School. The High School's rear windows face the playground. The playground flows in front of the primary school, with a noticeboard on the railings facing West Street. The playground is a designated *community playground*: open till 9pm. During school hours, the gate is bolted at the top.

The group working on the overcrowding problem did not want new classrooms to be built on the playground. The group opposing the planning application worried about the playground's proximity to the Old High School: from several ground floor windows it would be possible to shake hands with someone in the playground. Proximity is not considered a *material* concern within the City Council's Planning Guidelines. However, "noise and disturbance" are material objections: potential problems with noise from the playground, especially in the evening, could strain relations between the flats' residents and the school.

H1 System interactors and H2 Core interactor groups

Figure 43, on p185, shows system interactors.

During term-time, the playground is used by children, school staff, and parents and carers taking children to and fro. For campaigners, the playground provided opportunities to talk to other parents and distribute flyers. The school fair and an induction day have Parent Council stalls and were held during the campaign. People cross the playground to attend meetings at the school, e.g. with the Parent Council. A site visit, apropos the planning application, was attended by councillors on the Planning Committee, people from Local and Neighbouring Community Councils, local councillors and the Developers. These visitors walked through the playground, around the North Street building, experienced the proximity issue, and learned that the playground was open until 9pm: "I don't think we'd fully appreciated, until we visited the site, and heard from the residents, saw photographs, the extent to which it wasn't just that the development was next to a school, it was essentially within it" (Joseph).

People walking past the playground could read Parent Council updates, on their noticeboard (Figure 41 on p181). Local media use pictures of the playground in their articles about overcrowding in schools, the proposals for new classrooms, and the CPS campaign.

Figure 41: Parent Council noticeboard

The playground is maintained by the Council (employees and external contractors): people renovating the Primary School would be in the playground. The Parent Council and PSA fundraise for new equipment.

H3 Incentives

Figure 44, on p186, shows motivations, exclusions and problematic interactions.

Children are in the playground to play outside. During the school day, children are monitored by teachers and assistants. The DPEA report notes that play is always supervised, in a tacit response to parents' safety fears. People cross the playground to get to the school: parents and carers to pick up and drop off children, and to attend meetings and events.

Campaigners made contact with other parents and carers, in the playground, to tell them about the campaign. They distributed flyers which outlined the issues and potential actions, and encouraged people to join the email list and Facebook Group: ""Have this bit of paper. This is happening to the school you're coming to, and you will be interested." And, we had a phenomenal response. […] We now have even a recipients list of about 80, out of a school with 300 children. So that's quite a lot of parents, who responded to our piece of paper"

(Dmitri). The school either printed or paid for the first two sets of flyers. Later flyers were printed by the campaigners, at home or work.

Campaigners gathered material to support their campaign, e.g. taking photos which showed the proximity of the North Street building. Stuart took measurements to interpret the scale of the Developers' plans and recalculate the floor areas of the proposed flats. Developers accessed the playground to survey the building.

H4 Excluded actors and undesired interactions

The school holidays are an impediment to the campaign, as parents meet less. The planning application was submitted in late June: the 21 day objection period was within the (Scottish) school holidays. Face-to-face campaigning and flyering took place before the holidays. Campaigners needed to convince people to join the Facebook Group and/or email list to stay involved. This time-frame increased the potential exclusion of people without Internet access. Some parents do not visit the school because that is done by a carer or the other parent.

The campaigners were worried that the development of the disputed building would be problematic. After the case study period, a chisel fell from scaffolding supporting renovations on the primary school. Luckily, no one was hurt.

H6 Resource flows

The Council are unable to finance the repair and reconversion of the North Street building. According to Council figures, via Hyperlocal Paper, this would cost £5m, compared to £250,000 per modular classroom. Conversely, the sale of the building provides revenue.

H7 System architectural choice points

A primary and secondary school were built in Victorian times, with the playground flowing round and between. In the 1960's or 70's, the secondary school moved to a purpose-built building. According to City Council, the North Street building housed the High School until c1960; it was used as office space for Council staff until 2010 when it was vacated and marketed for sale. In a tweet published on Hyperlocal website, a former pupil remembers

the *annexe*[29] being used for primary classrooms in 1979 or 1980. In 2013, the Council sold the building, contingent on a change of planning permission from office use to residential.

H8 Viable configurations and trade-offs

In parallel to the sale, rising school rolls in City Primary School were causing overcrowding. Council plans to build partially prefabricated (modular) classrooms in the playground were leaked to the local paper. Parents had been hoping that the North Street building could provide the extra space.

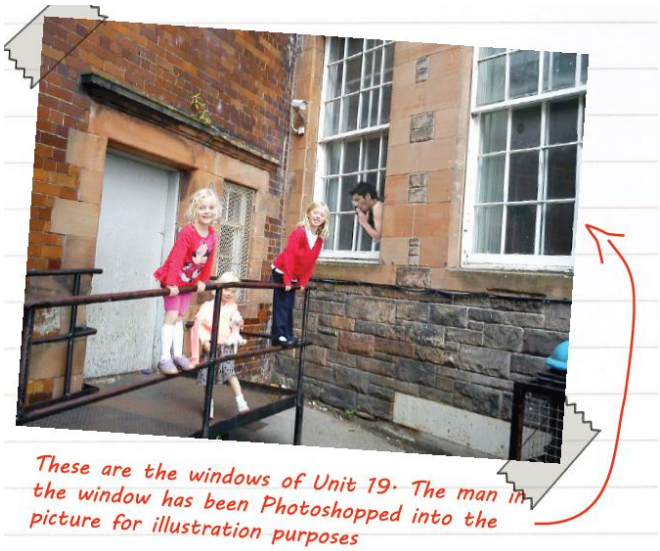


Figure 42: Photo of Ground Floor Window with Smoker Added

Although proximity between the North Street Building and the playground could be dismissed as not *material*, its relevance became more conspicuous through photos that showed ground floor windows abutting the playground. The proximity issues were important emotionally. The parents' presentation to the Planning Committee included a photo in which a shirtless young man, smoking a cigarette, had been added to a ground-floor window in the North Street building, with children playing directly outside (Figure 42 on p183). This photo had a powerful effect at the hearing. In one of the workshops it became apparent that the use of this photo in the campaign was discussed extensively:

[29] The North Street building was known as the annexe by local people. However, the Council were intolerant of this term and campaigners complied. While the term "Annexe" is used on the second flyer, in subsequent flyers and presentations, it is referred to by its address. One objection letter includes: "*this building, which we believe had previously been used as an annex to [City] Primary School*".

“Well, there was a concern issue for the person whose children were in the photograph. […] But there was a wider debate about –is, was it flippant […]? Did it set the right tone? […] And there was a lot of to-ing and fro-ing” (Rachel). Parents also specifically discussed the use of children in photos[30].

Digital photos, taken in the playground, illustrated other problems with the planning application: proximity, waste disposal, lack of green-space, traffic and parking problems, the removal of a tree. These photos were used in emails, reports and presentations, and shared via the Facebook Group and email list.

The playground was used to represent the children’s safety and innocence, in contrast to the values of the Council and the Developers, who prioritised money. The future inhabitants of the North Street building were portrayed as a vague threat to the children: not living in families; overlooking the playground. The contrast is epitomised in the photo of the shirtless smoker, next to three little girls, smiling and playing. The parents made a trade-off between using emotive photos featuring children and privacy.

[30] See the annotation on the STIN diagram in the main body of the thesis.

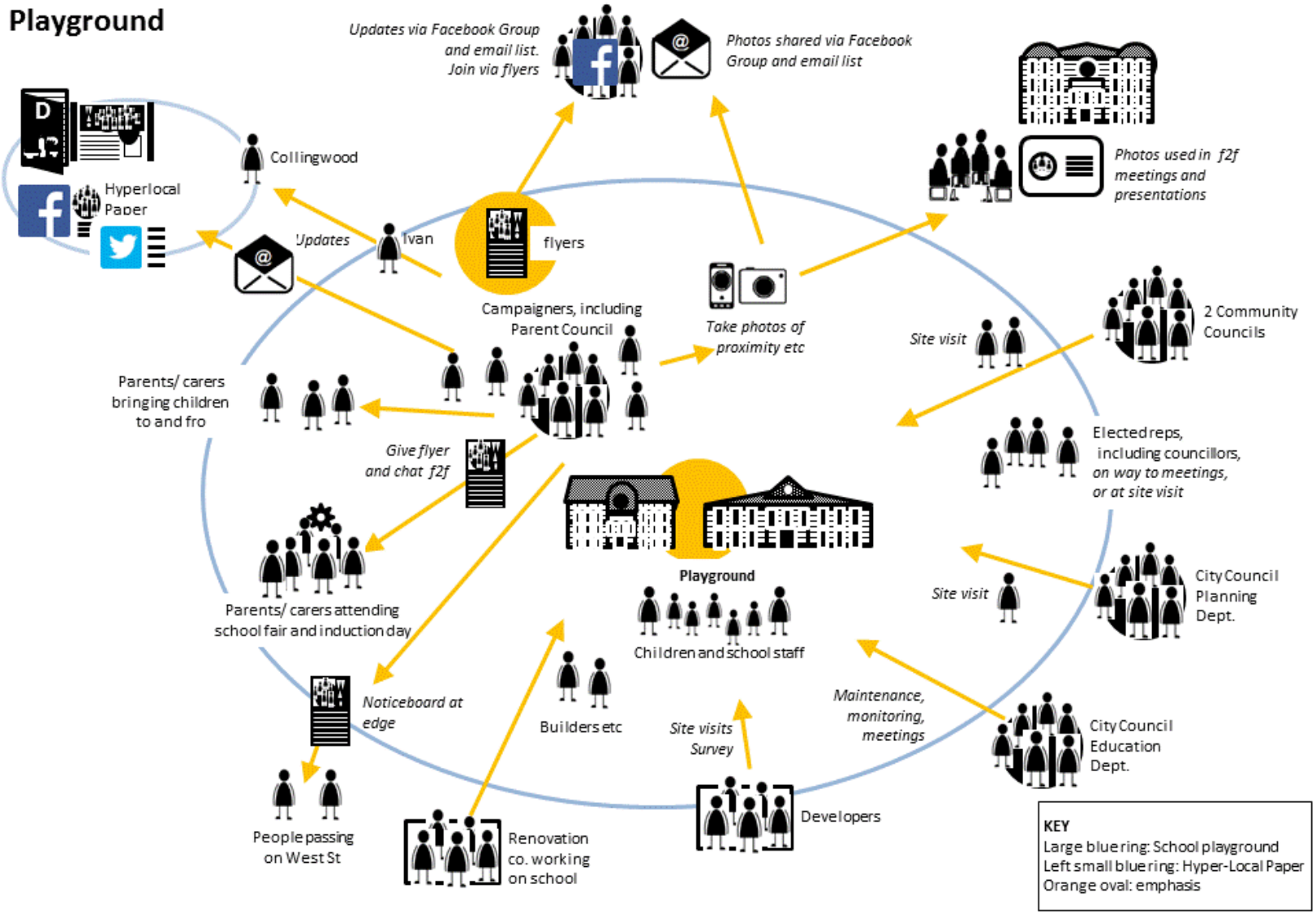


Figure 43: Playground – Overview of Interactors

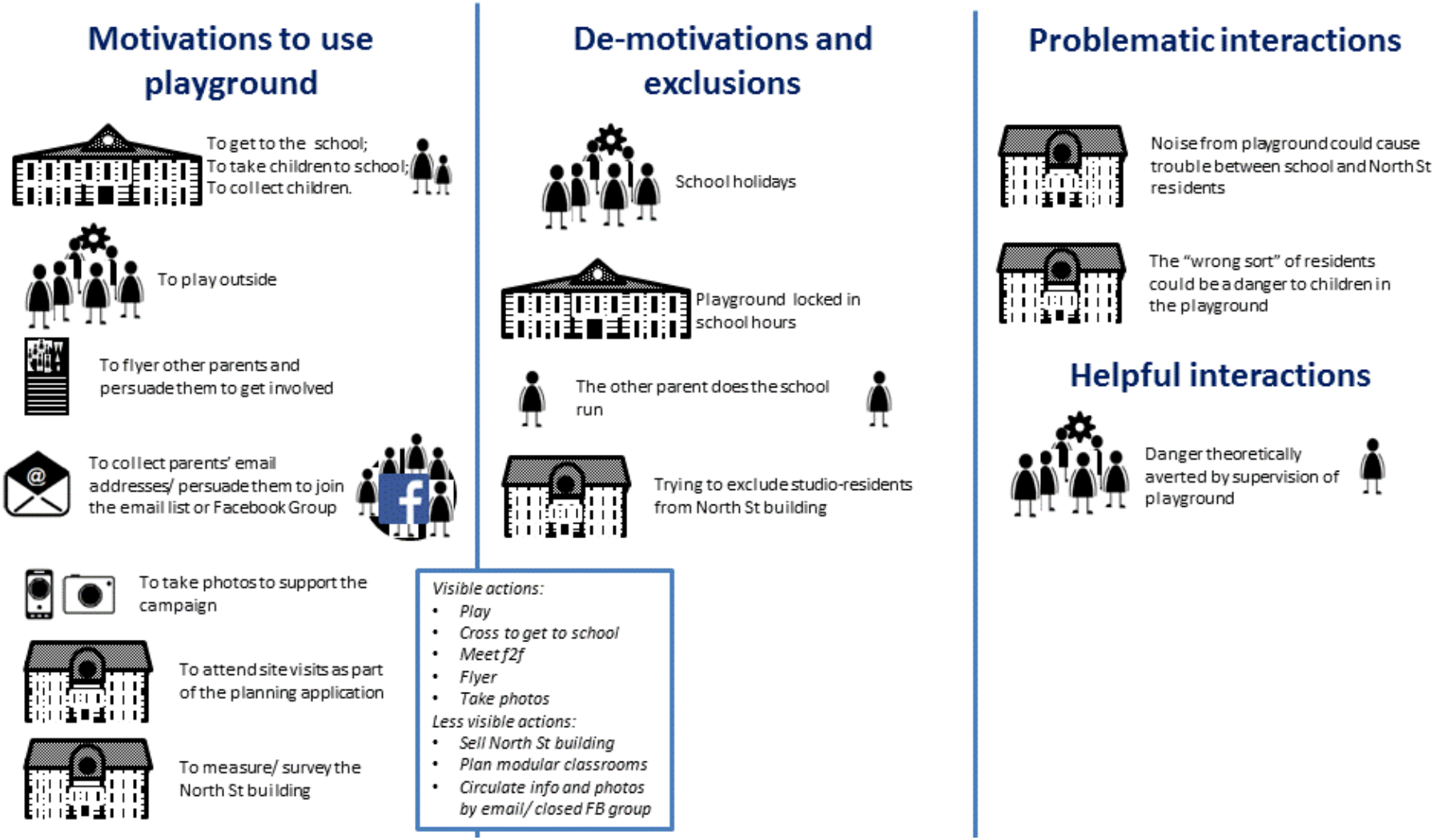


Figure 44: Playground – Motivations, Exclusions and Problematic Interactions

STIN Study: City Planning Portal (CPS)

The Planning Portal is provided by software company, Idox[31], as part of the Scottish Government's ePlanning program[32]. The portal publishes all the public documents, drawings and decisions, for each planning application. Visitors identify planning applications via search. If the 21-day objection period is current, an online form can be used to submit a comment. See Table 21: Registering and commenting on the Planning Portal192.

The Planning Portal contains the public documents associated with the application to convert the Old High School into studio flats: forms, documents, plans, drawings; reports and responses from Council departments and external bodies; papers and reports associated with the hearing; current status. After the Planning Committee decision, objections and comments were made public. Planning pages on City Council's website contain information about planning processes, including a list of what the Council considers to be *material considerations* (Table 19, p187) and a collection of strategic planning documents.

Table 19: Material considerations (planning)

Text on the Scottish Government website[33]
"Legislation requires decisions on planning applications to be made in accordance with the development plan (and, in the case of national developments, any statement in the National Planning Framework made under section 3A(5) of the 1997 Act) unless material considerations indicate otherwise.[…] There are two main tests in deciding whether a consideration is material and relevant: • It should serve or be related to the purpose of planning. It should therefore relate to the development and use of land, and • It should fairly and reasonably relate to the particular application.[…] The range of considerations which might be considered material in planning terms is very wide and can only be determined in the context of each case."
Static planning pages on City Council website
City Council provides a list of specific examples: traffic and parking, appearance of the area, impact on a conservation area, setting or character of a listed building, loss of significant landscape features, noise and disturbance, effect of cooking odours, loss of sunlight or daylight, overshadowing, privacy.

H1 System interactors and H2 Core interactor groups

Figure 45, on p194, shows system interactors.

[31] http://www.idoxgroup.com/
[32] https://eplanning.scotland.gov.uk/
[33] http://www.scotland.gov.uk/Publications/2009/07/03153034/11

For the North Street application, portal publications include Developers' application documents, reports from Police Scotland and Council agencies: Services for Communities, Archaeology Service, Transport Policy and Planning, Environmental Assessment, Planning.

Campaigners accessed information about the process, and compared design guides, including the Local Plan, to the planning application published on the portal: "I went through the application documents; I went through the policies to see where they didn't meet the policies. Several of us in the group were doing that" (Georgette). Campaigners shared information from the Portal, via their email list, Facebook Group and in face-to-face situations. Regular portal users include Heritage Org's chair, Daisy; Desmond, from Neighbouring Community Council; Hyperlocal Paper's editor, Collingwood; and presumably elected representatives. The Community Councils, Heritage Org, and Hyperlocal Paper regularly monitor planning and provide information to the public. They visit the Portal when an application attracts their attention in the weekly planning bulletin.

Objections are made public after the Planning Committee decision (at the end of the case study period). Table 20 (p188) summarises the objections published on the portal. Twelve people used the portal's objection form. Eight people objected by email or letter. These are collated into a pdf document with emails received by other council departments, and between council staff. Objections received by phone are *not recorded on the Portal*. Daisy, Desmond, and the campaigners shared their objections by email.

Developments on this scale usually require Developers to consult locally in a pre-planning application consultation (PAC). The Planning Department decided this was not required, as the conversion primarily affected the building's interior. This effectively shifted responsibility for consultation from the Developers to the campaigners.

Table 20: Objections and comments hosted on the Planning Portal

People	Objection method	Content
Dmitri, Ivan, Rachel and Stuart	Online form	Objection
Other parents: 5 "members of the public"; 1 "other"	Online form	Objection
Neighbouring Community Council's planning convener	Online form	Objection
Desmond (Neighbouring Community Council)	Online form	Objection

Georgette and Georgette's husband	Email or letter	Objection
PC Chair (on behalf of the Parent Council),	Email or letter	Two objections, with different content
4 people (at least 3 parents)	Email or letter	Objection
Daisy (Chair of Heritage Org)	Email or letter	Objection
Mr MSP	Email or letter	Objection
Local Community Council	Letter	Critical, but neutral comment
Georgette and her husband	Email or letter to another service	Objection
PC Chair	Email or letter to Head of Services for Communities	Objection
Another parent	Email or letter to Head of Services for Communities	Objection

H3 Incentives

Figure 46, on p195, shows motivations, exclusions and problematic interactions.

The Portal is provided to support the planning process. People visit the Portal to get information about specific applications, and Council website planning pages to get information about the planning process. People access the Portal to submit objections online. By cross-referencing application documents with planning guidelines campaigners were able to identify material considerations, like parking and green-space allocations, to support their objections. Stuart and Desmond exchanged emails about relevant design guides. Stuart also exchanged "virtual paper" emails with the Scottish Government about discrepancies in the planning guidelines: "you couldn't send an email, you have to send them a letter, but you did your letter, scanned it and emailed it" (Stuart). Stuart downloaded the plans to calculate the floor area of each flat: the results were less than those given in the application form and less than the minimum specified in the design guides.

H4 Excluded actors and undesired interactions

People who do not have Internet access are excluded. Using the Portal effectively requires good Internet skills and a high level of literacy, in English: "I felt quite strongly about that – that in terms of a process, that was very tailored towards educated, confident, literate people, and was excluding lots of parents at [City Primary] […]. I felt quite strongly that that was very wrong, in terms of a mechanism of lodging your objections […] I felt there were

lots of barriers there for the perhaps people who didn't feel very confident, you know, to write letters. Perhaps people whose first language is not English. I knew that there were lots of people being excluded from that system" (Rachel). For many CPS parents and carers, English is not their first language.

The 21 day objection period coincided with the school holidays. Campaigners needed to rely on the Facebook Group and email list to encourage objections. However, people could object remotely (e.g. on holiday). The space changes over time, with different deadlines affecting different groups:

- There is a window of 21 days for submitting objections.
- Developers can upload new versions of documents and drawings at any time.
- Reports may appear at any time.
- Objections and comments are only visible to the public after the decision.

The publication of objectors' full names and addresses may prevent people from submitting objections, either due to personal circumstances or awareness of identity theft. The objection form does not make it clear that names and addresses will be published. However, in the workshop, Stuart and Ivan were unconcerned that their addresses were published on the Planning Portal. In one of the objections published on the Portal, the writer says that she could not use the online form as the text was constrained to 2000 characters[34].

A document called "BackGround Papers" ([SIC] Planning Portal) is associated with the Planning Committee hearing. It contains the list of speakers, an objection from G-Councillor, two comments submitted by Local Community Council, one comment submitted by Neighbouring Community Council, some slides from the parents' presentation. Several of these items are duplicated through the document.

H6 Resource flows

The Planning Portal is part of the Scottish Government's Online Planning Information System (OPIS), an £11.2m online ePlanning initiative, developed in partnership with local authorities and public bodies. The ePlanning system was introduced to be "simpler, faster and more

[34] Of 12 comments submitted online and published on the portal, 10 had less than 2000 characters and 2 had more.

accessible" (Milne, 2009). The Scottish Government "anticipated that the new service would save planning authorities £16.7m over 10 years, and save users, including Developers, a further £43.8m" (Milne, 2009). Efficiency savings are not further differentiated between Developers and people monitoring applications. Implementation is not complete: consultation mechanisms are planned.

Information is created and uploaded to the Portal by Planning Services staff and Developers, within their paid employment. Developers do not pay to use the Portal, but are encouraged to donate to local schemes during planning negotiations. Daisy uses the Planning Portal as part of her paid role as director of Heritage Org. Community Councillors and Hyperlocal Paper journalists use the Portal within voluntary roles. The campaigners used the Portal predominantly in their own time. This work included learning how the system worked, how to apply it to this situation, and distilling knowledge into templates to support objections and lobbying. Most interactors pay for the Portal indirectly through taxation.

The payment from the Developers to the City Council for the North Street building was conditional on planning permission for a change of use. Within the Council, there were briefings about the planning application, which were not published on the Portal.

H7 System architectural choice points

Campaigners chose to object online or to send objections by email or letter. Georgette "emailed the case officer with a letter attached, at the last minute". The campaigners also emailed other City Council staff to generate heat around the application, to prompt a hearing. These emails were forwarded to the Planning Department and published with the comments received directly. By treating these emails as objections and passing them straight to Planning Services, the original recipients were absolved of any need to respond.

Objection letters submitted on paper were scanned to pdf, without OCR, and made public, after the Committee's decision. Objections submitted by email were printed out and scanned. Some information was blacked out before scanning, including signatures and email addresses, but not postal addresses. Emails and letters are published together, in one pdf document, including email exchanges between Council staff and emails received by other

Council services. Although the system supports the Developers to upload drawings, there is no facility in the comment form for objectors to upload images.

H8 Viable configurations and trade-offs

The Planning Portal is designed to save money and create a more open and transparent system. However, some relevant documents may not be published and not all relevant discussions are recorded. Councillor Bruce received a verbal briefing. Transparency would be improved if relevant confidential documents were listed, even if they could not be made public. It is reasonable to require full names and addresses for objections, but these \could be made available to councillors and Planning staff without being publicly displayed on the Internet.

To use the Portal effectively, citizens need to be highly literate and put in time to learn the process. The campaigners needed to continually visit the Portal to check for new information. It would be helpful to provide alerts for new content. There is a trade-off between accessing drawings online and their readability. Stuart copied the floor plans of the proposed conversion into PowerPoint, in order to recalculate floor areas.

City Council's list of material concerns could be considered a *dispositif* (see link to dispositif): it encapsulates the Council's power over the planning process by categorising potential reasons for objecting into binaries: to be acknowledged/ may be ignored. In practice citizens' reasons for objecting may be reasonable by other, widely shared criteria.

Table 21: Registering and commenting on the Planning Portal

Registering and commenting on the Planning Portal
To use the online comment facility on the Planning Portal, people need to register.
Registration
• Registration is a two-stage process: sign-up and email confirmation. • To sign up, a person needs to provide their full name and address, via an address look-up system.
Making a comment
1. To comment on a planning application, a person needs to login, find the relevant application and complete the comment form. 2. Information provided during registration, including their full name and address, has been pre-entered into the form.

3. The commenter identifies their “Commentor Type” [sic]. This category includes “Community Council” and “Neighbour Residential”, among others[35].
4. The commenter chooses a stance: “Object”, “Support” or “Neutral”.
5. A text box is provided for the comment. Text by the form notes that “Comments will be made public when the report or application has been completed”. There is no warning that the registered commenter’s full name and address will be published with their comment.

[35] Full list: Amenity Body, Community Councilor, Member of Parliament, Member of Public, member of scottish parliament [SIC], Neighbour, Neighbour –Commercial, Neighbour-Residential, Online Representation, Other, Parish Councillor, Petition, Residents Association, Ward Councillor.

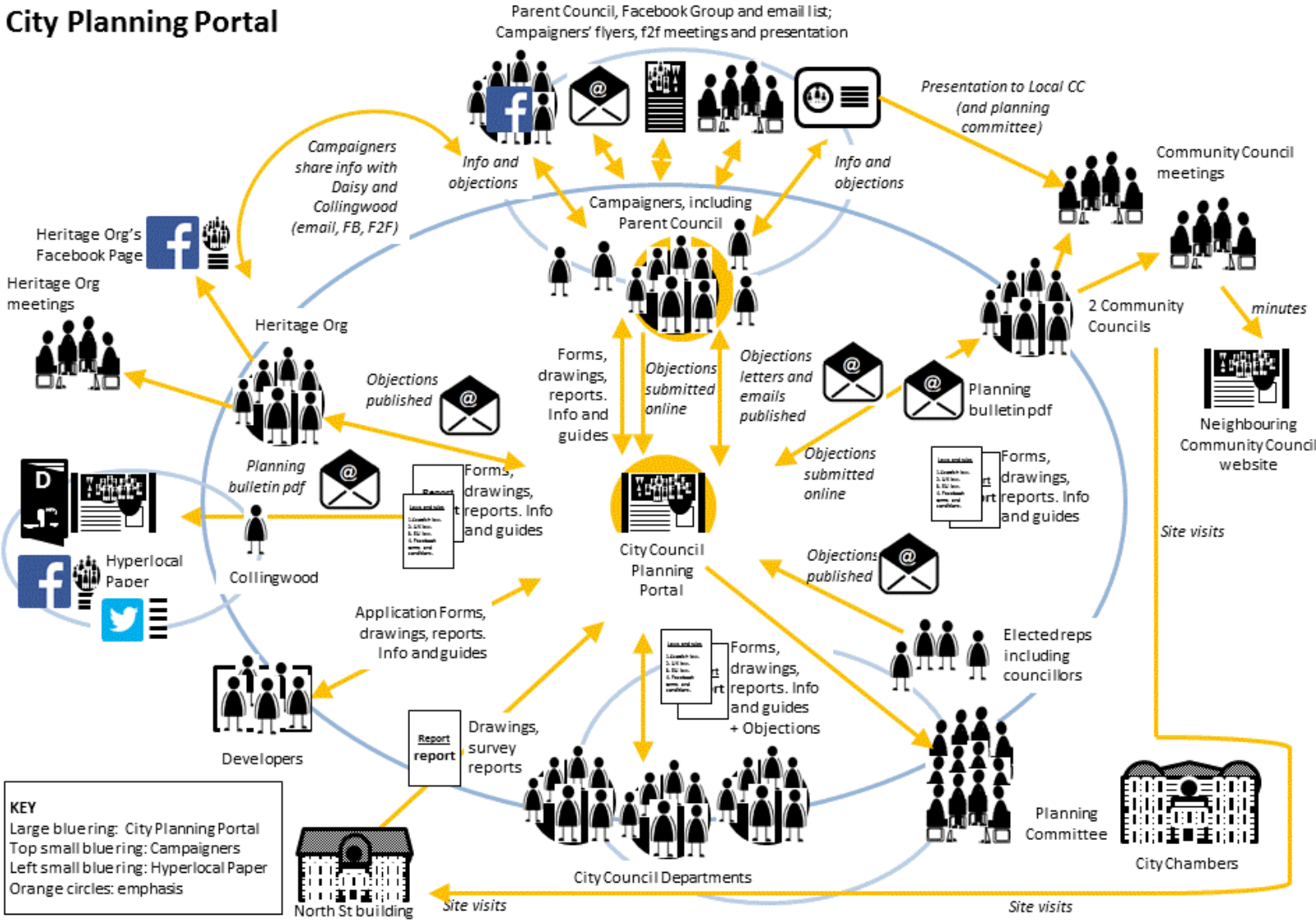


Figure 45: City Planning Portal – Overview of Interactors

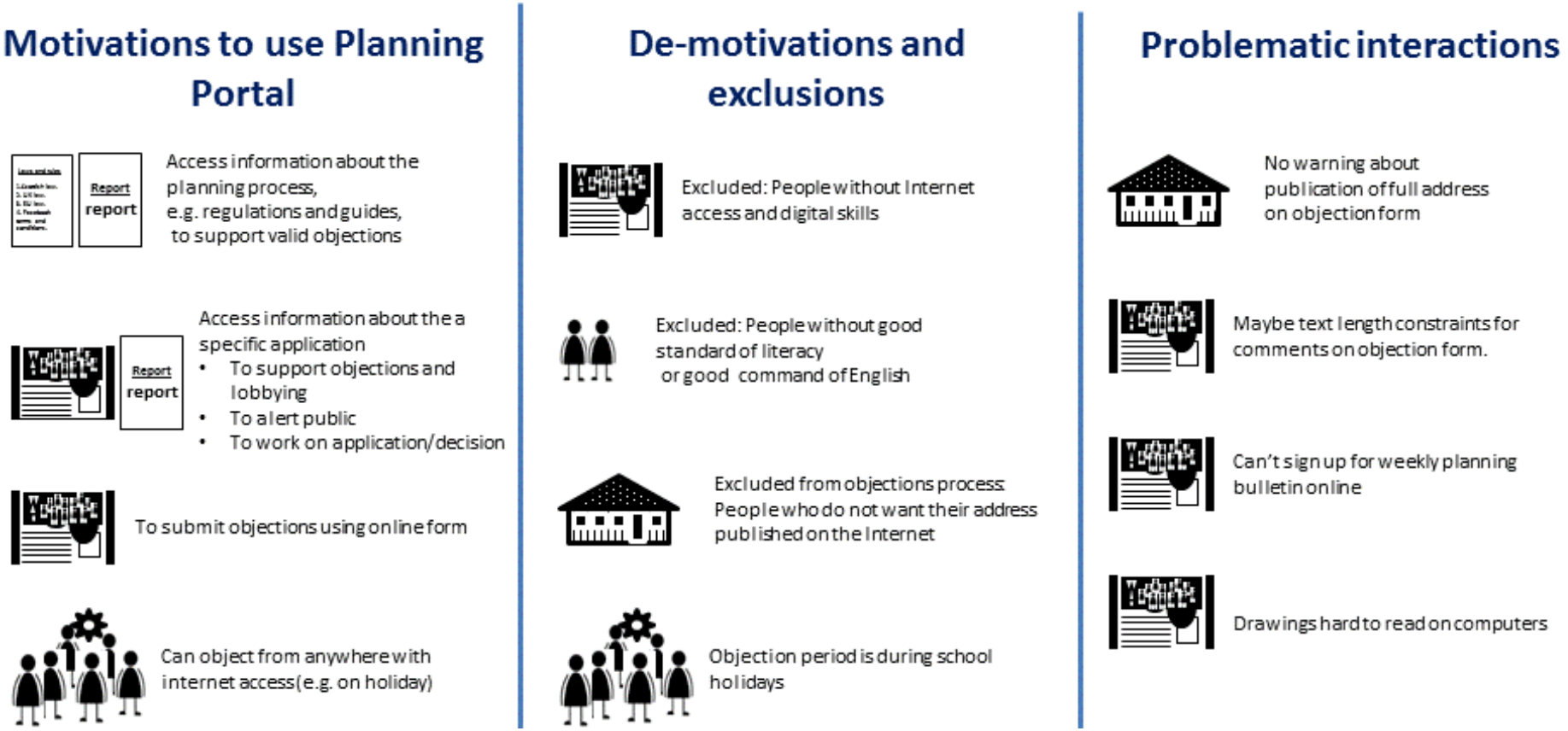


Figure 46: City Planning Portal – Motivations, Exclusions and Problematic Interactions

STIN Study: City Chambers Room (CPS)

The City Chambers houses the Council's deliberative body. The main building was built for the Royal Exchange in the 18th century and taken over by City Council in the 19th century. Access is restricted. Rooms are available to hire, e.g. for weddings. This study models one City Chambers room during the Planning Committee meeting, in November 2013, at which the application to convert 3 North Street was heard. It is one of the larger rooms. The meeting was open to the public, but held on a weekday morning. The North Street application was heard first and decided around 12:30. Councillors voted 7/6 against the application.

H1 System interactors

Figure 49, on p202, shows system interactors.

The Planning Committee consists of 15 councillors and meets twice a month. Thirteen of the Committee's councillors were present, plus staff, including the Head of Planning. The director of the Developers and his colleague were there to support the application. The following people were there to give presentations objecting to the application:

- Local Community Council's planning convener;
- Desmond, on behalf of Neighbouring Community Council;
- Rachel and Stuart, on behalf of CPS Parents;
- Mr MSP;
- Councillor Bruce;
- Daisy, director of Heritage Org.

The public gallery was full (c.40 people): parents, people giving presentations, Collingwood (editor of Hyperlocal Paper) and the researcher. Some City Council meetings are webcast, but this was not. Minutes were taken and later published on the Council's website. Screens in the back of desks are visible to the Committee. There is one screen in the public gallery. They show presentations, plus images from the chair's camera, which he uses to show plans, maps and drawings. The screens enable critical visual elements to be brought into the

meeting in a shared way. See Figure 47 on p197. Photographs played a key role in the hearing.

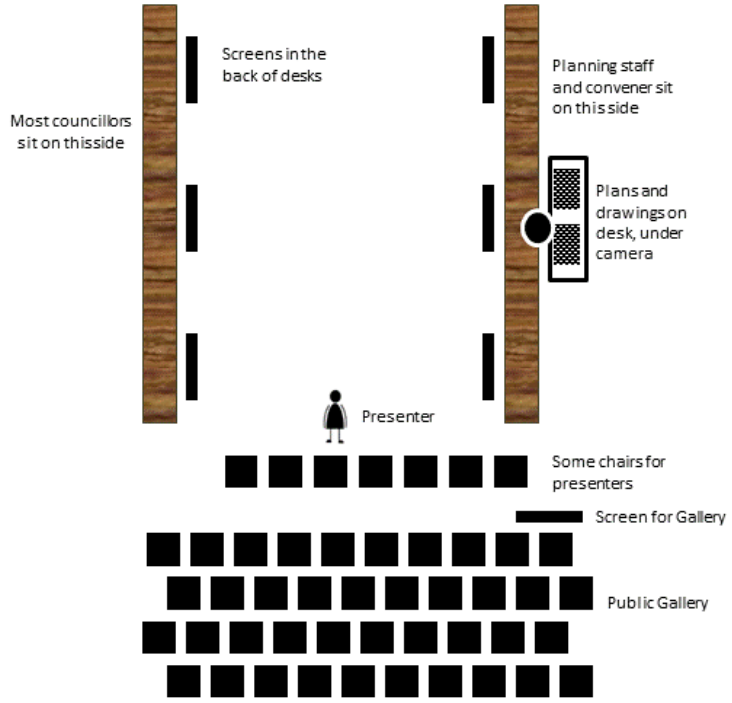


Figure 47: City Chambers Room – Layout with Screens

H2 Core interactor groups

The core interactor groups were the City Council (Council staff, especially Planning Services; councillors on the Committee); other elected representatives; the Developers; campaigners (parents); Heritage Org; Community Councils; Hyperlocal Paper. The City Council has its own policies, budget and procedures. Political parties were sub-groups: Councillor Bruce, Mr MSP and two councillors on the Committee are L-Party, the larger party in the Council's ruling coalition. They voted against the application. The City Chambers room is provided and maintained by the City Council. Planning Services organised the meeting.

Mr MSP tweeted before the meeting, published to his Facebook Page, where Rachel, later, added the verdict and thanks. Collingwood tweeted the verdict, from Hyperlocal Paper's account, as he left the City Chambers. This was how Georgette accessed the result. Hyperlocal Paper published an article online that afternoon and promoted it via Facebook and Twitter. Local TV's website and Facebook page provided links to the Hyperlocal Paper article. Daisy published the verdict on Heritage Org's Facebook Page. Articles about the

meeting were later published on Local Environmental Org blog, in the Evening Paper, and in Hyperlocal Paper's news-sheet.

H3 Incentives

Figure 50, on p203, shows motivations, exclusions and problematic interactions.

The Developers were there to persuade the Committee to grant their application: presenting their case, answering questions, and suggesting design concessions, such as frosted glass on ground-floor windows. Planning Services staff were there to process planning applications. City Councillors on the Committee were there to decide planning applications: questioning presenters and planning staff, making comments, suggesting conditions, voting. They had duties to their wards, the Council, and their political parties.

Bruce and Mr MSP were there to present objections on behalf of their local ward and constituency. Stuart and Rachel were there to object on behalf of the school community. Ideally, they hoped to stop the sale of the building and make it available to the primary school and local community. Daisy represented Heritage Org, to object to the planning application. Heritage Org want to promote the use of good quality buildings for the City's children. The Community Councillors were there to represent the views of their Community Councils, and, theoretically, their local communities: "I'm aware from various people I know who are connected with the [school], not just in this [street], but […] in this area, that there was a very serious concern about using this building as accommodation, as flats" (Desmond). Others were there to demonstrate that local people felt strongly about the planning application and put pressure on councillors to vote against it. Collingwood was there to report in Hyperlocal Paper (p204). The researcher was there to observe and meet people, including potential interviewees. This tended to show support for the campaigners.

H4 Excluded actors and undesired interactions

There were not enough chairs in the public gallery; some people could not see the proceedings. Chairs were provided for presenters, but there were more presenters than chairs. The meeting was difficult to follow. An agenda, on paper, listed the order and suggested times of presentations for this application, but was not available in advance; a

patchy collection of hearing papers included duplicates and omissions. Very little information was provided about the remit or constitution of the Committee: no information was provided about the staff who managed the meeting and had created a report recommending the application be granted.

Some campaigners would have liked to be at the hearing, but had to be elsewhere, e.g. Georgette had to work. For a couple of months, the campaigners did not know the date of the hearing. Until the meeting, the application's timeslot was unknown. Rachel had attended a previous meeting, finding out how the process worked and what kind of questions to expect.

H6 Resource flows

The City Chambers Room is owned by the Council. Its upkeep includes cleaning, maintenance, and technology. The Council gets some income from hiring out rooms, but this room is not for hire. Planning staff are employed by the Council. This meeting is part of their paid work. Councillors receive a relatively low annual wage. Bruce managed to subsist on this and work full-time as a councillor; others have additional jobs. This makes a noticeable difference to the amount of time councillors are able to spend working for their communities. Mr MSP presented within his paid role as a Member of The Scottish Parliament. Daisy presented within her paid role as director of Heritage Org. The Developers were there within their paid work. They had already invested time and money in the project. There is an overprovision of office space in the City, so the building needs to be converted to be profitable. Parents and Community Councillors were there voluntarily: most presenters had to organise their work to enable their attendance. This flexibility tends to be commensurate with having an established job and professional role. Collingwood was there voluntarily, reporting for Hyperlocal Paper.

There is financial pressure on the Planning Committee to approve the application. Although City Primary School needs additional space, it is much cheaper to build classrooms on the playground, than to reconvert the Old High School. The Council would receive a large sum from the sale. This may have influenced the Council's interpretation of Scottish Law concerning planning applications. *Major* applications go through a consultation process,

which enables community input, *before* the application is submitted –a Pre-Application Consultation (PAC). Although the High School conversion would create 73 new homes in a heavily populated area, it was not classed as a major development, because there would be little alteration to the exterior of the building. This controversial interpretation, and subsequent lack of public consultation, was mentioned in objections and presentations. Mr MSP had been involved in writing the relevant law and was unhappy with the Council's interpretation: "this is what classes as a Major Development: "and housing, construction of building, construction, erection for use as residential accommodation". Now, it's that word "construction" which did it. […]They're not actually building anything. So, therefore, this didn't apply. So therefore the Council classed it as Local […] And [Mr MSP] was quite surprised about that. When we met him, he said "Well, hang on a minute. I did all this and I passed it and that was never the intention"" (Stuart).

H7 System architectural choice points

City Council held the meeting in this room, rather than in the Main Chamber, which has a larger public gallery and supports webcasting (City Council email). A month later, the Committee met in the Main Chamber and their meeting was webcast.

The *Photoshopped* image of a man smoking out of a ground floor window (Figure 42 on p183) seemed to sway the meeting. The photo was shown, within Rachel and Stuart's presentation, to illustrate the proximity of the North Street building to the playground. Daisy parleyed this into a material consideration, by linking smoking to the lack of green-space in the plans. The parents' presentation was based on the report they had created for the Planning Committee, which was carefully crafted to be engaging. The report and presentation resemble a child's workbook, with perforations, pictures, arrows and comments (Figure 48 on p201); objections are carefully laid out, including reference numbers from planning guidelines: e.g. "HOU6" for affordable housing requirements. Rachel and Stuart gathered information and images for their presentation via their Facebook Group and email list, and worked in small email groups to keep the objections confidential. The report was later published, as a pdf, on Hyperlocal Paper's website, below an article about the hearing.

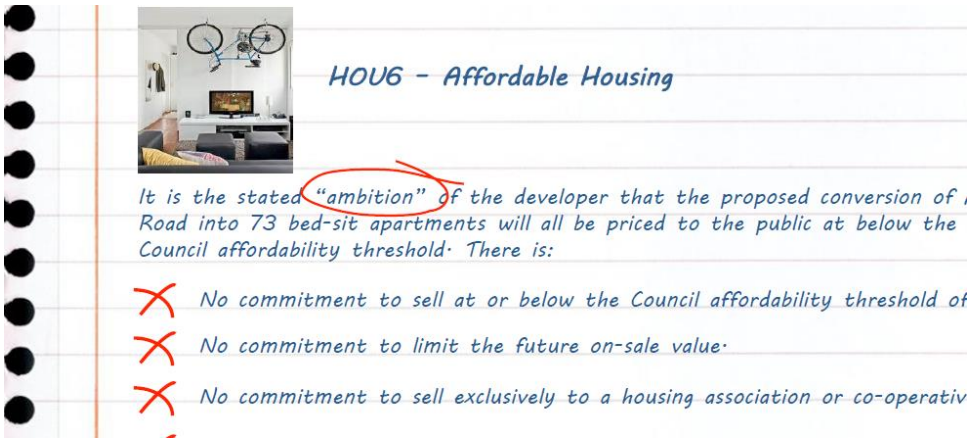


Figure 48: Image from Parents' objection

H8 Viable configurations and trade-offs

The campaigners want the North Street building to stay in community hands and be used by the primary school. Some are worried about studio flats overlooking the playground. However, presentations and discussion at the meeting centre on other concerns, such as room size, green-space, parking and public transport, because these are m*aterial concerns*. The picture of the smoker is a Trojan horse, bringing concerns about proximity onto the agenda through its emotional import, and Daisy's comment linking the smoker to a lack of greenspace.

The Council has enshrined all city children's wellbeing in the governing agreement of its ruling coalition (quoted in the parents' slides). However, the Council inherited a budget deficit and a poorly maintained estate, a Council Tax freeze, and the recession. These circumstances are reflected in the vote: 7/6 against the planning application. Small differences in support for various actors at the meeting could have a decisive effect. The parents probably benefited from Rachel attending a previous meeting. The meeting could be made more accessible by improving the information provided in advance. Webcasting the meeting should have been a priority. From January 2015, all Planning Committee meetings are webcast.

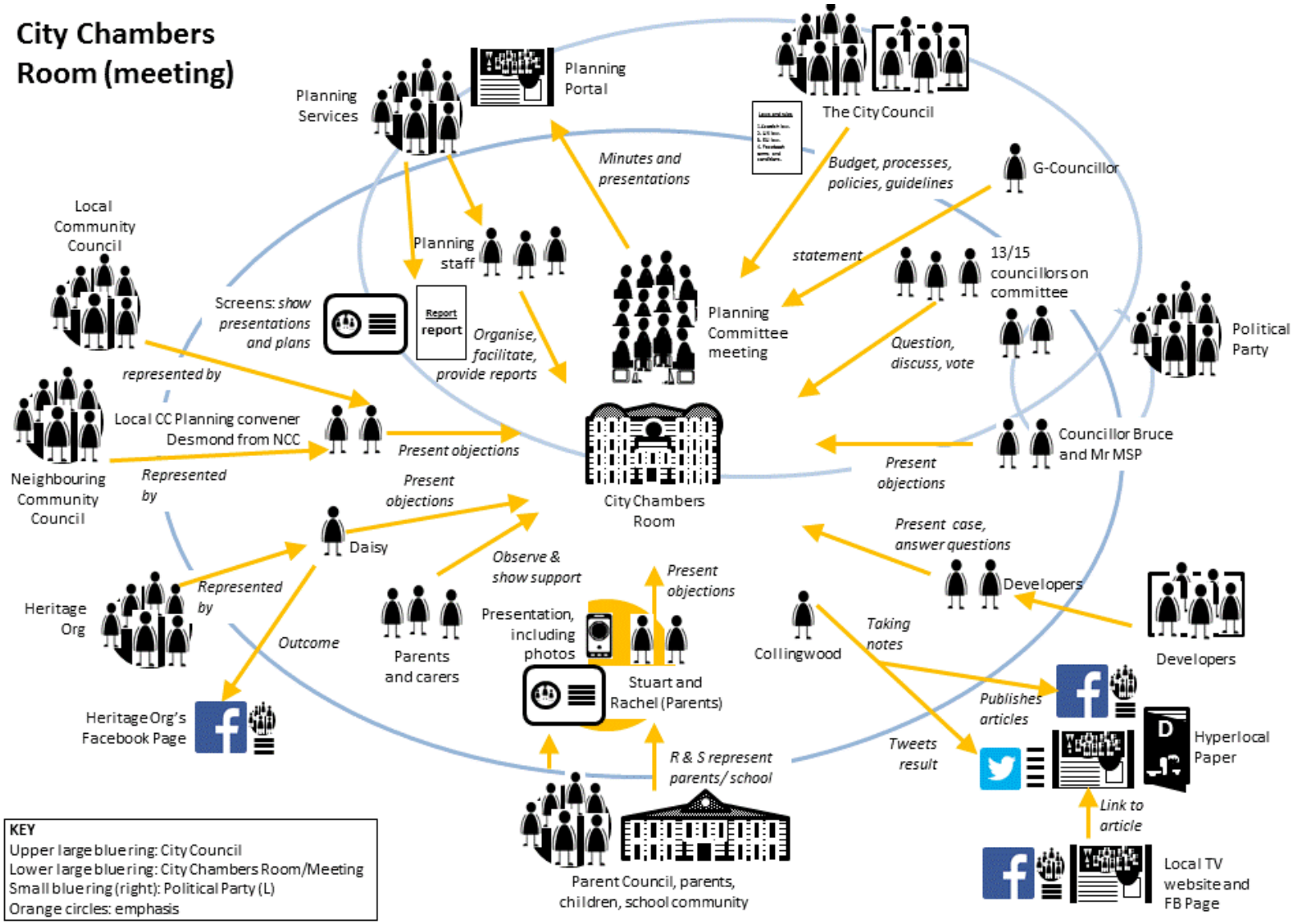


Figure 49: City Chambers Room – Overview of Interactors

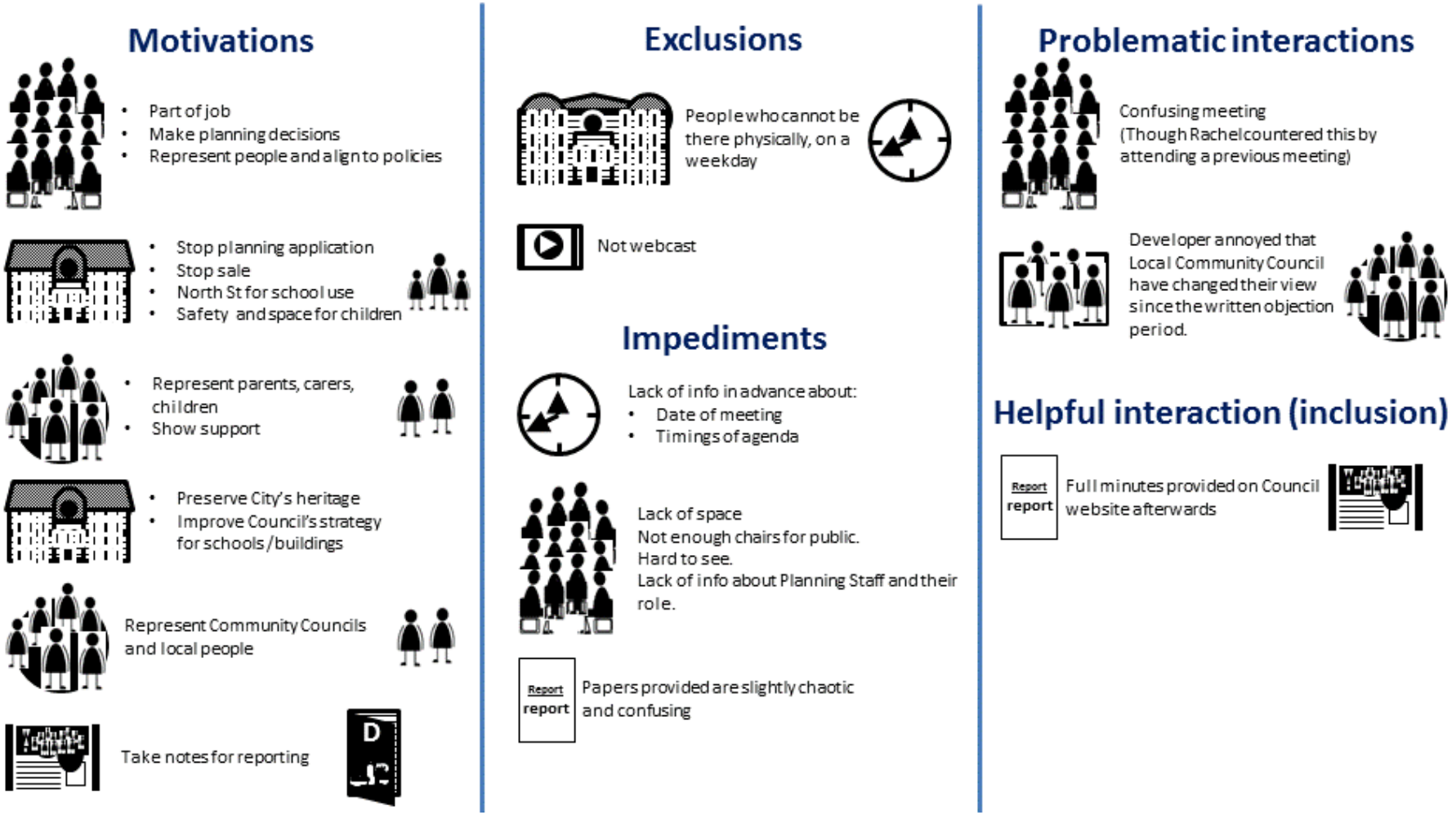


Figure 50: City Chambers Room – Motivations, Exclusions and Problematic Interactions

STIN Study: Hyperlocal Paper (CPS)

Hyperlocal Paper covers an area about 3 miles square over four City wards. It appears as an A4 paper news-sheet (4-sides) once a month. 1500 copies are printed and distributed. Hyperlocal Paper is also a website, with a new article each day. A Facebook Page and Twitter account promote website articles. The website received about 5000 unique visitors per month in the case study period[36]. People can comment via email, phone, Facebook or Twitter: comments are appended to website articles. The news-sheet is available as a colour pdf from the website. In interviews, people rarely distinguished between the Hyperlocal Paper website and news-sheet, though Desmond referred explicitly to the "paper".

Across its website and news-sheet, Hyperlocal Paper published 13 articles about the school's overcrowding problem, the sale and potential conversion of the North Street building, and the campaign. See Table 22: Relevant Hyperlocal Paper Articles, p208.

H1 System interactors and H2 Core interactor groups

Figure 51, on p209, shows system interactors.

City Primary School is within Hyperlocal Paper's area. People living near the school have access to the news-sheet in local shops, cafes, pubs, waiting rooms, and the library. Copies are delivered to the school. The Parent Council contacted the paper about the campaign: "the parents were very anxious that [Hyperlocal paper] should get involved, because they didn't think they had enough time to get as many parents organised and informed as they needed, without getting some kind of local publicity. So [Hyperlocal paper] was ideal for them to do that" (Collingwood). Parents provided quotes and information, and appear in articles. In comments published below relevant articles, commenters identify themselves as parents, former pupils, and people who used to work in the North Street building. G-Councillor, Bruce and Mr MSP are mentioned as campaign supporters; a Facebook comment by Mr MSP is published. Other Councillors are quoted, including links to information on City Council's website. Council Staff are present in statements and emails, published within articles. An anonymous Council employee is the source of an article contrasting CPS' situation with a new school nearby.

[36] A year later, 500 people *liked* Hyperlocal on Facebook and 2400 accounts *followed* on Twitter.

Community Council members read Hyperlocal Paper, which reports on the meetings of Local and Neighbouring Community Councils (LCC and NCC). In one website article, the former chair of the Parent Council expresses disappointment with LCC's neutral comment on the planning application; NCC's objection is appended. The Developers' Planning Statement for the North Street building is published as a pdf; articles include statements from their director. Daisy, from Heritage Org, features in the Planning Committee article. Articles link to other local media, including Evening Paper which broke the story about the planned modular classrooms.

Hyperlocal Paper's website is built using Drupal modules, by Ivan. The paper news-sheet is put together by Collingwood and Hyperlocal's layout designer. It is printed locally.

In terms of articles about City Primary School, core interactor groups are the Hyperlocal Paper team; readers; social media followers; parents, including the Parent Council; local people, former pupils; NCC and LCC; City Councillors and Mr MSP; City Council staff (present and previous); the Developers.

Three Hyperlocal volunteers interact with the campaign. Collingwood is the editor and main writer. Ivan's child was at CPS during the beginning of the campaign; his email correspondence with the Council is published on Hyperlocal website. During the case study period, the researcher delivered the news-sheet to subscribers, including CPS, and reported from NCC[37].

H3 Incentives

Figure 52, on p210, shows motivations, exclusions and problematic interactions.

The Hyperlocal team want to publicise local news and actions, including information about City Primary School, the community councils and City Council. Readers want local news and information. People value the writing and sense of humour. People read the news-sheet because it is available free, locally. The campaigners wanted Hyperlocal Paper to publicise their campaign, because they needed to gather public support and stimulate objections to

[37] While the STIN framework supports objectivity, the researcher's involvement with Hyperlocal Paper may influence her perspective on its role in the campaign.

the planning application. People use Hyperlocal Paper to share their news and opinions: Mr MSP's comments publicise his actions to support the campaign, including a link to a statement on his Facebook page. In comments, local people provide their own history of 3 North Street, not entirely aligned to the Council's account ("STIN Study: The Playground", p180). Community councillors use Hyperlocal Paper to access local views: they theoretically represent local communities, but have few resources to consult. Hyperlocal Paper reports on community council meetings: Rachel read about LCC's neutral response to the planning application, because Collingwood reported on their meeting.

H4 Excluded actors and (un)desired interactions

People may disagree with articles. Desmond felt the coverage of his presentation to the Planning Committee was inaccurate. The director of the Developers emailed Collingwood to clarify a few points; his email was published. Comments contributed via social media, email or telephone, are appended to articles. Collingwood protects the identities of City Council staff who leak information or provide political opinions.

H6 Resource flows

Hyperlocal Paper is a non-profit, staffed by volunteers. It receives income from advertising, and subscriptions. Its main outgoings are printing and website hosting. Profits are donated to local charities. In the case study period, LCC and NCC pay for adverts for their meetings and elections. Theses Community Councils benefit from Hyperlocal Paper reporting on their meetings. LCC were unable update their website: Hyperlocal Paper was a way to find out what happened at their meetings. The local MP and most of the local members of The Scottish Parliament, including Mr MSP, advertise in Hyperlocal Paper, including contact details and information about surgeries. They receive publicity by appearing in articles.

The campaigners received free publicity, including the Parent Council Gmail address and a link to the Facebook Group. The Developers got free publicity: their Planning Statement and director's comments were published. The City Council's position was publicised through links to their websites and the email exchange between Ivan and the Head of Education. (No comments were sympathetic to the Developers or the Council). The director of the Developers and the Head of Education emailed Hyperlocal paper within their paid

employment. Ivan was not paid for emailing the Council: “The letter, the emails to [the Head of Education] I spent ages composing those” (Ivan).

H7 System architectural choice points

Collingwood had a long-term relationship with the school, previously chairing the Parent Council. He was already pursuing the story, when the Parent Council contacted him. Hyperlocal Paper regularly reported on CPS news. At the beginning, campaigners sought publicity, to force the Planning Committee to hold a hearing. Later, as campaigners were assembling their objection report and presentation, more privacy was required. Their confidentiality was respected by Hyperlocal Paper, though Collingwood had potential access to information through contacts on the email list.

People contacted Hyperlocal Paper through all available channels: face-to-face, telephone, email, Facebook and Twitter. Comments left via Facebook and Twitter show people accessing website articles via social media. Comments link back to the relevant account. The campaigners shared links to online news articles on their email list and Facebook Group. Hyperlocal Paper articles include links to information on other websites, including City Primary School’s website, the Developers’ website, the Council website, the Planning Portal, Evening Paper’s website and Mr MSP’s Scottish Parliament webpage. Email addresses are provided for the Parent Council, Councillor Bruce and G-Councillor.

H8 Viable configurations and trade-offs

Paper news-sheet articles are constrained by time (monthly publication) and available space, but are accessible without Internet access. For local people, it also functions like a push-technology: people come across it in their day-to-day lives. To this extent it resembles social media. It also resembles a flyer for the website, as it includes URLs for articles there. The website supports longer articles, with hyperlinks to other sites, and many photos, but requires Internet access. Social media publicise articles, by pushing them into newsfeeds, and support public discussion. As photos are important, digital cameras are essential to creating Hyperlocal Paper.

Hyperlocal Paper was started in the wake of a campaign to save a local school[38]. The Council's sale of a public building and the parents' uphill battle against the planning application are the essence of local politics, with *David and Goliath*/ *plucky underdog* elements that make the narrative especially engaging. The combination of paper news-sheet, website and social media, with local actors and networks enabled Hyperlocal Paper to play a strong role in the campaign.

Table 22: Relevant Hyperlocal Paper Articles

Article	Publication date/events	Content
Website articles		
1.	Early June	Outlines the issues around overcrowding and the sale and potential conversion of 3 North Street.
2.	When the planning application is submitted (July)	About the planning application and consultation. Includes the Developers' Planning Statement.
3.	The day after article 2 (July)	The Developers' response to the previous two articles; includes the text of an email from their director.
4.	Mid July	Based on Ivan's correspondence with the Director of City Council's Education Department. Ivan is a parent on the Hyperlocal Paper team.
5.	Late July	
6.	After the objection period (August)	Based on reactions to Local Community Council's neutral submission about the planning application. This includes Neighbouring Community Council's objection text.
7.	September	Comparing City Primary School's situation with that of a new primary school half a mile away. (Anonymously contributed article).
8.	After the planning committee meeting (November)	About the Planning Committee meeting where the application was rejected.
9.	November	About the Developers' reaction to the planning committee outcome.
10.	December	About the Developers' appeal to the Scottish Government's Directorate of Planning and Environmental Appeals (DPEA).
Paper News-Sheet articles		
11.	July	Overcrowding, the sale of 3 North Street and parents' campaign.
12.	November	Parent dismay at the situation.
13.	December	The outcome of the planning committee and the appeal; overcrowding and modular classrooms.

[38] The first Hyperlocal Paper news-sheet was published in 1994; the first website articles date from 2009; Hyperlocal Paper joined Twitter in 2010; their Facebook page was set up in 2011.

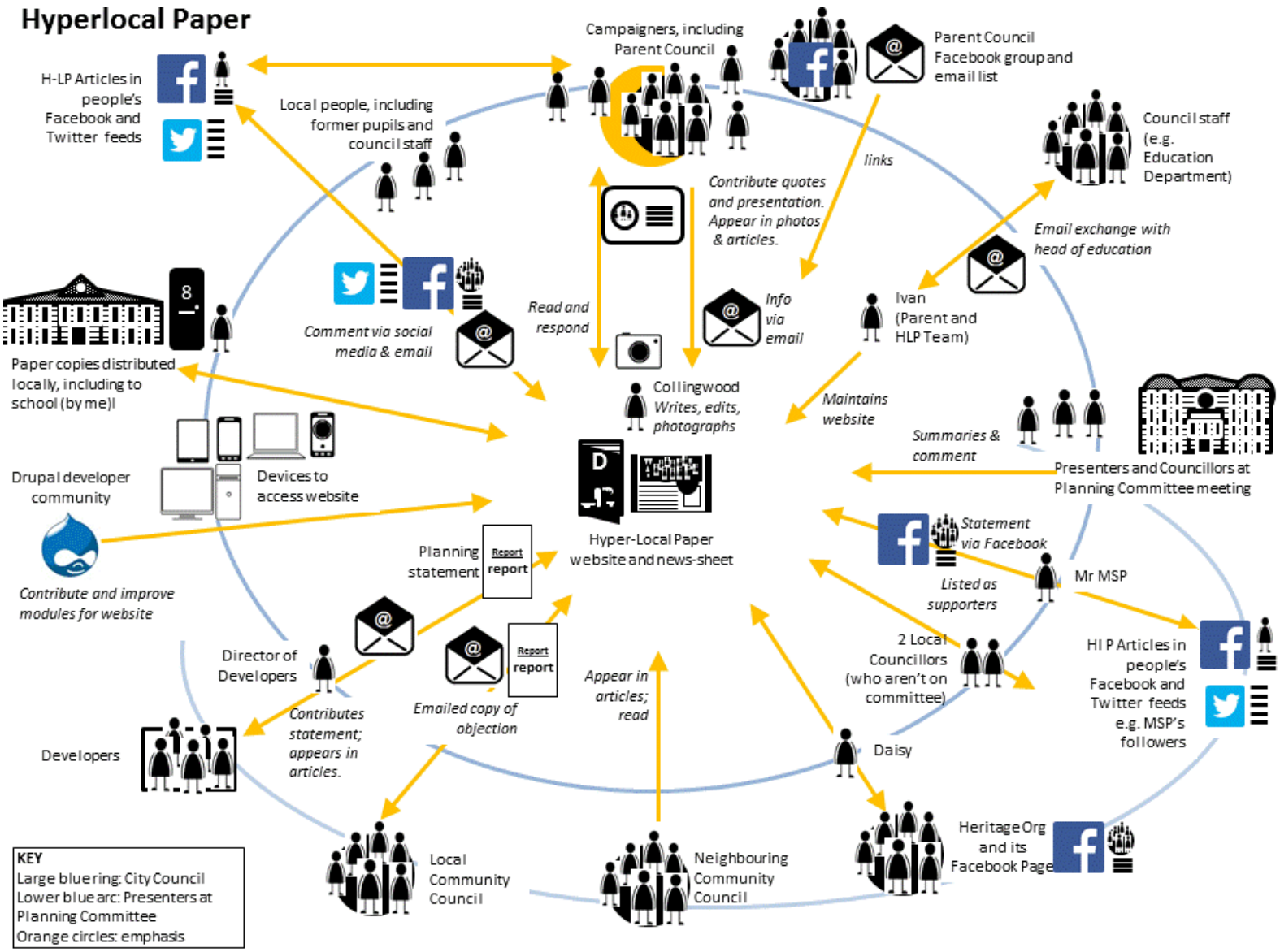


Figure 51: Hyperlocal Paper – Overview of Interactors

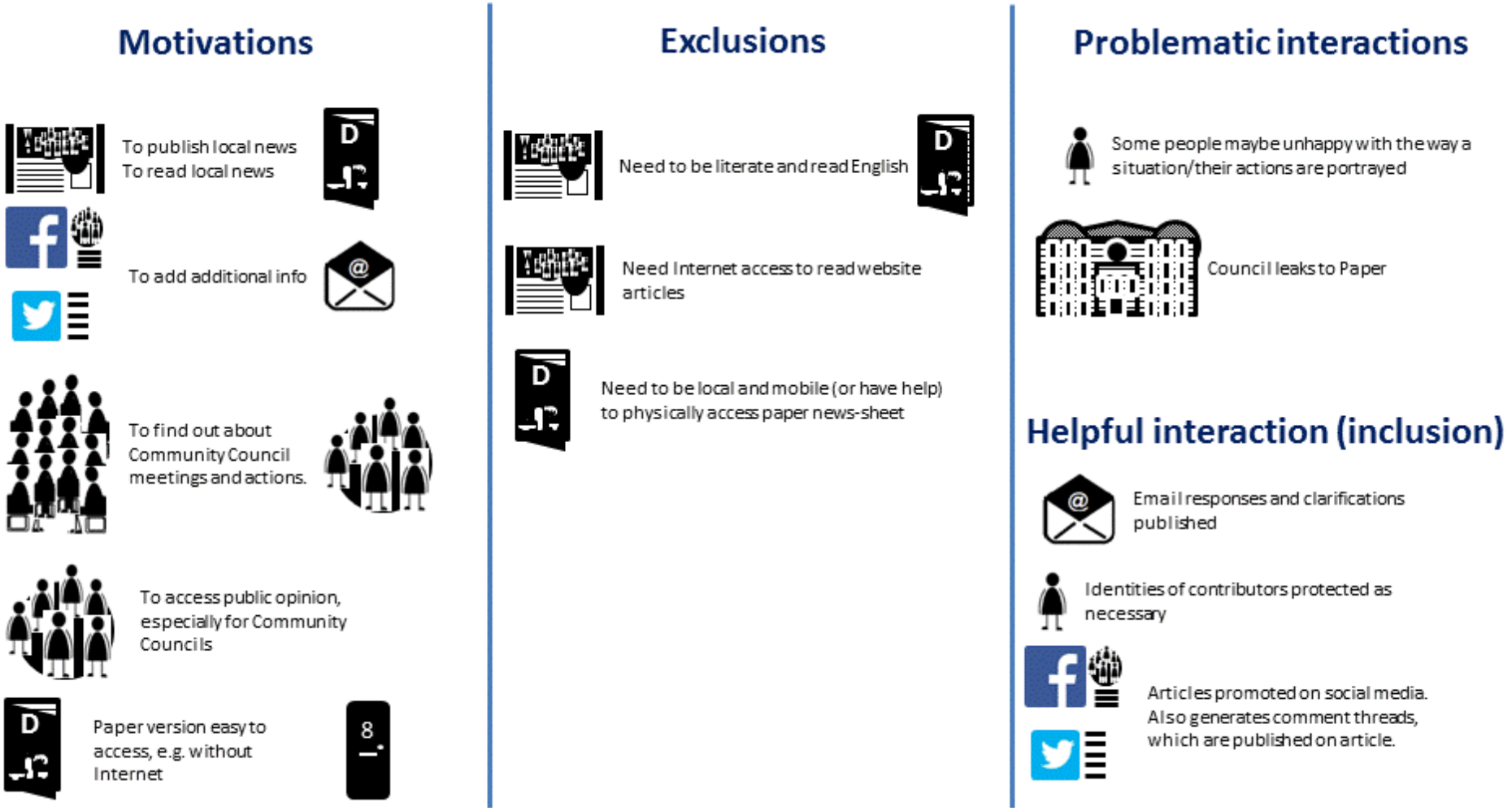


Figure 52: Hyperlocal Paper – Motivations, Exclusions and Problematic Interaction

Appendix 34. CPS: Flyers

No.	Format	Aimed at	Contents	Contact details	Date/ stage of campaign
1	A5 1 side	Parents and carers	Request for input; Overview of overcrowding options with link to local paper; Sale of North St building to convert into flats; Come to the meeting about this.	Headed "Parent Council"; Gmail address provided.	June –after Parent Council hearing about development, before big meeting.
2	A4 2 sides	Parents and carers	Information about overcrowding options, including "Parents' View"; More info about sale of North St building and proposed conversion; Intension to stop sale and challenge planning application; Email Director of Corporate Governance (+email address); Object to planning application –contact for more info on how to do this.	Headed "Parent Council"; Gmail address and Facebook Group provided.	June –after big meeting, before planning application is submitted
3	A4 2 sides	Parents and carers	Update on overcrowding options; Update on sale of North St building and proposed conversion; Parents' reasons for objecting (objections submitted so far); Suggestion to lobby councillors before hearing; Contact details for local councillors; councillors on Planning Committee and 4 other people; Come to the hearing; Spread the word.	Headed "Parents' Update"; Gmail address and Facebook Group provided.	September – after objection period is closed, after site visit, before date of hearing is known[39]
4	A4 2 sides	Local residents	Update on sale of North St building and proposed conversion; Reasons for residents without children at school to be concerned; Date and location of hearing; Suggestion to lobby councillors; Contact details for local councillors; councillors on Planning Committee and 4 other people; Ref number for details on Council's website; Come to the hearing; Spread the word.	Headed re proposed development on North St; Gmail address provided	October, before hearing.
5	A4 10 sides (pdf)	Councillors on Planning Committee[40]	The Parents' reasons for rejecting the application. Designed to engage (pictures and styling).	Headed Parent Council (on last page)	October, before hearing.

[39] The flyer suggests that the hearing could be before the end of September.

[40] The parents' PowerPoint presentation to the Planning Committee is based on this report, which had also been created in PowerPoint.